

user manual

Last updated on 10/16/2026

The Melodyne Help Center and this PDF document

This PDF document was generated automatically from the contents of the Melodyne Help Center. It contains what, on the date indicated on the front page, were the latest versions of the text and images.

You will find the comprehensive and invariably up-to-date Melodyne Help Center along with numerous films and inspiring tutorials, as well naturally as the latest version of this PDF document, on our web site. Why not take a look? Just follow the link at the foot of each page of this PDF.

Melodyne 5 assistant – Quick Start

Integration • Checking the algorithm • Editing • The macros • What else should I read?

Melodyne in Cubase with ARA

Required versions and compatibility • The chord track • Inserting Melodyne • Rearranging regions – Melodyne follows • Changing what's shown in Melodyne from within Cubase • Transport functions • Tempo adjustments • Comping • File management

Melodyne Expert Tips

Lead vocals • Background vocals • Guitar and bass • Other instruments and mixing • Workflows and techniques

Stefan's Quick Tips

Workflow • Editing

Reference manual videos

Fundamentals and workflow • Tools and functions • Algorithms and note assignment • Tempo

Installation and activation

Procedure and terminology • What files are installed and where • Your user account • Licence options: Deactivate • License options: iLok • Checking for updates • Selling your license • Uninstalling Melodyne

Updates and upgrades

Terminology: major and minor updates, upgrades • Checking for updates • Information about your edition, version and serial number • How updates and upgrades are performed and what the process involves • iLok when updating or upgrading • Compatibility after an update or upgrade • Parallel operation of old and new versions after an update or upgrade • Going back to your old Melodyne • What upgrades are available and what benefits do they bring

Inserting and preparing to use Melodyne

Opening Melodyne • Bypassing or removing Melodyne, comparing edits • Tip: Working with long files • Saving, archiving and passing on your songs • Buffer Size

Playback, navigation, zooming

Local playback in Melodyne • Controlling playback, scrubbing and zooming using the Time Ruler • Scrolling and zooming in the Note Editor • Navigation and zoom functions

Cycle mode

Defining the cycle range • Switching cycle mode on and off • Changing the length of, and moving, the cycle range • Defining the cycle range using a blob selection

Display and other options

Showing and hiding elements of the user interface • Show Pitch Curve • Show Note Separations • Show Note Tails • Displaying sibilants • Displaying fades • Show Blob Info • Show Intended Notes • Highlight Notes During Playback • Monitor When Editing Blobs • Show Clip Borders

Preferences and keyboard shortcuts

Opening the window and user interface settings • The audio cache • Shortcuts • Check for Updates

Audio characteristics and algorithms

The detection process • The Universal algorithm • The “Percussive” algorithms • The Melodic algorithm • The “Polyphonic” algorithms • Switching algorithms • Automatic or manual algorithm selection

Note Assignment Mode

What editing the detection involves • What is edited and where • Various types of notes

Tools for note assignment

The Main Tool in Note Assignment Mode • The Activation Tool • Starting point lines and designated starting points • The Note Separation Tool and the Separation Type Tool • The Starting Point Tool • The Sibilant Range Tool • The Note Inspector

The Algorithm Inspector

The Preview parameters • The Algorithm parameters • Sibilant Handling, Robust Pitch Curve, Separate Audio

The Time Grid

Activating and setting the Time Grid • Moving notes when the grid is active

Chord recognition and the Chord Track

Limitations of the editions Melodyne essential and assistant • One Chord Track for all Melodyne instances • Triggering the harmonic analysis • Selecting between alternative designations • Entering chords manually • Keyboard shortcuts for editing the chords • Auditioning chords • Chord symbol conventions • The Key Track and key changes • The Key Track and the Scale Ruler • Interaction with the chord track of the DAW • Chords and keys in Note Assignment Mode

The Pitch Grid

The functions of the Pitch Ruler and access to the Pitch Grid • The Pitch Grid and the background in the Note Editor • The Scale Ruler and the Reference Pitch Ruler • Adjusting the master tuning • Selecting the tonic and scale variety • The Scale Window

Tracks and Events

Changes to audio events that Melodyne follows automatically • Things to remember when copying events • The Track and Clip editing modes

Comping specialities of Cubase/Nuendo

Making lanes visible • Creating lanes • Activating Melodyne • Swipe or click • Moving boundaries • Melodyne modes: Track Edit vs Clip Edit

Selecting notes

Standard selection techniques • Snake selection • Selection using the Pitch Ruler • Selection commands in the menu

Correct Pitch Macro

Opening and using the macro • Closing the macro and correction values when it is reopened • The Correct Pitch macro and sibilants

Quantize Time Macro

Quantizing timing: What is moved and where to? • Opening the Quantize Time Macro and setting the parameters • Closing the macro and correction values on reopening

The Leveling Macro

Opening and setting the Leveling Macro • The Mean Amplitude • Closing the macro and correction values when it is subsequently re-opened

Main Tool

Modifying the pitch and timing of notes • Modifying note lengths • Editing note separations

Pitch Tool

Shifting the pitch center • Monitoring pitch shifts • Editing pitch with the inspectors • Correcting pitch with a double click • Pitch transitions • Resetting individual edits and introducing random deviations

Pitch modulation and drift

Editing pitch modulation and drift • The inspector for pitch modulation and drift • The Reset commands

Formant Tool

Shifting formants • The inspector for the formants • Formant transitions • The Reset commands

Amplitude Tool

Editing amplitude • Editing amplitude using the inspectors • Amplitude transitions • Muting notes • The reset commands

Tools for fades and sibilant balance

The Fade Tool: Fade-in and fade-out on notes • Fades in conjunction with other tools • The Sibilant Balance Tool: The management of sibilants and breath noise • Uses for the Sibilant Balance Tool

Timing Tool

Adjusting the beginning and length of notes • Clicking on and dragging the middle of a blob • Correcting timing with a double-click • Adding random deviations • The reset commands

Time Handles and Attack Speed

How time handles and the Attack Speed Tool work • Modifying the evolution of notes using time handles • Changing the attack speed of notes • Combining time handles with the Attack Speed Tool

Note separation tools

Inserting, moving and removing note separations • Editing note separations with multiple notes selected • Soft and hard note separations • Switching between hard and soft separations with the Separation Type Tool • In the context menu: Separate Note • In the context menu: Separate Notes as Trills • In the context menu: Merge notes

The Note Inspector

The parameters of the Note Inspector • Entering values and handling multiple selected notes

Copying notes

The selection, cursor and grid when copying • Tempo adjustment when copying: the Auto Stretch Switch • Copying in an ARA context

The Edit menu

Restore Original • Adding random deviations • Macros • Select Special • Chords and Keys

Audio to MIDI

About Audio-to-MIDI • Exporting MIDI

Time-stretching, tempo and tempo matching

Switching to Melodyne studio trial mode

Switching to trial mode • Comparing editions • Expiry of the trial period • Convinced?

Melodyne 5: Update guide

The Melodic Algorithm with Sibilant Detection • Compatibility with Melodyne 4 • New tools (not only) for vocals • The Leveling Macro • Pitch correction by double-clicking and the Correct Pitch Macro • Chord Recognition and the Chord Track • The new Percussive Pitched Algorithm • Keyboard shortcuts

Already own a Melodyne?

How does the coupon work? • What if I have already activated my Melodyne 5 essential by mistake? • Coupons: terms and conditions of use

Version history

New in Version 5.4.2 • New in Version 5.4.1 • New in Version 5.4 • New in Version 5.3.1 • New in Version 5.3 • New in Version 5.2 • New in Version 5.1.1 • New in Version 5.1 • New in Version 5.0.2 • New in Version 5.0.1

User manuals for older versions

Melodyne studio, editor, assistant and essential 4 • Melodyne editor, assistant and essential 2 (singletrack) • Melodyne studio 3 • Ending support for older versions of Melodyne

Melodyne 5 assistant – Quick Start

Melodyne 5 assistant gives you direct access to individual notes within your recordings, allowing you to edit their pitch, position, duration and other musical parameters in an intuitive way. The quality of Melodyne's correction of out-of-tune notes is legendary, but you can also introduce melodic variations, create vocal arrangements, quantize audio, improve timing and do many other things with it as well.

Here is a quick and concise guide to getting Melodyne 5 assistant up and running.

Integration

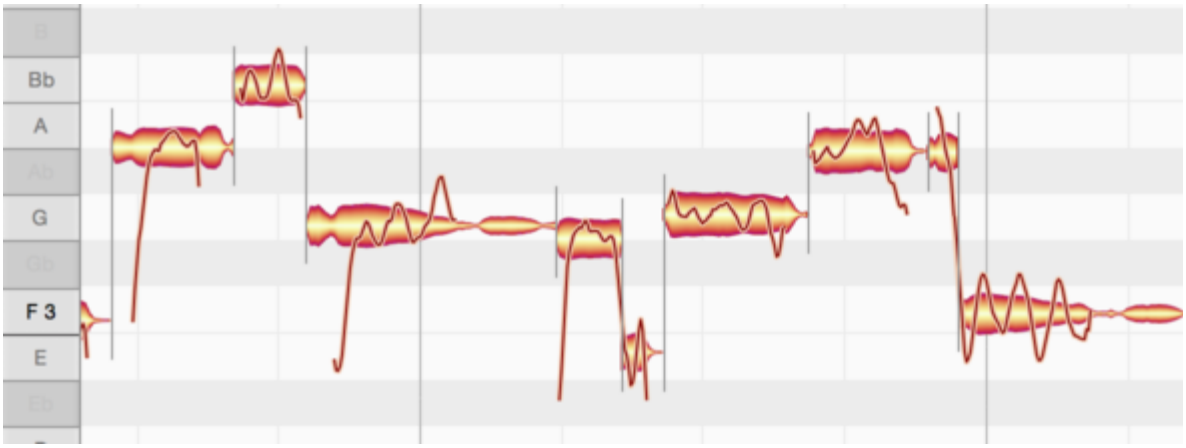
In your ARA-compatible DAW, open Melodyne (using whichever command is provided by your DAW for that purpose) directly on the audio clip(s) you wish to edit with Melodyne. Melodyne will then perform its detection analysis and show you the results in its Note Editor.

Melodyne 5 assistant is suitable for the editing of lead vocals and monophonic instruments as well as drum and percussion tracks, but you can also edit entire mixes with it – using functions such as transpose, quantize and time-stretch.

Checking the algorithm

Melodyne's characteristic blobs represent the notes found in your recording, which you can select, drag and edit using the tools provided. Before you begin, however, there is one thing you must check:

Based on its analysis of the audio material, Melodyne assistant will have chosen to use either its Melodic or its Percussive algorithm. When the Percussive algorithm is used, all the notes are displayed in a single horizontal line; when the Melodic algorithm is used, on the other hand, the vertical position of the notes represents their pitch.



If your audio material is not displayed the way you want, you can select a different algorithm from the Algorithm menu. Please note, however, that if you do this, any editing of the track you may already have done using Melodyne will be lost! That is why, you should always make sure that the correct algorithm has been selected before you begin editing.

Editing

In Melodyne assistant, you will often be working with Melodyne's Main Tool, which can be used not only to change the pitch of notes but also their position in time and their duration as well as to split them. With the other tools, you can alter, among other things, the vibrato, amplitude and formant spectrum of notes as well as their internal timing.



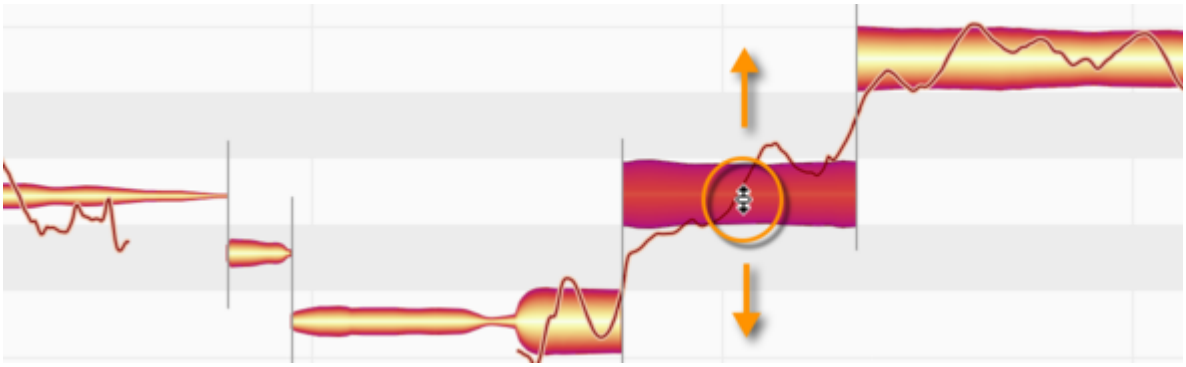
Using the tools, you can edit notes individually or entire selections of notes simultaneously. The Main Tool is used as follows:

To change the pitch of a note:

– Click in the middle of the corresponding blob and drag it up or down. The note will move in steps of a semitone.

– If you hold down the Alt key as you drag, the grid will be deactivated and you will be able to move the note by smaller amounts (in steps of a cent).

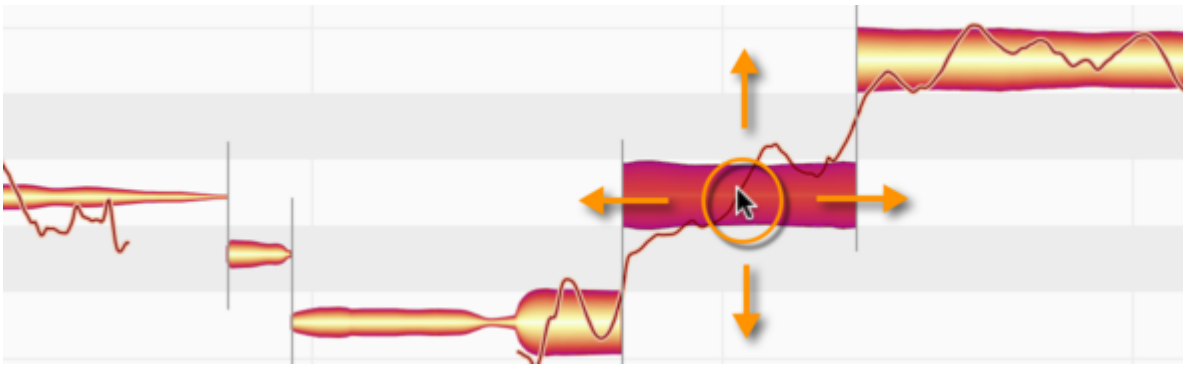
– If it's the right note but simply out of tune ("off key"), double-click on it and it will snap at once to the intended pitch.



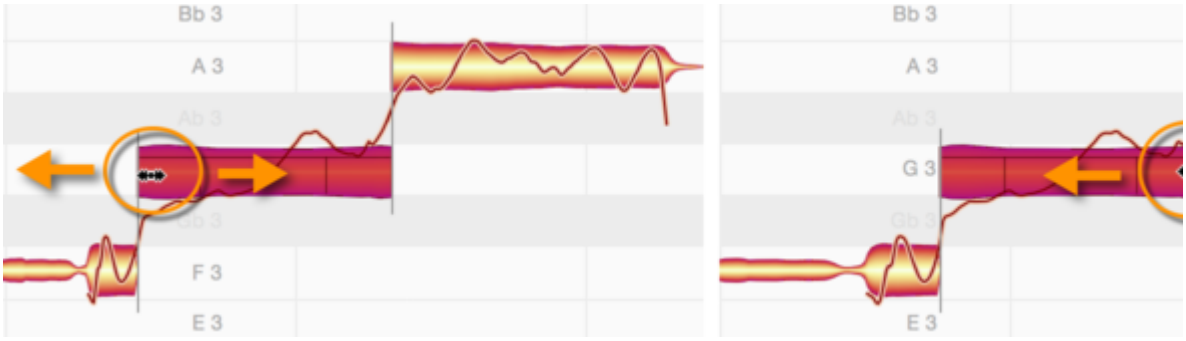
To change the position in time of a note:

– Click in the middle of the corresponding blob and drag it to the left or right. When released, the note will snap to the nearest grid line.

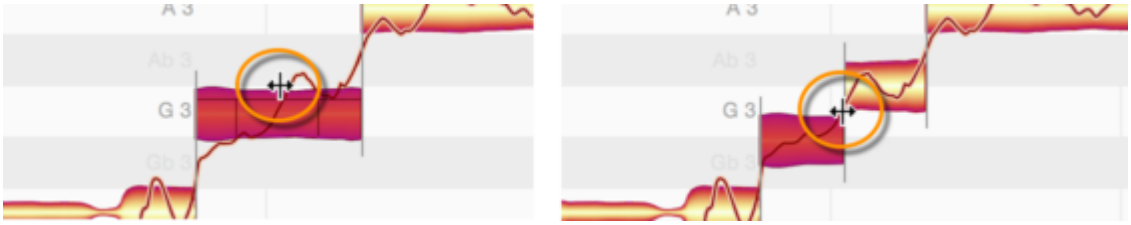
– If, however, you hold down the Alt key as you drag, the grid will be deactivated and you will be able to position the note freely.



To change the duration of a note…
…by making it begin earlier or later: Click the left-hand side of the blob and drag it, respectively, to the left or right.
…by making it end earlier or later: Click the right-hand side of the blob and drag it, respectively, to the left or right.
– If you hold down the Alt key as you drag, this will deactivate the grid, allowing you to position the beginning or end of the note freely.



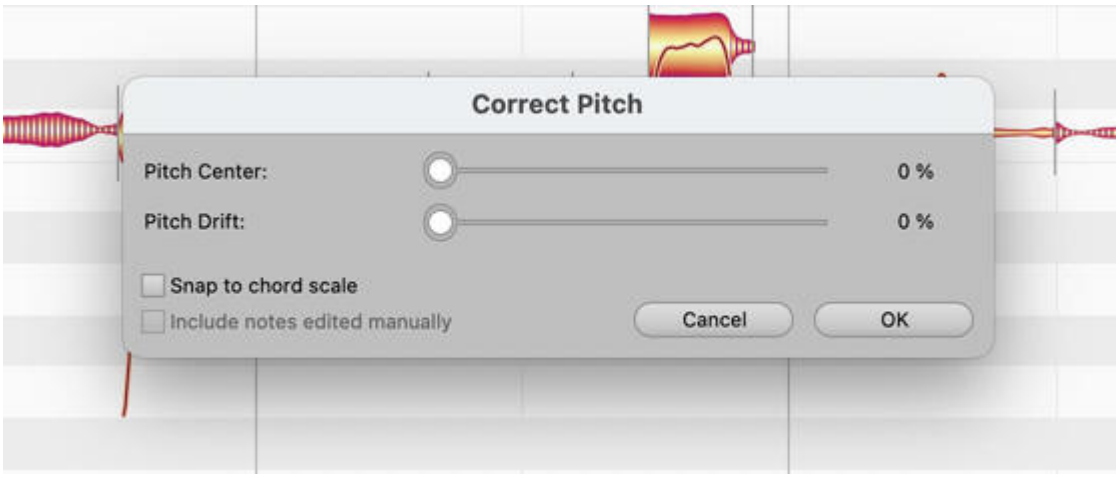
To split a note in two:
– Position the tool at the intended split point – not on but slightly *above* the blob; the appearance of the mouse pointer will then change, and you will be able to split the note with a double click. This can give you greater flexibility when correcting or reshaping notes.
– The note separation that is created can be removed with a double click to reunite the two segments.



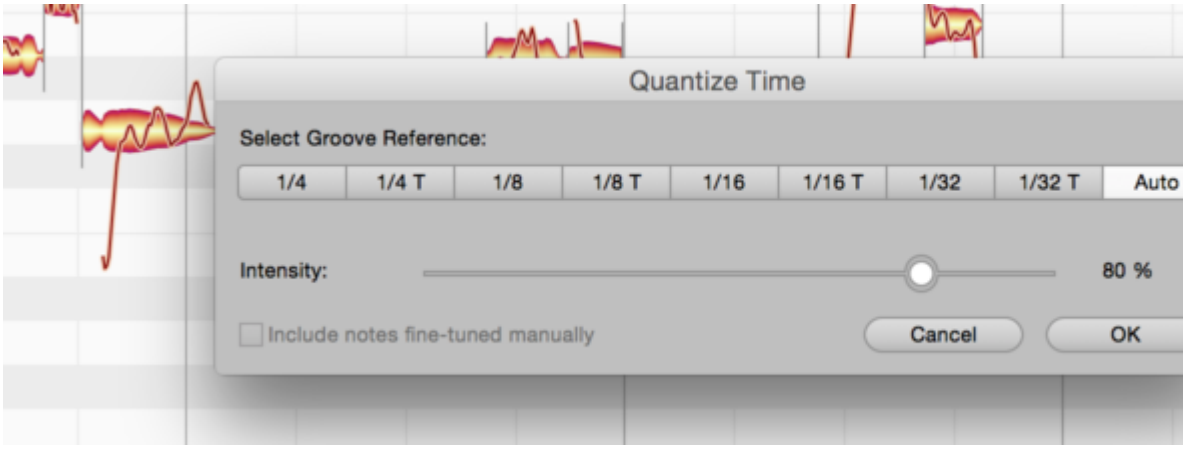
The macros

Whilst the tools are used primarily to solve specific problems with individual notes, the macros allow you to edit multiple notes and even entire recordings in one go. The macros affect only the notes currently selected, unless none are, in which case they affect all the notes of the current audio file. There are three macros:

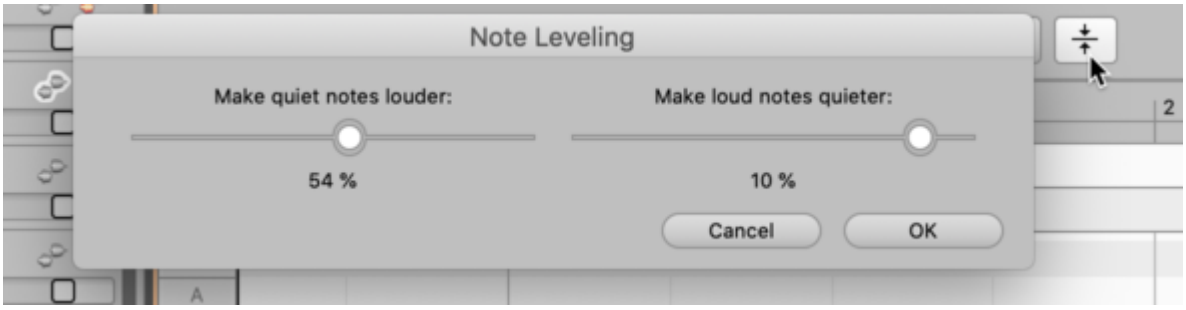
Correct Pitch, which moves notes to, or towards (you decide how far), the nearest semitone. How far they move also depends upon how badly out of tune they were to begin with. With the second slider, you can rein in pitch drift within notes.



Quantize Time moves notes to or towards (you decide how far) either the intended beat or the nearest line of the selected grid.



Note Leveling allows you to make loud notes quieter, or quiet notes louder, or both. In this way, you can smooth out disparities in volume and give your recordings greater homogeneity. It is also the perfect way to optimize input to any compressor after Melodyne in the signal chain.



What else should I read?

In this tour we have covered only the points needed to get you off to a fast and successful start with Melodyne. But there’s plenty more to discover and to learn. Take a look at the list of topics on the left: In the Help Center, you will find each of these topics explained in detail as well as a wide range of video tutorials. You can access these any time via Melodyne’s Help menu.

Melodyne in Cubase with ARA

Thanks to ARA integration, the interaction between Cubase and Melodyne is many times faster, simpler and more powerful. This tour explains all you need to know on the subject.

Required versions and compatibility

To use Melodyne with ARA in Cubase, you require at least Cubase Version 10.0.40 or Nuendo in Version 10.2 as well as Melodyne in Version 4.2.3 or higher. For all the possibilities described here, you require at least Cubase 11 and Melodyne 5.1.

If you open old projects from the pre-ARA era with this program configuration, Melodyne is integrated in the form of the Transfer plug-in, as was usual back then. All your Melodyne editing is preserved and you can continue modifying it. Naturally you can also apply new Melodyne editing to older projects via ARA.

The chord track

Melodyne and Cubase each have their own chord tracks – each with its own advantages: The Cubase chord track can control all the MIDI tracks, whilst the Melodyne chord track can control all the audio files – and even polyphonic instruments.
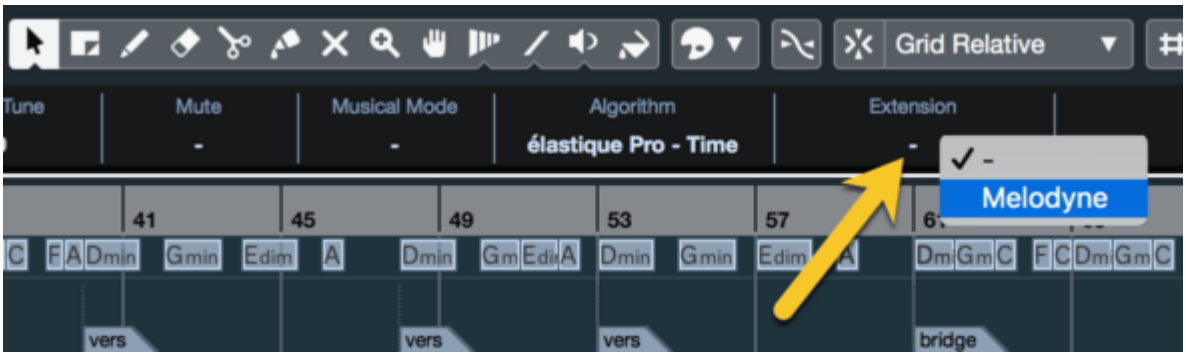
The Cubase chord track can derive its contents from an analysis of previously recorded MIDI tracks but is incapable of analyzing polyphonic audio tracks. With Melodyne, it’s the other way round: Melodyne can recognize the chords in any audio track and generate a lead sheet for it with blinding speed. However Melodyne cannot examine MIDI tracks (unless you have previously converted them to audio signals by bouncing them).

What this means for your workflow is that you will probably want to combine the two chord tracks. Thanks to ARA, this is easily done: You can display the chords from Cubase within Melodyne and in this way quasi-control the Melodyne chord track remotely from Cubase. This gives you full access from the Cubase chord track to both MIDI tracks (directly via Cubase) and audio tracks (from Cubase via the remote-controlled Melodyne).

The return path – which amounts to the remote control or automated filling-in of the Cubase chords by Melodyne, for example when it comes to discovering the chords contained in polyphonic audio recordings – is not yet realized via ARA in the current Cubase/Nuendo versions. You can get there, however, by exporting the lead sheet generated by Melodyne, importing this into Cubase, and using it to fill in the Cubase chord track.

Inserting Melodyne

With ARA, Melodyne is no longer inserted as a plug-in in the channel strip; instead audio events are equipped with it directly. This can be done by right-clicking on the event (and selecting “Melodyne” under “Extensions” from the context menu) or, even more swiftly, via the Info line. You can do this event by event or select multiple events and equip them all with Melodyne simultaneously :



As soon as you do this, Melodyne obtains access to all the audio data (of all the events) and can display their musical contents at once as audio notes that you can edit directly in Melodyne.

Rearranging regions – Melodyne follows

In older versions of Cubase, without ARA, changes in individual events on the Cubase track were not automatically reflected in Melodyne, which meant making the necessary adjustments to the blobs in Melodyne by hand. With ARA on the other hand subsequent actions affecting the events are reproduced automatically in Melodyne.

- Moving events
- Copying or repeating events – Melodyne treats these initially as ghost copies. If, however, you use the command “Convert to Real Copy” in Cubase, Melodyne will then treat each iteration (repetition) as a separate entity.
- Changing the volume of events
- Muting events
- Reducing or extending event boundaries
- Setting fades at event boundaries

More...

Changing what's shown in Melodyne from within Cubase

As soon as you select an event in Cubase, its contents are displayed in Melodyne. If you now select a different event, Melodyne will show the contents of this second event instead. This is the default behavior, but, if you like, you can change it in Melodyne by choosing Options > Follow Selection in DAW.

In Melodyne, you see not only the contents of the current event but also that of the events preceding and following it on the same track (always assuming such tracks exist and that the Melodyne extension has been applied to them as well). The ability to edit freely across event boundaries is very convenient, as it makes it possible to edit entire tracks quickly and efficiently – even tracks that have been pieced together from a large number of events of very short duration.

As an alternative to this Track Edit Mode, Melodyne offers a Clip Edit Mode that allows you to look beyond event boundaries.
More about these two modes…

Transport functions

Thanks to ARA, you can also control playback and cycling in Cubase from within Melodyne. That means fewer mouse movements and lets you to work more swiftly.

Tempo adjustments

Events to which Melodyne has already been added cannot later be set to Musical Mode in order to adapt to changes in the song tempo. The opposite procedure is therefore recommended: First switch on Musical Mode and only *afterwards* add Melodyne to the event. The musical behavior that adapts to any tempo adjustments is then retained at all times; furthermore, this is implemented using the Melodyne algorithms, which, depending on the instrument being edited, result in the eventual sound being better than that of the 'naked' Musical Mode.

Comping

The comping workflow also benefits from ARA. All takes can be optimized at any time without the comping process having to be completed first and set in stone by means of a bounce or audio mixdown.

So you have all Melodyne's possibilities at your disposal to edit the segments under consideration, so as to be sure of selecting at each point in the song the option that is truly the best. Furthermore, you retain at all times an overview over the entire track, however intricate it might be, and no matter how short, and how numerous, the segments of which it is composed. And: Thanks to Melodyne, you can now easily bring problematic take transitions under control.

Discover how to master comping with Melodyne in Cubase/Nuendo here.

And we've put together a collection of more general tips and tricks on comping (in Cubase but not only in Cubase) for you here.

File management

When creating backups or sharing a Cubase song with collaborators, ARA performs all the requisite housekeeping tasks for you. All Melodyne-relevant information, in particular all musical changes made in Melodyne, are automatically part of the Cubase or Nuendo project.
More...

Melodyne Expert Tips

Rich Crescenti is a freelance engineer who works as a Melodyne specialist for our American distributors, writes pro audio articles, interviews and reviews, and conducts numerous courses and seminars, having clocked up over 10,000 hours of classroom instruction time.

Sensho is an audio engineer, music producer and Melodyne specialist that built his career working in recording studios all over Los Angeles. In his work he explores and shares innovative ways for modern production processes.

Look over the shoulders of our experts in the following videos and watch them at work. Benefit from their experience, and draw fresh inspiration. They are working in each case with Melodyne 5 studio. Smaller editions may differ.

Lead vocals

Background vocals

Guitar and bass

Other instruments and mixing

Workflows and techniques

Stefan’s Quick Tips

“Stefan's Quick Tips” are short films, barely one to two minutes in length, but packed with useful tips and neat tricks to help you obtain faster workflows, greater ease of use and – above all – better results from Melodyne. Stefan is not just anyone: He’s part of the Melodyne development team and as Product Specialist shares responsibility for workflow. So if anyone knows, he does!

Stefan will regularly offer a new tip and explain the idea behind it, so you too can become a Melodyne pro. Stay tuned!

Workflow

Editing

Reference manual videos

Here you will find all the videos to accompany the Reference manual, sorted by topic. The videos are in English with subtitles in German, French, Spanish and Japanese. Shown here: Melodyne 5 studio, smaller editions may differ.

Fundamentals and workflow

Tools and functions

Algorithms and note assignment

Tempo

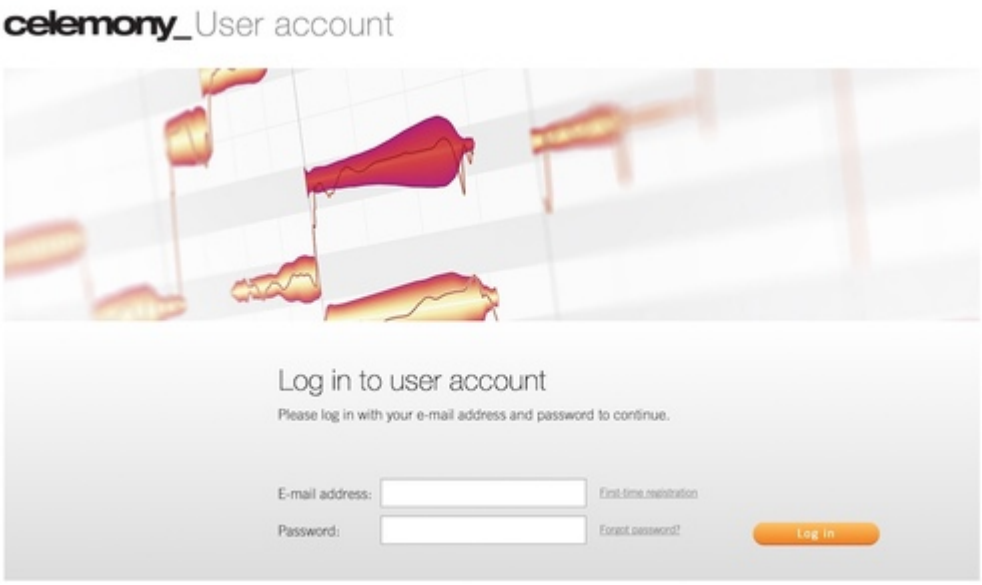
Installation and activation

From this tour, you will learn all you need to know about installing and activating Melodyne. We begin with the basic procedure and the most important terms before outlining further options and details. From the separate tour “Updates and upgrades”, you can learn how updates and upgrades work and what you need to bear in mind when considering them.

Procedure and terminology

Serial number and Melodyne license: Your serial number is a multi-character string that corresponds to your Melodyne license. If you make the purchase in our web shop, we give you your serial number; if you buy it from a dealer, you will get it from them. If you obtain Melodyne essential as part of a bundle, whoever supplied the bundle will provide the serial number as well.

Registration and user account: Your user account is created when you first register a Melodyne license. To do this, simply enter the serial number. When you make the purchase from our web shop, that is part of the procedure. You can then register any further Melodyne licenses via your user account. From your user account, you can manage your Melodyne licenses, choose your newsletter options and download installation programs.



Installation program: When you download the installation program (whether for macOS or Windows) from your user account, it installs the latest versions of the stand-alone implementation of Melodyne as well as of all the various plug-ins.

Activation: In order to run Melodyne on a particular computer, the computer must first be activated for Melodyne. In the course of this process, Melodyne checks the validity of your license data with our server, so an Internet connection is required. You will be prompted to activate Melodyne the first time you launch the program; this only takes a few clicks and you will need your serial number. Please note: Unlike the deactivation process (see below), you can only activate a computer from the computer itself, not from your user account.

Licence, number of activations and workstations: The standard Melodyne license allows you to use Melodyne on *one* workstation only at a time. However, the license does allow you two activations, the second being an emergency one you can use to activate a substitute computer quickly and easily if, for example, your primary computer breaks down in the middle of a production.

If you wish to use Melodyne simultaneously on two or more workstations, you can purchase further activations, converting your standard license into a team license. If you perform an update or upgrade of your team license for which a charge is made, up to four workstations are included for the same price as a single workstation update or upgrade. For five workstations or more, special purchase discounts and update/upgrade conditions apply. You can find out more about these in our web shop.

What files are installed and where

The installation program you download from your user account installs the stand-alone implementation of Melodyne as well as all the various plug-ins. In the process, the following files are placed in the following locations:

Windows 10

VST 3: C:\Program Files\Common Files\VST3\Celemony\Melodyne.vst3

AAX: C:\Program Files\Common Files\Avid\Audio\Plug-ins\Melodyne.aaxplugin

Melodyne stand-alone: C:\Program Files\Celemony\Melodyne 5\Melodyne.exe

Note for Windows users: For its audio processing, Melodyne needs to be able to store temporary files on your hard disk and read them. For this purpose, a directory called: C:\Users\Documents\Celemony\Separations is created. To avoid Windows Defender (virus protection) being invoked every time data is read from this directory – which would slow Melodyne down drastically – an exclusion from Microsoft Defender anti-virus scans is defined for this folder when Melodyne is installed.*

macOS 10.12 (and later)

VST 3: Macintosh HD/Library/Audio/Plug-Ins/VST3/Melodyne.vst3

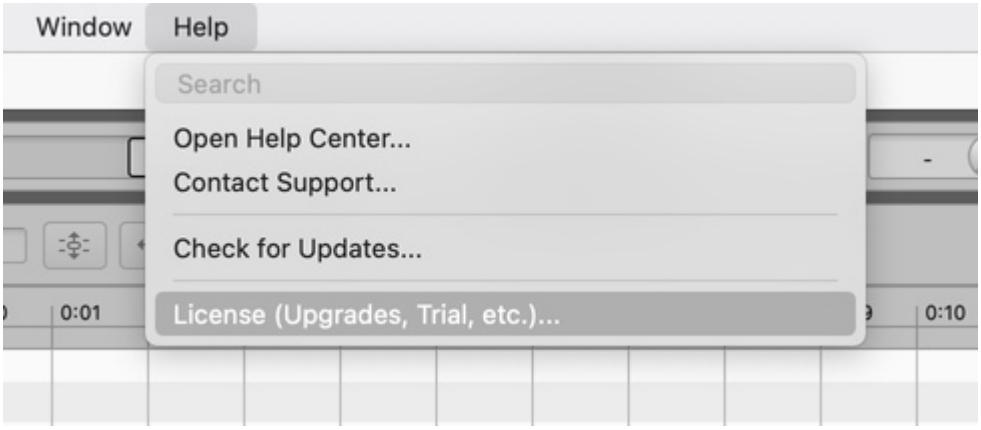
AAX: Macintosh HD/Library/Application Support/Avid/Audio/Plug-Ins/Melodyne.aaxplugin

AU: Macintosh HD/Library/Audio/Plug-Ins/Components/Melodyne.component

Melodyne stand-alone: Macintosh HD/Applications/Melodyne 5/Melodyne.app

Your user account

You can access your user account via the menu of our website, the following link: www.celemony.com/login or by choosing License from Melodyne's Help menu.



In addition to the latest installation program for your Melodyne and your newsletter preferences, you will find in your user account various options for managing your license. There is the option, for example, of deactivating an activated computer or of transferring an activation to iLok (except with Melodyne essential or in the case described above of the emergency activation).

Licence options: Deactivate

Any computer that has been activated to run Melodyne can be deactivated. The activation will then be credited to your user account, so that it can be transferred later to a different computer.

This means that if you have no activations left in your user account but wish to use Melodyne on a new computer, you can simply deactivate another computer that is still active, and this will free up an activation to transfer to your new one. You can switch between computers like this as often as you like. The only restriction is the number of computers involved. If you want to switch activations frequently between a fairly large number of computers, we recommend using the iLok USB copy-protection dongle (see next section).

To deactivate a computer: Log in to your user account via our website or by choosing “License” from Melodyne’s Help menu. If you log in via our website, you must click the “License options” button to get to the page with the “Deactivate” option. If you choose “License” from Melodyne’s Help menu, it will take you to this page directly.



Nice to know: The fact that you can deactivate a computer from any other computer (provided you first log in to your user account) is important, as it allows you to retrieve your Melodyne activation from a lost or stolen computer or from one that has broken down. You can only *activate* a computer, on the other hand, from the computer itself and cannot do it through your user account.

License options: iLok

iLok is a service provided by Pace that we offer as an optional supplement to our computer-based activation system (except in the case of essential, the smallest edition of Melodyne).

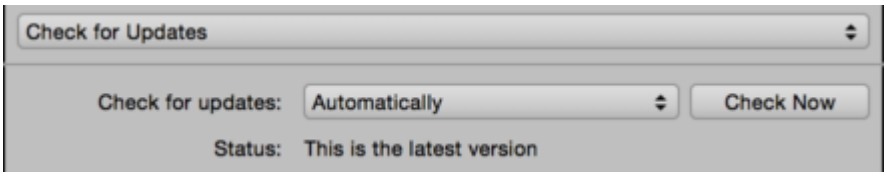
The iLok USB copy-protection dongle is popular because it can store many licenses and be used on different computers. So it allows you to take your Melodyne activation “on the road” with you if you are constantly moving from one computer to the next and want to use Melodyne on each computer in turn.

Pace offers a variety of license-protection solutions. For technical reasons, we only support one of these i.e. activation by means of an iLok USB dongle, which is available from dealers for around 50 US dollars. The two other varieties (computer-based iLok activation and activation via the iLok Cloud) are *not* supported by Melodyne.

If you wish to use iLok, you can transfer your Melodyne activation to your iLok account. Your second Melodyne activation is reserved for our own computer-based activation, as an emergency solution, so to speak, if your iLok is not to hand when needed. Additional activations that you may have purchased for your Melodyne license can also be transferred to iLok. Please note that a Melodyne activation that has been transferred to an iLok account cannot be retrieved. So before transferring an activation, you should make sure you really can, and do wish to, use an iLok USB copy-protection dongle to activate Melodyne.

Checking for updates

Each time you launch Melodyne, it automatically checks to see whether a newer and better version of the program is available for download. If a new version is available, a page giving you details of it will open in your browser and from this you can download the new version.



If you open the “Check for Updates” page of Melodyne’s “Preferences” dialog, you can opt, if you prefer, to check for updates manually (which is done by clicking the “Check Now” button) rather than have Melodyne do this for you automatically at program launch. We recommend you to leave the default setting (“Automatically”) so that you never miss an important update.

Selling your license

Naturally it is possible to sell your Melodyne, but to do so you need to contact our support. Since the person you sell it to will require their own user account with their own access data, we will have to remove your serial number from your user account and also cancel any activations you may have transferred to iLok. Only then can the license be transferred to the purchaser.

Please note : Resale of a Melodyne license purchased by credit card from our web shop is not possible within three months of the date of purchase. This is to prevent possible credit card fraud.

Uninstalling Melodyne

To uninstall Melodyne under macOS, just run the program “Melodyne Uninstaller”, which you will find in the “Melodyne 5” folder within your “Applications” folder. Under Windows, follow the standard procedure for uninstalling applications.

Updates and upgrades

From this tour, you will learn all about updating and upgrading Melodyne. We explain the installation procedure, the Melodyne license and the activation of the program in the tour “Installation and activation”.

Terminology: major and minor updates, upgrades

Minor update: This is a free update containing bug fixes and perhaps new functions of lesser importance. In this case, although the version number is incremented, its first digit remains the same (e.g. from 5.**0.3** to 5.**1.0**).

Major update: This is an update that contains significant new features and is indicated by a change in the first digit of the version number (e.g. from **4**.2.1 to **5**.0.0). These updates are not free of charge. Exception: Melodyne essential, for which even major updates are free of charge.

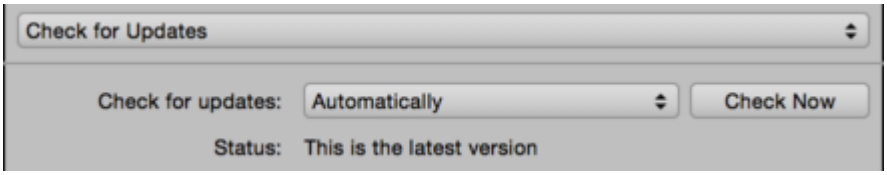
Upgrade: This is a change, for which you do have to pay, from a smaller edition of Melodyne to a larger one with more functions (e.g. from Melodyne essential to Melodyne assistant).

An *upgrade* may also contain a major *update*. For example, an upgrade from Melodyne **4 editor** to Melodyne **5 studio**. It is not necessary to update to editor 5 before upgrading to studio 5.

Checking for updates

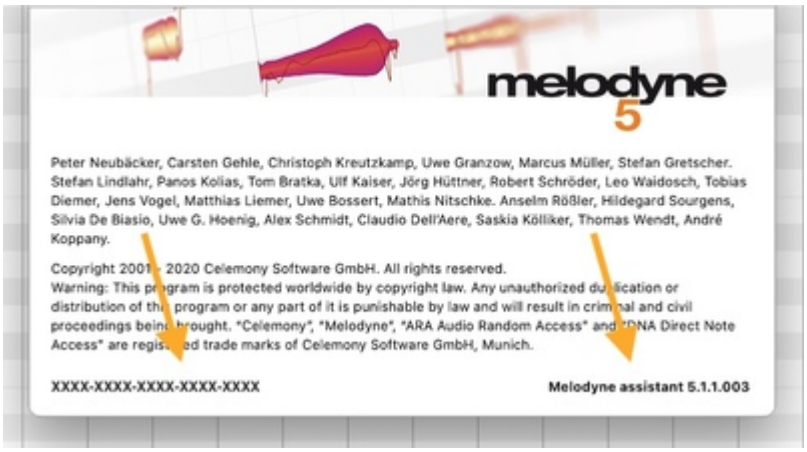
Each time you launch Melodyne, it checks automatically to see whether a new and improved version is available for download. If this is the case, a page will open in your browser giving you details and allowing you to download the new version.

In Melodyne’s Preferences dialog, you will find a page entitled “Check for Updates” where you can switch from automatic checks (the default) to manual checks triggered by clicking the “Check Now” button. We recommend you to leave the default setting (“Automatically”) unchanged, so you never miss an important update.

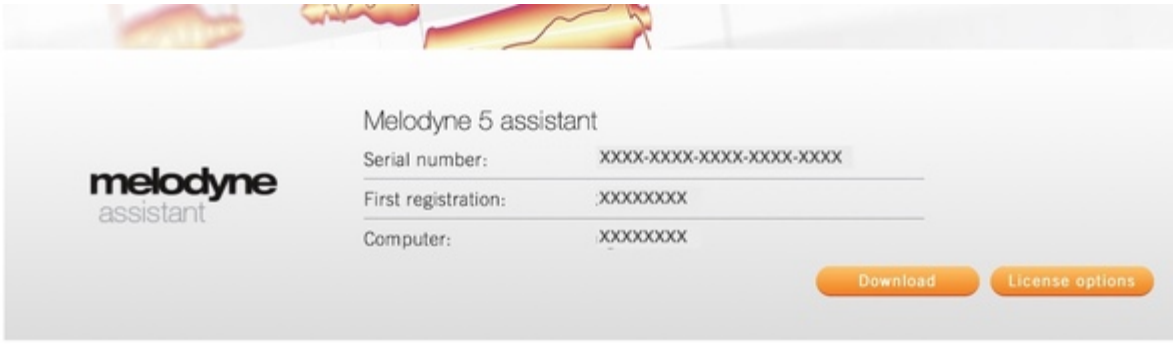


Information about your edition, version and serial number

To discover which version of which edition you have, as well as your serial number, choose Melodyne > “About Melodyne” from the main menu.



The name of your edition and your serial number are also displayed in your user account. There you will also see which basic version you have (i.e. the first digit of your version number: 4, 5 etc.) but not which specific update is currently installed on your computer (e.g. 5.1.0).



How updates and upgrades are performed and what the process involves

When you are notified by Melodyne's Check for Updates function or by newsletter that an update for your Melodyne is available, you will always be provided with a download link for the corresponding installation program. If you learn of an update in some other way or if you have **purchased an upgrade**, you will find the installation program in your user account.

Every update or upgrade requires you to install the latest version of Melodyne. In the case of a free-of-charge *minor* update, that's all there is to it. In the case of a *major* update or an upgrade, on the other hand, you will be given a new license and at the same time your old one will expire. This also means that your old serial number will be replaced by a new one. So Melodyne may also need to be reactivated after the update or upgrade.

When you are reactivating the program after a major update or an upgrade, your old activations will no longer count, because along with your new license you will receive new activations.

A tip about updates: If you are running Melodyne on more than one computer, a major update is liable to involve many changes to the program, some of which may also affect the sound. For this reason, you will probably not want to update Melodyne on the production computer until the projects you are working on there are complete, but you may still want to try out the new version on your laptop. This is not a problem: if you buy an update from Melodyne 4 to Melodyne 5, your activations for Melodyne 4 will not be removed immediately but only after the installation of Melodyne 5. You can update Melodyne on one of the computers and continue to run Melodyne 4 on the other for a transitional period.

iLok when updating or upgrading

With iLok, too, a distinction has to be made between (on the one hand) a *minor* update and (on the other) a *major* update or an upgrade. In the case of a minor update, you don't need to do anything; your iLok USB dongle will continue to work.

With a **major update or an upgrade**, however, you receive a new license, so in both these cases your iLok license must be updated. If you are using iLok, we transfer your new licence automatically to your iLok account, where it replaces the old one.

At this point, action from you is required: To run your new Melodyne, you must then transfer your new Melodyne license from your iLok account to your iLok USB dongle.

Compatibility after an update or upgrade

An update will give you new features and possibilities, but will remain compatible with your existing projects. Please note, however, that we are talking here about *upward* compatibility only: You will be able to open projects saved by your old version of Melodyne in your new one, but you will not be able to open projects saved with your new version of Melodyne in your old one.

In the case of massive leaps, however, such as from Version 1 to Version 5, there will naturally be major differences, as the pace of development at Celemony is unrelenting. New processing methods and bug fixes, as well as new and improved functions, all find expression in higher sound quality – or, to put it in neutral terms, acoustic differences. For this reason, you are advised in case of doubt not to perform this type of major update while you are still working on a project.

Different *editions* of the program are also compatible, provided they have the same version numbers. You can, for instance, open a project created by Melodyne editor Version 5.0.1 in Melodyne essential Version 5.0.1 or even in Melodyne player (a non-activated Melodyne) Version 5.0.1. Everything will sound exactly as it did when it was saved by Melodyne editor, even if some or all of the functions you used to perform the edits in Melodyne editor are not available in Melodyne essential or player.

The reason is that Melodyne editions differ from one another not in the technology they use but in the range of functions they provide. Since Melodyne essential offers fewer functions than Melodyne editor, you will be limited to these when performing any further editing in Melodyne essential of a Melodyne editor project, and no further editing of it at all will be possible using Melodyne player. A wider range of functions, on the other hand, would be available to you if you opened the same editor project in the more powerful Melodyne studio.

Parallel operation of old and new versions after an update or upgrade

This is impossible for technical reasons: DAWs recognize the Melodyne plug-in by its identifier, and this does not change when the product is upgraded or updated. The advantage is that this allows you to update or upgrade Melodyne in the middle of a project and continue working seamlessly. It does mean, however, that you cannot run your old and new versions of Melodyne in parallel inside the same DAW, as they would need to use the same identifier and no DAW will allow the same identifier to be used more than once.

Going back to your old Melodyne

After a major update or upgrade, it is usually not possible to go back to the version or edition of Melodyne you were using previously. However, if serious problems or incompatibilities arise in your system after an update or upgrade, please contact our support. We’re sure to find a solution.

What upgrades are available and what benefits do they bring

You can upgrade from any edition of Melodyne to any of the larger editions – even directly from the smallest, Melodyne essential, to the largest, Melodyne studio.

You will find an overview of all updates and upgrades in our web shop. Under “More Info...”, you can discover which key functions and features not offered by your current edition the upgrade will bring you.

You will find a table comparing the various editions here.

Inserting and preparing to use Melodyne

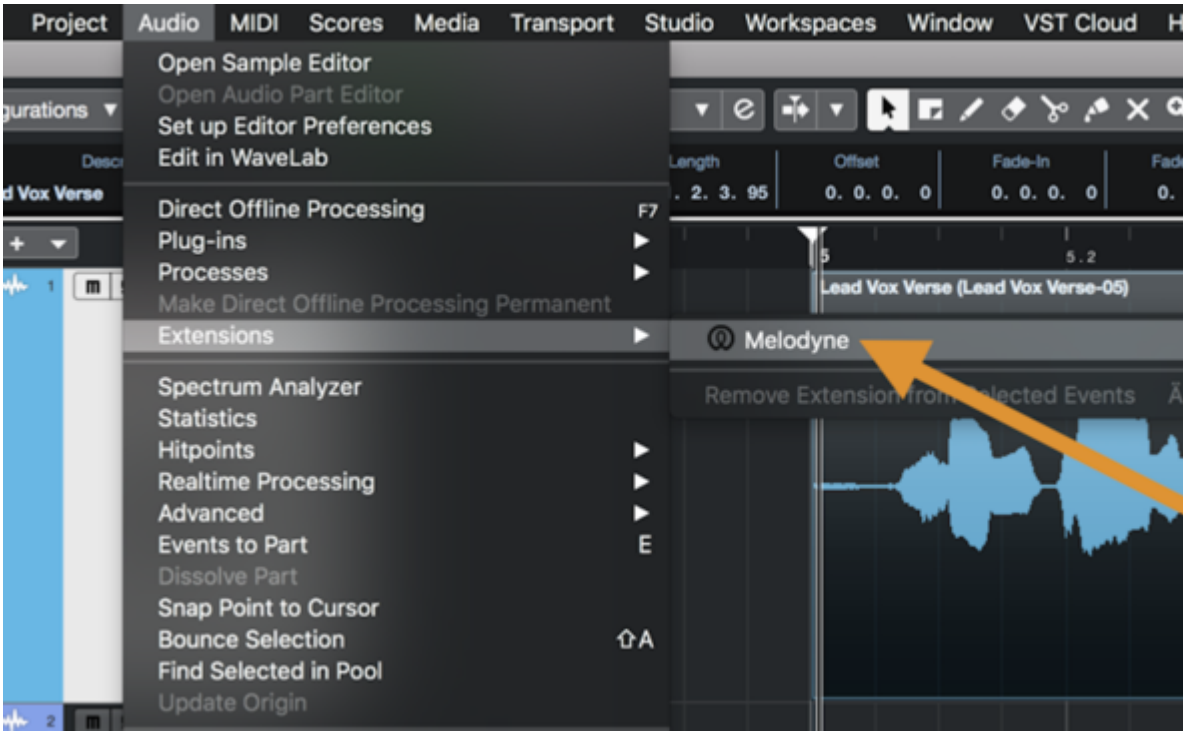
The following tour will show you how to integrate Melodyne into your Cubase project.

Please note: For the ARA integration of Melodyne, Cubase 10.0.30 or later is required. The two programs then communicate via ARA2, which is the new, expanded version of ARA Audio Random Access.

Opening Melodyne

To edit audio events with Melodyne in Cubase, first select them, then:

- either choose *Audio > Extensions > Melodyne* from the menu;
- or activate Melodyne in the Extension field of the info line.



Alternatively, Melodyne can be employed as an extension in the track header,
in which case Melodyne will automatically be applied to *all* the events on the track. The corresponding items in the Extensions menu and info line will then be superfluous and will remain grayed out.



Whichever of the three methods you choose, Melodyne will be launched automatically, the audio events in question analyzed, and their notes displayed. By default, Melodyne opens in the bottom pane of the Cubase window unless you have altered your Editor settings, in which case it opens in a separate Editor window.

To toggle between these display modes, click the arrow button in the top right corner of the editor. Whenever the bottom pane or Editor window are closed, just double-click on the event and it will reopen and the notes will be displayed in Melodyne as before.

When Melodyne is applied to the entire track, a small extension symbol is displayed in the track header.



When Melodyne is opened from the menu or info line, the audio event in question carries the same symbol.

Bypassing or removing Melodyne, comparing edits

To remove Melodyne from an event, select it and choose Audio > Extensions > Remove Extensions from Selected Events. Alternatively, in the Info line, under “Extension”, just deselect Melodyne. A further alternative is to restore the setting “No extensions” in place of “Melodyne” in the track header; Melodyne will then be removed from all the audio events currently selected on the track in question.

If you remove Melodyne, obviously, you will lose any changes you have made with it.

The Compare switch

The Compare Switch in Melodyne offers you an elegant way of comparing the current state of your editing with the original state of the audio file.

Unlike a typical bypass function, however, Melodyne’s Compare function reverses not only the acoustic, but also the visual, consequences of all editing. It is also the case that:

- the Compare switch affects all audio events equipped with Melodyne, regardless of track and whether or not they are currently displayed in the Note Editor;
- the effects of all changes you have made to the notes yourself using Melodyne are nullified, but not actions performed in Cubase such as muting or moving events.

Tip: Working with long files

With ARA, Melodyne always analyzes in its entirety the audio file that is being referenced by an audio event, even if you have narrowed the event’s boundaries before using Melodyne. This has several advantages. It allows you, for instance, to widen the event boundaries again later without any further analysis by Melodyne being required.

It does mean, however, that there can be a noticeable hold-up when Melodyne is first used on an audio event; this would be the case, for example, if the audio file being referenced by the event was a live recording lasting several hours (which Melodyne would analyze with the Polyphonic algorithm).

So if you just want to edit part of such a recording, we recommend that, before you begin editing with Melodyne, you convert the passage in question into a new event (Audio>Bounce Selection). This will then be based on a new, shorter audio file that Melodyne will be able to analyze that much faster.

Saving, archiving and passing on your songs

Thanks to ARA, when saving and archiving your work, it is not necessary to give special thought to Melodyne, because all the files used by Melodyne (which it will need again when the song is next opened) are stored in the Cubase project.

If, however, you are passing on your Cubase project to third parties – for remixing, for example – you do then need to make sure that the recipient also has at their disposal Version 4.2.2 (or higher) of Melodyne. Which actual edition of Melodyne the recipient possesses is not relevant. If, for example, they only possess the “small” Melodyne essential, where you have been working with the “big” Melodyne studio, they will still hear all your Melodyne editing exactly as if they too had the studio edition. Naturally, if they propose to modify or add to your Melodyne editing of the song, they will be limited in in the actions they can perform to the function set of the edition they possess.

If not, it cannot hurt to render your tracks before sharing your work with others. This may be advisable for other reasons too, such as any use you may have made in your project of third-party plug-ins.

Buffer Size

Buffer size

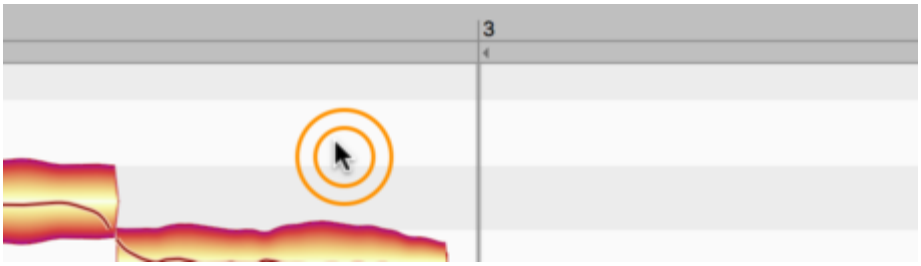
We recommend an audio buffer size of 1,024 samples. Smaller values lead to a marked increase in the CPU load. Should you require a smaller buffer, e.g. when you are performing the headphone mix directly in your computer and not monitoring via an external channel strip or mixer, switch all instances of Melodyne during the recording to bypass Reactivate Melodyne as soon as you begin editing your new track.

Playback, navigation, zooming

This tour will give you an overview of the functions Melodyne offers for navigation and the playing back of audio.

Local playback in Melodyne

If you commence playback from the DAW, using its bar ruler, for example, or transport buttons, the full arrangement plays back. The DAW mixer then determines the balance between tracks. The same is true if you commence playback by double-clicking on the Melodyne ruler. It is also possible, however, to “solo” Melodyne (i.e. for Melodyne to playback on its own); we call this “local playback”. With ARA integration, this local playback is started by double-clicking in the background of the Note Editor.



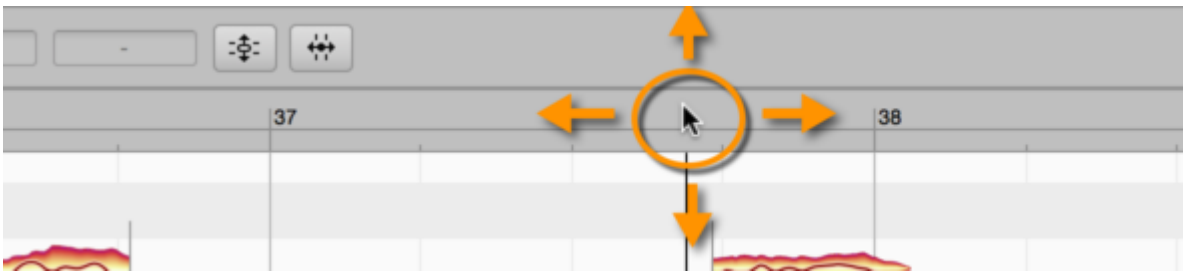
Local playback in Clip Edit Mode: Here, a significant difference arises at the clip borders between this mode of playback and playback in the DAW: During DAW playback, you hear only what lies within the clip borders selected in the DAW. If any notes are incomplete, due to a poorly positioned clip border slicing off the start or end of the note, this is immediately obvious during DAW playback. During local playback, on the other hand, you can hear material lying beyond the borders of the clip (i.e. in areas with a gray background).

This allows you to check out what the result would be if you were to move the clip borders in the DAW. It can also be useful if, for instance, you wish to use the rest of the track – i.e. the material lying outside the clip as currently defined – as a “note supply” from which to “pinch” notes, by copying them and pasting them into the clip you are working on.

Controlling playback, scrubbing and zooming using the Time Ruler

- Double-click in the Melodyne Time Ruler to start the DAW playback from the corresponding place.
- Double-click in the editing background of Melodyne's Note Editor to start Melodyne only (local playback) from the position in question.
- [Alt]-double-click in the Time Ruler plays back only the current note selection in both the DAW and Melodyne.
- [Alt]-double-click in the editing background of the Note Editor plays back only the selected note segment and only in Melodyne.

These functions can also be triggered during playback.



If you double-click again in the Time Ruler while the playback is in progress, the playback will stop and the playback cursor will move to the point clicked.

A single click in the Time Ruler moves the playback cursor to the point clicked. If you do this while playback is in progress, instead of halting, playback skips to the position clicked and continues from there. If you do it while playback is halted, the playback cursor moves to the position clicked but playback remains halted and only resumes if you double-click in the Time Ruler.

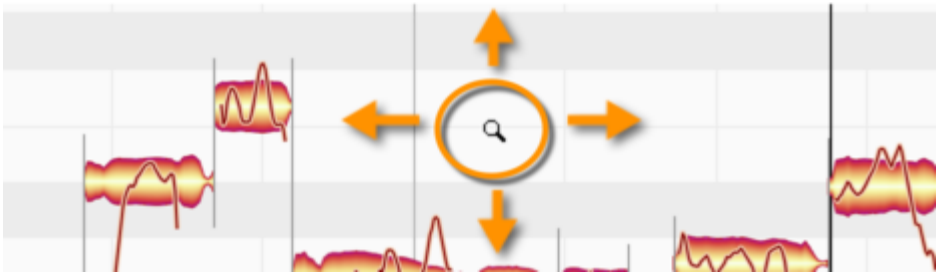
When playback is halted, you can scrub through the audio material by clicking and dragging in the Time Ruler.

By dragging upwards or downwards, you can zoom the display at the current position. Scrubbing and zooming can be used in combination, allowing you to navigate and position the cursor intuitively, setting the zoom factor at the same time.

Scrolling and zooming in the Note Editor

Select the Scroll Tool (the hand icon) from beneath the main tool or hold down the [Command] and [Shift] keys to move the display area with the mouse.

Select the Zoom Tool (the magnifying glass) from beneath the Main Tool or press [Command]+[Alt] to zoom the display with the mouse. You can zoom horizontally and vertically at the same time – with different levels of intensity in each case.

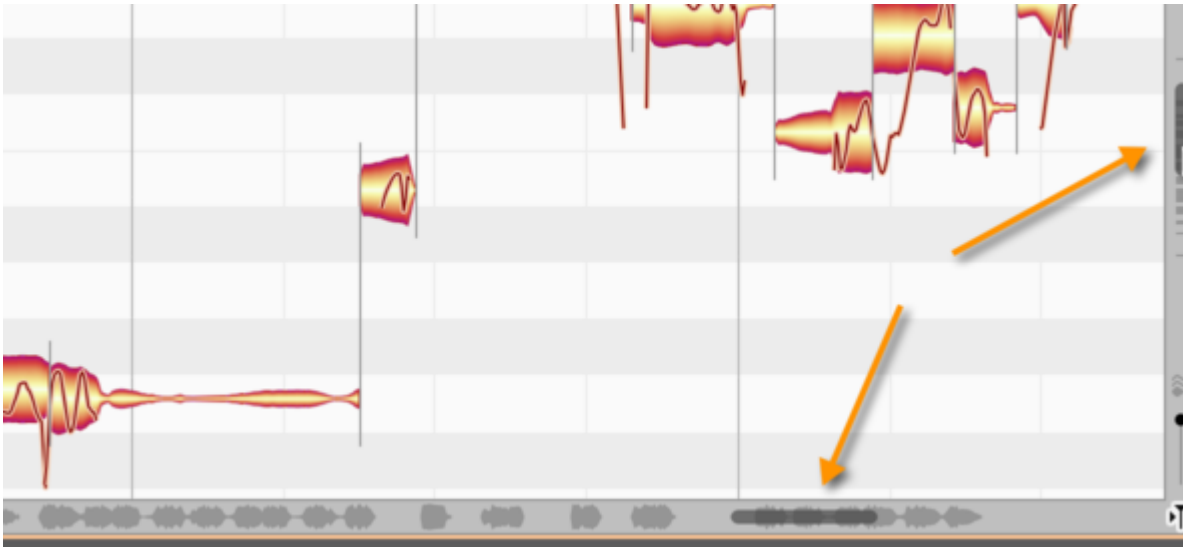


[Command]+[Shift]+double-click zooms in on one blob or several (if several are selected). A corresponding double-click in the editing background returns you to the previous zoom level.

If your hardware supports the corresponding functions, you can also scroll and zoom with the mouse and trackpad:

- The mouse wheel and swiping with two fingers on the trackpad can be used for horizontal and vertical scrolling.
- Pinching with two fingers on the trackpad zooms the display simultaneously on the horizontal and vertical planes.

Drag the horizontal or vertical scrollers (i.e. the scroll boxes or ‘thumbs’) to move the display. The horizontal scroller contains a miniaturized image of the contents as an orientation aid.

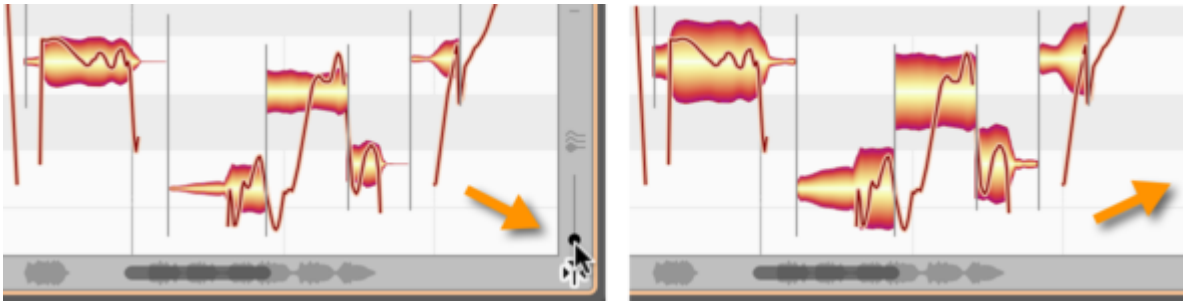


Drag the ends of the scroller to zoom the display.

If you are editing a particularly long audio file, you may find the reduced size of the scroller makes it difficult to achieve the desired zoom resolution. In that case, you can zoom in further by holding down the [Command] and [Alt] keys whilst dragging in the edit pane or else by dragging vertically in the Time Ruler.

If you pull one end of the horizontal or vertical slider as far as it will go and hold it, you can increase the vertical or horizontal size of the area displayed. This can be useful in the plug-in, for example, when you have only transferred the first three bars (measures) of your material but wish to insert something at bar 20.

Double-click in the center of the scroller to zoom in or out just enough to ensure that all the blobs are displayed. If cycle mode is active, double-clicking on the horizontal scroller zooms the display just enough to ensure that the entire contents of the cycle range are visible.

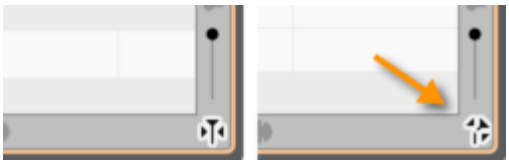


Use the slider in the bottom right-hand corner near the Note Editor to alter the height of the blobs. This does not alter their volume. Your likely motive will be to obtain a clearer view of material containing a lot of particularly quiet or particularly loud notes.

A note about automatic scrolling in the Note Editor
If you have selected one or several notes, Melodyne assumes that you wish to see and edit them, and exercises the requisite restraint by deactivating the auto-scroll function temporarily. Only when you deselect the notes (for example, by clicking in the background of the Note Editor) and restart the playback does the display resume its pursuit of the playback cursor.

Similarly, if you move the horizontal scroller so far during playback that the playback cursor actually disappears from the screen, automatic scrolling will be deactivated. Stopping and restarting in this case will reactivate the auto-scroll function.

If automatic scrolling has temporarily been deactivated, the auto-scroll icon in the bottom right-hand corner of the Note Editor takes the form shown here.



Navigation and zoom functions

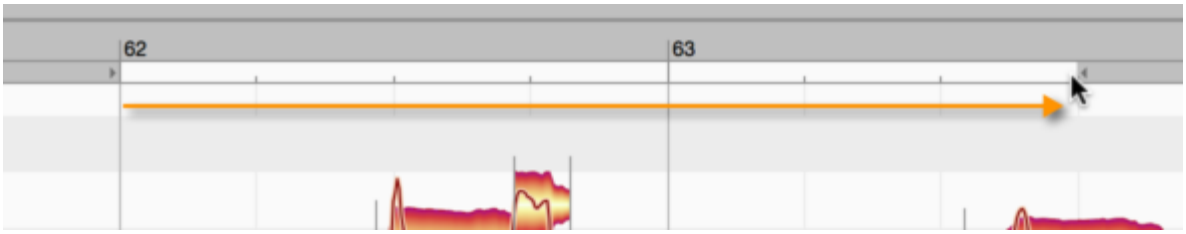
- To resize the window (also in Plugin), drag the bottom right corner
- Hold down the [Command]+[Shift] keys and drag the editing background of the Note Editor to move the area displayed
- Use the mouse wheel to scroll up and down or else (holding the [Shift] key) left and right
- A two-finger swipe on the trackpad can be used to scroll the display
- A two-finger pinch on the trackpad can be used to zoom the display.
- [Command]+[Alt]+drag in the Note Editor serves to zoom the display horizontally and/or vertically
- Drag vertically in the Time Ruler to zoom in on the area indicated
- Press [Command]+[Alt] and use the mouse wheel to zoom both axes simultaneously
- Press [Command]+[Alt] and double-click to zoom in on a blob or the current selection of blobs
- Press [Command]+[Alt] and double-click in the editing background to restore the previous zoom setting
- Drag the scrollers to move the display horizontally or vertically
- Drag the ends of the scroller to zoom the display horizontally or vertically
- Pull the left- or right-hand ends of the horizontal slider as far as they will go to increase the length of the section displayed (important in the plug-in e.g. when you have only transferred the first four bars and are able to navigate only in this area but wish to insert something at bar 20)
- Double-click the scrollers to zoom in or out horizontally or vertically until all notes are displayed
- The slider in the bottom right-hand corner governs the height of the blobs

Cycle mode

In Melodyne's cycle mode, a selected passage is repeated endlessly.

Defining the cycle range

To define a cycle range, click and drag in the lower part of the Time Ruler. If, as you do so, you hold down the [Alt] key, the Time Grid will be ignored, allowing you to position the start and end points (which we call the "cycle locators") freely.

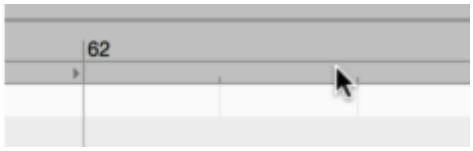


Please note that when ARA is operational, the DAW's cycle and that of Melodyne are firmly coupled: If you change the one cycle, you simultaneously change the other one as well.
In the case of Pro Tools (from Version 2022.9 upwards), this means that when you change the length of the loop in Melodyne, you control remotely the edit selection in Pro Tools too.

Switching cycle mode on and off

Double-click on the cycle range in the narrow strip immediately below the Time Ruler to toggle cycle mode on and off. When cycle mode is active, the cycle range is shown in dark grey





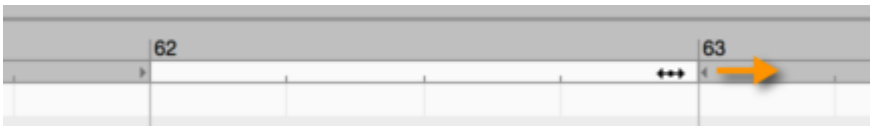
In the stand-alone implementation of Melodyne, you can also switch cycle mode on and off from the transport bar.



It is also possible by choosing File > Preferences > Shortcuts to define a keyboard shortcut for toggling cycle mode on and off.

Changing the length of, and moving, the cycle range

Drag the right- or left-hand locators to alter the length of the cycle range. If, as you do so, you hold down the [Alt] key, the Time Grid will be ignored, allowing you to position the locators freely.



Drag the middle of the cycle range to move it ‘en bloc’ to the left or right. If, as you do so, you hold down the [Alt] key, the Time Grid will be ignored.



If you [Shift]+click near either of the cycle locators, it will move to the designated position. If, as you do so, you hold down the [Alt] key, the Time Grid will be ignored.

Defining the cycle range using a blob selection

To move the cycle locators to the beginning and end of the current blob selection (snapping to the grid) hold the [Shift] key and double-click anywhere in the cycle range. If you hold the [Alt] key as well as the [Shift] key as you do this, instead of snapping to the grid, the locators will be placed at the beginning of the first, and end of the last, blob in the selection.

Display and other options

Melodyne offers for the user interface and working in the Note Editor various options that allow you to adapt the appearance and behavior of the program to your tastes.

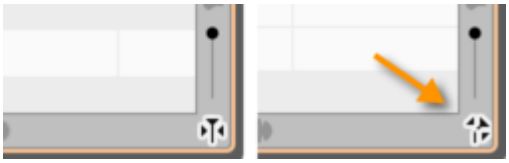
Showing and hiding elements of the user interface

Melodyne's user interface can be adapted to a variety of different work situations and demands. You will find the means of doing so in the Options menu as well as the interface itself.



- “Show Info Pane” (A): Shows/Hides the info pane.
- “Show Scale Ruler” (B): Shows/Hides the Scale Ruler.
- “Pitch Grid Settings” (C): Offers the choice between various options for the Pitch Grid.
- “Time Grid Settings” (D): Offers the choice between various options for the Time Grid.
- “Auto Scroll” (E): When this option is selected, the display in the Note Editor follows the playback cursor. (See also the note below.)
- “Track Edit Mode” (F): Shows the notes of all the regions/clips on the track.
- “Clip Edit Mode” (G): Shows only the notes of the region/clip currently selected.
- “Tempo Dialog” (H): Offers various options governing the way tempo adjustments are performed.
- With the “Keys” (I) and “Chords” (J) switches, you can show or hide the Key and/or Chord tracks.
- The “Compare” switch (K): This facilitates acoustic and visual A/B comparisons between the edited and original state of the notes.

A note about automatic scrolling in the Note Editor:



If you have selected one or several notes, Melodyne assumes that you wish to see and edit them, and exercises the requisite restraint by deactivating the auto-scroll function temporarily. Only when you deselect the notes (for example, by clicking in the background of the Note Editor) and restart the playback does the display resume its pursuit of the playback cursor.

Similarly, if you move the horizontal scroller so far during playback that the playback cursor actually disappears from the screen, automatic scrolling will be deactivated. Stopping and restarting in this case will reactivate the auto-scroll function.

If automatic scrolling has temporarily been deactivated, the auto-scroll icon in the bottom right-hand corner of the Note Editor takes the form shown here.

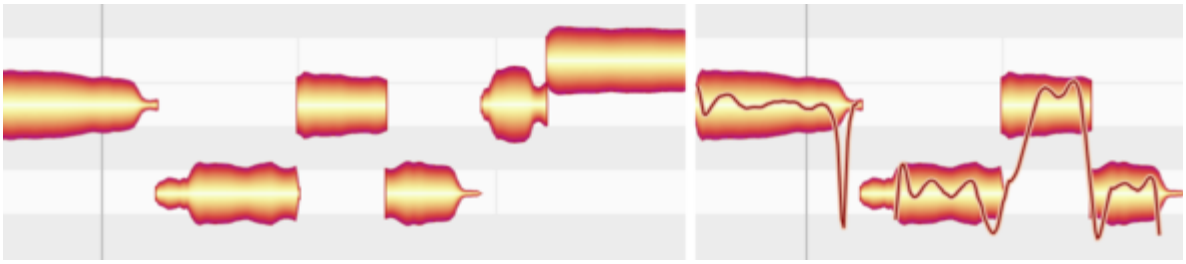
All the options described below relate to the Note Editor and are found by choosing Options > Note Editor Options from the main menu or by clicking the cog icon in the top right-hand corner of the Note Editor.

Please note that these options can be selected independently for Edit and Note Assignment modes.

Show Pitch Curve

If you check the option Show Pitch Curve, a thin line tracing the exact pitch of the tone at each instant will be superimposed on the corresponding blob.

On the left, you can see the ‘naked’ blobs (with none of the Note Editor display options selected) and on the right, the same blobs with the Show Pitch Curve option checked.

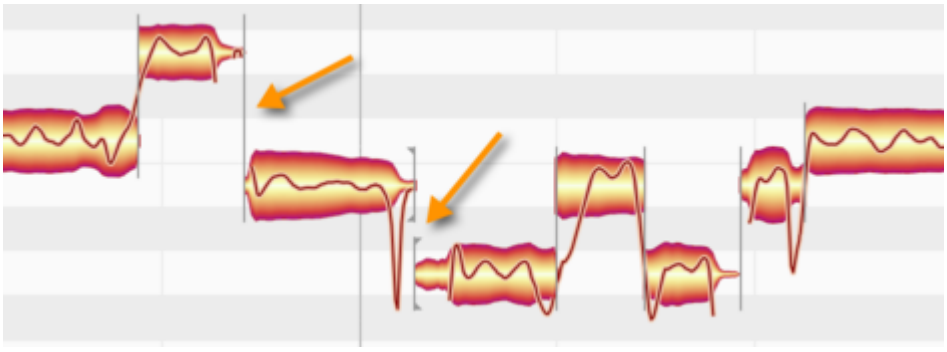


Regardless of whether or not this option is checked, the pitch curve will be displayed whenever the Pitch Tool is selected.

Show Note Separations

If you select the option Show Note Separations, gray vertical lines appear at the beginnings and endings of notes indicating their limits or separations.

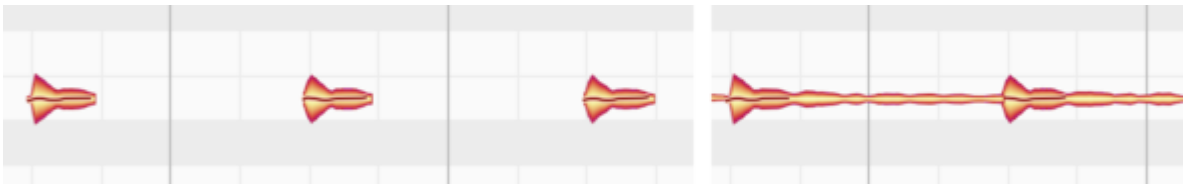
Note Separations are either shown as lines (soft separations between connected notes) or thin brackets (hard separations).



Note separations are always displayed when the independent Note Separation Tool is in use, regardless of whether or not the menu entry is checked.

Show Note Tails

In the detection and display of notes, Melodyne editor draws a distinction between the notes themselves and their tails – notes being the events of musical relevance and tails depicting the non-musically-determined fading-away of the sound. The share of the reverberation ascribed to a given tone, for example, is reflected in its tail. The Show Note Tails option allows you to decide whether the reverberative phase of notes should be displayed or hidden. This is likely to depend upon whether you prefer to concentrate upon their musical or their acoustic aspects.

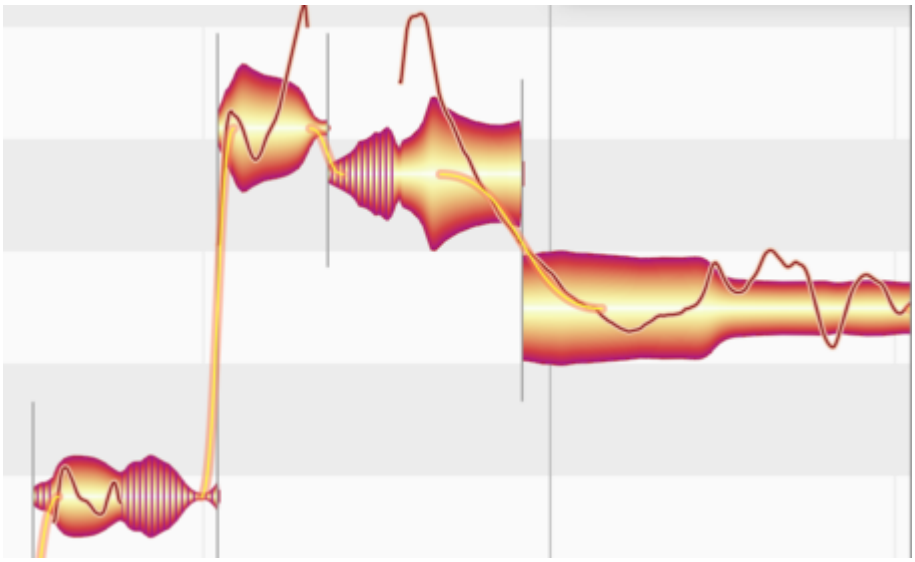


If the tail is not displayed, the end of the musically relevant part of the note provides the handle you can drag with the Time Tool to make the note longer or shorter. Any reverberation present will in this case automatically be governed by the changes made. This display option serves to provide a clearer overview of the intended musical events.

If the note tail is displayed (assuming it has one), it is this that provides the handle for the Time Tool. Show Note Tails is the option most suitable when what is sought is as authentic a picture as possible of the sounds actually heard – including any reverberation present.

Displaying sibilants

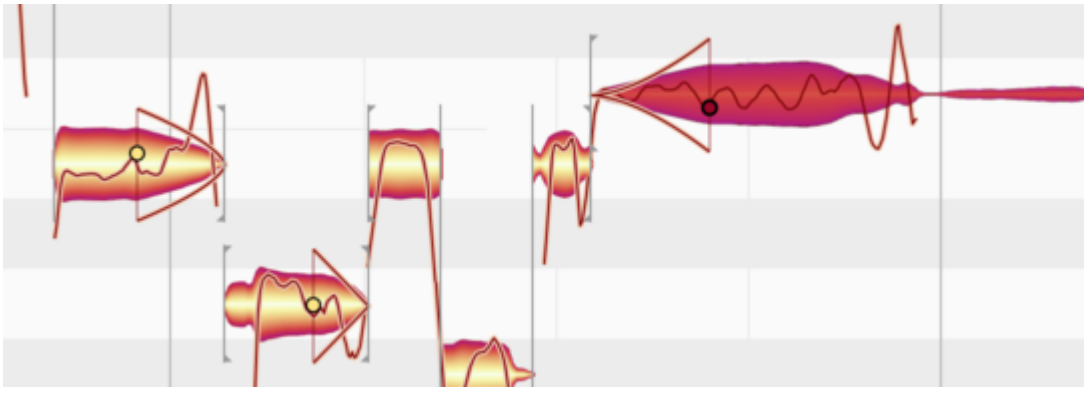
If you check the option “Show Sibilants”, the presence of sibilants (usually “s” sounds or breath noise) is indicated by hatching.



When the Sibilant Balance Tool is selected in normal edit mode, or the Sibilant Range Tool is selected in Note Assignment Mode, the sibilants are invariably hatched, whether this option is checked or cleared.

Displaying fades

If the “Show Fades” option is checked, the control elements belonging to the Fade Tool are displayed beside any notes you have previously edited using the Fade Tool.

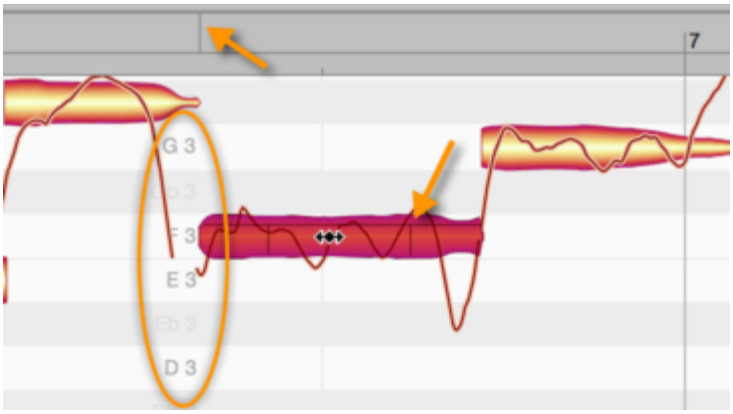


When the Fade Tool is selected in normal edit mode, the control elements in question are invariably displayed, whether this option is checked or cleared.

Show Blob Info

With the option Show Blob Info, you can elect to show or hide a variety of display elements designed to facilitate working with individual notes.

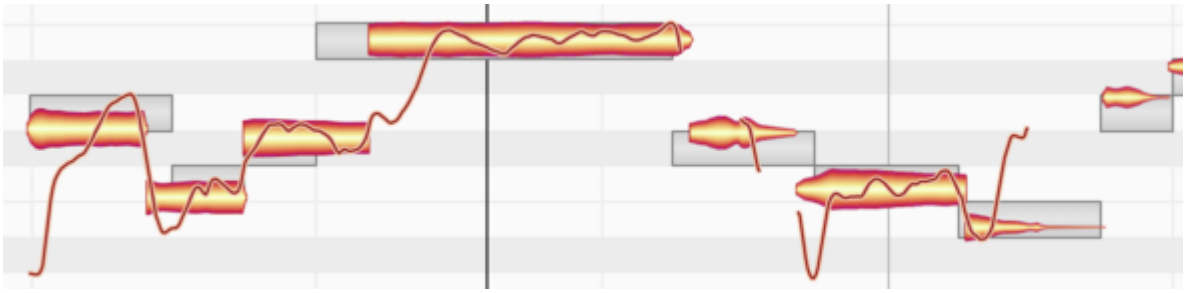
The most striking of these elements is the Local Pitch Ruler that appears directly in front of any note over which you move the mouse pointer. Within the blob itself, thin lines mark the drag zones for the context-sensitive tools.



If you drag a blob when the Show Blob Info option is checked, a vertical line also appears in the Time Ruler aligned with the exact start of the note. This makes more precise positioning possible.

Show Intended Notes

If you check the option Show Intended Notes, gray frames appear around each blob.

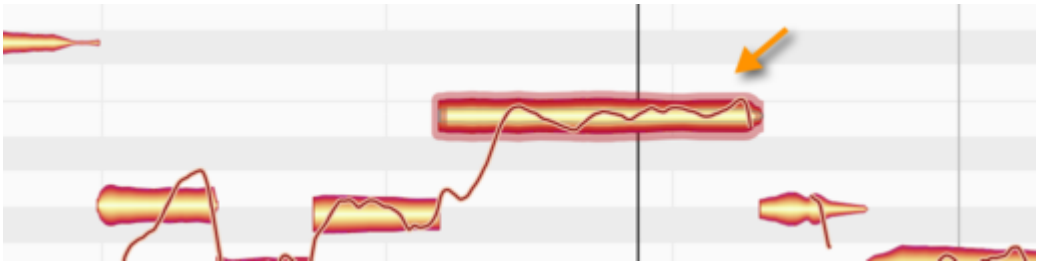


These invariably lie directly on the semitone and coincide exactly with a gridline. They represent, in other words, Melodyne's assumptions (based on its own analysis of the audio) as to the intended pitch of the note and its intended position within the measure or bar. These assumptions generally turn out to be correct, but are not inevitably so. They are to be thought of as suggestions.

The frames also display the positions in pitch and time towards which the notes in question will gravitate if partial quantization is applied to them with the macros, which are also the positions they will snap to if you double-click on them with the Time Tool or Pitch Tool.

Highlight Notes During Playback

With this option, you can select whether or not you would like your eye to be drawn to the note currently playing back. Highlighting is mainly useful when the screen is thick with notes.



Monitor When Editing Blobs

When you shift the pitch of blobs in the Note Editor with this option selected, Melodyne plays for the purpose of orientation the sound of the note at the position originally clicked. You can turn this acoustic feedback on or off.

Show Clip Borders

This option is only visible when you are using ARA. It allows you, if you wish, to hide the gray lines between the clips in Track Mode to obtain a clearer overview of the material in the Note Editor. This is especially useful when the track you are examining contains a large number of clips and you have zoomed the display a long way out.

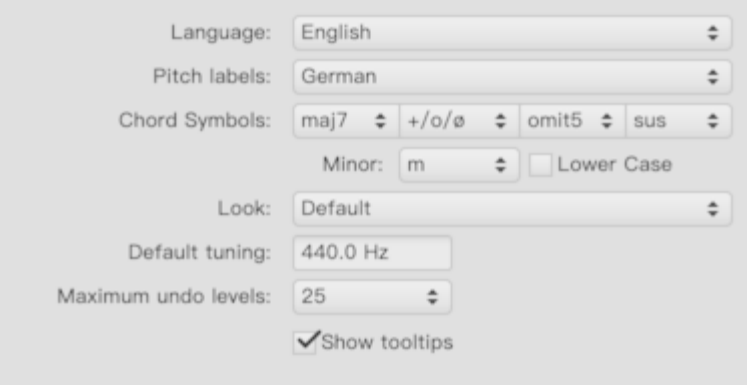


Preferences and keyboard shortcuts

From the Preferences property sheet, you can select fundamental options governing the modus operandi of Melodyne as well as define a number of keyboard shortcuts.

Opening the window and user interface settings

In the plug-in implementation of Melodyne, you open the Preferences property sheet from the Settings menu; in the stand-alone implementation, choose Preferences from the program (macOS) or File (Windows) menu. The settings available in the stand-alone implementation differ slightly from those offered by the plug-in.



The following user interface options, however, are available in both implementations of Melodyne. Any changes you make in either implementation apply to both.

- Language: Determines the language of the user interface.
- Pitch labels: Determines which system is used to name the notes – i.e. (descending chromatically) English (C, B, Bb etc.), German (C, H, B etc.) or Latin (Do, Si, Sib etc.).
- Chord spelling: Here you can choose the spelling convention used on the Chord Track.
- Appearance: Here you can select between different contrast settings for the user interface.
- Default tuning: Determines the default frequency of the reference pitch A4 for newly created documents.
- Maximum undo levels: Melodyne allows you to undo up to 100 actions. The default value, however, is 25. You can, if you wish, increase this value, which will consume more RAM, or you may prefer to reduce it, if memory is running short.
- Show tooltips: Once you are thoroughly familiar with Melodyne, you may prefer to hide the tooltips, i.e. the explanatory text that appears as you move the cursor over the various icons and other elements of the user interface.

The audio cache

On the Audio Cache page of the Preferences dialog you will find the following two options:

- Audio cache: This shows the location of the audio cache Melodyne uses for its work.
- Audio cache size: This allows you to adjust the size of the cache.

The cache is used to store files Melodyne needs temporarily. The size of the files generated depends on the audio files being processed as well as upon the algorithm Melodyne is using for the detection.

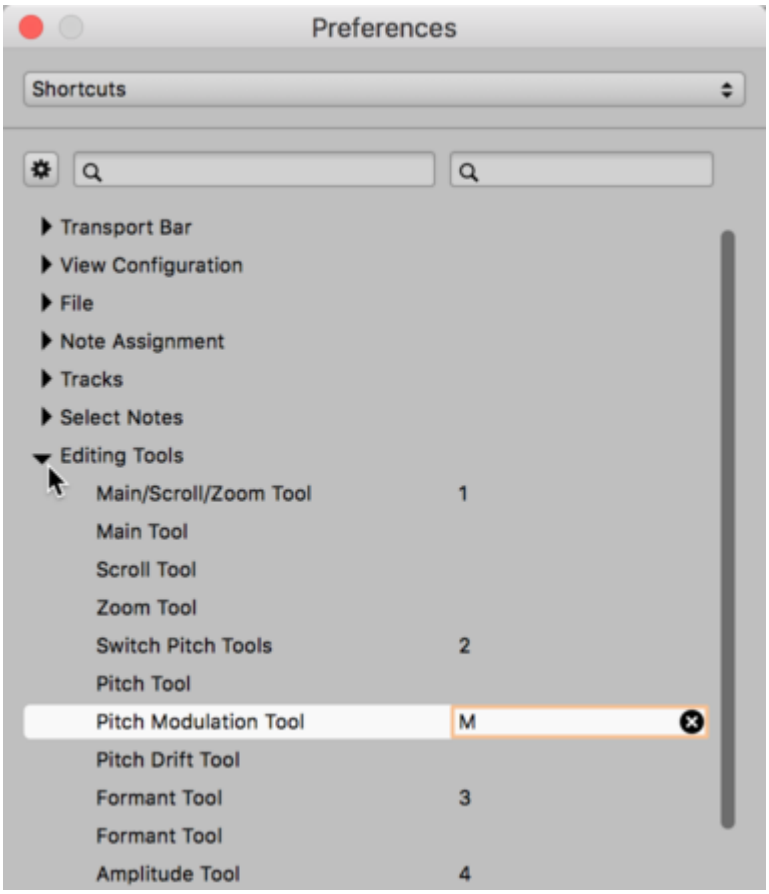
If these files are deleted and the Melodyne project that created and was using them is later opened again, they have to be recreated, which, obviously, means it takes a little longer to open the project. If, on the other hand, the files are still available, Melodyne will just carry on using them as before.

You can adjust the size of the cache. If, when the program is next opened, the cache is full, Melodyne frees up space automatically for fresh data.

Please note: The location of the audio cache is predetermined and cannot be altered:
Windows: C:\Users\USERNAME\Documents\Celemony\Separations.
macOS: /Users/USERNAME/Library/Caches/com.celemony.Melodyne/Separations

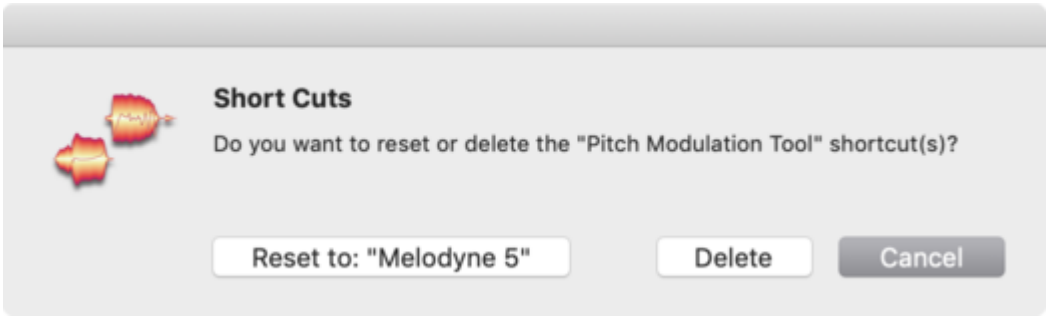
Shortcuts

From the “Shortcuts” page, you can assign keyboard shortcuts to a large number of Melodyne functions and commands. The functions and commands in question are grouped according to category; click on the triangle alongside a given category to see a list of all the functions it includes. The following screenshot, for example, shows all the commands associated with the editing tools.



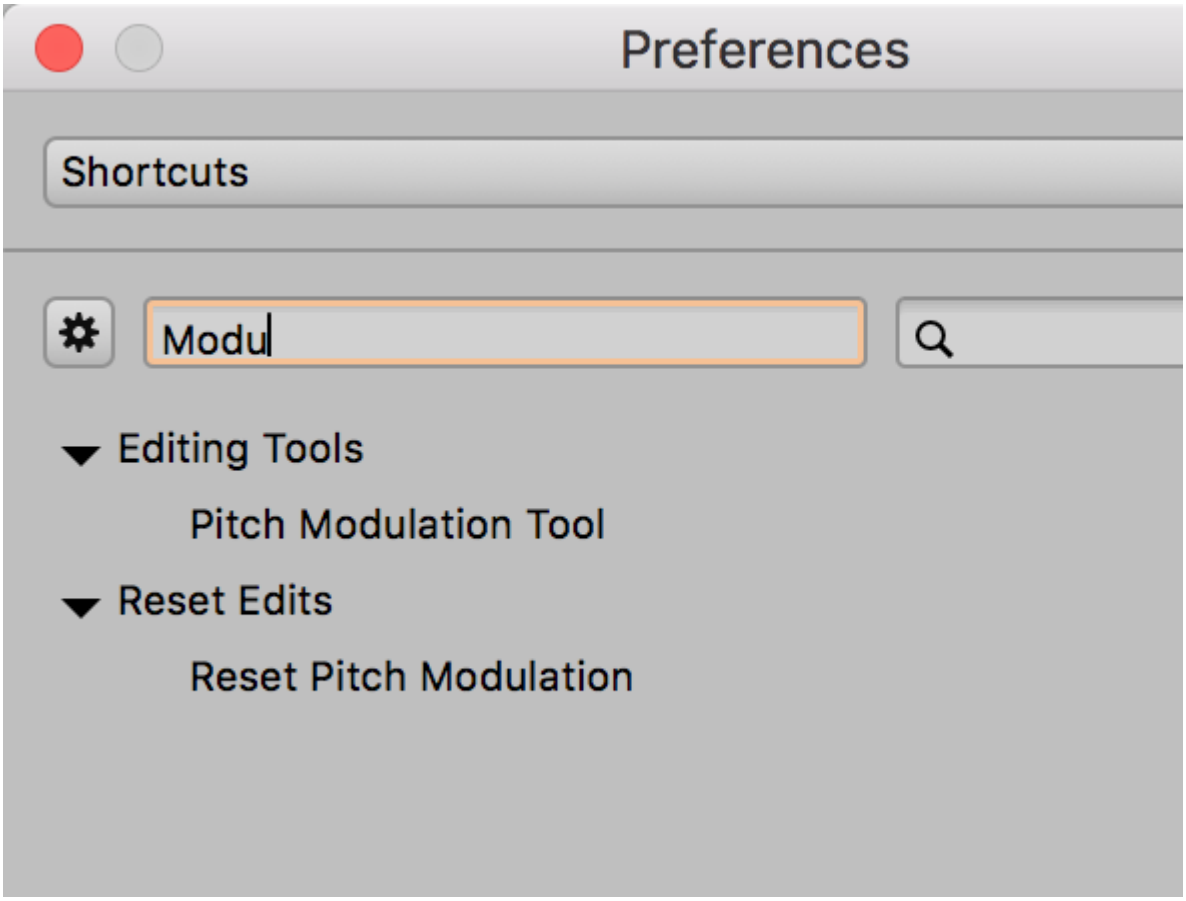
Click on a command (“Pitch Modulation Tool” in our example) and then press the key or key combination you wish to assign to it. Melodyne will remember your choice, so any time you press the key or combination in question, this will activate the Pitch Modulation Tool. Repeat the procedure for as many commands as you like.

To the right of each key combination assigned, you will see an “x”. If you click on this, you can choose one of the following functions:



- “Delete”: This cancels the assignment, so it will no longer be possible to invoke the command in question using a shortcut.
- “Melodyne 5”: This restores the default shortcut for the command in question. (In the case of many commands – namely those for which there *is* no default shortcut – choosing “Melodyne 5” here will have the same effect as choosing “Delete”).

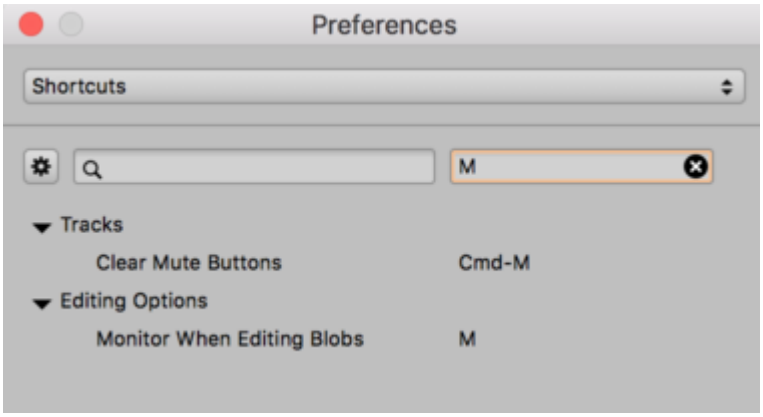
As an alternative to opening and closing the categories and scrolling through list of commands, you can find the command you’re looking for by typing in the *left-hand* search box. This rapidly narrows the choice and can save time. You don’t have to type the entire name of the command; just typing “Modulation”, for instance, throws up two search results:



If you change your mind, just click on the “x” in the left-hand search box and the original list will be restored in its entirety.

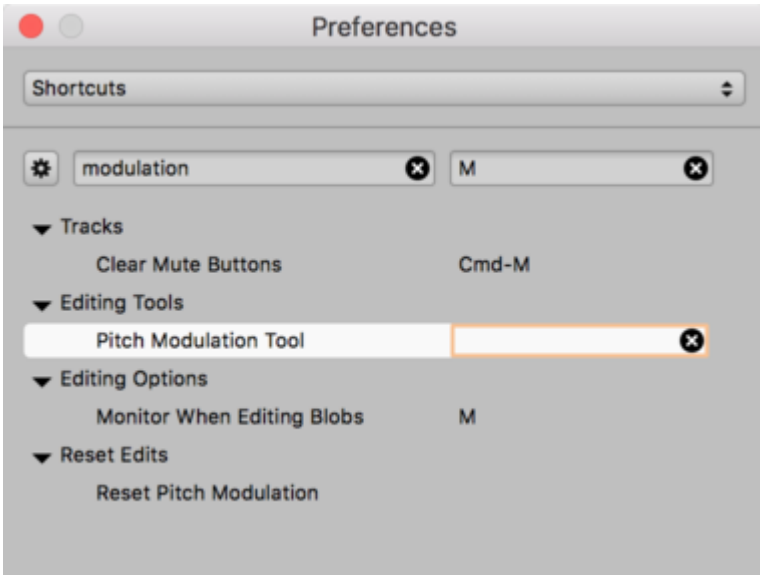
As well as searching by command or function name, you can search for the keys or key combinations already assigned; you do this using the *right-hand* search box. Here, too, an incomplete entry can yield multiple search results, which is very helpful in practice.

For example, suppose you wish to assign a keyboard shortcut to the command that activates the Pitch Modulation Tool. In that case, [M] (i.e. the “M” key on its own, standing here for ‘modulation’) would appear to be the obvious choice; or, if that key’s already taken, perhaps [Shift][M] or [Cmd][M]. To find out, just type “m” in the right-hand search box, and you will see what your options are:



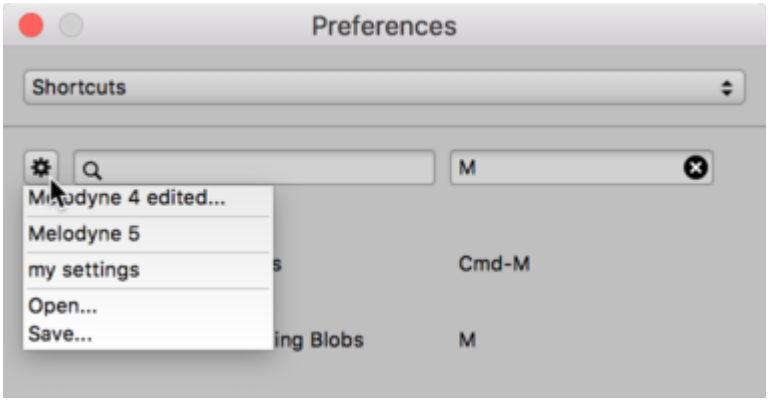
[M] on its own, as you see, has already been assigned, but the combinations [Alt][M] and [Shift][M] are still available.

You could also combine both fields, like this, for example:



This makes it child’s play to find a suitable shortcut. And, naturally, in our example, you could still opt for [M], even though it’s assigned by default to another function; it appears in your filtered list to make it easy for you to reassign it, if you choose to do so.

You can save your preferred shortcut assignments as a set and also load custom-designed sets, including one with keyboard shortcuts that correspond to those of Cubase. To manage all such sets, use the gear/cog menu at the top left.



- "… edited": This shows you which set of shortcuts you are currently using. If it says "Cubase", for example, and nothing more, this means that the set of shortcuts currently loaded is the one designed for the Steinberg DAW of that name and that you have not yet modified it in any way. If, on the other hand, it said "Cubase (edited)", this would indicate that, after loading the set designed for Cubase, you had made certain changes of your own. In such cases, you might wish to save the set under a new name (see below).
- "Melodyne 5": Click here to load the factory default shortcuts for *all* commands and functions. If you do this, any unsaved assignments of your own will be lost.
- "Open" and "Save": These commands allow you to load an existing set of shortcuts or save the changes you have made to the hard disk. By saving your preferred shortcut assignments, you can take them with you when you change studio and load them into Melodyne there.

When you use the Save function, Melodyne suggests you store your shortcuts in the following folder:

macOS:
/Users/Shared/Library/Application Support/Celemony/Shortcuts/Melodyne5

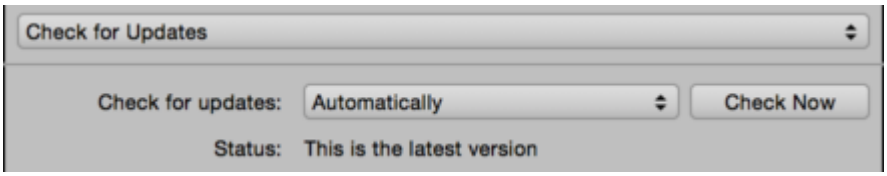
Windows:
C:\ProgrammData\CelemonySoftwareGmbH\Shortcuts\Melodyne5

The advantage of storing your shortcuts in the folder suggested (give them a name such as "MyShortcuts") is that they will then appear in the list and be readily to hand at all times.

If, on the other hand, you're travelling to a different studio where you will be working on a different computer, you should simply ignore the folder suggested and save your shortcuts to some other location, such as a USB stick or your Dropbox folder.

Check for Updates

On this page, you can determine whether Melodyne checks for updates automatically or manually i.e. only when you click the ‘Check Now’ button, which you can do at any time.



Audio characteristics and algorithms

For the display and editing of different types of audio material, Melodyne employs different algorithms. Here, we outline which algorithms are available and for which types of audio material each is used.

The detection process

Melodyne analyzes the audio material to find the notes it contains and offer them to you for editing. We call this process “detection”.

In the course of the detection process, Melodyne itself takes a view as to what kind of material it is confronted with and decides which algorithm to use for the display and playback of the notes. You can tell which algorithm is selected at any given time by the check mark in the Algorithm menu as well as by the blobs in the Note Editor.

A brief overview: Which algorithm for which type of material?

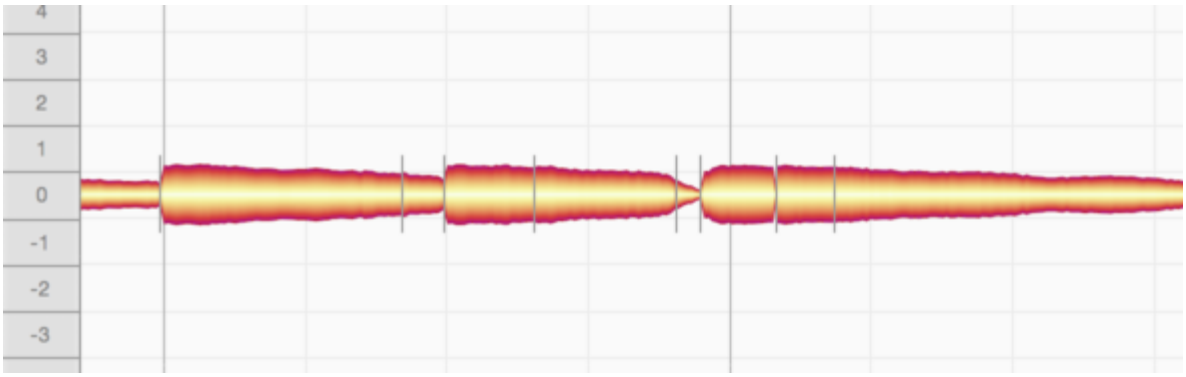
To obtain the most suitable and detailed editing possibilities, for the following sound sources, the following algorithms are generally used:

- Singing, speech, saxophone, flute, monophonic bass etc.: **"Melodic"**
- Drum and percussion sounds or loops, and other percussive sounds with no significant pitched components: **"Percussive"**
- 808-kicks and -toms, tabla and similar percussive sounds with a pitched component: **"Percussive Pitched"**
- Polyphonic instruments of all kinds, loops featuring multiple instruments, and complete mixes, that you wish to time-stretch, quantize or transpose: **"Universal"**

The Universal algorithm

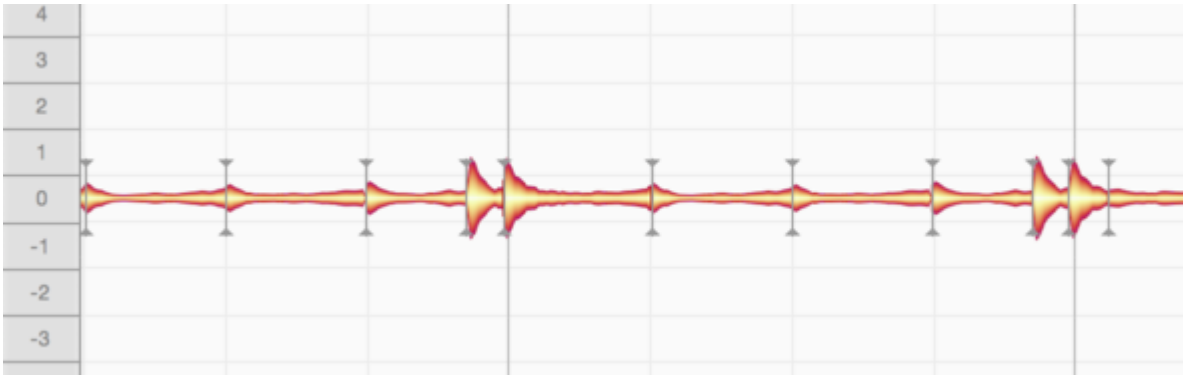
The Universal algorithm is particularly suitable for complex signals containing both percussive and tonal elements. If, for example, you wish to alter the pitch, timing or tempo of an entire piece of music, this algorithm will deliver the best sound quality.

The Universal algorithm, like the Percussive one, displays all the detected notes at the same pitch. The Pitch Ruler displays no note names, merely relative values for the semitones, and the scale functions are deactivated. Please note that with files that have been detected using the Universal Algorithm, the Attack Speed Tool cannot be used. Attack speed handles will therefore not be displayed for the corresponding blobs and the Attack Speed field in the Note Inspector will be grayed out. Please note that “Universal” is never used automatically for the detection; it must be selected manually if required.

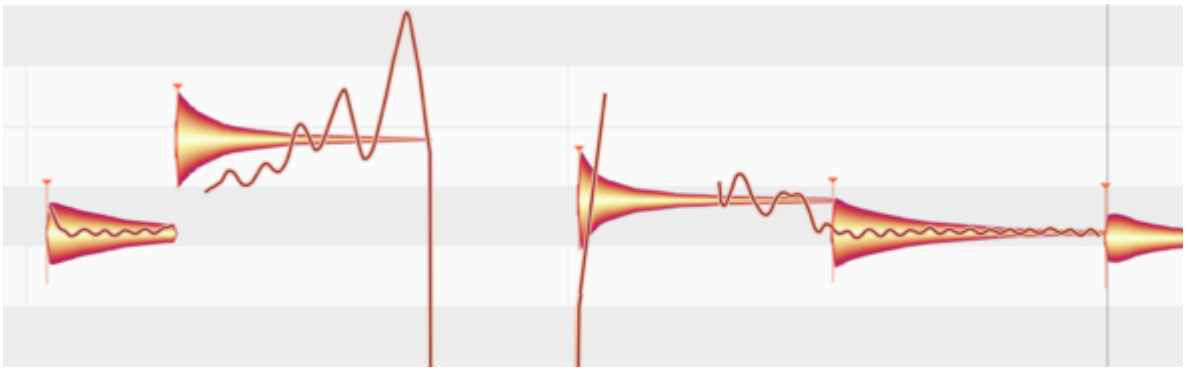


The “Percussive” algorithms

The **"Percussive"** algorithms are suitable for recordings of drums and other percussion instruments but also noise and atmospheric effects as well as other material in which Melodyne cannot detect any clear pitch in the sounds. In this case, successive drum strokes (for example) are distinguished, but they are all displayed at the same pitch. The blobs can still be raised or lowered, however the Pitch Ruler does not display the names of any notes but simply relative values in semitones. The scale functions are deactivated.



Some percussion instruments, however, *do* have what can be understood as a melodic capability, in that many of their sounds have a perceived pitch. Certain 808 kick drums, for example, are clearly tuned to the bass. The berimbau, too, for all the percussive character of its sound, plays recognizable melodies – as does the tabla. It is for such instruments – instruments that are in fact percussive yet still somehow also melodic – that the **"Percussive Pitched"** algorithm is intended. Here the detected sounds are separated and assigned to individual pitches. This makes it easy to adjust the tuning of an 808 kick drum, berimbau or tabla to the piece of music in question.



Whilst the Percussive and Universal algorithms are similar in terms of the way the blobs are handled and displayed – just as the Percussive Pitched and Melodic algorithms seem similar at first sight – the two percussive algorithms in fact operate in a different way internally from their optical “twins”, as they are optimized for various aspects of percussive sounds and consequently deliver their most convincing sound quality when dealing with material of a predominantly percussive nature. When dealing with non-percussive sources, however, such as the human voice, guitars, pianos and so forth, they are at a distinct disadvantage compared with the other algorithms, which are optimized for sounds with a distinct pitch.

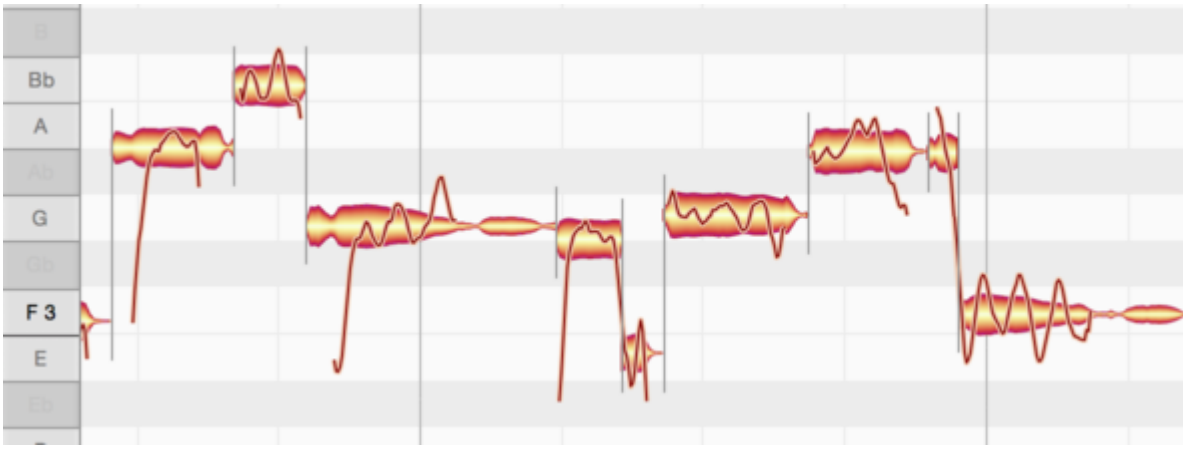
In case of doubt – with instruments seeming to fall (or perhaps alternate) between the stools “percussive” and “melodic” – the best policy is to try each algorithm in turn.

Another distinctive feature of the “Percussive Pitched” algorithm, which it shares only with the “Melodic” algorithm, is that Melodyne is able here to detect, display and permit the editing of sibilants. With the “Melodic” algorithm, however, this happens automatically, whereas with the “Percussive Pitched” algorithm, sibilant control is by default switched off. To switch it on, go to Note Assignment Mode and check “Sibilant Handling” in the Algorithm Inspector. You can learn more about this here.

The Melodic algorithm

Melodic material is monophonic, by which we mean it is such that only one note is ever sounding at any given instant. Please bear in mind, however, that reverberation can cause notes to overlap even in monophonic material, creating, in effect, a kind of polyphony. If melodic material is to be edited in Melodyne, therefore, you should aim for as clean and “dry” (reverberation-free) a recording as possible.

The blobs representing notes in melodic material are displayed at different pitches. Whether the blobs are isolated or joined to other blobs depends on the way they were played or sung: staccato or legato.



The “Melodic” algorithm is predestined for lead vocal tracks, as these are invariably monophonic; for there to be polyphony, there would have to be at least two singers. Furthermore, this algorithm takes into account the sibilants invariably heard in vocal parts. In the term ‘sibilants’, Melodyne includes not only consonants and digraphs such as “s” and “ch”, but also word fragments like “k” and “t” as well as the sound of the vocalist inhaling or exhaling between words.

Such sounds, which Melodyne identifies automatically and displays hatched, share one peculiarity in nature: There is no way singers can give them a particular pitch, so they remain unaffected by melodic changes. This behavior is preserved perfectly by Melodyne’s “Melodic” algorithm: Sibilants remain unaltered even when the word or syllable to which they belong is shifted upwards or downwards in pitch.

Let’s say the word is “sweet”, and we move the blob that represents the note in question upwards or downwards. Whilst the entire note will appear to move, acoustically this will not be the case as the “S” at the beginning and the “T” at the end will sound exactly the same after the pitch shift as they did before; only the “wee” in the middle will change pitch – in the direction, and by the amount, of the blob movement.

When editing timing, too, you will notice that the sibilants (indicated by the hatching) are never unnaturally squeezed or stretched.

This intelligent treatment of sibilants is vital to achieving natural-sounding correction of intonation and timing. Melodyne even takes into account the borderline cases that occur in nature, where sibilants and pitched components are heard simultaneously (rather than successively, as was the case earlier with the word “sweet”).

In Note Assignment Mode, you can edit the results of the detection and (if need be) alter the length of the sibilants detected or deactivate sibilant detection for an audio file in the Algorithm Inspector.

The “Polyphonic” algorithms

In Melodyne, thanks to DNA Direct Note Access, notes can be detected within recordings even of polyphonic instruments such as the piano or guitar – including the individual notes of which chords are composed. When the Polyphonic algorithms are used, the blobs are displayed in a similar manner to those of monophonic material, with the obvious difference that the blobs are stacked vertically (at their respective pitches) whenever a chord or harmonic interval sounds. For example, in the case of a chord of E minor, you will see the individual notes E, G and B.

In Melodyne essential and assistant, of course, you can only see the notes of polyphonic instruments, displayed as gray blobs. With the editions Melodyne editor and Melodyne studio, on the other hand, can you also edit the polyphonic blobs and change, for example, the G of an E minor chord to G# to obtain a chord of E major.

But even the gray blobs in Melodyne essential and Melodyne assistant are highly useful, as you can use them to discover the chords played by the guitar or the piano and display them in the Chord Track. This chord track then provides you with important clues for editing other melodic sound sources such as bass guitars or vocals.

Please note, however, that in Melodyne essential and Melodyne assistant a polyphonic instrument is never detected *automatically* using a polyphonic algorithm. By default, the Universal algorithm, which allows you to transpose or improve the timing of the material, is used.

If you wish to see the gray, polyphonic blobs, you must choose one of the polyphonic algorithms manually. Then work out the chord track before switching back to the Universal algorithm for the track in question.
How to switch algorithms is explained below. You will find information on the detection and use of chords in the “Chord Detection and the Chord Track” tour.

Your choice between the two polyphonic algorithms should be determined by the type of instrument and the playing technique employed:

- **Polyphonic Sustain** is suitable for a wide range of polyphonic audio material in which the start of each note does not differ significantly from the rest, as is the case with string instruments played legato and organ music.
- **Polyphonic Decay** is a variation of the algorithm designed for instruments or playing techniques where the start of each note is markedly different from the rest of it, examples being string instruments played pizzicato, guitars and pianos.

Switching algorithms

You can at any time select a different algorithm to that chosen automatically for you by Melodyne. You might want to do this, for example, if you find that the material has not been interpreted in a way that suits your editing needs. To do this, while playback is halted, select the algorithm you prefer from the Algorithm menu. Melodyne will reinterpret the material in the light of your choice and adjust the display accordingly.

Note: when you do this, any editing performed prior to switching algorithms, including any copying of notes, will be lost . The right time to decide which algorithm you wish to use, therefore, is before you begin editing.

In the plug-in implementation of Melodyne, the choice of algorithm applies per transfer, whereas in the stand-alone implementation and an ARA DAW, it applies per audio file in the document being edited – collectively, we describe all such material as ‘audio sources’. Before you can change the algorithm applied to a particular audio source, you must first select one or more notes belonging exclusively to it. If you have selected no notes, or notes from two different audio sources, the Algorithm menu will be grayed out. In such cases, reduce your selection to notes belonging to one audio source only and it will be possible to switch algorithms.

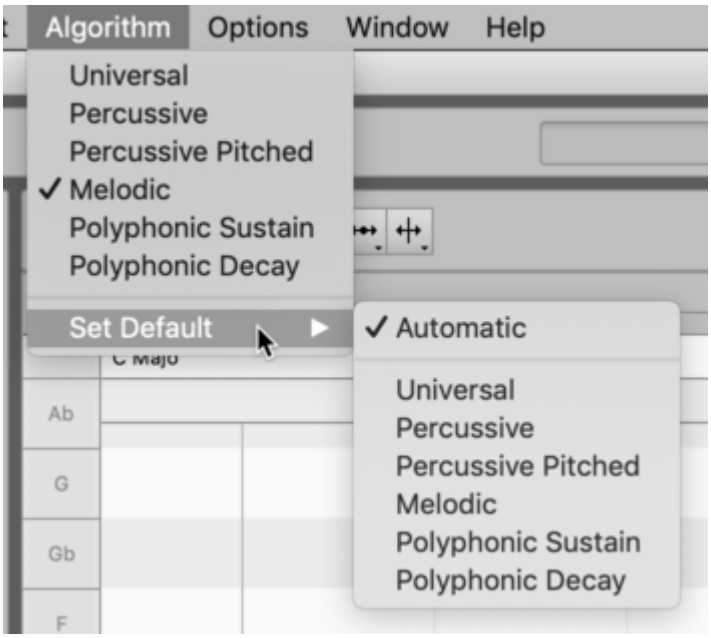
A special feature of the stand-alone implementation: When you switch algorithms, triggering a fresh detection, Melodyne looks at the status of the Auto Stretch switch: if the Auto Stretch function is activated, once the new detection is complete, the tempo of the file will also be adjusted: if Auto Stretch is not selected, the original tempo of the file will be retained.

Automatic or manual algorithm selection

By default, Melodyne makes its own determination, based on the characteristics of the sound, as to which is the best algorithm to apply, distinguishing between three types of material:

- Percussive material, in which case the “Percussive” algorithm is selected.
- Monophonic melodic material, in which case the “Melodic” algorithm is selected.
- Polyphonic material, in which case the “Polyphonic Sustain” algorithm is selected.

This default behavior is overridden, however, if you are using files in Melodyne for which you have already saved additional information regarding the algorithm and note detection. (From Note Assignment mode in the stand-alone implementation of Melodyne, it is possible to store this type of assignment data in an audio file.)



Do not forget, however, when you no longer need to impose your choice of algorithm on Melodyne, to restore Automatic as the default setting. Otherwise, since Melodyne remembers your default selection even after you have quit the program, you might be surprised to discover when the program is next launched that your vocals have been interpreted as percussive.

You will find further tips on working with these algorithms in the Melodyne Training section.

Note Assignment Mode

Since Melodyne invariably conducts an analysis (we call it “detection”) of the audio material before you can do any editing, the correctness or otherwise of this analysis has a considerable influence upon how well you are able subsequently to work with the material and how authentic the results of your editing will sound. For this reason it is important to check whether Melodyne has identified the notes within your material accurately and if necessary correct any mistakes. This where Melodyne’s Note Assignment Mode comes in.

What editing the detection involves

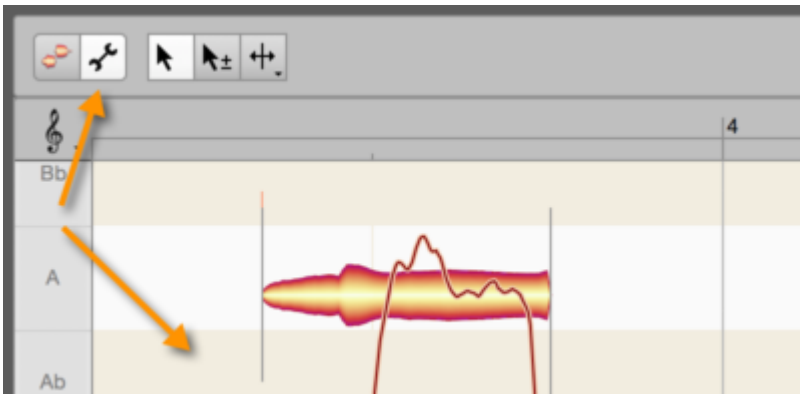
When you are working in Note Assignment Mode, none of the changes you make has any audible effect on the notes themselves. All you are doing is ensuring that the notes that are displayed do actually correspond to those that were played or sung. In other words, you are bringing what you see into line with what you hear. In the process, you are working at all times on the display of the original recording and, with it, so to speak, on the basis for all musical changes made later with Melodyne. The sounder the basis, the better the eventual sound of your edits.

The fact that it is sensible and necessary to check and edit the detection and, with it, the interpretation of the audio material may seem tiresome at first sight. But it brings with it enormous advantages, for there are often several possible interpretations of the audio material, and which is the correct one in a given acoustic and musical context is for you, ultimately, to decide.

But don’t worry. The detection process in Melodyne is mainly automatic and delivers logically coherent results. How much there is to edit in this mode depends upon the algorithm used and the audio material in question. With a dry recording of a single vocalist, for example, you will very rarely encounter problems. It may happen from time to time that a note is detected in the wrong octave, in which case, if you later transpose it, it will sound unnatural. Correcting the detection in such cases is a task swiftly accomplished. The same goes for percussive material, where it is generally only necessary to introduce or remove the occasional note separation.

What is edited and where

Like the choice of algorithm, Note Assignment Mode applies invariably to all the notes of i) a particular audio file, ii) a particular recording, or iii) a particular transferred segment – we will use the term “audio source” to cover all three. When the Note Editor contains notes from different audio sources, begin by selecting a note belonging to the source the detection of which you plan to edit.



Now click the wrench (spanner) icon next to the toolbox of the Note Editor to activate Note Assignment Mode. The background in the Note Editor changes color to show that you are no longer in normal Edit Mode but have switched to Note Assignment Mode. In Note Assignment Mode, what you see and hear is the original state of the audio source; any editing you may have performed on it previously is ignored here.

Any time you click on the blob icon (to the left of the wrench), you will leave Note Assignment Mode and return to Edit Mode. There you will hear once again the results of any editing you performed before switching to Note Assignment Mode. This only applies, however, if you have not changed algorithm in Note Assignment Mode, as any change of algorithm triggers a fresh analysis, and any time you trigger a fresh analysis – any time, in other words, the detection process is repeated – all editing that has been performed on the notes previously is lost.

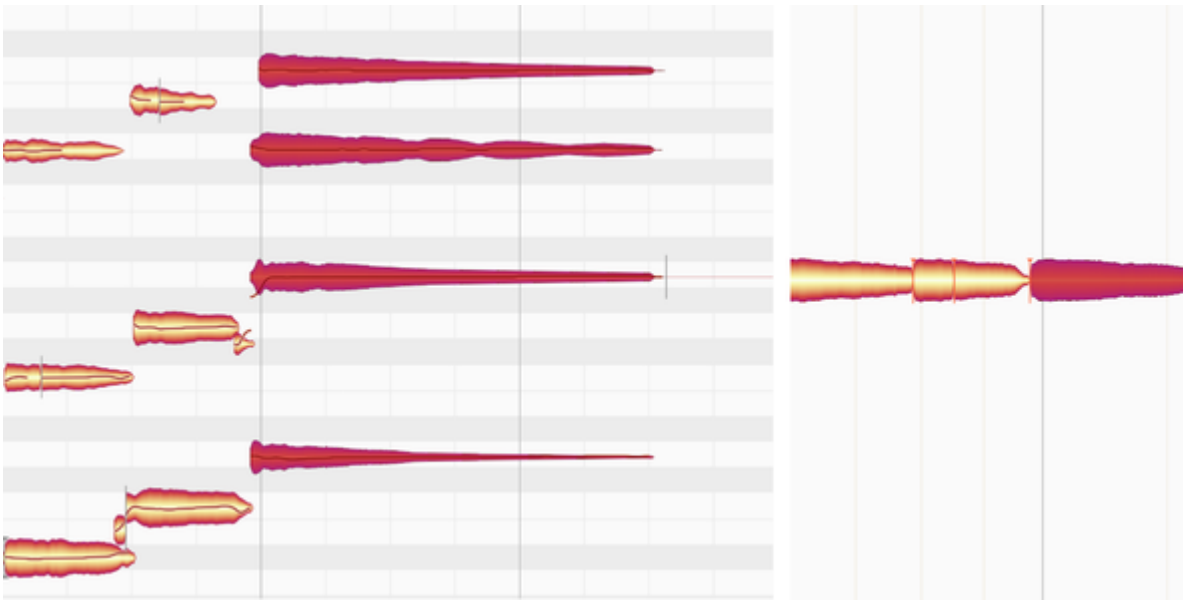
Various types of notes

A Melodyne “blob” represents a note, but Melodyne distinguishes between several types of note, and it is important – especially when you are working in Note Assignment Mode – to understand the difference between them. They are:

- active notes
- inactive/potential notes
- silent notes.

Most blobs represent **active notes**. These are what Melodyne, having carefully analyzed the recording, believes to have been the notes (i.e. the fundamentals) that were actually played or sung. Active notes correspond to the notes that would be displayed on the sheet music: here a D, here an F#, here another D or an A etc. As well as a definite pitch, active notes have a definite length; and naturally, you can alter these and other characteristics of the notes in Melodyne.

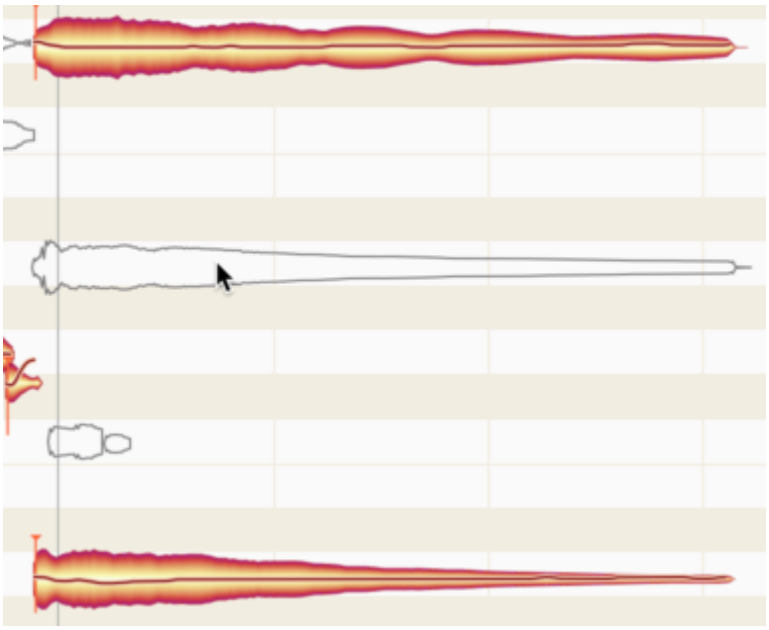
When the Melodic algorithm is used, only one note can ever be active at a time; that is because this algorithm is the one designed for monophonic sound sources (the human voice, say, or an instrument such as the clarinet or trumpet that is only capable of playing one note at a time). With the polyphonic algorithms, which are designed for instruments like the piano or the guitar that are capable of playing chords, or multiple melodic lines simultaneously, two or more notes can be active at the same time, with a separate blob assigned to each. When the audio material has been analyzed using the Percussive or Universal algorithms, however, all the notes of a chord are represented by a *single* blob. So it is better, with these two algorithms, to think of a blob as representing a “slice of time” rather than a musical note. To illustrate the difference, here we see a guitar chord detected (on the left) using the Polyphonic algorithm, and (on the right) using the Percussive one:



From the blobs on the left, you can see exactly which notes comprise the chord. From the “time-slice blob” provided by the Universal algorithm, on the other hand, it is impossible to tell which, or even how many, notes comprise the chord.

In terms of their editability using the tools, there is not a great deal of difference between the ordinary blobs provided by the Polyphonic algorithm and the Universal algorithm's time-slice blobs – except, that is, when it comes to editing chords: When represented by a time-slice blob, a chord can only be transposed *en bloc*; so a chord of F major, for example, could become G major or A major. In other words, the intervals *between* the various notes that make up the chord cannot be changed because all the notes hidden behind the (single) time-slice blob move exactly the same distance when the chord is shifted upwards or downwards. With the Polyphonic algorithm on the other hand, a separate blob is assigned to each of the notes that make up the chord and you can move each blob individually – perhaps in a different direction and/or by a different amount to the blobs above or below it. In this way you can turn an F major into an F minor – or any other chord you like.

Melodyne's **potential notes** form our next category.



Represented by outlines (or "hollow silhouettes"), they lie at pitches where Melodyne thought about drawing a regular, solid blob, but decided in the end to place this somewhere else, leaving the silhouette as a hint at to what might be a possible alternative for that particular note.

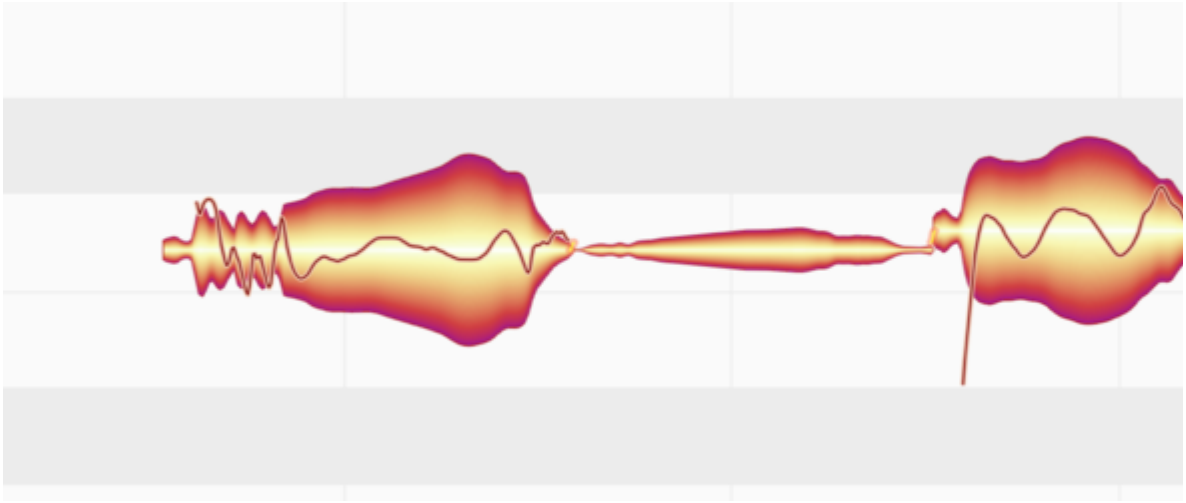
So you might consider turning this potential note into a regular note. This, you can only do in Note Assignment Mode, so it is only in Note Assignment Mode that you will ever see a hollow silhouette. Once you return to normal edit mode, only solid blobs (representing the active notes) appear in the display. It should be added that potential notes are only ever encountered with the Melodic or Polyphonic algorithms.

Finally, there are what Melodyne calls **silent notes**. These can be seen in both Note Assignment and normal Edit Mode, regardless of which algorithm is used to detect the material. A silent note appears wherever there is a break between two notes; it corresponds, therefore, to a rest or pause in the score.

Like a rest, then, it has a definite length but no pitch, so you cannot transpose silent notes. Their length, however, will change if the notes that precede them are shortened or lengthened, or if the notes that follow them are moved forwards or backwards in time, in the same way that an eighth note (quaver) rest in the score would become a sixteenth note (semiquaver) rest if the preceding note were lengthened, or the following note moved forward, by the same amount.

Silent notes are not in fact *entirely* silent, because even during breaks between normal notes the recording continues, picking up things like the hiss of the microphone preamp or the hum of the guitar amp, but they are generally far quieter than the notes around them.

Here we see three notes: an active note, followed by a silent one, followed by another active one:



This illustrates the two significant visual characteristics of the silent note: i) it has no Pitch Curve; and ii) it is always placed level with the note to the left of it; if you shift the latter up or down, the silent note moves with it, but the change is purely visual; whatever sounds the silent note represents remain unaltered.

It is when you come to use the tools in Note Assignment Mode that a clear understanding of the nature and behavior of the various types of note found in Melodyne will pay the greatest dividends. That is the subject of the next tour. You will also learn there how to transform silent notes into normal ones – as well as silhouettes into solid blobs and vice versa, thereby activating and deactivating, respectively, the corresponding notes.

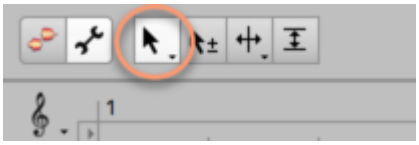
Tools for note assignment

The Main Tool in Note Assignment Mode

In Note Assignment Mode, the toolbox contains tools with functions other than those used in normal Edit mode. The most important difference is this: In Note Assignment Mode, the tools have no direct or immediate impact on the sound of the notes; their object, rather, is to bring the detected and displayed notes as closely as possible into line with the actual music. This makes it possible subsequently to edit the material more efficiently and obtain optimal acoustic results.

Which tools are available depends upon the algorithm, as, to a lesser extent, do their functions.

As is the case in normal editing mode, the Main Tool in Note Assignment Mode combines a number of the most important functions of the other tools, so as to allow you to perform a variety of common tasks without having to change tools.

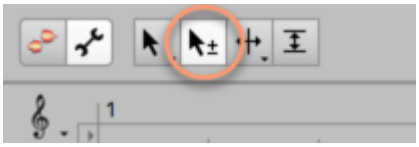


- In the lower part of a blob, the Main Tool functions as the *Activation Tool*.
- In the upper part of a blob, the Main Tool functions as the *Note Separation Tool*.

We will deal with each of these in turn.

The Activation Tool

The Activation Tool has no function when the Percussive and Universal algorithms are selected. What follows, therefore, only applies when either the Melodic or the Percussive Pitched algorithm is selected.



If you move the Activation Tool over a blob, its overtone series will be displayed in the background. This enables you to see at a glance which of the blobs above it coincide in pitch with the partials of the note selected.

In addition to the normal solid blobs used in Melodyne to represent notes, you may see hollow blobs of which only the outlines or “silhouettes” are visible. These represent what we call “potential notes” and lie at pitches where Melodyne considered drawing a regular, solid blob, but decided instead to place this at a different pitch, leaving the silhouette as a hint that this might be a possible alternative for that particular note.

So you might consider turning this potential note into a regular note. This you can only do in Note Assignment Mode, so it is only in Note Assignment Mode that you will ever see a blob silhouette. Once you return to normal edit mode, only solid blobs (representing the active notes) appear in the display. It should be added that potential notes are only ever encountered when the Melodic or Polyphonic algorithms are employed.

If you **double-click on a silhouette**, it will be replaced by a solid blob, indicating that the note in question has been activated. As soon as you do this, the solid blob vertically aligned with it will be replaced by a silhouette, indicating that the corresponding note has been deactivated; this is inevitable, since there can never be two notes sounding simultaneously. There can, of course, with the larger editions, Melodyne editor and Melodyne studio, which offer algorithms that support polyphony, but with the Melodic algorithm, of which we are speaking here, no two notes can ever be active at the same time.

If you **double-click on a solid blob**, you will deactivate it. As no blob would then remain, a silent note will be created in its place, representing a rest or pause in the music. If you double-click on a silent note, the solid blob will reappear, indicating that the original note has been reactivated. Silent notes – what distinguishes them, how they arise in nature, and how they behave in normal edit mode – are described in greater detail here.

Dragging blobs with the Activation Tool

A double-click is the gesture you will use most often when working with the Activation Tool. It is also possible, however, to drag blobs with it, as a means of persuading Melodyne to move the focus of its search to a different area. Particularly with material in which pitches are unclear, a new note can (in theory) be assigned to almost any pitch in this way, provided Melodyne finds something there. If Melodyne finds a plausible destination for the note in the area to which you have dragged it, the blob will snap to it; otherwise, it will return to its original position.

Melodyne only considers certain pitches to be plausible. This is one of the strengths of Melodyne: It brings to its analysis of the audio material real musical intelligence, and does not therefore automatically ascribe every cluster of spectral energy to the presence of a separate note. So, having eliminated all the pitches at which the note played could not possibly lie, Melodyne is left with a handful of candidates it considers “plausible” and invites you to choose between them.

Recalculation of the pitch center

When you move notes with the Activation Tool, a fresh search for the Pitch Curve within the blob is conducted automatically. While conducting the new search, Melodyne also recalculates the pitch center of the note. It does this even if you have only moved the blob a very short distance before returning it almost immediately to its original position. You can also trigger a fresh search for the Pitch Curve and a recalculation of the pitch center by holding down the [Alt] key and double-clicking – for instance, after activating or deactivating the option “Robust Pitch Curve” in the Algorithm Inspector.

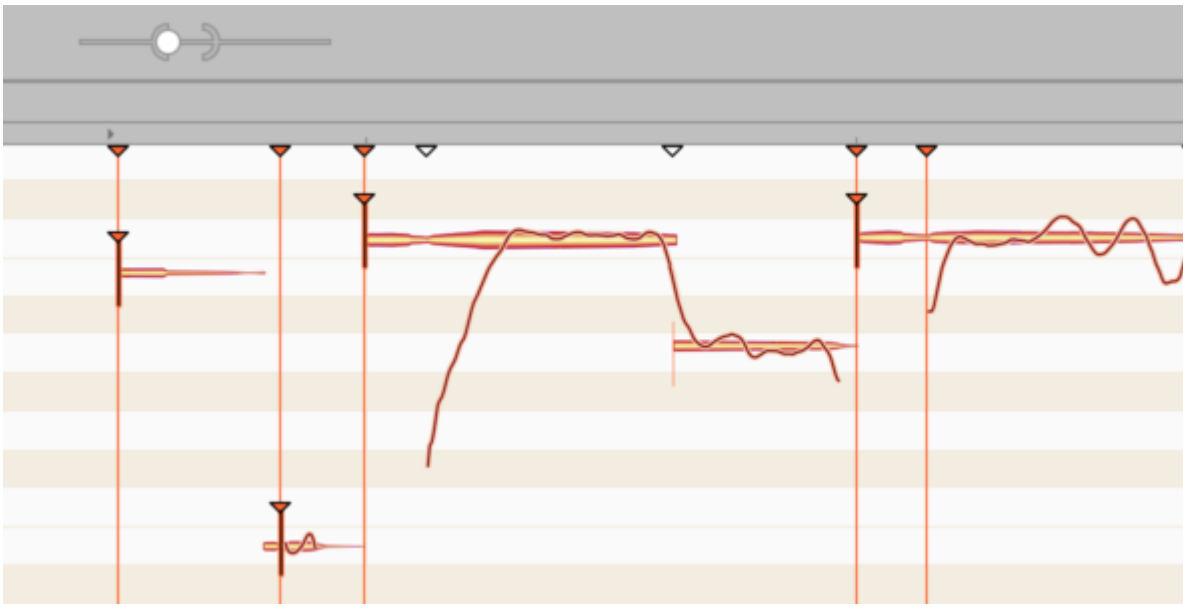
This is particularly useful when you are importing a file from an older version of Melodyne, as the technology Melodyne 5 uses to determine the pitch center of notes is greatly superior to that of earlier versions. After the recalculation (most swiftly triggered by holding down the [Alt] key and double-clicking), the blobs will be realigned slightly on the vertical access – some higher, some lower than before – with the results representing the musical content better than those of earlier versions of the program. This provides for better results – especially when you are quantizing pitch by double-clicking or using the Correct Pitch macro in normal edit mode.

If, on the other hand, the original detection was performed by Melodyne 5 itself, recalculating the pitch centers will change nothing, as the results – already optimal – will be no different the second time. The only circumstance in which [ALT]-double-clicking has any effect is in Note Assignment Mode is when the option “Robust Pitch Curve” is checked in the Algorithm Inspector. This option is discussed in greater detail here.

Starting point lines and designated starting points

If, in Note Assignment Mode, you select one of the separation tools, vertical lines appear in the Note Editor. At the same time, a slider with two indicators appears next to the toolbox.

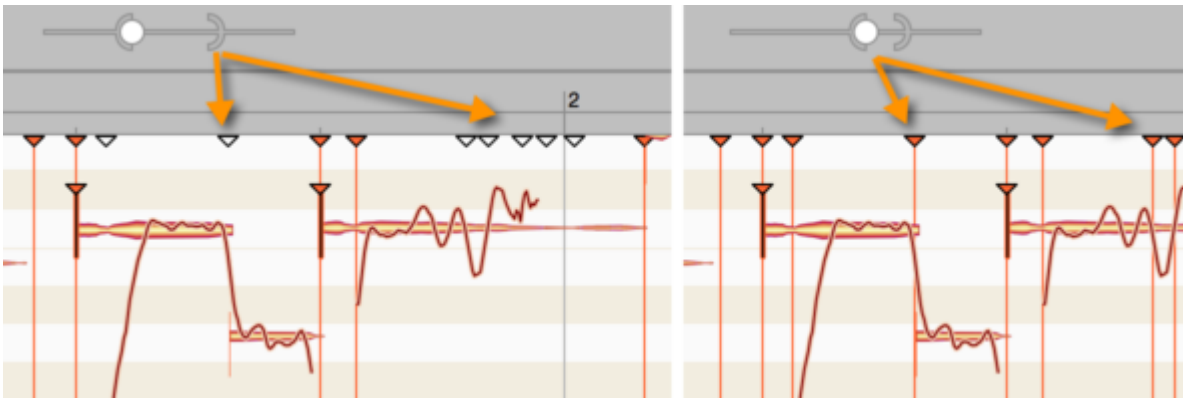
We call the vertical lines “starting point lines”. Rising in parallel from their respective blobs to the Time Ruler, they show the *musical starting points* that Melodyne has identified in the audio file. A “designated starting point” is indicated by a short vertical line (a “vertical”) topped by an inverted triangle and is invariably found near the start of a blob (though not necessarily at its leftmost extremity); when active, it indicates what, for the purposes of timing, Melodyne considers to be the effective musical starting point of the note. The musical starting point may, but does not necessarily have to, be aligned with the separator at the beginning of the note. Think of a brass instrument, for example, where each note is often heralded by a certain amount of wind noise. This noise also belongs to the note, so it falls to the right of the note separator. What is relevant from the standpoint of timing, however – as is the case also with quantization – is the moment when the sound really unfolds and the pitch first becomes discernible; *that* is the timing-critical moment, and it is that later instant that is designated the musical starting point. If Melodyne is unable to pinpoint the musical starting point of a note, no starting point line is displayed and the note has no designated starting point. For the purposes of quantization, the leftmost extremity of the note is then considered to be the starting point.



Each of the longer, starting point lines also culminates in an inverted triangular indicator, which you will see just below the Time Ruler. This indicator can be solid, in which case the corresponding starting point line is visible and active; or it can be hollow, in which case the line is invisible: we call it in this case a “potential” or “inactive” starting point line. An inactive starting point line invariably coincides with the beginning of a note. For the note in question, however, Melodyne has been unable to discern with sufficient confidence a musically relevant starting point; it is for this reason that the starting point line is only a potential one and that no vertical (no designated starting point indicator) is displayed at the blob.

The two slider indicators, the Parenthesis and the Ball, govern, respectively, how sensitive Melodyne is to the presence of potential starting points and how willing it is to activate them, the result being reflected in turn by the total number of triangles displayed and the percentage of these that are solid red. As you move the Parenthesis gradually to the right, more and more hollow triangles (indicating the presence of “potential” starting points) appear beneath the Time Ruler; this reflects Melodyne’s increasing sensitivity that is allowing it to divine more and more points in the material at which a starting point *might* reside – “might” because the lines that are added remain invisible and do not (yet) have any effect upon the blobs.

You can alter this, however, with the slider’s second indicator: the Ball. As you move the Ball to the right, more and more of the previously invisible, “potential” starting point lines will become active; and directly below them, at the level of the blobs, designated starting points will appear at the same time.



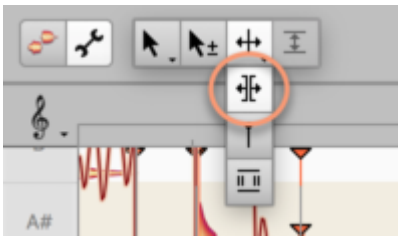
You can activate a potential starting point line by double-clicking on the hollow triangular indicator beneath the Time Ruler and, conversely, deactivate an active line by double-clicking on the corresponding solid triangle. Double-clicking in a free place in the ruler generates a new starting point line.

By dragging its indicator, it is possible to move a starting point line forwards or backwards in time; this, however, will seldom be necessary, as Melodyne almost invariably identifies the ideal position. You may still wish, though, to do some fine-tuning. If, for the purposes of experiment, you move a starting point line from left to right, you will notice that as soon as you pass over the start of a blob, a vertical appears complete with inverted triangle (indicating the presence of a designated starting point) that follows the line for a while before disappearing as soon as the note begins to decay, as, clearly, it would be futile to look any further for the musical starting point.

Starting point lines exhibit a kind of “magnetic” property seen not only when you move them but also when separating notes and designating starting points manually.

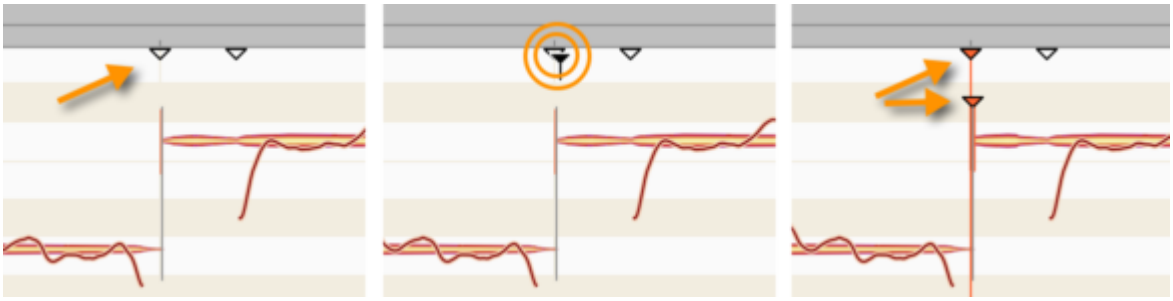
The Note Separation Tool and the Separation Type Tool

The Note Separation Tool and the Separation Type Tool (directly below it in the toolbar) are available with all algorithms and function in the same way as their counterparts in Edit Mode. You can set or remove note separations by double-clicking and also move them along the time axis. With the Separation Type Tool, you can toggle between hard and soft separations.



By contrast with normal editing mode: In Note Assignment Mode, the separation tools are not used to reshape the music but to edit the analysis or “detection”. The object is to ensure that the blobs represent as accurately as possible the actual music. Tip: To provide two or more notes of differing pitch with a soft separation, you can select “Convert Selection to Connected Sequence” from the context menu (see below).

Since the placing of note separations and the editing of starting points often go hand in hand, you can also edit starting points with the Note Separation Tool. Simply move the pointer into the vicinity of the triangular starting point markers near the Time Ruler and it changes appearance to resemble the Starting Point Tool.



It is possible at any time to deactivate a designated starting point (i.e. withdraw the designation). A new starting point can only be designated if an active starting point line is present in a plausible place i.e. the left-hand end of a blob. Look for a moment at the starting point indicators: In the relevant place, a hollow triangle (indicating the presence of a potential starting point) will probably already be displayed. Double-click on the triangle to activate the starting point line.

If no potential starting point line has been identified at the desired position, using the slider near the toolbox you can cause additional potential starting point lines to appear: to do this, simply move the right-hand control element (the Parenthesis) further to the right.

Alternatively, by double-clicking on an empty area of the ruler at the level of the starting point markers, you can create a new starting point line and drag it into position with the mouse. When, with the Melodic, Percussive or Universal algorithms selected, you activate a potential starting point line or create a new starting point line, a note separation is automatically inserted near a note at the position in question.

Tip: When editing starting point lines, if ever you have the feeling that somewhere a note starting point exists but that it is not indicated even by a potential starting point line, scrubbing in the relevant area often makes it to easier to locate the exact position. At the position in question, a rather loud noise component will be audible. Where the noise is loudest, release the mouse button and double-click to place a starting point line.

The context menu: When you select one of the note separation tools, a context menu appears in the Note Editor in which you will find the following commands:

- Convert Selection to Connected Sequence: With this command, you can convert a selection comprising two or more adjacent notes between which there are hard separations into a connected sequence with soft separations. This is also possible with notes differing in pitch and allows you gather together melodic lines to make more coherent editing possible later.

- Separate Note: This command separates a note automatically at a point determined by Melodyne. It is useful when you need to make precise cuts in a vocal passage and isolate sibilants or breathing noise prior to editing using the tools.

- Reseparate Notes at Starting Point Lines: This command splits the selected notes at all active starting point lines passing through them. It offers you, therefore, a convenient way of inserting separations at the same point in multiple notes simultaneously, while removing any superfluous separations found elsewhere.

- Separate Notes as Trill: The effect of this command is to slice a selection of one or more notes into smaller segments determined by the instantaneous pitch of each note. This is done by inserting note separations into the slopes of the pitch curve as it rises and falls, thereby turning each ‘hill’ and each ‘valley’ of a vibrato into a separate note.

Please note that the fluctuations in the Pitch Curve must be fairly pronounced for the “Separate Notes as Trill” function to have any effect and that it is only available when the Melodic algorithm is active, being grayed out in every other case. If you wish to assign a shortcut to the command “Separate Notes as Trill”, this can be done using the Preferences dialog.

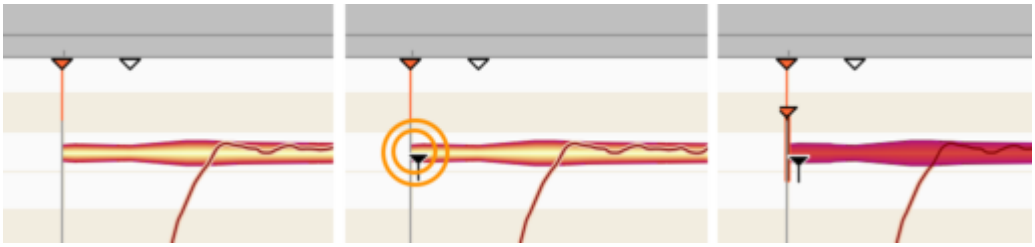
- Reset Separations Based on the Selected Grid: This command separates the notes at obvious starting points as well as at suitable positions on the selected Time Grid. This command is available with the Melodic, Percussive and Universal algorithms.

The Starting Point Tool

The Starting Point Tool is the second sub-tool of the Note Separation Tool.



It is available with all algorithms and is used to designate or undesignate starting points manually by double-clicking. This tool function is also available in Note Assignment Mode by checking the corresponding option in the Note Inspector. A designated starting point is indicated by a vertical (i.e. a short vertical line) with a red triangle on top located at or near the leftmost extremity of the blob.

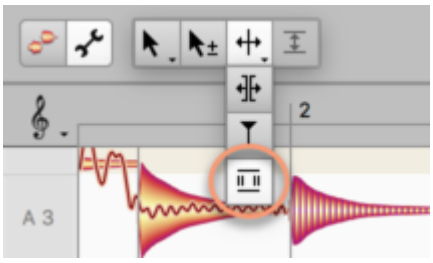


By moving the Starting Point Tool in the region of the starting point markers beneath the Time Ruler, you can also edit these with the Starting Point Tool. As a rule, however, you will generally use the Note Separation Tool for this purpose, as described above.

The Sibilant Range Tool

Melodyne defines as “sibilants” all components of the sound that have no detectable pitch curve. In the case of vocals, these include not only fricative consonants and digraphs such as “s”, “z”, “ch” and “zh”, but also other unvoiced consonants such as “k” and “t” as well as the sound of the vocalist inhaling or exhaling between words. When the various pitch tools are used, these components are treated differently from the pitched components – a policy that leads to particularly good and natural-sounding results when editing vocal tracks. For Melodyne to detect the presence of sibilants, either the Melodic or Percussive Pitched algorithm must be active.

Sibilants are detected, and their extent ascertained, automatically; but, if need be, you can overrule Melodyne and move the start and end points of sibilants at will. This is done in Note Assignment Mode using the Sibilant Range Tool.



When this tool is selected, the range of the sibilants detected by Melodyne is represented on the display by hatching. A sibilant might lie at the beginning and/or end of a note, but never in the middle. The tool has the following functions:

- Click and drag the edge of the hatched area to extend or shorten the range of the sibilant in question.
- Double-click on the hatching to remove it. (This instructs Melodyne to treat the sibilant in question the same way it treats all other components of the sound, which would allow you to apply radical pitch shifting to a “S”, for example, as a special effect). If multiple blobs are selected at the time of the double-click, all their sibilants will be declassified in the same way.
- Double-click on a note without any hatching (or from which the hatching has been removed): this instructs Melodyne to search the note for sibilants. Depending upon the note, one of the following states will result:

- Melodyne will find a sibilant at the beginning and/or end of the note and display its extent through hatching. Sometimes the entire blob will be hatched (e.g. in the case of breath noise). It makes no difference in the case where exactly in the blob you click; towards the beginning, towards the end, the result is the same. This case in fact only occurs if you have previously declassified any sibilants it contains by double-clicking. Melodyne will then rediscover the sibilants when you double-click a second time.

- If the note represented by the blob is in fact sibilant-free (i.e. it contains no sound components that Melodyne regards as sibilants), but you wish it to be treated as though it did contain them, the effect of the double-click is to create a sibilant range at the point clicked. To be more exact: if you double-click with the tool on the front half of the blob, the sibilant range will extend from the start of the blob to the point clicked. If you double-click in the second half of the blob (i.e. right of center), the range will extend from the point clicked to the end of the blob. You can also do both: create a sibilant range at the start of the blob and then another at the end, or vice versa.

Tip: To check the boundaries of the hatched area acoustically, use the “Sibilant” preview control in the Algorithm Inspector. With the control at the extreme right setting, you will hear only the hatched area of the note; at the left extreme, you will hear only the part of the blob without the hatching.

The Note Inspector

As is the case in normal edit mode, the Note Inspector in Note Assignment Mode governs the selected notes – only here, different parameters are on view.

Pitch: The three fields correspond to those in edit mode and display i) the nearest note of the chromatic scale, ii) the deviation (if any) in cents from it, and iii) the equivalent frequency in hertz. It is not possible to input values into these fields but their content is updated whenever a blob is assigned to a different pitch (e.g. to correct an octave error).

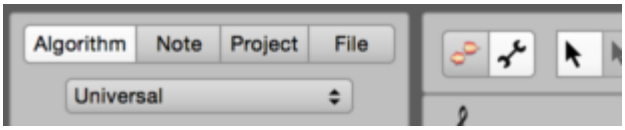
Hard separation: The status of this field is determined either by changes made with the Separation Type Tool or by checking/clearing the box. You can only check this box if there is currently a soft separation between the selected note and an adjacent one.

Starting Point: The status of this field is determined either by changes made with the Starting Point Tool or by checking/clearing the box. Here, just as with the corresponding tool, you can attach the selected note to a starting point line or detach it from it.

The Algorithm Inspector

The Algorithm Inspector in Note Assignment Mode offers you a number of options that allow you to adjust and optimize the way the selected algorithm operates to suit the audio material to be edited.

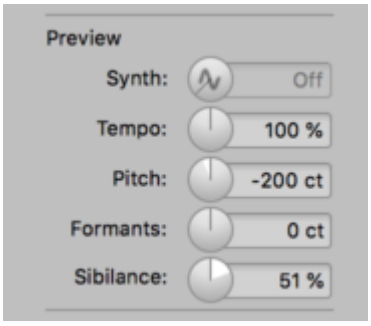
Whenever Note Assignment Mode is active, the Algorithm Inspector is available in the info pane.



Algorithm: The pop-up button at the top shows the current algorithm. With the menu displayed, you can select a different algorithm from the list, thereby triggering a fresh analysis. Warning: Any time you switch algorithms, all editing previously performed on the audio source in question is lost! For this reason, you should make a habit of checking to make sure the best algorithm has been selected and, if this is not the case, choosing a more suitable one *before* you begin correcting the analysis or editing notes.

The Preview parameters

In the Preview section, you will find the following important options to assist you with the editing of the detection and the fine-tuning of the algorithm parameters.



Synth: The objective in Note Assignment Mode is to ensure that the notes displayed really do match the notes intended and played. Since, however, in Note Assignment Mode you are listening to the full original sound of the audio file you plan to edit and editing of the blobs has no audible effect, determining whether notes have been correctly detected is generally only possible on a visual basis. This is where the Monitoring Synth comes in: Using a synthetic tone generator, the Monitoring Synth plays the blobs exactly as they appear, thereby providing you with acoustic as well as visual feedback. You can toggle the synth on and off by clicking on the “Z” icon; click and drag upwards or downwards to control the volume. The Monitoring Synth is not available when the Percussive or Universal algorithms are selected.

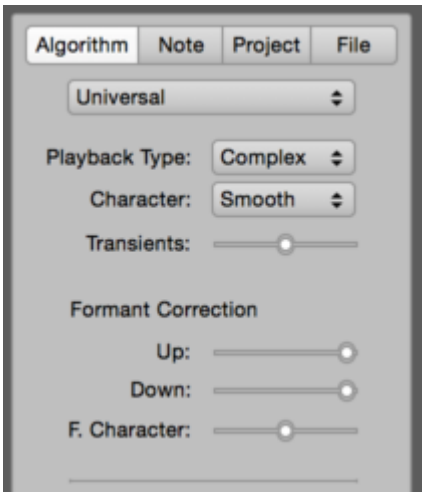
Tempo, Pitch and Formants: With these three controls, you can “simulate” changes to the corresponding parameters in order to examine their effect upon the current algorithm settings. Example: you have changed the formant character in the Algorithm Inspector. This change, however, has no effect until you shift the formants in normal edit mode, as in Note Assignment Mode you always hear the original state of the audio source. You would have, therefore, to leave Note Assignment Mode, shift the formants by way of experiment in normal edit mode, and then return to Note Assignment Mode if you felt any further adjustment to the formant character was necessary. The preview controls make such a procedure unnecessary: simply turn the formant control, and you can begin at once experimenting with the character slider without ever leaving Note Assignment Mode. The tempo and pitch controls operate much the same way. The values of all three preview controls only apply temporarily and are reset each time you leave Note Assignment Mode.

NB: When the synth is in use, the controls for pitch and formants are grayed out, as they cannot be used simultaneously.

Sibilance: With this control, you can simulate the effects of the Sibilant Balance Tool. This is useful when your intention is to modify a sibilant range in Note Assignment Mode, as it allows you to hear exactly where the sibilant in question begins and ends. With the Sibilant Preview Control slider at its rightmost extreme, you hear only the sibilant; at its leftmost extreme, it is the other way around: you hear everything *except* the sibilant areas. If you then notice that a sibilant is still sounding in a pitched zone, or pitched components in a sibilant zone, you know that the boundaries of the sibilant range are not perfectly drawn.

The Algorithm parameters

The other parameters in the Algorithm Inspector relate to the behavior of the algorithm, allowing you to fine-tune it for the entire audio source.



Playback Type: Melodyne applies two different processes for the playback of audio. The Melodic Algorithm employs as standard the playback type “Tonal”, whilst the other algorithms favor “Complex”. These choices are generally the best in practice but you can override them here if you wish.

The difference is most noticeable when time stretching is performed (and also when notes are transposed upwards): material with clearly recognisable pitches generally sounds better with the “Tonal” option. For material in which the pitch of notes is not clear and where noise components are more in evidence better results are generally obtained with “Complex”. Experimenting with the two playback types is therefore most useful when material falls between these two stools. Experiment with the tempo and pitch preview controls to see which playback type is best suited to your needs. Please note, however, that if “Tonal” is selected, the Character, Transients and Formant Character parameters described below are no longer available and therefore grayed out.

Tip: For the playback type “Tonal”, a variation called “Tonal (high)” is also available. If you are working with sopranos or very high-pitched melodic instruments (such as piccolos), instead of “Tonal”, you should try out the variant “Tonal (high)”, as this could enhance the sound quality. Voices or instruments with normal registers, however, are less well served by “Tonal (high)”, so its use in such cases is best avoided.

Character: This is a another pop-up button and allows you to select between a smoother and a crisper playback. If “Crisp” is selected, Melodyne uses a smaller processing window that allows fast acoustic movements in the signal to be reproduced more clearly. This setting is therefore best for percussive sounds and others with many fast tone changes. To soft, sustained sounds, however, the crisper setting can introduce a certain restlessness. To avoid this, opt for “Smooth” which employs a larger processing window and is therefore more suitable for the reproduction of smoother, more gradual tonal transitions.

Transients: This parameter is only available when the Universal and Percussive algorithms are in use. It determines how the transients in the signal should be handled during playback. With the slider fully to the right (the default position in the case of the Percussive algorithm), the transients are clearer and more acute. As the slider is moved to the left, the transients become softer. By default, with the Universal algorithm selected, the slider is in the middle. Experiment to see which setting delivers the best sound with your own material.

Formant Correction Up/Down: Whenever you transpose a note in Melodyne, the formants are automatically corrected to avoid, in the case of vocals, the dreaded “Mickey Mouse” effect. Or, in technical terms, whenever you transpose a note a whole tone upwards, Melodyne automatically corrects the resulting formants by shifting them back down a tone, in this way preserving the original timbre. In the case of the human voice, this is generally what is wanted, but with an acoustic guitar perhaps not: With many sounds, it can add charm if the formants are transposed in parallel with the fundamentals – i.e. not automatically corrected.

The Formants Up and Down sliders are provided, therefore, to allow you to determine the degree of the automatic formant correction – independently for upward and downward transpositions. With the slider all the way to the right, the full 100% formant correction is applied; fully to the left, no automatic formant correction at all is applied. When you return to normal edit mode, you will only hear the effect of these parameters if you shift, or have shifted, the formants of one or more notes in the Note Editor. To simulate and test their effect in Note Assignment Mode, use the pitch controller in the preview section of the Algorithm Inspector. If the current value for this is positive, you will be able to preview the effect of the Up slider; if the current value is negative, you will hear the effect of the Down slider.

F(ormant) Character: When formants are shifted, this slider alters their weighting in the frequency range and therefore alters the sound of the shifted formants. Experiment to see with which setting your material is best reproduced. This parameter has no audible effect when you return to normal edit mode unless and until notes have been transposed in the Note Editor. To simulate and test its effect in Note Assignment Mode, use the formant control in the preview section of the Algorithm Inspector.

The Formant Center parameter is only relevant to the algorithms Universal and Percussive, as the blobs are not sorted by pitch when either of these two algorithms are active, and the formant center is therefore not determined automatically. Not only with the Melodic and Polyphonic but also with the Percussive Pitched algorithm, the formant center is derived from the pitches themselves, so this control is grayed out when any of these algorithms is selected.

Sibilant Handling, Robust Pitch Curve, Separate Audio

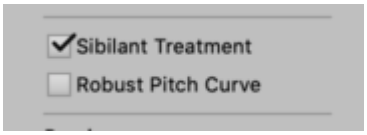
Sibilant Handling The Melodic algorithm detects the presence in a recording of what we define broadly as “sibilants”. Included here along with fricative consonants and digraphs like “s”, “z”, “sh” and “zh”, and certain other word fragments such as “t” and “k”, is breath noise, such as the sound of a vocalist inhaling or exhaling between words. Melodyne 5 treats these differently from all other components of the sound when you begin to make pitch or timing adjustments, and the editing sounds more natural as a result. If you prefer, you can decline to give sibilants this special treatment by clearing the checkmark next to “Sibilant Handling”.

For vocals, Sibilant Handling is without question ideal; whether that is equally true of monophonic instruments varies enormously from case to case. If with a bass guitar, for example, the attack noise is marked as sibilant, you should listen critically to the results when you first change the melody or timing, and decide whether or not they are to your liking. If not, clear the checkmark next to “Sibilant Handling”.

By default, Sibilant Handling is always switched on when the Melodic algorithm is selected, whereas with the Percussive Pitched algorithm it is by default switched off. With the other algorithms, the corresponding functions are unavailable, so the option is grayed out.

Note: When you open older projects (from the time before Melodyne 5), you will find that the Sibilant Handling option on their vocal tracks is not checked. The reason for this is that you may already have perfected the vocals, in which case we assume you’ll want your project to sound exactly the same as it did before. If so, leave the Sibilant Handling option switched off.

If, on the other hand, you want the project in question to enjoy the benefits of Melodyne 5’s new functions, you should activate Sibilant Handling. Your older vocal tracks will then most likely sound better at once, and you will enjoy greater creative freedom in other areas besides.



Robust pitch curves: With the algorithms “Melodic” and “Percussive Pitched”, Melodyne detects the Pitch Curve in very high resolution. This is especially advantageous in the case of vocals, as there is then particularly detailed control over all aspects of the intonation, and the pitch tools are able to deliver optimal sound quality.

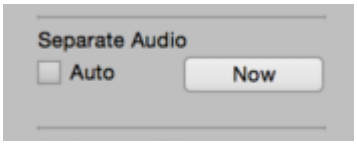
With certain recordings, however, this high resolution can be counterproductive. This is particularly the case with instruments that were in fact played monophonically but where sub-optimal recording conditions (resulting for example, from obtrusive room resonances) or the physical composition of their resonance chambers gives rise to what we might call “technical” polyphony.
Examples of this might be the electric upright bass or frequency modulated synthesizer sounds – sometimes, even, the human voice, when, for example, a (usually male) rock singer wrings deep throaty sounds from his voice.
In such cases the pitch tools (at least, when heavy use is made of them) deliver artifacts, and it is then that switching to a “robust pitch curve” makes sense.

The simple act of switching to a robust pitch curve initially results in no detectable change, but as soon as a note is edited with one of the tools in Note Assignment Mode, Melodyne searches afresh for the pitch curve of this note (and of this note only) and delivers then, when this option is checked, a simpler, more stable, more *robust* curve.

The simplest command to trigger this type of renewed search for the pitch curve, but which otherwise changes nothing, is a [Alt]+double-click with the first assignment tool.

The Polyphonic, Universal and Percussive algorithms have robust curves by default, so with these algorithms the option is grayed out.

Separate Audio: When you are editing the detection of an audio source, Melodyne sometimes has a great deal of processing to perform in the background and large volumes of data to move in and out of its cache. The option Separate Audio gives you control over this behavior. If the Auto box is checked, with each change you make, Melodyne performs all the requisite calculations immediately. The advantage? Whenever you use the preview controls to test your algorithm settings, Melodyne accesses the latest data, and everything sounds exactly as it would in normal edit mode. The disadvantage? Melodyne sometimes needs to introduce a processing pause during which the progress indicator appears and your work is interrupted.

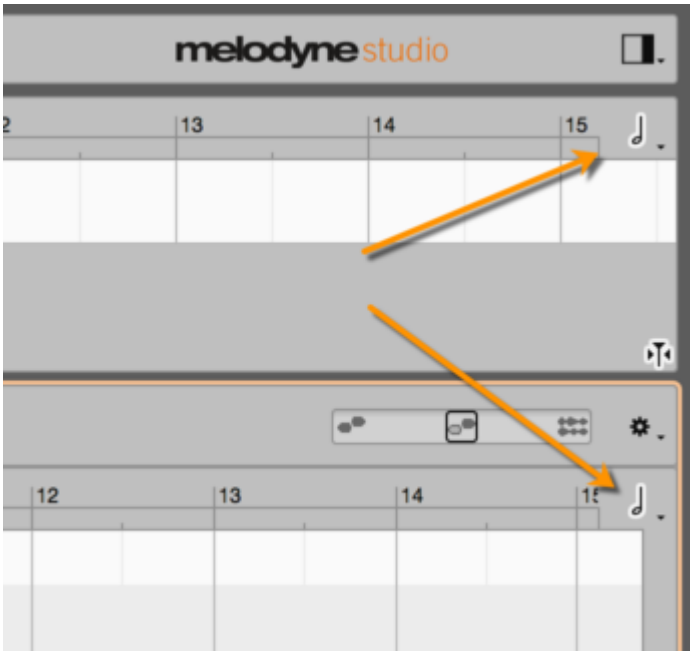


Since you do not always need the preview controls, you have the option of changing this behavior by clearing the Auto checkbox. In the case of certain editing actions, the requisite calculations are then not performed immediately but only when you click the Now button or leave Note Assignment Mode. The advantage of this is that your workflow is not interrupted. The disadvantage is that the preview controls in such situations cannot access the latest data and therefore do not always reflect the changes you have made. Should there be a discrepancy between the previous data and the current state, the Now button will flash to warn you. If you then click on it, Melodyne will perform all the outstanding calculations and update the totality of the data.

The Time Grid

The Time Grid slices up the time axis at regular intervals to provide a clearer temporal overview. It can also have the function, however, of causing content as it is moved to snap to the nearest grid line, thereby making it easier to position notes exactly on the beat. For the spacing of the grid (i.e. the distance between adjacent grid lines), you can choose between Seconds and any of a variety of note values (half note, quarter note etc.).

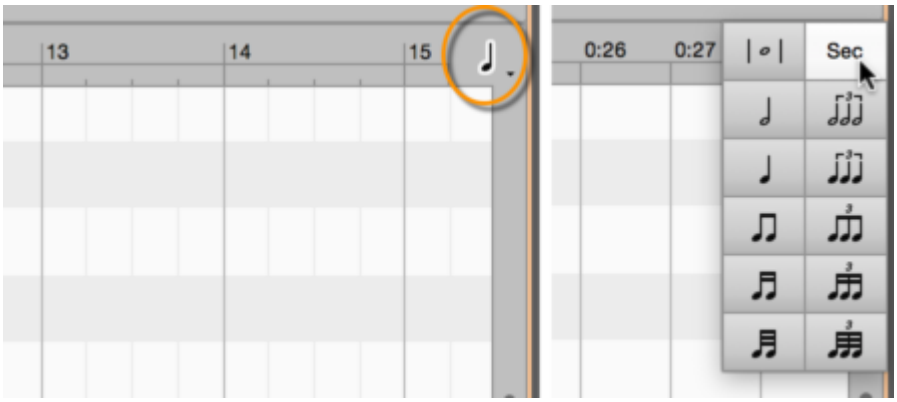
Activating and setting the Time Grid



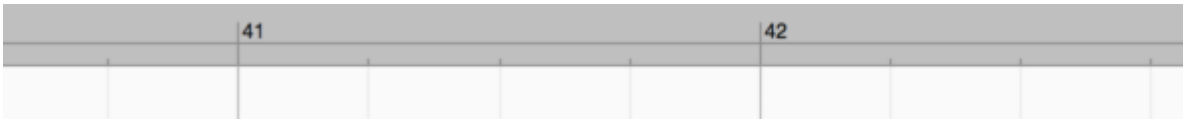
To adjust the Time Grid, either choose Options > Time Grid from the main menu or click the note icon (at the top right of the Note Editor) to open the pop-up menu shown here.

Clicking on the note icon activates or deactivates the grid; you can also define a keyboard shortcut for this command from the Shortcuts page of the Preferences dialog. If you click the note value or the arrow alongside it and hold down the mouse button, the grid menu pops up.

This allows you to the set the interval between grid lines to any of a variety of regular or triplet note values or else to Seconds.

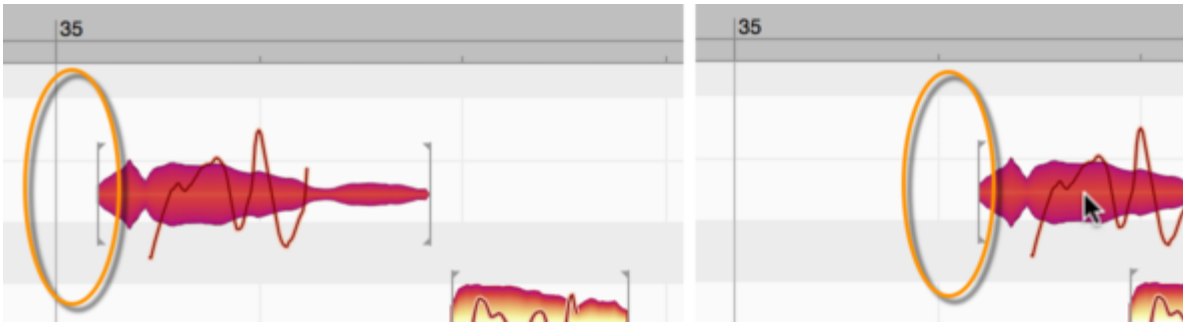


The time axis is then graduated at intervals equivalent to the note value selected. If you have chosen a small note value (such as 1/16) and then zoom the display outwards, at a certain point it will become impossible to display all the grid lines; the grid value selected, however, will remain active.



Moving notes when the grid is active

When the Time Grid is active and Seconds is not checked, notes moved from one beat to another will end up the same distance from the new beat as they were from the old one. In other words, whilst the grid does influence their position, they don't snap exactly to the nearest grid line unless they were on a grid line to begin with. The note depicted below, for example, sounds slightly after the first beat of the bar.



If, while the grid is active, this is moved to the second beat, there, too, it will sound slightly after the beat – the offset in the two cases being identical.

Even if the grid is active, you can still adjust the position of a note (or a selection of notes) independently of the grid by holding down the [Alt] key as you move it.

Chord recognition and the Chord Track

Melodyne is capable of recognizing the chords and detecting changes of key (or ‘tonality’) in your recordings. Here you will find all you need to know about Melodyne’s Chord and Key tracks.

Limitations of the editions Melodyne essential and assistant

The chord recognition function is implemented in Melodyne assistant and essential but in those editions it is not possible to edit polyphonic material i.e. material in which two or more notes sound simultaneously. The procedure is as follows:

- Recordings of polyphonic instruments are opened by default in Melodyne assistant and essential with the Universal algorithm.
- To allow chord recognition, select “Polyphonic” from the Algorithm menu. The notes are now displayed polyphonically but in gray, and they cannot be edited using the tools.
- You can, however, following the procedure described in the next section, get Melodyne to identify the chords formed by these gray notes and display them in the Chord Track.
- Once the chords have been identified, you must switch back to the Universal algorithm before you can perform any musical editing e.g. transposition or timing quantization.

One Chord Track for all Melodyne instances

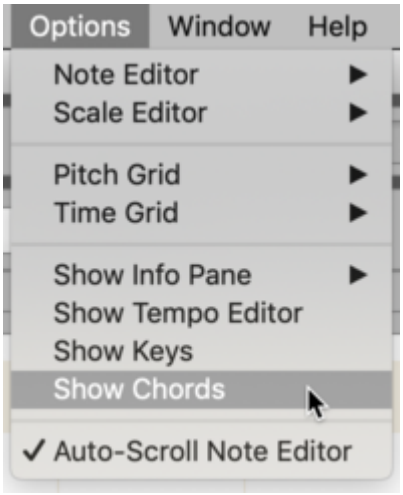
The Chord Track is displayed in all instances of Melodyne that are open – i.e. on each track. You therefore see the same chords for all instruments, although the melodic line, or chords, played by each instrument may be different.

So what the Chord Track is displaying is the combined effect of all the instruments: the harmonic structure of the song or composition *as a whole*. Armed with this information, you can examine the notes played by any instrument at any moment and see how well they accord with the overall harmony.

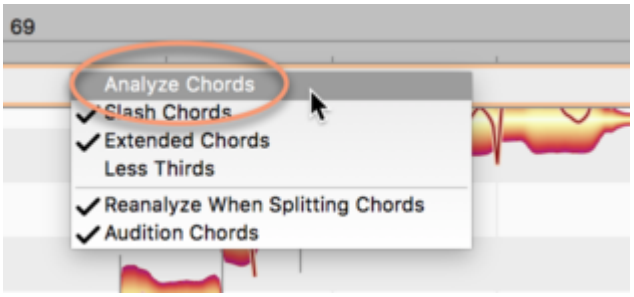
Triggering the harmonic analysis

To get Melodyne to identify the chords, proceed as follows:

- Open the recording of a polyphonic instrument (e.g. piano or guitar). In Melodyne studio, you can open multiple tracks simultaneously in the Note Editor (e.g. guitar and bass) so the harmonic analysis can take all of them into account.
- Display the Chord Track (and the Key Track too, if you wish) by checking the relevant entries in the Options menu. Alternatively, you can click on the icons beneath the Time Grid Settings menu in the top right-hand corner of the Note Editor.



- Right-click in the Chord Track and select “Analyze Chords” from the context menu. You will then see a ‘lead sheet’ of your recording.



Please note: Before optimal results can be obtained from the chord recognition function, the detected tempo must be correct; otherwise the chord symbols may be aligned with the wrong beats. For this reason, prior to the chord analysis you should choose “Copy Song Tempo to File” from the Tempo dialog.

You can repeat the “Analyze Chords” command at any time to update the analysis.
You might do this, for example, after recording a new guitar part containing different chords.

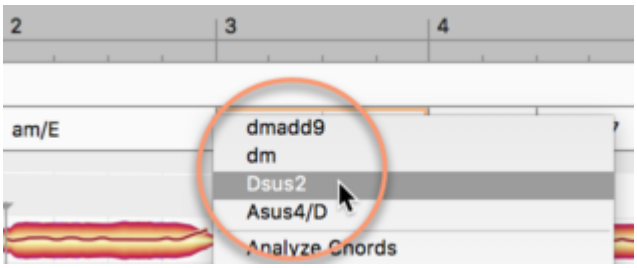
- If it's only certain chords that need to be reexamined, select the chords in question in the Chord Track and choose "Analyze Chords".
- To select two or more chords, use the Shift and Cmd keys.
- If you click on one chord and then press Cmd+A, all the chords will be selected.

Note: The chord analysis is invariably based on all the notes in selected areas of the Chord Track. It is not possible to influence the analysis by selecting or deselecting individual blobs. That would in any case make no sense from a musical point of view, as the less information taken into account, the less accurately the chords displayed would reflect the overall musical content of the recording.

There could, however, be cases – if you were analyzing the chords of a complete mix, for example – when certain blobs (attributable to the kick drum, say, or the cymbals) might lead to confusion. The solution in such cases is to the copy the audio file to a new track, delete the offending blobs, and trigger a fresh chord analysis based on that track only.

Selecting between alternative designations

The context (right-click) menu of the Chord Track suggests alternatives for the chords detected:



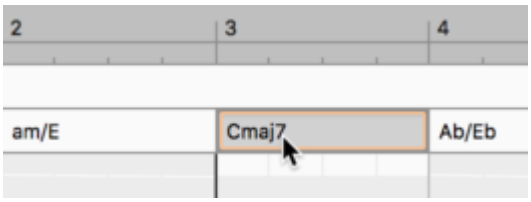
These, we must stress, are *not* compositional suggestions, as in "here you could also play this chord". The alternatives suggested are simply alternative interpretations of the audio material.

A chord made up of the notes C, E, G and A, for example, could be interpreted as either C6 or Am7. Both interpretations are legitimate, but which is the more apt might depend on the degree to which the various notes are emphasized; Does the highest note sound loudly and clearly, for instance, or is it barely perceptible? The most appropriate interpretation might depend also on the surrounding chords or the prevailing key (or 'tonality') of the passage in question. These are questions of content but also of taste that are best left for you, the user, to answer. For this reason, Melodyne offers you all plausible interpretations and lets you choose between them.

Of course, in the case of very basic chords, there will be fewer alternatives and in some cases only one. If the chord, for example, consists of three notes: C, E and G, this can only sensibly be interpreted as "C Major".

Entering chords manually

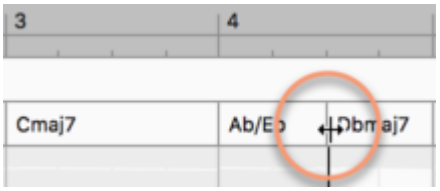
Independently of the results of the chord detection, you can also fill in the Chord Track manually, by typing in the names of the chords or standard chord symbols.
To do this, select an existing chord (a frame will appear, highlighting the chord selected) and type in text in the normal way:



In areas of the Chord Track where no chord symbols are displayed, you can enter them simply by double-clicking in the appropriate places and typing them in.

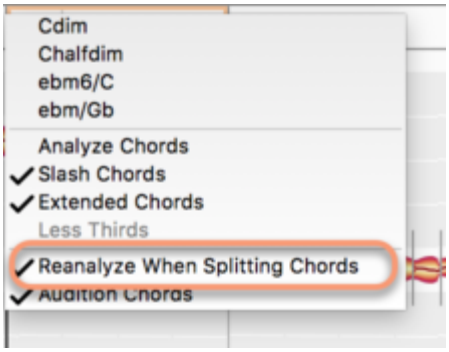
Melodyne accepts all the standard conventions for denoting chords.
For “F minor”, for example, you can spell the chord in any of the following ways: “Fminor”, “Fmin”, “Fm” or “F-” (with the “F” in upper or lower case). By default, Melodyne prefers the set language.

You can eliminate specific chord changes by moving the cursor over the borders between chords (the cursor than changes its shape) and then double-clicking.



Conversely, you can insert additional chord changes by double-clicking on an existing chord. By default when you are inserting or moving chords, they snap to the nearest quarter note (crotchet) on the grid. By holding down the Alt key, however, you can temporarily increase the resolution of the grid and in this way reach intermediate destinations, an eighth or a sixteenth note to either side.

In the context (right-click) menu of the Chord Track, you can decide whether when you introduce a new chord change, a fresh anlysis of the newly created chord halves should take place:



Keyboard shortcuts for editing the chords

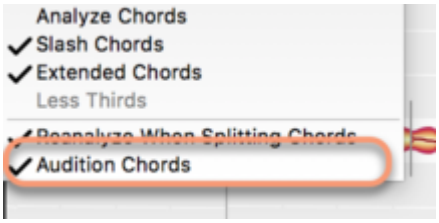
The following shortcuts, which are the same as those used for the selection and editing of blobs in the Note Editor, allow you more swiftly to enter and edit the chords to be displayed. If you wish, you can change the shortcut assignments in the Preferences dialog.

- Shift-click and Cmd-click: Extend the chord selection
- [Left/Right Arrow]: Select previous/next chord
- Shift+[Left/Right Arrow]: Extend selection to include previous/next chord
- [Up/Down Arrow]: Switch between alternate chord designations (as described above)
- Cmd+[Up/Down Arrow]: Shift the chord up or down diatonically i.e. using only the notes of the current scale, so major intervals are replaced where necessary with minor ones and vice versa to suit the key. For example, if the key is A minor and the chord selected is C major. After pressing Cmd+[Up Arrow], this will become D minor (not D major, which is not found in the key of A minor). If, on the other hand, the key were E minor, selecting a C major followed by Cmd+[Up Arrow] would produce D major. In this case, the quality of the chord (e.g. the type of triad) would not change.
- Shift Cmd[Up/Down Arrow]: Transpose the chord chromatically upwards without regard to the key. So C major becomes C# major, followed by D major, then D# major etc. So the quality of the chord does not change: major chords remain major, minor chords remain minor.

By editing the Chord Track in this way, you are not (initially) changing the recorded music. However, such changes to the Chord Track will make a difference when you come to edit the notes, if you select “Chord” or “Chord Scale” as the Pitch Grid.

Auditioning chords

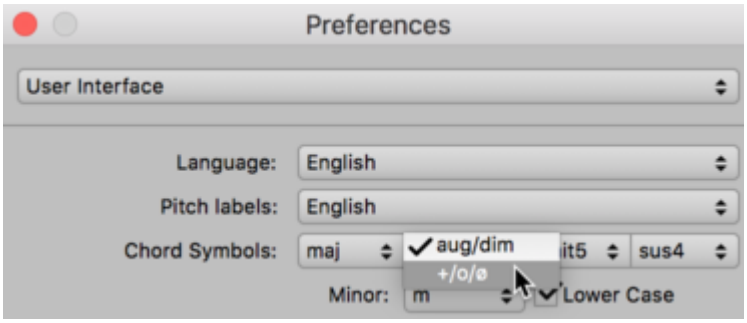
In the Context (right-click) menu of the Chord Track, you will find an option to audition the chords:



If this option is activated, as you step through the chords with the arrow keys or alter them through text input or using the keyboard shortcuts, you will hear the chords in question played with a guitar sample.

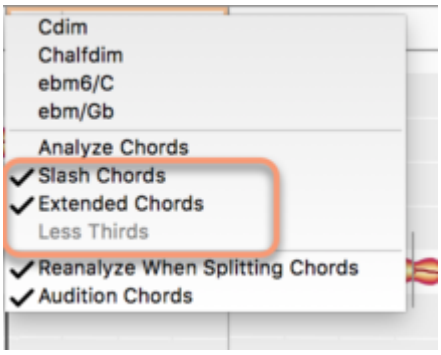
Chord symbol conventions

Melodyne's Preferences dialog allows you to choose the chord symbol conventions used in the Chord Track. There are various conventions in common use and Melodyne is familiar with all of them. Some musicians, for example, write "Cm" to indicate a chord of C minor, whilst others prefer "C-" or "c-".



Even though you may have chosen a particular format (e.g. "c-") for the display, you can still use a different convention (e.g. "Cm") to input the data; Melodyne will simply translate "Cm" into "c-" for you. This is particularly useful if you have opted for a convention that involves special characters that are awkward to type in. In the Preferences dialog, you could specify, for example, that a chord of F major with a major seventh should be displayed as "F#7", but use a format that is easier to type (such as "F maj 7") when entering chords in the Chord Track.

As well as choosing a naming convention for the display, you can also influence the complexity of the chords. For certain musical genres, you may prefer to make the lead sheet easier to read. The context (right-click) menu of the Chord Track offers the following options:



Slash Chords

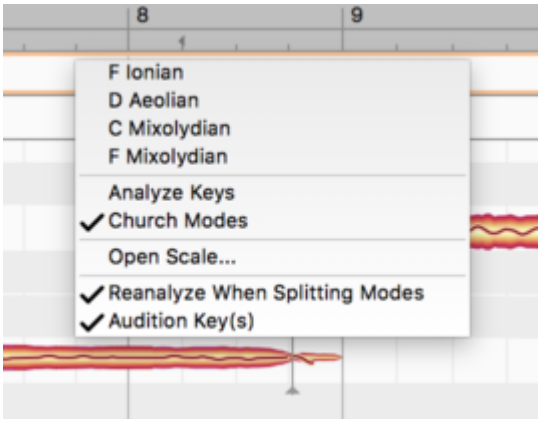
If the guitarist is playing a chord of C major, for example, but the note sounding in the bass is not C but G, then – even though this does not change the chord (since the note G does appear in the chord of C major) – you may still feel it is important for the notation to take account of this fact using the familiar "slash chord" notation: C/G (i.e. C major with a G in the bass).
If you check this option, this convention will be used throughout the track.

Expanded chords
If you check this option, Melodyne finds expanded chords (such as those common in jazz). If the option is cleared, a simpler description will be preferred. For example, if the chord in question is C Major but a D is sounding at the same time. D is the ninth of a C major chord, so an exact description of the chord would be “Cadd9”. In this case, though, it would be a perfectly legitimate simplification to just write “C major” in the lead sheet. This would in any case have no effect (initially) upon the music itself. Whether or not this option is checked could have implications, but only on the manner in which you edit notes later on. (The editing of the notes in the chord context is dealt with in the next tour).

Less Thirds
Melodyne adds thirds in the course of the chord detection even when none were played, which is usually very helpful. But in the blues genre, for example, the musicians often omit thirds on purpose and in such cases the addition of thirds is undesirable. If you check this option, the added thirds are hidden. Thirds that were actually played, however, remain unaffected and are always shown. If no added thirds are present, this option is grayed out.

The Key Track and key changes

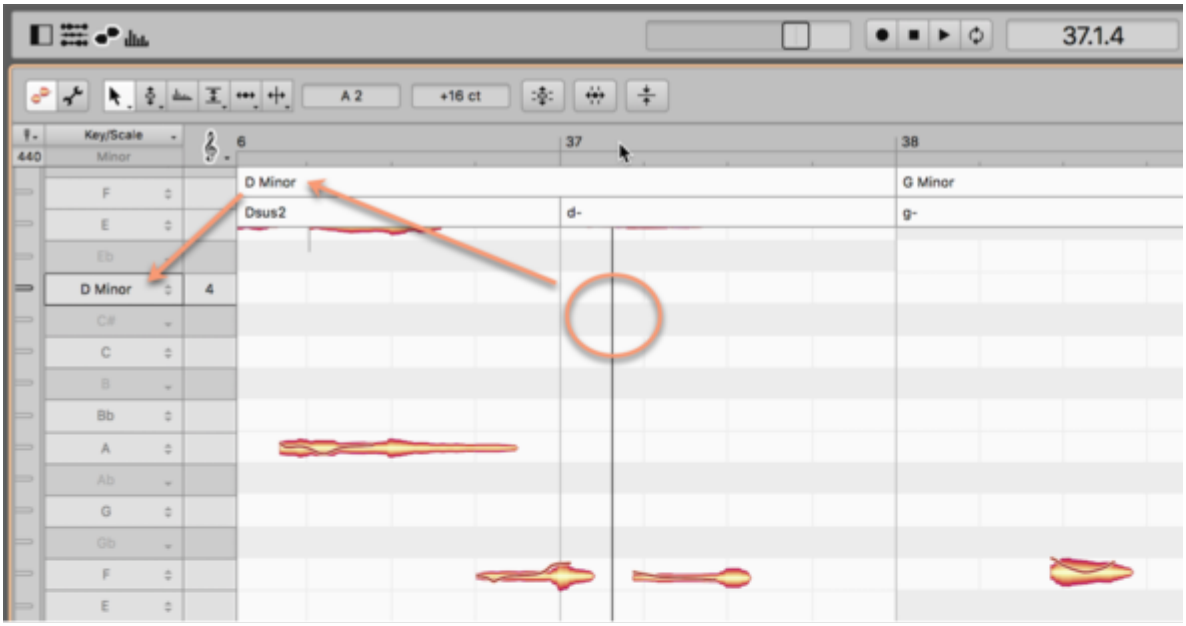
The methodology for editing the Key Track is basically the same as that just described for the Chord Track.
The only real difference is that the context (right-click) menu has fewer entries:

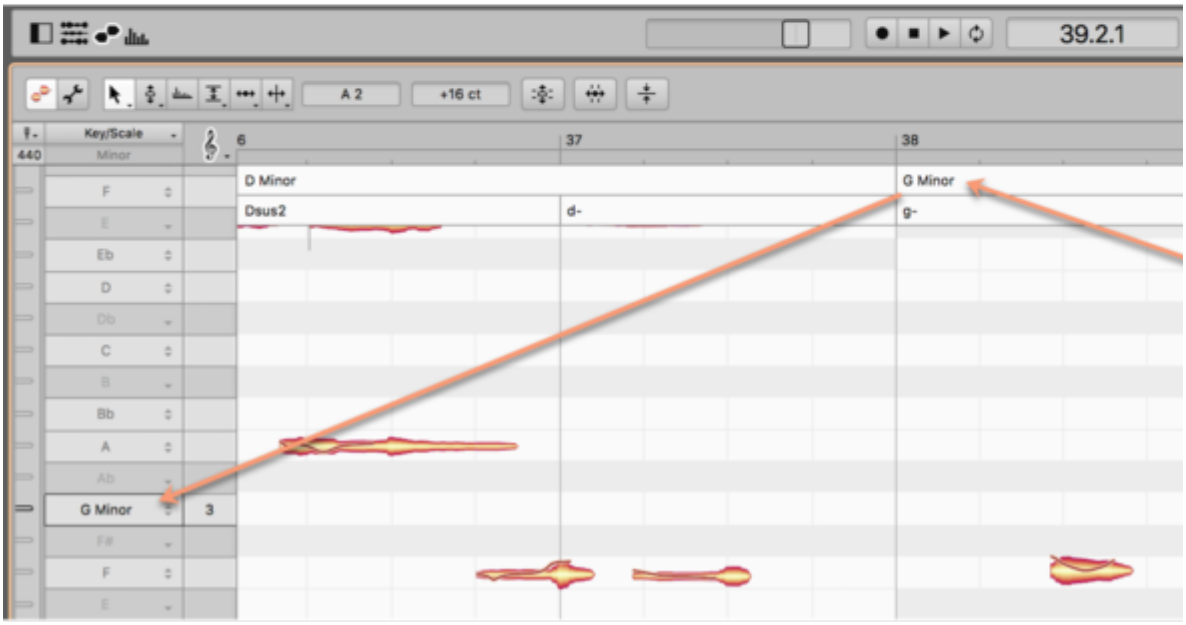


- The upper area offers you alternatives to the detected key.
- Analyze Key: This triggers a new detection of the key.
- Church Modes: Uses the church modes (Dorian, Phrygian etc.)
- Open Scale: Opens a separate window to let you select a key.
- Conduct New Analysis after Slicing Modes: By double-clicking in the Key Track, you can slice an existing segment in two, or merge two segments. This option determines whether or not a fresh analysis of the key of the segment or segments involved should be carried out automatically whenever you slice or merge segments in this way.

The Key Track and the Scale Ruler

The Scale Ruler (the left-hand margin of the Note Editor) invariably displays a key, for which numerous variations are possible. If your song contains key changes, which scale is displayed will depend upon the playback position:





Interaction with the chord track of the DAW

Melodyne's chord track (initially) works independently on the technical level from the chord track in Cubase. This leaves it up to you to decide whether to enter the chords in Cubase or in Melodyne.

As soon, however, as one of the chord tracks (whichever of the two offers you the better workflow) has been filled in meaningfully, rather than working on in "parallel worlds", you will naturally wish to synchronize the two chord tracks. This can be done in either of two directions:

Adoption of Cubase chords by Melodyne
In Melodyne, activate the "Use DAW Chords" option under "Chords and Scales" in the Edit menu or from the context menu that opens when you right-click on Melodyne's chord track.

Melodyne then, instead of displaying the chords it itself detected or that you have typed in to the Melodyne chord track, will mirror the chords from Cubase. Thereafter, every chord change in Cubase will be automatically reflected in Melodyne. Within Melodyne, you can tell that this is the case not only from the chord track itself but also from the background in the Note Editor, provided you have set this to "Chords" or "Chord Scale".

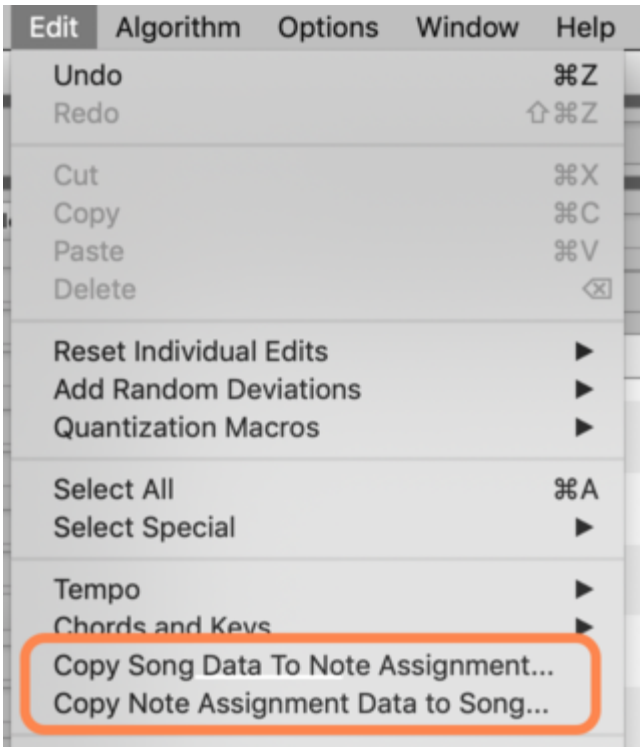
Transfer of Melodyne chords to Cubase
It is also possible to do things the other way round, though in the current version of Cubase not yet using ARA but the following workflow instead:

Right-click on Melodyne's chord track and choose "Export Lead Sheet" from the context menu to generate a MIDI file. This file then contains the chord sequence, detailing both the notes of the various chords and the duration for which they are held. Import this file into Cubase and use it to fill in the Cubase chord track.

Chords and keys in Note Assignment Mode

In Note Assignment Mode, you do not see a shared Chord Track for the entire song, as is the case in normal Edit Mode, but only the chords played by the instrument you are examining. Note: Even if you have activated the option “Edit” > “Chords and Scales” > “Use DAW Keys”, you can still use all the functions of the Chord Track in Note Assignment Mode, because remote control of the Chord Track from the ARA DAW is only effective in Track Edit and Clip Edit modes – not in Note Assignment Mode.

For this reason, we speak in the one case of “project chords” that relate to the entire song and in the other of “file chords”, which are only visible in Note Assignment Mode and relate only to the instrument in question. In the Edit menu, you will find commands that allow you to replace file chords with project chords, and vice versa.



It is the same with the keys: The song has a common Key Track (“Project Scale”), whereas what you see in Note Assignment Mode in each case is the current “File Scale”.

The Pitch Grid

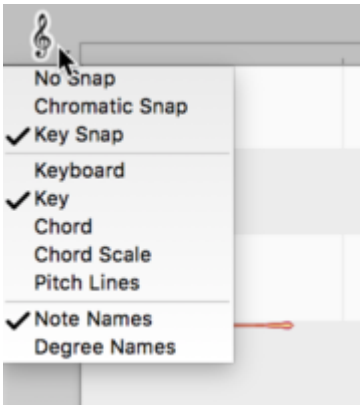
You can shift the pitch of notes in Melodyne either continuously or in discrete steps using the grid. When the grid is active, notes can only be moved to such pitches as the snap mode selected at the time will allow.

The functions of the Pitch Ruler and access to the Pitch Grid

You can change the options relating to the Pitch Grid either from the sub-menu of the same name under Options in the main menu or by clicking the clef icon directly above the Pitch Ruler.

Clicking on the Clef icon toggles the grid on and off. When the grid is deactivated, you can slide notes continuously upwards or downwards in pitch. Only faint lines in this case separate the notes in the Pitch Ruler.

If you click on the Clef icon (or the little arrow next to it) while holding down the mouse key, the menu containing the grid options drops down.



The Pitch Grid and the background in the Note Editor

The Pitch Grid, when activated, causes notes to snap to particular pitches as you drag and release them. The white horizontal beams beneath the blobs in the Note Editor represent the pitches allowed by the currently selected grid. The gray beams represent pitches that are not included in the current grid and that the blobs therefore spring over as they are moved.

When you double-click on a blob with the Main Tool or the Pitch Tool, it will snap to the center of the nearest white lane – so whether it was perfectly in tune or slightly offset from its previous pitch, its offset from its new pitch will be zero. Thus, as well as moving notes to more suitable pitches, a simple double-click perfects their intonation at the same time.

If, on the other hand, you hold down the [Alt] key as you double-click, if a blob was offset 10 cents (say) from its previous pitch, it will be offset from its new pitch by the same amount. In other words, even though the blob may move to a different pitch, its “degree of imperfection” (in terms of intonation) will be preserved – such deviations are, after all, often musically desirable and used intentionally in order, for instance, to obtain a warmer, richer tone.

For the Pitch Grid and the background to the blobs in the Note Editor, the following options are available:

Pitch Grid

- No Snap: The Grid is deactivated and notes can be shifted continuously up or down in pitch.
- Chromatic Snap: Notes snap to the nearest note of the chromatic scale.
- Key Snap or Chord Snap: Notes snap to the grid currently selected as the display background in the Note Editor.

Pitch Background

- Keyboard: The background in the Note Editor mimics the pattern of black and white keys on the piano keyboard – only in this case, the pitches produced by the black keys are shown in gray. When the grid is active, these pitches are inaccessible, so you are effectively locked into C Major – which is fine if the song happens to be in that key but not much use otherwise.
- Key: Now the notes of the current key or tonality are displayed in white and notes foreign to the key in grey. Again, when the grid is active, only the white beams are accessible. If there is a change of key in the course of the song, the pattern of white and gray beams will change accordingly.

- Chord: Now the background pattern changes from chord to chord, with white beams representing chord members and notes foreign to the current chord shown in gray. So in the case of chords based on simple triads (C Major, F minor etc.), only three notes per octave will be available. In the case of more complex chords, more pitches will be available – four per octave in the case of a major seventh chord, for example.

- Chord Scale: With this option, once again seven white beams per octave are displayed. Unlike the case, however, when “Key” was selected, these are not the notes of the current key, but instead form a scale that reflects the current chord.

A brief explanation: It is perfectly possible, in jazz for example, for chords to be used that do not fit the key, without the listener immediately interpreting this as a key change. For example: You are in C major, and the chord played is D major, which does not actually fit the key. If the option “Chord Scale” is selected, for this one chord a black-and-white pattern will be displayed corresponding to the notes that fit the chord played within the key. So, in our example, F# would be a legitimate tone and would be shown in place of F.

- Pitch lines: When this option is selected, a ruled line appears in what was previously the center of each beam, and the beams are no longer displayed. The pitch lines invariably reflect the key – including any key changes – but not the chords; bold lines indicate the pitch of notes belonging to the key; that of notes foreign to it are denoted by thin lines. This display mode is useful when you are correcting intonation errors, as the lines show the exact pitches to aim for.

Pitch Labels
Here you can choose whether the names of the notes (C, D, E etc.) or degrees of the scale (I, II, III etc.) are shown on the Pitch Ruler.

A practical example
You are perhaps wondering what earthly purpose is served by all these options. An example may make things clearer. Let’s suppose you want to import a guitar part from your loop library and adapt it to the current song. Here’s how it’s done:

- First create a chord track (either by applying the chord recognition function to the instruments you already have or by typing in the chords).
- Now activate Scale Snap
- As the Pitch Background, choose "Chord"
- Insert the guitar part from your library and select all its notes (shortcut: [Cmd]+A)
- Then double-click any of the selected notes

Now the imported guitar part will follow the chords of the song. You may perhaps want to shift one or two of the chords upwards or downwards along the Chord Grid to obtain inversions.

With this procedure, of course, you may find occasionally that two notes that were different in the original guitar part end up on the same pitch. This is bound to happen where, for example, in the original recording, there's a major seventh chord (which is made out of 4 notes) but a simple major or minor chord (consisting of 3 notes) in the current song. Such problems, however, are easily solved: just select one of the two notes and drag it by hand to a "free" white note. Or you could switch the display background from "Scale Notes" to "Chord Scale" to obtain a wider choice of suitable notes.

When you are dealing with vocal parts, on the other hand, you will hardly ever find the "Chord" setting useful – it would limit the voice to too few notes (often only 3 or perhaps 4 per chord). Choose instead "Chord Scale", which will allow you greater flexibility when working with melodies. Where, on the other hand, you have multiple vocal tracks comprised of little more than "Ooh" or "Aah" sounds that you are using to provide layers of harmony, then "Chord" might be the most useful setting.

Once you have finished composing the melodic line and begin to address the finer points of intonation, switch the display background to Pitch Lines. This is because the lines – which represent perfect intonation – provide a clearer indication of which notes are out tune (and by how much) than that provided by the (far broader) beams.

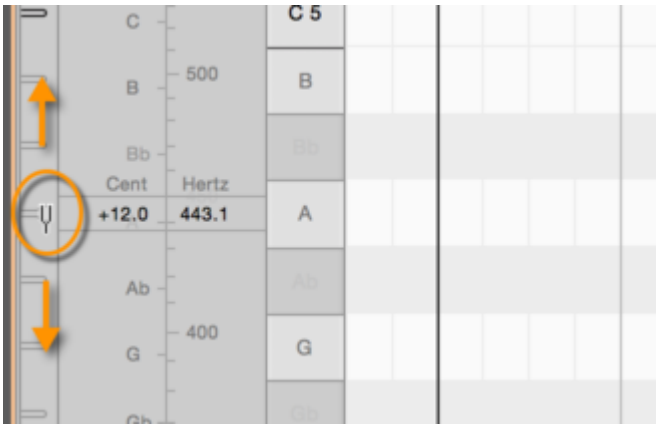
The Scale Ruler and the Reference Pitch Ruler

To select a scale for the Pitch Grid yourself or change other settings, click the rightmost icon (the two sharp signs) beneath the Pitch Ruler. Two new columns will appear to the left of it.

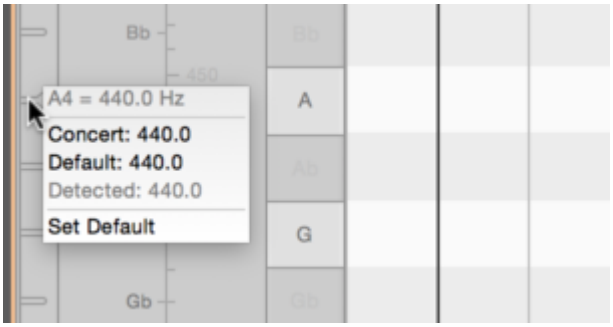


Adjusting the master tuning

The narrow column on the very left is the Reference Pitch Ruler. Drag in either direction the mark alongside any note – A4, for example – and the Frequency Ruler appears, which you can consult as you fine-tune the note in question and, with it, of course, all the other notes of the scale. What you are doing here is adjusting the master tuning for the entire Pitch Grid. A tip: increase the vertical zoom factor, as this will make it easier for you to locate the value you want.

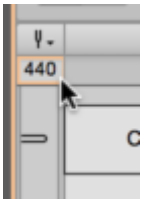


By right-clicking any of the marks on the ruler, you can open a small context menu. This offers a number of pointers to help you bring the Pitch Grid swiftly into line with a particular tuning:



- At the top, you will see the current frequency of the note selected.
- Concert: bases the tuning on modern standard concert pitch (where A4 = 440 Hz).
- Default: bases the tuning on the frequency currently assigned to A4 in the Preferences dialog.
- Detected: bases the tuning on Melodyne's analysis of the music being edited – the original tuning.
- Set as Default: tells Melodyne to use the current value as the default tuning for new documents and adjusts the value in the Preferences dialog accordingly.

The various settings for A4, incidentally, can be found quickly by clicking the tuning fork icon at the top of the Reference Pitch Ruler. By typing into the box immediately below this icon, you can assign to A4 any frequency you like.



Selecting the tonic and scale variety

The wider ruler next to the Reference Pitch Ruler is the Scale Ruler. Here you can select the ‘tonic’ (i. e. the first degree or keynote) of the scale as well as its mode or type. First click on the note you wish to use as the tonic. The following menu opens:



Related scales: in the top part of the menu, you will find a varying number of scales preceded by a “=” sign. These are scales that correspond to the current scale but are differently named. If your DAW offers a chord track and you have checked the option “Edit” > “Chords and Scales” > “Use DAW Keys”, certain options – such as the ability to select a related scale or switch between major and minor keys – are no longer available within Melodyne, as in that case you perform the settings in the key display of your DAW. Please note that when you select a related scale from this menu, only the main structure of the mode in question is adopted: the scale is simply given a new name and, if applicable, a new tonic. It can be, however, that the exact definition of the related scale in question contains additional secondary degrees or fine-tuning. If you wish to use these, please choose Open Scale... from the scale drop-down menu.

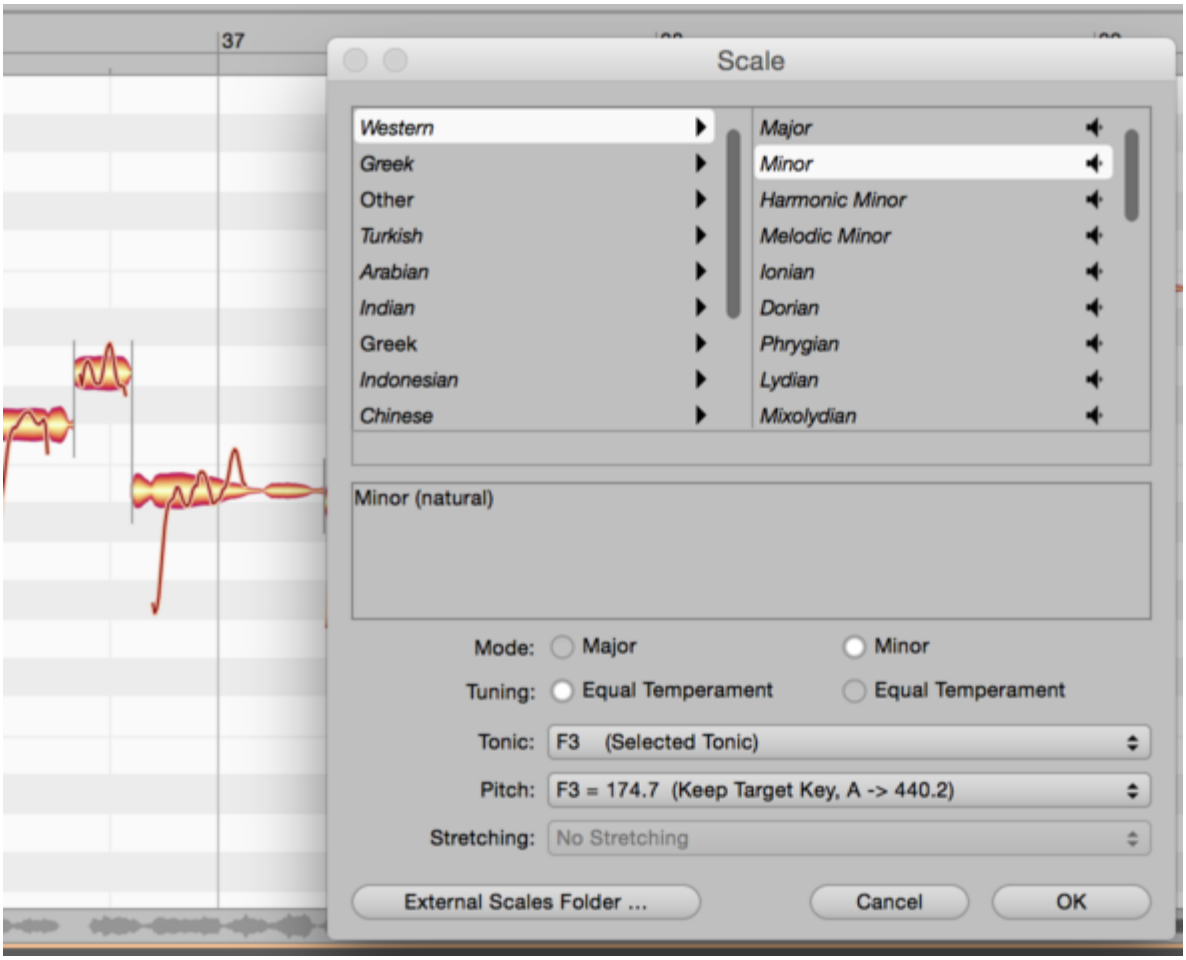
- The current note: in the middle of the submenu, grayed out, you will see the name of the note you have clicked on and which you can now make the tonic.
- Major / Minor: Allows you to select a major or minor scale with the note selected as tonic. To select C Major, for example, click C in the ruler, followed by C Major from the submenu.
- Open Scale... : opens Melodyne’s Scale Window, which offers access to a wide variety of additional scales. This window will be described in the next section.
- Analyzed: this offers you rapid access to two options derived from Melodyne’s analysis of the material: the closest major or minor scales and an exact microtonal scale.
- Notes Reflect Scale Changes: normally when you change the scale, Melodyne adjusts the Pitch Grid but does not change the notes themselves unless you double-click on them first, in which case they will snap to the grid. If, however, you wish the notes to adjust automatically to any change of scale, select either Tuning or Tuning and Mode. Then any changes will take effect immediately and you will hear them at once during playback.
- Play Scale: plays the current scale. When this function is active, the loudspeaker icon appears above the Scale Ruler. By clicking on this icon, you can deactivate the function without needing to access a menu.

Tip: Initialize the key prior to the transfer/load: In the case of monophonic or polyphonic audio material, Melodyne also recognizes the key of the music. With short melodic phrases, however, the key chosen is often not the one intended, simply because too few notes are available for a correct appraisal. To prevent this happening, you can set the key using the Scale Ruler of an empty instance of the plug-in or an empty document (if using the stand-alone implementation of the program) *before* the transfer or loading of an audio file. To do this, simply click on the desired keynote in the Scale Ruler and select the desired scale from the context menu. Melodyne will then retain this initialized value, regardless of its own subsequent analysis.

The Scale Window

Melodyne's Scale Window offers a multitude of scales you can select, listen to, and make use of. To access this window, choose "Open Scale" from the context menu of the Scale Ruler.

The selected scale applies to all instances of the Melodyne plug-in.



To open the Scale Window, select Open Scale from the context menu of the Scale Ruler.

Now choose a category from the left-hand pane followed by the desired scale from the pane on the right. Click the loudspeaker icon to the right of each entry to hear the scale selected.

If you have activated the option Notes Follow Scale Changes, during playback you will hear immediately the effect of applying the scale selected to your audio material. The window allows you to try out (or 'audition') different scales quickly and easily. If you wish to adopt the changes, exit the window with OK; otherwise click Cancel.

From the lower pane of the window, you can select between the parameters of your existing scale and those of the scale selected in the Scale Window.

- Mode and Tuning: you can adopt either the parameters of your existing scale (on the left) or of the scale currently selected in the Scale Window (on the right).
- Tonic: you can choose between the selected tonic or the tonic from the preset.
- Pitch: here you can choose between current tuning, the pitch from the preset or various standard tunings.
- Stretching: here you can select whether or not stretched tuning should be applied to the scale.
- External Scales Folder...: this button allows you to open a folder containing scale definitions in Scala format (filename extension “.scl”) which will then appear as an additional category in the Scale Window.

On the Internet, you will find at http://www.huygens-fokker.org/microtonality/scales.html a collection of over 4,000 Scala files that you can copy to any part of your hard disk and audition and try out in this way using Melodyne.

You can also load scale definitions created in Melodyne studio (filename extension ‘.mts’) with this button.

Tracks and Events

Thanks to ARA, Cubase and Melodyne work hand in hand when you are arranging your song. The following tour will familiarize you with all the requisite functions and offer practical tips.

Note: Since Melodyne runs in a number of different DAWs not all of which use the term ‘audio event’ as in Cubase (preferring perhaps ‘region’ or ‘clip’), in the Melodyne manual we generally use the term ‘clip’. All this means for you, as a Cubase user, is that whenever we use the term ‘clip’, whether in the program itself or the manual, you should understand us to mean an ‘event’ in Cubase.

Changes to audio events that Melodyne follows automatically

When you change the arrangement of audio events in Cubase, Melodyne, when integrated with ARA, follows automatically. Without ARA, every change made to the DAW track has to be reproduced manually in Melodyne. Changes to audio events that Melodyne with ARA follows automatically include the following:

- muting
- changing event boundaries
- moving
- copying

Things to remember when copying events

When audio events are copied in Cubase, both the original and each of the copies are (to begin with) mutually dependent, as far as Melodyne is concerned. This means that any changes made in Melodyne to one such event automatically appear in all the others. Suppose, for example, you have made consecutive copies of a two-bar bass riff and then changed a note in Bar 6. This same change will appear in each iteration of the riff (i.e. in bars 2, 4, 8, 10…).

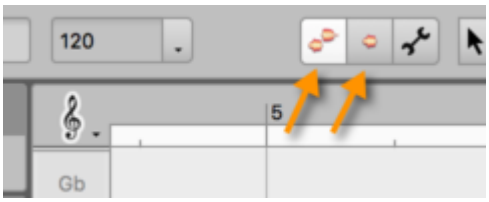
This is ideal if you want to make the same change to a riff wherever it appears. You cannot, however, introduce a one-off variation to it (i.e. a change that will appear in Bar 8 but not in Bars 2, 4, 6, 10…) quite as easily.

Before you can do this, you must first convert the event in question (in this case bars 7 and 8) into an independent copy. The Cubase command for this is “Convert to Real Copy”, which is found by right-clicking on the region in question.

Another example of the use of independent copies is copying a vocal track to a different track by dragging whilst holding down the Alt or Option key. Initially, this copy is not independent of the original track. If you wish to use it, however, as raw material from which to create a second voice to which you can then make melodic changes, you need to right-click on it and select “Convert to Real Copy”. In this way, you can create melodic variations, as well as vocal harmonies, at will.

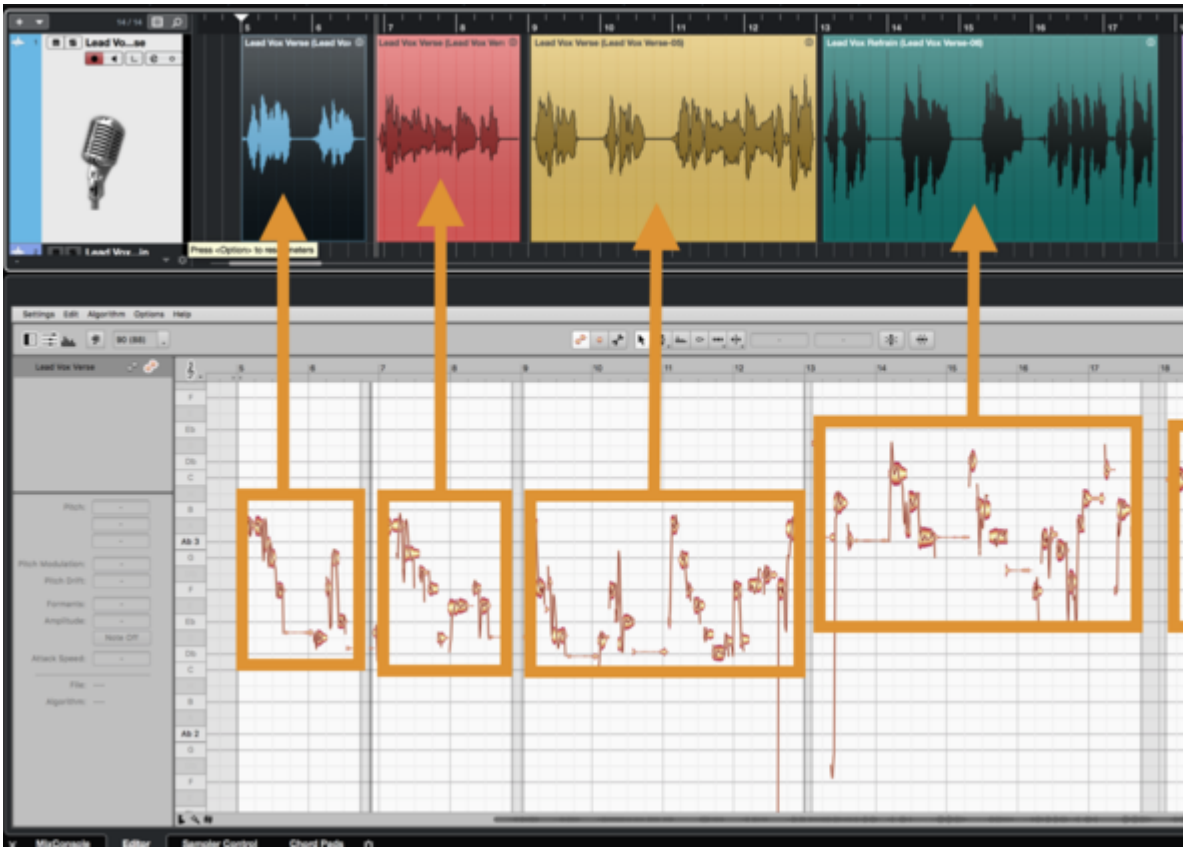
The Track and Clip editing modes

With ARA integration, after calling up Melodyne as an extension and opening a DAW track, two alternative modes are available for editing the notes: Track Edit Mode and Clip Edit Mode. You can switch between them using the buttons above the Note Editor. The left-hand button activates Track Edit Mode; the button to the right of it, Clip Edit Mode.



Track Edit Mode

Track Edit Mode lets you see the entire contents of the track opened in Melodyne, however many events it is composed of in the DAW.

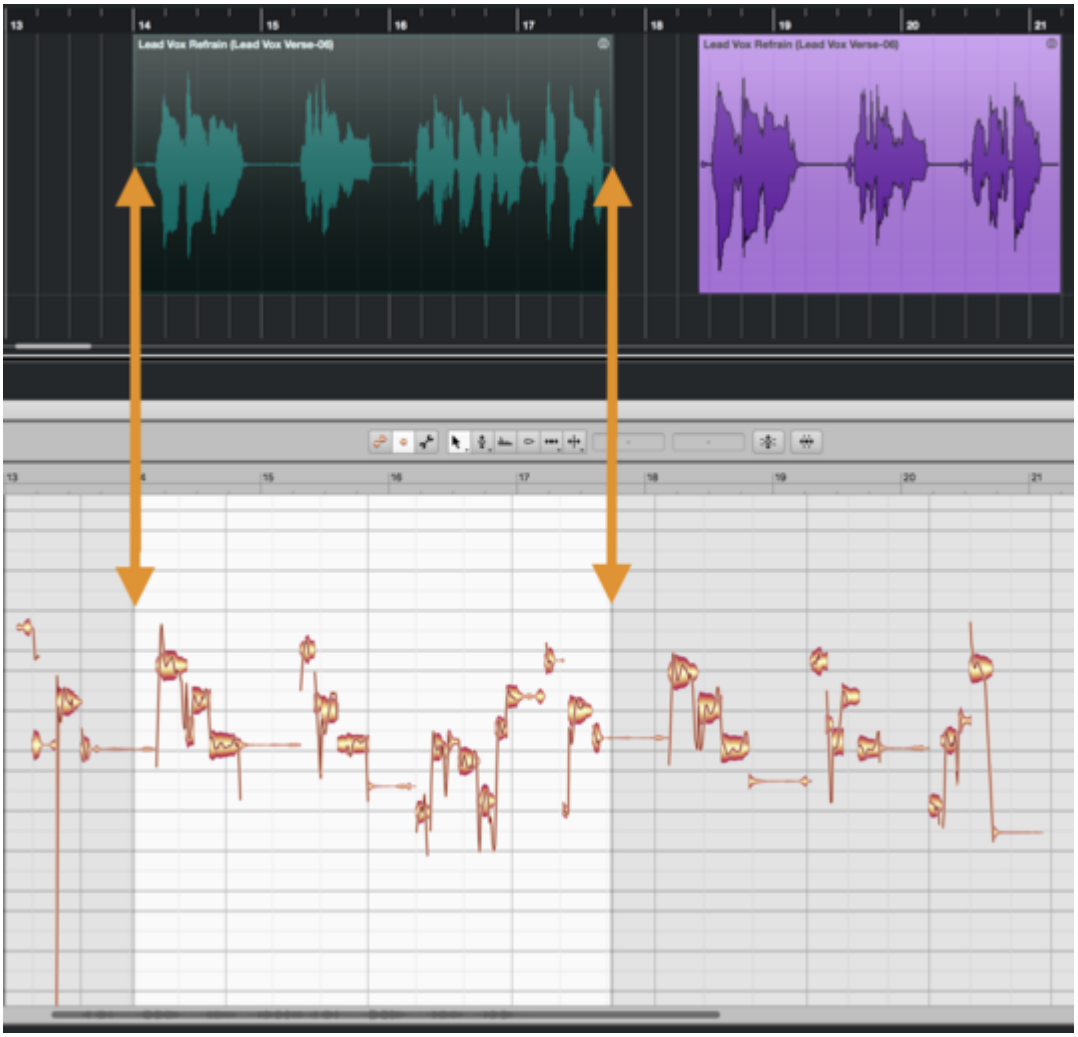


The event borders are indicated in Melodyne by vertical gray lines. The moving of borders is performed in the DAW, not in Melodyne, but the lines in the Melodyne user interface move accordingly. This allows you to see at once whether an event change occurs at an unwanted moment, such as in the middle of a note.

Clip Edit Mode

The alternative to Track Edit Mode is called Clip Edit Mode. You select this by clicking the right-hand mode button (the one with a single blob) above the Note Editor.

In Clip Edit Mode, you see only a single event from the DAW track at a time. The track list remains in view, but in Clip Edit Mode the Edit and Reference buttons are grayed out. Track Edit Mode and Clip Edit Mode differ in the way notes are displayed at event borders: whilst in Track Edit Mode, only notes lying within the event borders determined by the DAW can be seen, in Clip Edit Mode notes on either side of the borders remain visible; you therefore see in Melodyne – in the area with a gray background – what you might hear if you were to resize the event in the DAW.



Switching from Track Edit Mode to Clip Edit Mode and from event to event

Whereas in Track Edit Mode it is always obvious what you are looking at (the contents of the entire DAW track currently selected), Clip Edit Mode displays only one event at a time, so even other events belonging to the same track are excluded. This means that before you can switch to Clip Edit Mode, you must indicate clearly which event you wish to edit; until you do so, the Clip Edit Mode button will remain grayed out. In this case, while still in Track Edit Mode, you must make it clear which event you wish to examine. You can do this in either of two ways:

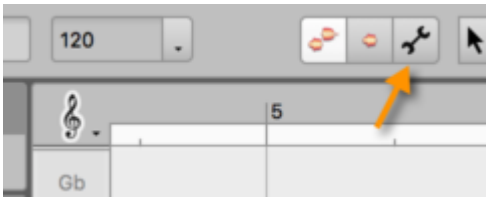
- By selecting a note, in which case it is obvious which event interests you: the one containing the note selected
- By making a selection, which, provided all the notes selected belong to the same event, is equally unambiguous; if they do not, you must narrow your selection – if need be, to a single note.

If no note is selected, Melodyne looks to see which event or events are selected in the DAW. If only one event is currently selected in the DAW, Melodyne opens its contents in Clip Edit Mode. Here in case of doubt you can avoid ambiguity by selecting a *single* event in the DAW (provided the option “Follow the Selection in the DAW” is activated).

Tip: If you are already in Clip Edit Mode and wish to change events, it is not necessary to switch back to Track Edit Mode in order to do so. Simply click on the desired event in the DAW, and Melodyne will display its contents immediately. For this to happen, however, the function “Follow the Selection in the DAW” must be activated in the Options menu and Melodyne must be present on the track containing the newly selected clip.

Entering Note Assignment Mode

You can only enter Note Assignment Mode from Track Edit Mode if it is clear from the current note selection which event you wish to examine. If necessary, therefore, click on one of the notes of the event you wish to examine in Note Assignment Mode. You can enter Note Assignment Mode from Clip Edit Mode directly, as only one event can be selected in Clip Edit Mode at a time and it is therefore obvious which event you intend to examine.

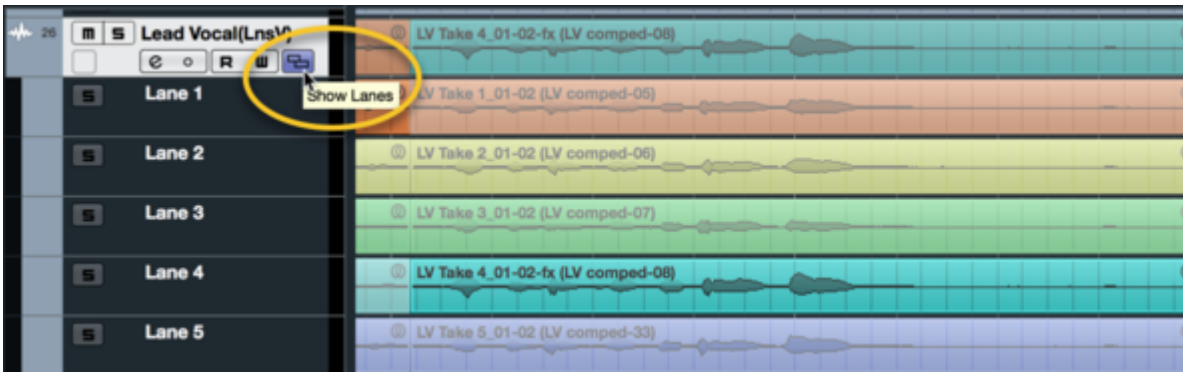


Comping specialities of Cubase/Nuendo

Whilst the comping tools and workflows of most DAWs are similar, there are certain differences in the way things are done and in the names of the various tools, and it is these we have set out to describe here – with particular emphasis, naturally, on how they affect the use of Melodyne.

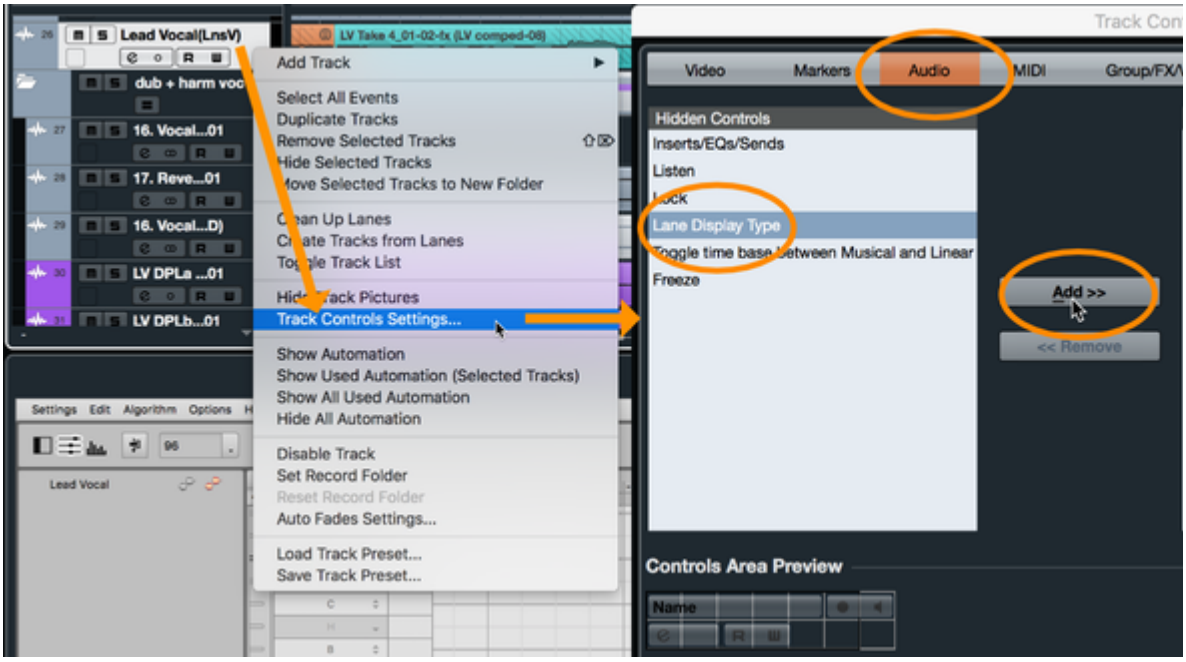
Making lanes visible

In Cubase/Nuendo, the individual takes are stored in lanes, which you can show and hide using this switch in the track header:



You can only use the comping tool (the Hand icon) while the lanes are showing.

If the switch in the track header is not visible, right-click on the track header, go to *"Track Controls Settings"* and choose there the *"Audio"* tab.



Now drag the entry *"Lane Display Type"* from the left-hand column to the right-hand one – i.e. from *"Hidden Controls"* to *"Visible Controls"*.

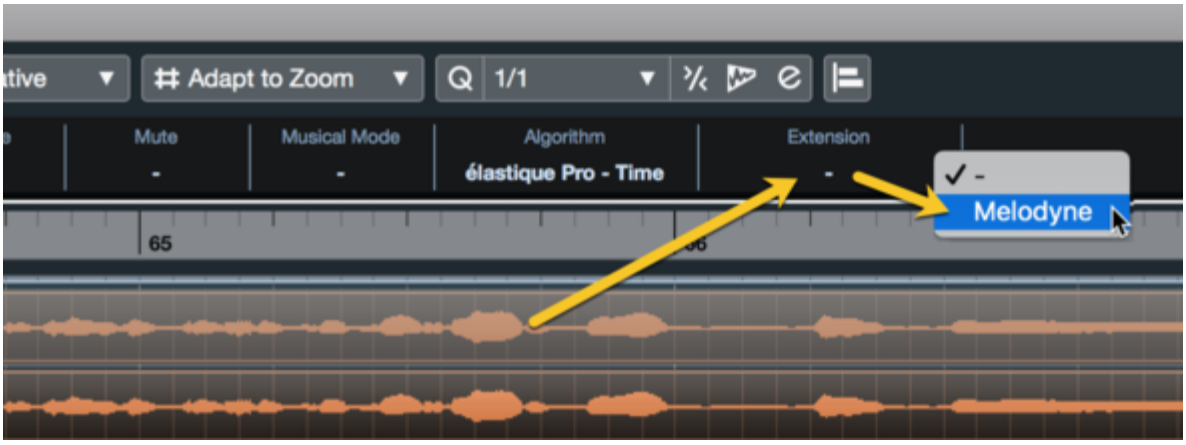
Creating lanes

You don’t need any special settings in Cubase or Nuendo to ensure that takes end up on separate lanes. If you simply record several times in succession on the same track, a new lane will be assigned automatically to each of the various takes.

If, however, you have not recorded your vocal takes in Cubase or Nuendo but exported them as individual files from another DAW (or have been sent them to remix), first create a new track and then drag onto it the first of the tracks to be imported. With this procedure, a second lane, to which you can drag the second of the files to be imported, is created automatically. Now do the same with all the other vocal takes you want to import.

Activating Melodyne

The moment you first use Melodyne on a take segment, Melodyne analyzes the entire take, including those parts of the take that do not currently feature in the comping schedule. This gives you maximum flexibility throughout the ensuing comping process, allowing you to work even more swiftly than in previous versions of Cubase, as in Version 11 it makes no difference when you use Melodyne, whether before or after you’ve begun comping.



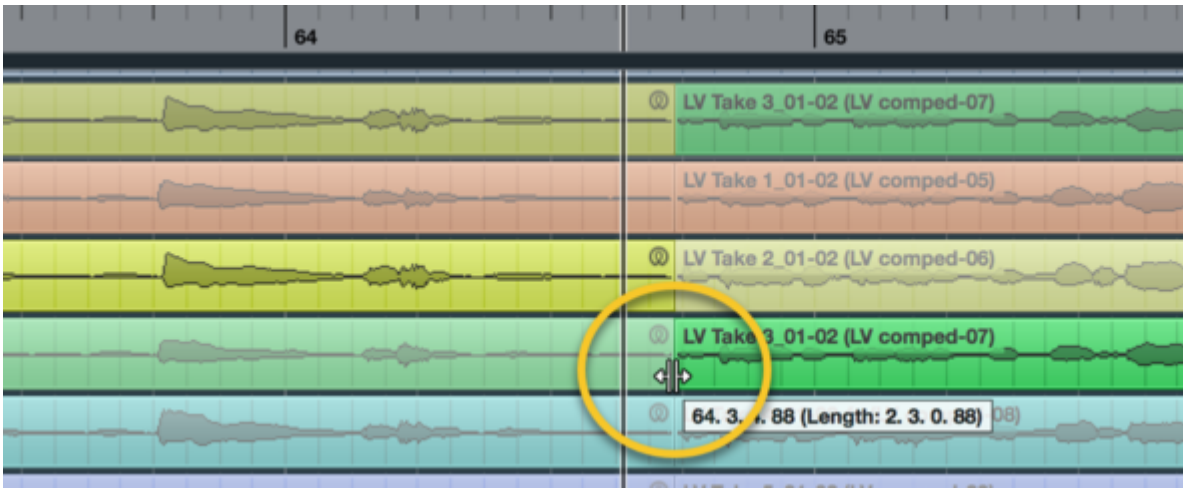
Swipe or click

When you click and swipe with the Comping Tool, you define the beginning and end of the passage during which a given take should play.

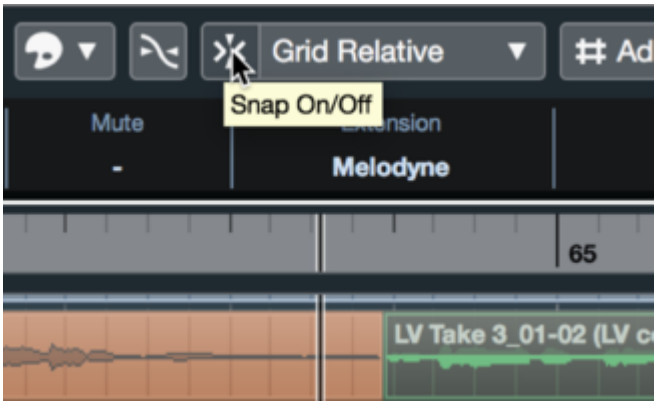
Once you have defined the boundaries of the passage in this manner, if you click with the Comping Tool on another take, the two takes swap places, so to speak, but the boundaries themselves remain unaltered.

Moving boundaries

To move comping boundaries subsequently, drag the border of either of two consecutive takes, and that of the other will move along with it:



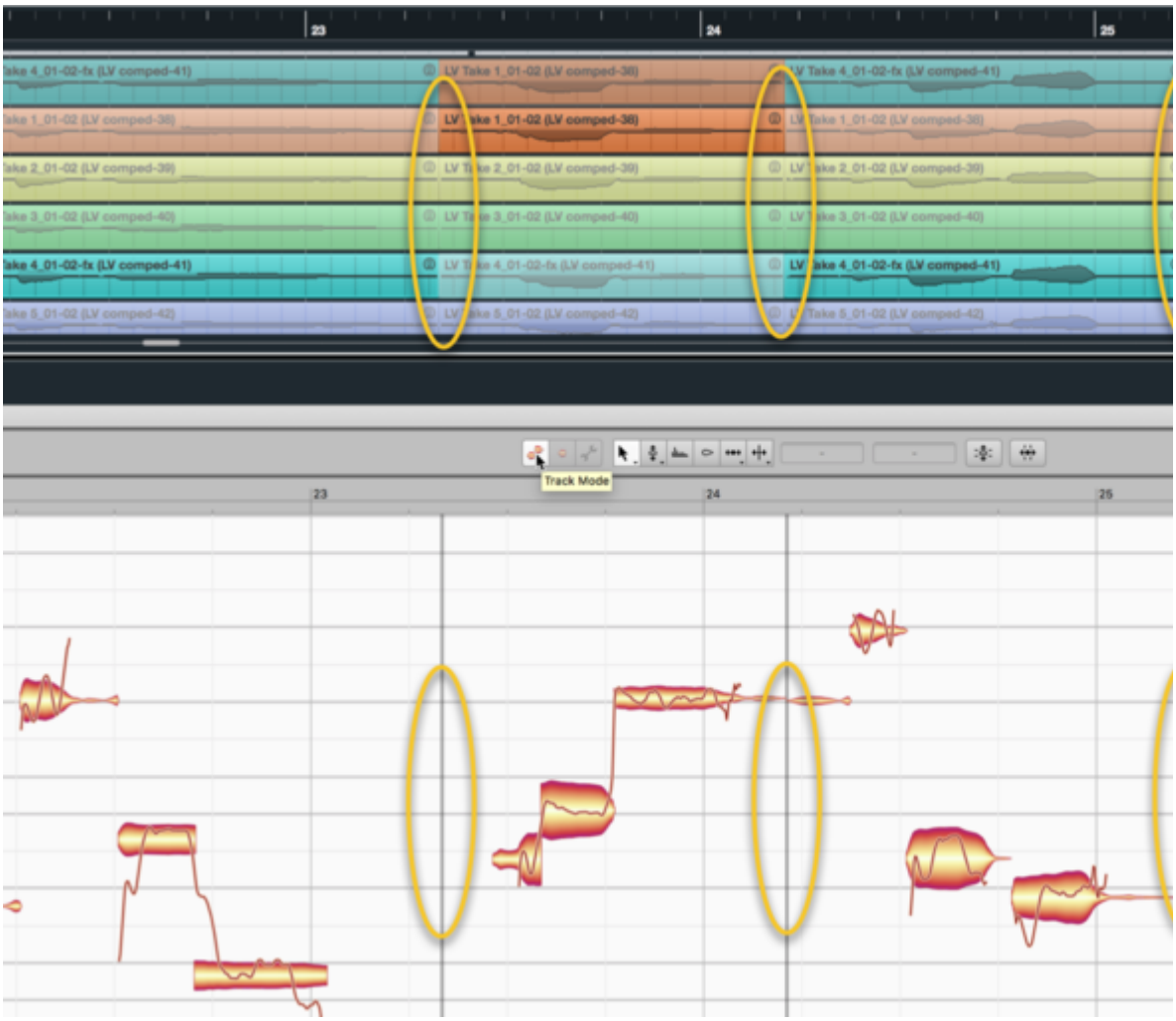
When doing this, it is advisable to deactivate the Time Grid:



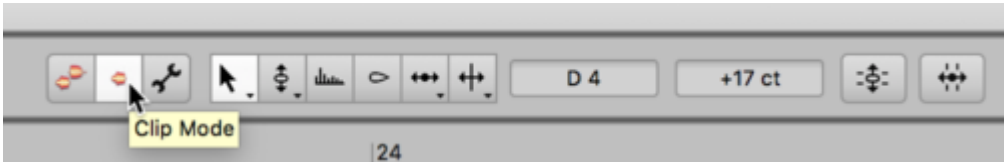
This is because the right place for a take change generally lies between syllables or breaths and not precisely on the grid. The zoom level in Cubase is relatively unimportant for the purpose, because when it comes to finding the precise break between syllables, you get the best view of the material in Melodyne. So zoom in Melodyne to the ideal level (which is most easily done by dragging upwards or downwards in Melodyne's Time Ruler); then move the boundaries in Cubase/Nuendo and make sure that the vertical line in Melodyne falls in a suitable position.

Melodyne modes: Track Edit vs Clip Edit

Most of the time, when you are comping in Melodyne, you will have Track Edit Mode selected. There you will see a representation of your main track – i.e. the exact succession of notes that you also hear, with vertical lines at the comping boundaries set in Cubase:

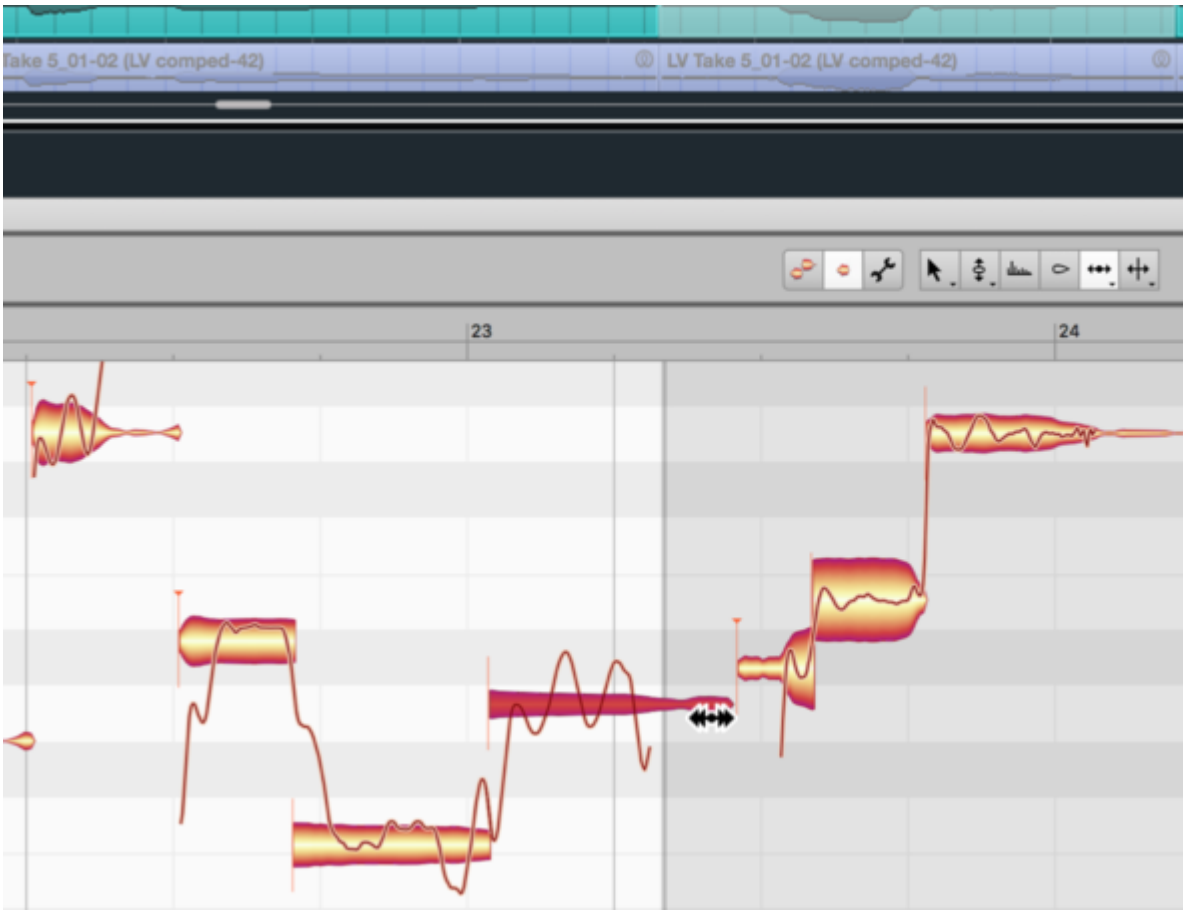


Alternatively, you can switch to Clip Edit Mode:



There you can look, so to speak, “under the bonnet” and examine *a single take* in its entire length. The highlighted area corresponds to the passage (defined in Cubase/Nuendo) during which this take is included in the playback; the areas with a gray background show you what else is included in the take and what you would hear if you were to move the comping boundaries in Cubase/Nuendo.

Clip Edit Mode allows you, among other things, to take hold of the end of a note currently truncated by the comping:



Now you can shorten the note until it is confined entirely to the highlighted area – which means it fits exactly within the comping segment defined in the DAW.

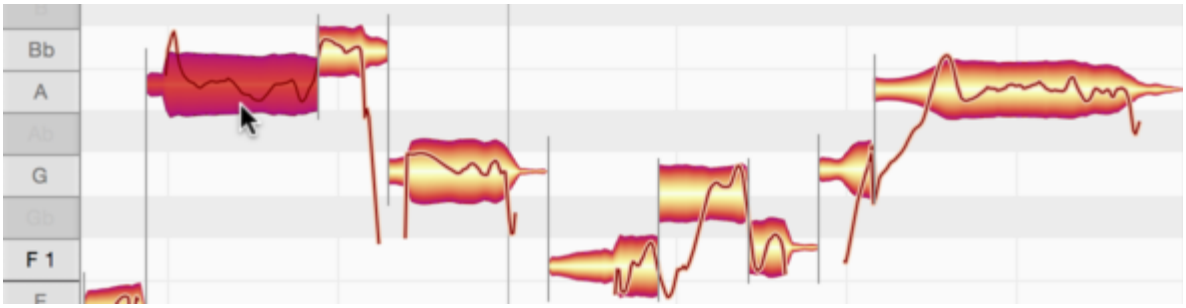
To learn more about the respective advantages of Track- and Clip-Edit Mode, click here.

Selecting notes

In this tour, you will learn which techniques you can use to select notes in Melodyne prior to editing them.

Standard selection techniques

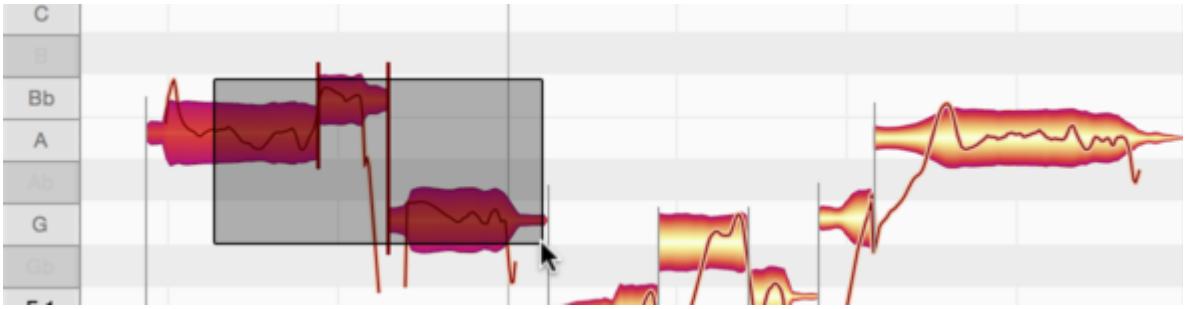
Click a note in the Note Editor to select it. Selected notes are more boldly colored.



[Command]-click additional notes to add them to the selection.

[Command]-clicking a selected note removes it from the selection.

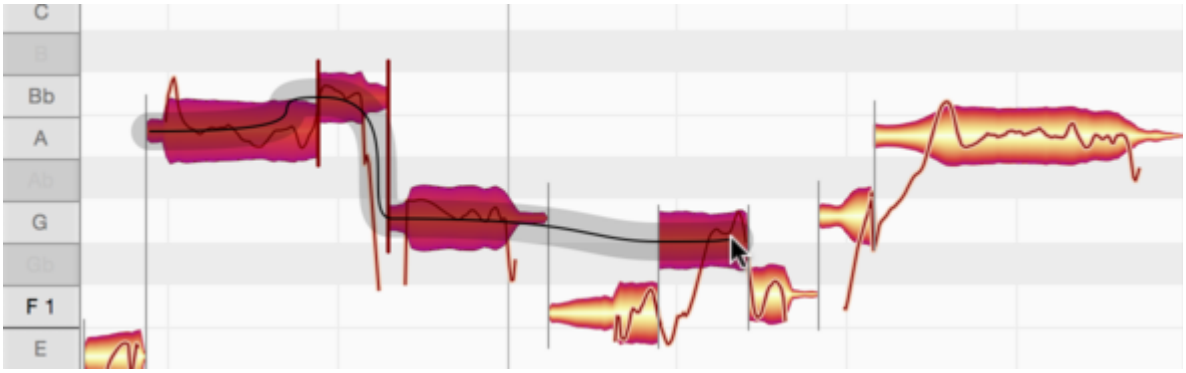
Another way of selecting multiple blobs is to lasso them by clicking the background in one corner of the desired selection and then dragging the pointer to the corner diagonally opposite. This is sometimes called rubber-banding. If you hold down the [Command] key, you can add a further rubber-band selection to the existing one. You can also add individual notes to the selection (or remove them from it) by [Command]-clicking.



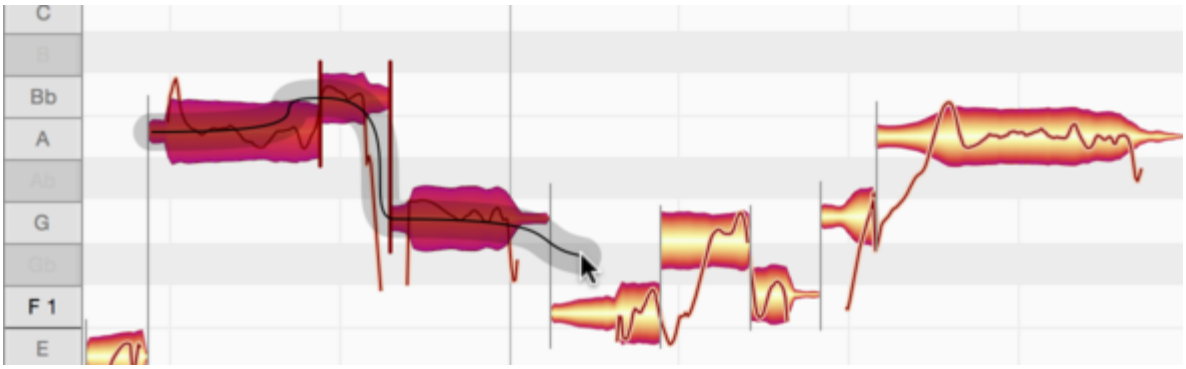
To select a passage (i.e. a series of notes), click the first note of the series and then [Shift]-click the last (or vice versa).

Snake selection

If you press the [Shift] key, click a note and then move the mouse pointer away, Melodyne's snake selection mode is activated. You can now add notes to the selection by painting over them with the snake.

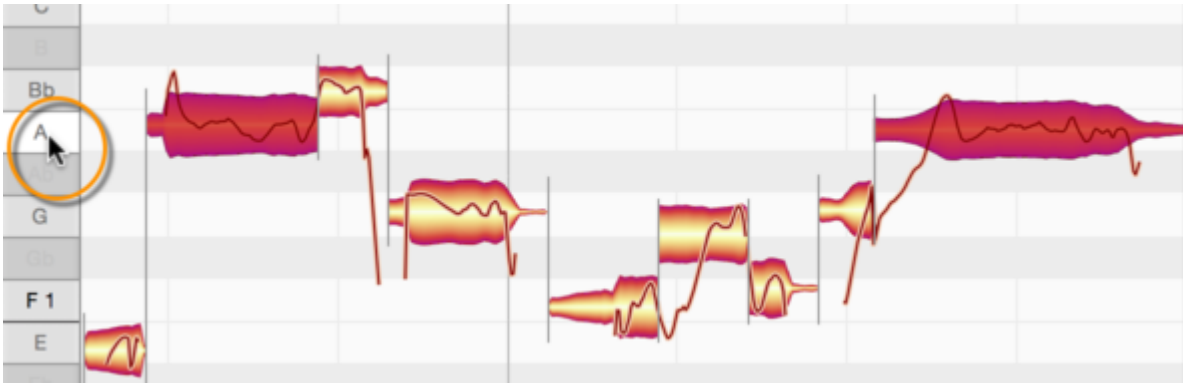


If you move the mouse (and thereby the snake) backwards again, you can remove notes previously painted over from the selection.



Selection using the Pitch Ruler

Click a note in the Pitch Ruler to select notes of the corresponding pitch.

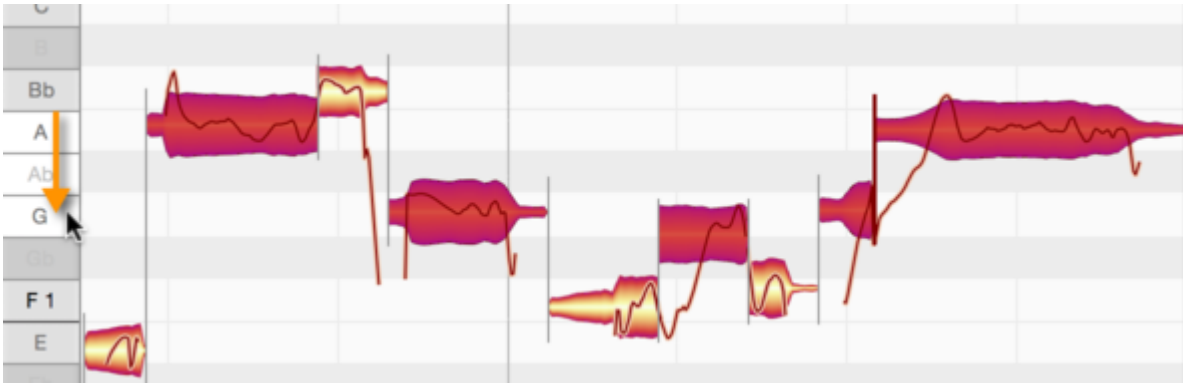


If cycle mode is active, the selection only affects such notes if they lie within the cycle range.

By [Command]-clicking other notes in the Pitch Ruler, you can add them to the selection and later remove them by the same means.

If you double-click, as opposed to single-clicking, a note in the Pitch Ruler, you will select the same note in all octaves rather than simply that single instance of the note.

Click and drag in the Pitch Ruler to select a range of notes.



By using the [Command] key in the Pitch Ruler, you can remove from the selection a range of notes or individual notes. Here too, if a cycle is active, only notes within the cycle range will be selected.

Selection commands in the menu

In the Edit menu and the context menu of the Note Editor, you will find the command Select All and the Select Special sub-menu, which contains a number of more sophisticated options.

The command Restore Last Selection reverses the last selection step, thereby restoring the selection that was active beforehand. This is useful if you are in the process of performing a complex selection and accidentally shoot astray, causing the selection to disappear. By clicking Restore Last Selection, you can retrieve it.

The command Invert Note Selection deselects all selected notes and selects all notes that were previously not selected. The commands that follow are similarly self-explanatory, allowing you to select all the notes that follow, all notes of the same pitch, all notes of the same pitch in all octaves, and so on.

The command Select Fifths Above and Below in All Octaves selects tones a fifth above and below the selected tones in all octaves. All the Select commands in the second subdivision of the menu operate on the cycle zone only if cycle mode is active.

The two commands that follow, Select Same Beat in All Bars and Select Notes Between Locators, are also self-explanatory.

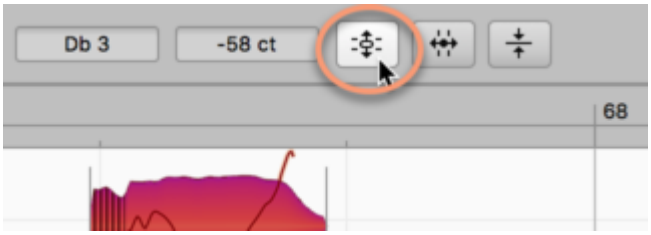
Correct Pitch Macro

The Correct Pitch Macro is used to rectify poor intonation quickly and intelligently and rein in any undue wavering in pitch.

Opening and using the macro

Select the notes you wish to edit. If no notes are selected, macro editing will by default affect all notes.

To open the macro, choose Edit > Quantization Macros > Correct Pitch or click on this button at the top of the Note Editor.

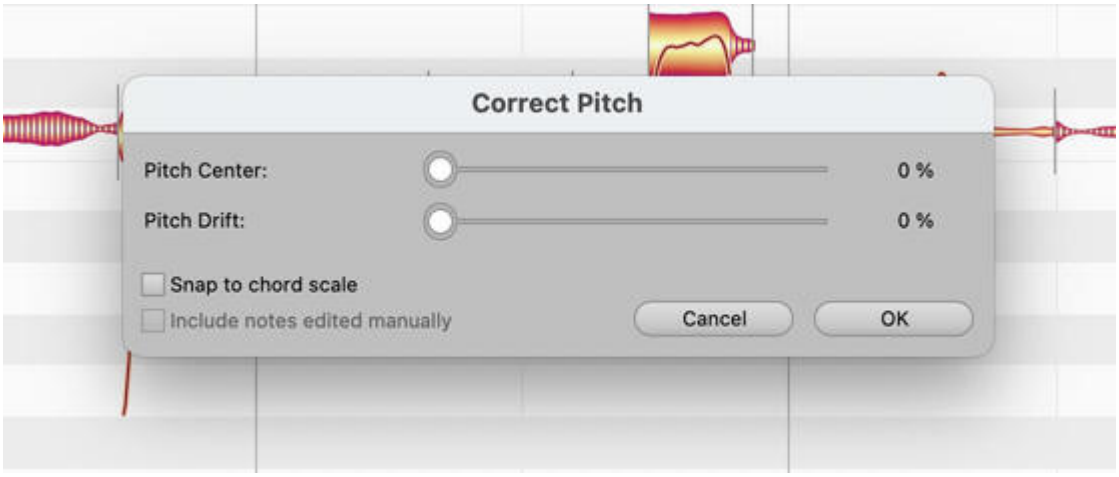


Here, with the upper slider, you can apply a degree of correction ranging in intensity from 0% (no influence) to 100% (full power) to the pitch center of the notes selected. By default, such notes are moved towards, or to, the nearest semitone:

If you prefer, however, you can have the notes snap to the nearest degree of the current scale or (if chords have already been defined) to the nearest member of the current chord; in either of these cases, check the option “Snap to Chord Scale”.
Depending upon the position of the intensity slider, the notes will then snap all, or part of, the way to the corresponding pitches.

The macro works in a musically intelligent manner: At lower settings it affects only those notes that are wildly out of tune, leaving untouched those that are already quite close to the intended pitch. As the slider is moved further towards the right, however, even those notes are influenced, and to an increasing degree, until at 100% all the selected notes are exactly in tune.

The pitch center, which the macro adjusts automatically, is the same parameter that is modified when pitch correction is performed manually using the Pitch Tool.



With the lower slider, you can progressively reduce the amount of pitch drift exhibited by the notes in question. By “pitch drift”, we mean the kind of slow wavering in pitch that is symptomatic of poor technique. More rapid fluctuations in pitch, such as pitch modulation or vibrato, remain unaffected.

You can modify both correction parameters in real time as the audio plays back; and hear, but also see (by the movement of the blobs in the Note Editor, the effect of different settings.

If you have already fine-tuned some notes using the Pitch Tool, Melodyne will assume you are satisfied with the results; this means that, by default, if you now open the Correct Pitch Macro with no notes selected and begin making changes, only the other notes will be affected. By default, in other words, notes that have been tuned manually are not affected by the macro. If you wish the pitch of these too to be affected by the macro, check ‘Include notes fine-tuned manually’. The option is grayed out, of course, as being of no relevance, if no manual editing of intonation has been performed.

Closing the macro and correction values when it is reopened

Exit with OK to keep your changes or Cancel to discard them. Naturally the fact that you have used the Correct Pitch Macro in no way precludes your fine-tuning notes at any time subsequently by hand.

If you select a note that has already been edited using the macro and then open the macro again, the settings previously applied to it will be displayed; the macro remembers, in other words, the parameters previously applied to each note. If the current selection includes notes to which different settings have been applied, when it is opened the minimum and maximum values for each parameter will be displayed.

Even after exiting with OK, you can still reverse the effects of the macro editing by using the undo function.

The Correct Pitch macro and sibilants

When the algorithm Melodic (the usual choice for vocals) is selected, Melodyne detects and marks what it defines broadly as “sibilants”. In the case of vocals, these include not only fricative consonants and digraphs such as “s”, “z”, “ch” and “zh”, but also word fragments like “k” and “t”, as well as the sound of the vocalist inhaling or exhaling between words. Whilst such sibilants do move upwards or downwards in the display under the effects of the macro, acoustically they remain unaltered.

By transposing only the pitched components of the sound in this way, the macro is able to maintain optimum sound quality throughout; to alter the frequency of sibilants would sound unnatural. But if, as a special effect, you ever do wish to apply pitch shifting to sibilants, this can be done manually using the Pitch Tool, as is described in detail here.

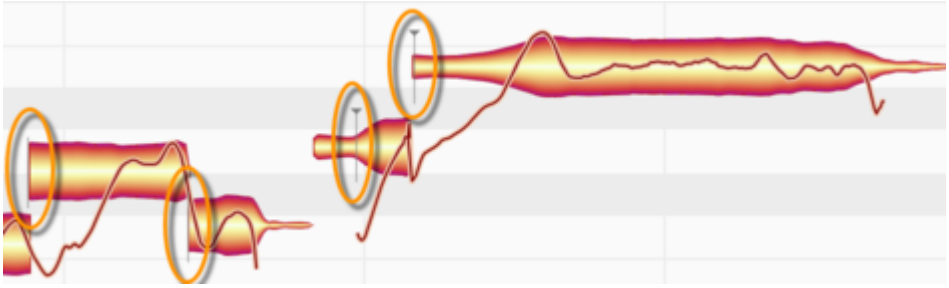
Quantize Time Macro

In this tour, you will learn how to work with the Quantize Time Macro, which makes it possible to correct the timing of notes swiftly and effortlessly.

Quantizing timing: What is moved and where to?

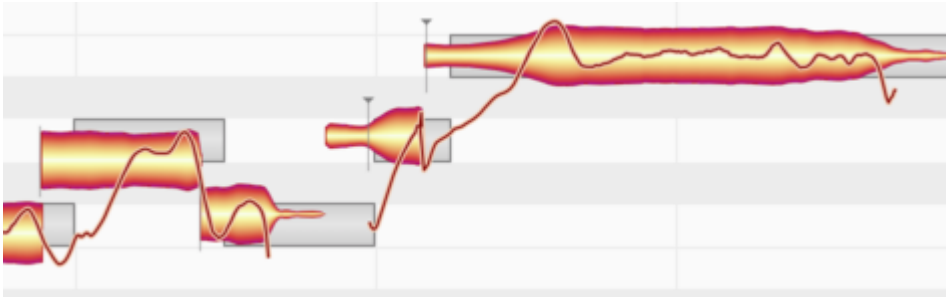
Before examining the operation of the Quantize Time Macro, we should clarify a few basic concepts and relationships.

To understand these better, let’s begin by selecting the Time Tool. When this is active, a note separation (indicated by a vertical dash) or the musical starting point of the note (indicated by a vertical dash with a triangle) appears near the start of each blob.



Now check Show Intended Notes in the Options > Note Editor sub-menu, which can also be accessed via the cog icon in the top right-hand corner of the Note Editor.

Gray boxes now enclose each blob.



When it first analyzes the material, Melodyne calculates for each note two parameters of relevance to the process of time correction.

The first is the intended musical beat of the note; this is indicated by the start of the gray frame enclosing the blob. As you can see, the start of the frame invariably coincides with a grid line.

The second is either the beginning or the musical starting point of the note, represented, respectively, by a note separation or a vertical dash with a triangle. The latter will not necessarily be aligned with the left-hand extremity of the blob. Think of a brass instrument, for example, where each actual note is often heralded by a certain amount of wind noise. Admittedly this noise belongs to the note, but from the standpoint of timing what is of relevance is the moment the sound really unfolds and the pitch first becomes discernible; that is the timing-critical moment.

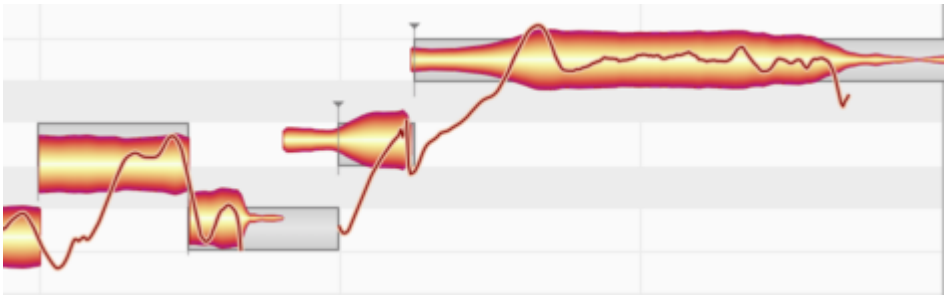
If you quantize notes with the Quantize Time Macro, the musical starting point of each note (if one has been determined; if not, the beginning of the note) will move towards the left-hand side of its gray frame. The quantization intensity slider determines whether it goes all of the way, or only part of the way, to the beat assigned it.

There are also notes for which no starting point is displayed. Such is the case with notes – and not only the human voice but almost all instruments too are capable of producing them – with an attack so drawn out that it is impossible to find an instant of which you can say with any confidence “this is where the note really begins”. It still begins somewhere, of course, so Melodyne treats the onset of the sound – the start of the long attack phase, in other words – as the musical starting point and moves that to (or towards) the quantization target – i.e. the beginning of the frame.

In determining, or seeking to determine, the musical starting point of each note, Melodyne conducts a careful analysis of the audio material and in most cases its determination is musically correct. Any time you disagree, though, you can enter Note Assignment Mode and define some other instant within the life of the note as its musical starting point.

The Melodic algorithm requires separate mention because when it is active, Melodyne locates and marks what it calls “sibilants”. In the term “sibilants”, Melodyne includes not only fricative consonants and digraphs such as “s”, “z”, “ch” and “zh”, but also word fragments like “k” and “t” as well as the sound of the vocalist inhaling or exhaling between words. Whenever such a sound coincides with the start of a blob, the musical starting point identified by Melodyne always comes later. This produces more sensible results when quantization is applied than would be the case if the sibilant itself were regarded as the musical starting point of the note.

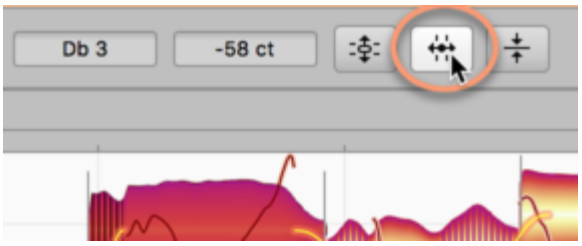
Another way of changing the way sibilants are handled by the Quantize Time macro is to use the Separation Tool to slice the note in two at the point where the sibilant ends; so an “s”, for example, at the beginning of a word, would get a blob all to itself. Since an unvoiced “s” can have no musical starting point, the left-hand extent of this blob (i.e. the onset of the sound itself) would then be regarded as the critical moment for the purposes of quantization.



Opening the Quantize Time Macro and setting the parameters

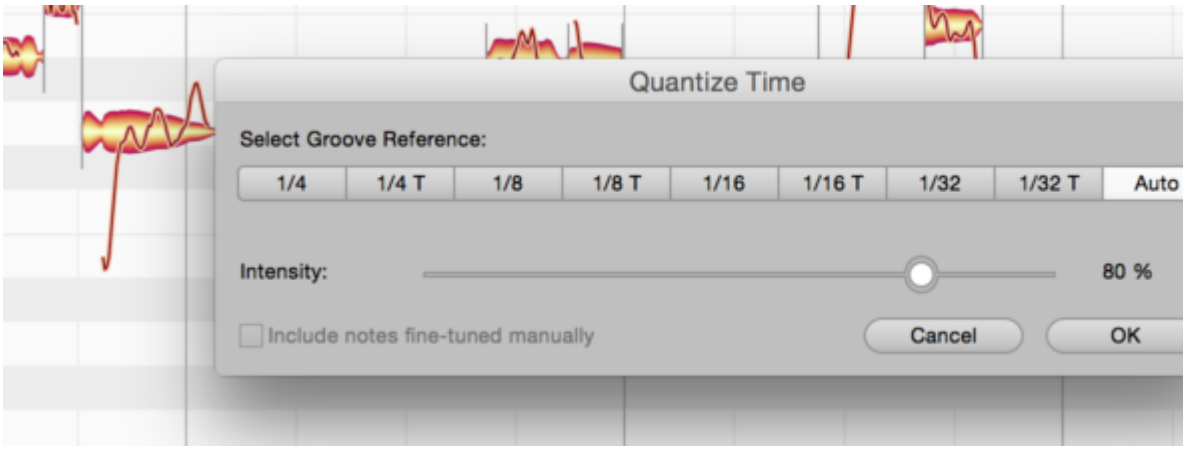
Select the notes you wish to edit. If no notes are selected, macro editing will by default affect all notes.

To open the Quantize Time Macro, choose Edit > Quantization Macros > Quantize Time or click the Quantize Time icon (illustrated here) to the right of the toolbar in the Note Editor.



First, the Groove Reference (if any) that will govern the time correction must be selected.

If Auto is selected, the target (or ultimate destination) of any quantization will be the left-hand edge of the gray frame, as already described. This is invariably aligned with the grid line that represents the beat to which Melodyne, in the course of its analysis, assigned the note. (On the whole, the system functions very well; but it can happen that Melodyne gets it wrong, and that after quantization you have to move the note manually to the preceding or following beat.) By selecting Auto, in other words, you are telling the Quantize Time Macro to move notes to (or towards) the beats assigned them by Melodyne based on its own analysis of the material.



With the other buttons, you can select the target grid for the quantization. The ‘T’ next to the note values stands for the corresponding triplet. If you select 1/4 as the Groove Reference, to give one example, the grey frames will move to the nearest quarter-note (or ‘crotchet’) and this will then become the ultimate destination for any quantization.
Note that the time correction macro works differently from, and in a more musical fashion than, the quantization typically offered by MIDI sequencers. Instead of simply causing all notes to snap to the selected grid, it edits the points of rhythmic emphasis of the selected notes. If, for example, you take a passage containing successions of sixteenth notes (semiquavers) and quantize it to quarter notes (crotchets), the beginning of each succession of sixteenth notes will be moved to the nearest quarter note. The timing of the semiquavers within the sequence, however, remains unaltered. If you wish to tidy that up as well, you can do so in a second pass, taking each semiquaver sequence in turn and using sixteenth notes as the quantization factor.

The Intensity slider determines what percentage of the distance to this ultimate destination the notes will travel in the course of quantization. If you select 0%, for example, they’ll not budge; 50%, and they’ll go half way; 100%, and they’ll travel the full distance, ending up precisely on the beat. You can modify both the Groove Reference and the Intensity of the quantization in real time as the audio plays back; and hear, but also see (from the movement of the blobs in the Note Editor), the effect of different settings.

If you have already finely adjusted the position of notes using the Timing Tool, Melodyne will assume you are satisfied with the results; this means that, by default, if you now open the Quantize Time Macro with no notes selected and begin making changes, all notes will be affected except these. If you wish the position of these too to be affected by the macro, check ‘Include notes fine-tuned manually’. The option is grayed out, of course, as being of no relevance, if no manual editing of note positions has been performed.

Closing the macro and correction values on reopening

Exit with OK to keep your changes or Cancel to discard them. Naturally, the fact that you have used the Quantize Time Macro in no way precludes your moving notes at any time subsequently by hand.

If you select a note that has already been edited using the macro and then open the macro again, the settings previously applied to it will be displayed; the macro remembers, in other words, the parameters previously applied to each note. If the current selection includes notes to which different settings have been applied, a mean value for each parameter will be displayed. Even after exiting with OK, you can still reverse the effects of the macro editing by using the undo function.

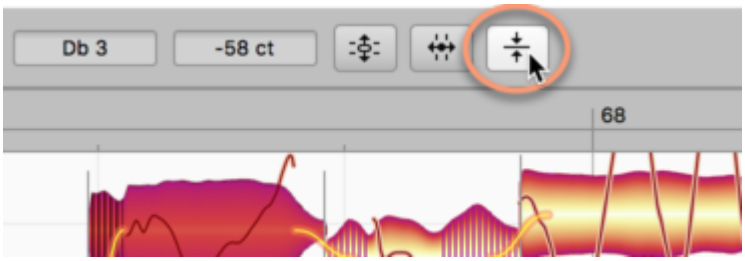
The Leveling Macro

The Leveling Macro serves to reduce or eliminate excessive volume differentials between the notes on a track. It can be used to make quiet notes louder, or loud notes quieter, or both – until, in the extreme case, no dynamic variation remains.

Opening and setting the Leveling Macro

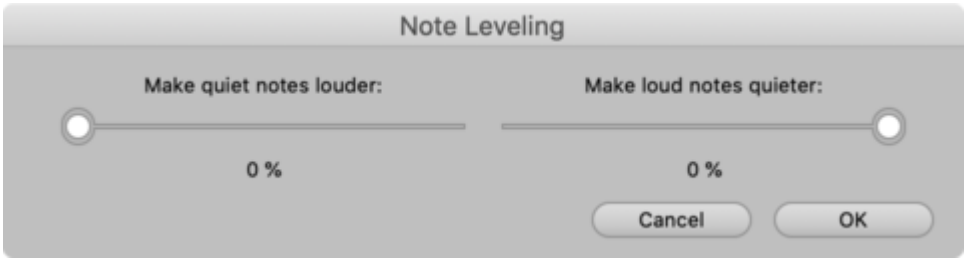
First select the notes you wish to edit. If no notes are selected, the macro will govern all the notes on the track.

Now open the Leveling Macro either from the Edit menu or by clicking on the icon shown here above the Note Editor.

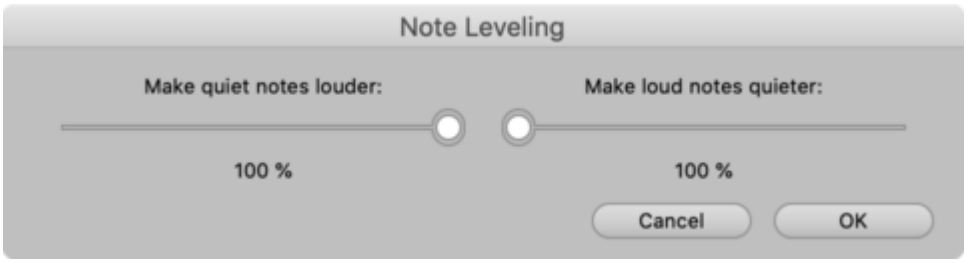


The macro offers you two converging sliders. The left-hand slider, as you move it from left to right, makes the quiet notes louder; the right-hand slider, as you move it from right to left, makes the loud notes quieter.

When you first open the macro, their positions are as follows;



If you apply maximum leveling, they will then look like this:



The Mean Amplitude

Coming from the left (quiet) and right (loud), the two sliders as they converge shepherd the blobs towards the Mean Amplitude in the center. This value is derived from an analysis of the notes you selected before opening the macro. It is therefore based upon the musical content and cannot be adjusted manually.

When you use the macro, you will notice that any given note will respond either to one slider or to the other. The reason is obvious: a given note's amplitude in the original audio file cannot be less *and* greater than the Mean Amplitude. Note also that since the ultimate extent of each slider is the Mean Amplitude (a line that neither can cross), a note that was originally quieter than the Mean Amplitude can never pass above it; and a note that was originally louder than the Mean Amplitude can never pass below it.

A further observation: You may notice that certain blobs, representing very quiet sounds that are also of very short duration, do not respond to the macro at all. This is deliberate, as Melodyne initially assumes the blobs in question represent (extraneous) noise, which if boosted by the left-hand slider of the macro would become even more obtrusive. Naturally, you can edit such sounds freely by hand using the Amplitude Tool.

If you have adjusted the volume of any of the selected notes manually using the Amplitude Tool before opening the macro, it is the adjusted rather than the original values that will be considered when calculating the mean amplitude. It is from the most recently set amplitude of the manually adjusted notes that any movement towards the centre will begin as the leveling takes effect. If you do not wish a manually adjusted note to be affected by the leveling, simply exclude it from the selection before opening the macro.

Of course, if you only select one note prior to opening the macro, neither slider will have any effect, as in that case the mean amplitude of the selection and the amplitude of the selected note will be identical.

Closing the macro and correction values when it is subsequently re-opened

Exit the macro with “OK” to keep your work or with “Cancel” to return to the status quo ante. Obviously, you can apply further adjustments later to the volume of the notes in question with the Amplitude Tool whether you exit with “OK” or “Cancel”.

Furthermore, even if you exit with “OK”, you can still use the Undo function to nullify the effects of the macro. Another way of doing this is to right-click (with the Amplitude Tool selected) and choose “Reset Amplitudes” from the context menu.

If you select a note the amplitude of which has already been affected by the macro and then open the macro again, the percentage shown in the macro window may differ from that displayed on the previous occasion. This is likely to be the case if the other notes selected are different on each occasion, as the mean amplitudes of the two selections will almost certainly differ and, with them, the percentage values displayed.

Main Tool

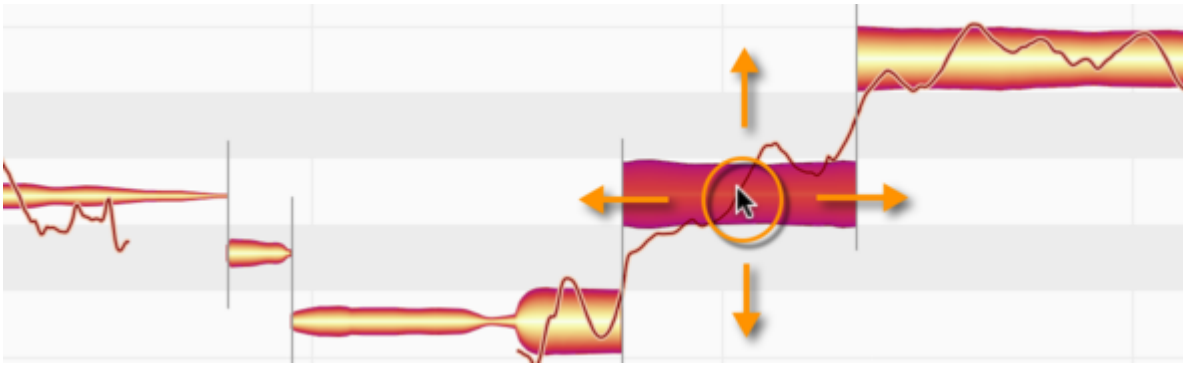
Melodyne's Main Tool is context-sensitive, its exact function at any given moment depending upon its position relative to the selected blob. It has no unique functions but simply offers a different mode of access to functions it shares with the more specialized tools for editing pitch, timing and note separations, combining them in such a way that you can perform the most essential editing tasks without ever having to change tools.

Modifying the pitch and timing of notes

Select the Main Tool (denoted by an arrow) from either the toolbox or the context menu of the Note Editor or by pressing the [F1] key of your computer keyboard. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.)



With the Main Tool, move the arrow to a point near the center of a blob and press and hold the mouse button as you drag it upwards or downwards (to alter its pitch) or left or right (to move it forwards or backwards in time). It is the initial movement (whether vertical or horizontal) that decides whether the pitch or timing of the note is altered. Before changing axis, you must first release the note. If you hold down the [Alt] key as you drag the note, the Pitch Grid or Time Grid, even if active, will temporarily be ignored, allowing you to position the note exactly where you want it.



While you are dragging a note up or down, you will hear the frozen sound of the note at the point where you clicked. If, whilst dragging, you move the mouse to the right or left, you can put other parts of the note under the acoustic microscope. If you do not wish to monitor pitch changes in this way, uncheck the option Monitor When Editing Blobs in the Options > Note Editor sub-menu, which can also be accessed via the cog icon in the top right-hand corner of the Note Editor.

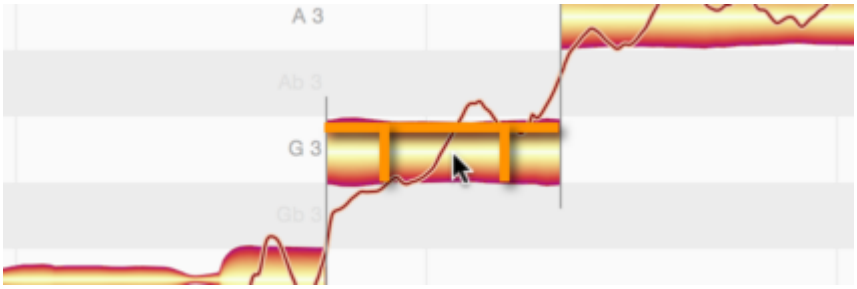
If you double-click with the Main Tool on the middle part of a note (or one of a selection of notes), you quantize the note(s) in question to the nearest pitch allowed by the current Pitch Grid.

The blob not only jumps to a different note altogether (e.g. from E to F, if E is not allowed by the active Pitch Grid), but also loses any fine offset it may have had from its previous pitch. In other words, it snaps precisely to the target pitch, the offset being then 0 cents.
This gives you a quick and easy way of correcting the intonation.

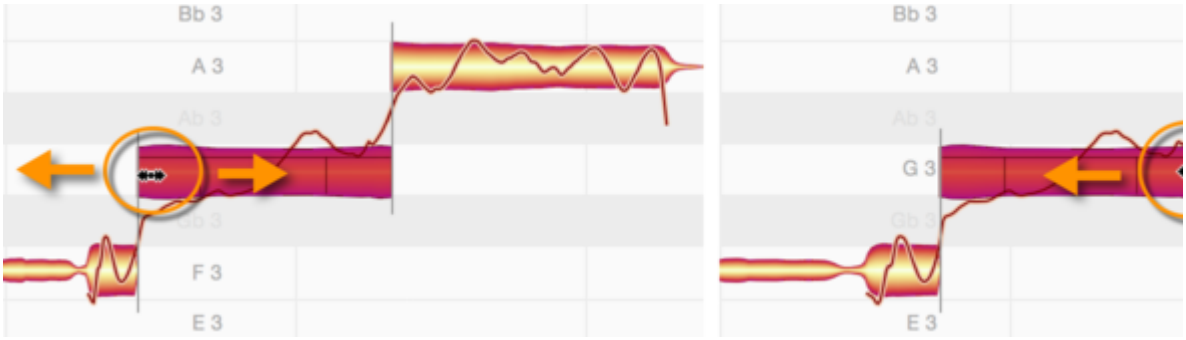
However, if correcting the intonation is not what interest you here and your aim is simply to make the notes fit new chords, hold down the [Alt] key as you double-click. Then the note will jump, as you intend, to the nearest note in the chord, but retain its previous offset, creating interference effects that are sometimes desirable.

Modifying note lengths

Open the Note Editor Options menu and check Show Blob Info. Zoom in on a few individual blobs, so that you can study them more closely. Now, as you move the mouse pointer over a blob, thin lines appear indicating the zones in which the Main Tool performs particular functions. For illustrative purposes, the lines here have been drawn more boldly than in the program itself. The central area you already know about. This has to be distinguished from the front, back and upper regions of the blob. As you move the mouse pointer from one of these regions to another, it changes its appearance to emulate whichever of the more specialized tools is most appropriate to that zone – adopting its functions at the same time.



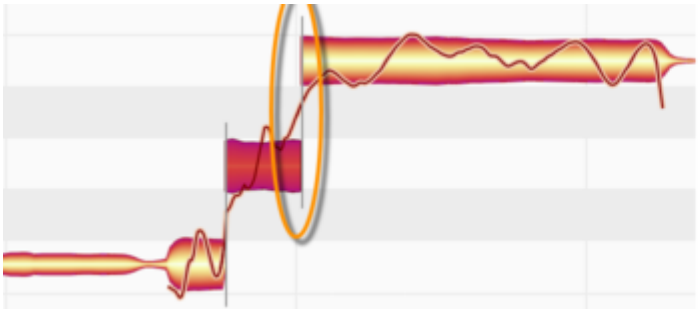
Drag the front part of a note to the right or left. Hold down the [Alt] key as you do so if you wish to override an active time grid. Now only the beginning of the note moves; the end remains anchored, so the note is either being stretched or compressed.

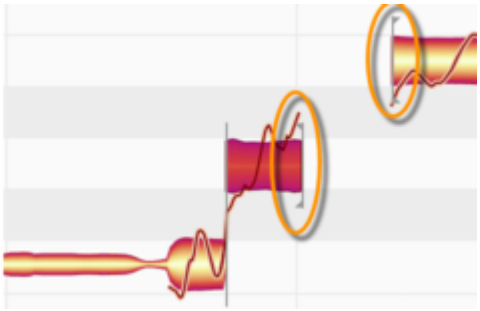


In the same way, you can move only the rightmost part of the blob (corresponding to the end of the note).

Notice that as you move the beginning or end of a note in this way, the preceding or following note, if adjacent, is also either stretched or compressed by the same amount to avoid either the two notes overlapping or white space (silence) appearing between them. This type of relationship exists whenever a pitch transition between consecutive notes has been detected. By moving the adjacent note as well, Melodyne ensures that discontinuities are avoided and the musicality of the phrasing is preserved.

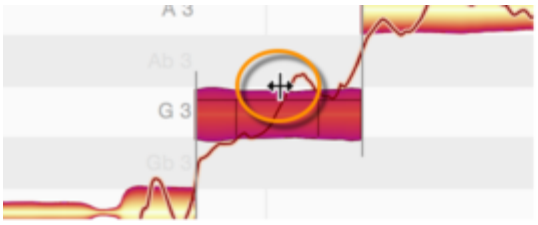
If this behavior is not what you want, you can change the ‘soft’ separation between the notes into a ‘hard’ one using the Separation Type Tool. Instead of the separation line, a bracket will then appear between the two notes to indicate that no further connection exists between them. You will find the Separation Type Tool beneath the Note Separation Tool in the toolbar.

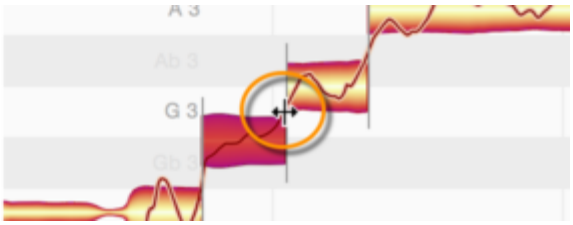




Editing note separations

If you move the mouse pointer to the upper part of a note (above the horizontal line), the Main Tool adopts the appearance, and emulates the functions, of the Note Separation Tool. If you double-click now, you can create a note separation – i.e. slice the note in two.





Don’t be surprised if the two notes that result move apart in pitch: this is because a new tonal center is calculated for each of the newly created notes, and that may differ from the tonal center they shared when they were one note. In such cases, each therefore moves to a new vertical position based on its newly calculated pitch center.

You can move an existing note separation horizontally with the Note Separation Tool. Before you begin, choose Options > Note Editor Options and check Show Note Separations.

You can double-click a note separation to remove it.

If you select several notes and move a note separation, the note separations of the other selected notes will also be moved. If you double-click one of the note separations to remove it, those of the other selected notes will also be removed.

If you have selected several notes that overlap, you can simultaneously insert a note separation at the same point in all of them, as well as move or remove one.

Pitch Tool

The Pitch Tool edits the central emphasis of the pitch of each note. This is the ‘pitch center’ note parameter that can also be edited using Melodyne’s Main Tool.

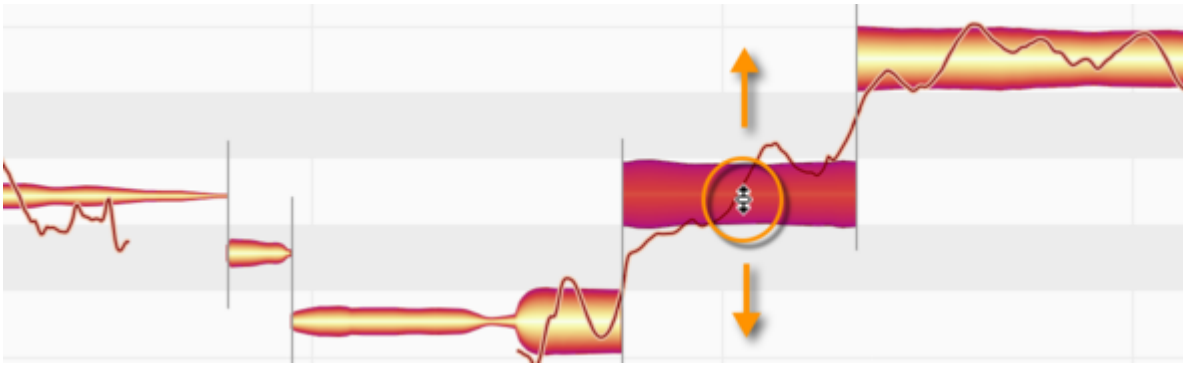
Shifting the pitch center

Select the Pitch Tool from either the toolbox or the context menu of the Note Editor or by pressing the [F2] key of your computer keyboard. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.)

The Pitch Tool is the topmost of the three pitch editing tools. It is responsible for the pitch center of each note, which can be thought of as its center of gravity. Melodyne allows you to edit the pitch center of notes independently of any modulation or drifting in pitch they exhibit. Press the [F2] key twice and three times in quick succession to select, respectively, the first and second sub-tools of the Pitch Tool. From the Preferences dialog, you can also, if you wish, define separate keyboard shortcuts for all three tools.



Drag a note up or down with the Pitch Tool to alter its pitch. If the note is one of several selected, all the notes in the selection will move up or down en bloc.



Depending whether No Snap, Chromatic Snap, Key Snap or Chord Snap is selected for the Pitch Grid, notes can either be moved freely or will snap to the nearest semitone, the nearest note of the selected scale or the nearest note of the prevailing chord.

Hold down the [Alt] key as you move notes if you wish the selected grid to be ignored; this will allow you to position the note freely.

Monitoring pitch shifts

As you move a note in pitch, you will hear the “frozen” sound of the note at the position clicked. By moving the mouse to the left or right while doing so, you can put other parts of the note under the acoustic microscope. If you do not wish to monitor pitch changes in this way, clear the option Monitor When Editing Blobs in the Options > Note Editor sub-menu, which can also be accessed via the cog icon in the top right-hand corner of the Note Editor.

If the note in question is part of a chord, you have the additional option of hearing the entire chord – and, with it, the changing harmonic context – as you drag the note up or down. To do this, once you have begun dragging the note, press and hold down the [Cmd] key. This is useful when you are creating or improving vocal harmonies by pitch-shifting notes within multiple tracks, as it allows you to hear and evaluate each new chord as it is created.

Editing pitch with the inspectors

As an alternative to editing the selected notes with the Pitch Tool, you can enter the desired value for the note and the deviation in cents from equal temperament in the inspector near the toolbar or the Note Inspector. The Note Inspector also allows you to determine the frequency in hertz of the note or notes selected. In each case you can increase or decrease the current value by clicking in the relevant box and dragging the arrow upwards or downwards.

When typing values into the Pitch field, you can enter either absolute values (C3, D4 etc.) or relative ones (+2, -1, etc.).

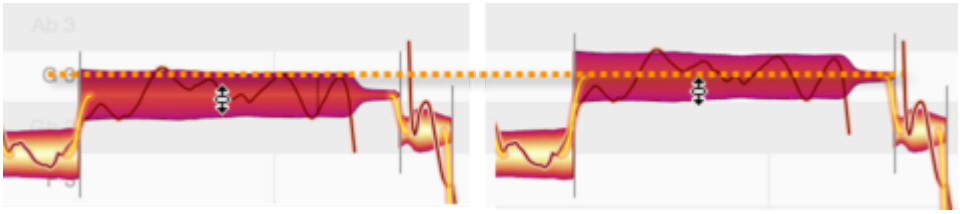


If you have selected several notes that differ in pitch, three hyphens are displayed in the boxes – followed, as you click in the box and drag, by values describing the extent of the relative change.



Correcting pitch with a double click

You can tell that a note is sharp or flat from the fact that it doesn't lie plumb in the middle of any of the horizontal lanes in the editing display. These represent the notes of the chromatic scale, the note in question, in each case, being indicated by the vertical Pitch Ruler to the left of the Note Editor. If, with Chromatic Snap activated, you double-click the offending note with the Pitch Tool or Main Tool, it – and any other notes selected at the same time – will "snap to the grid", which means they will move instantly to the very center of their respective lanes. The "fine offset" of the notes in question will then be 0 cents; in other words, they will be perfectly in tune.



If, however, instead of Chromatic Snap, Scale Snap or Chord Snap are activated, as well as setting their fine offsets to zero, a double-click may actually cause the notes in question to change lanes.

If, for example, as is shown here, Chord Snap is active and you double-click on an E, it could move to F if there is no E in the prevailing chord, as would be the case, for example, if that chord were F minor. In addition, the offset from the target note (in this case F) would be 0 cents, so the new note would be perfectly in tune.

If you are not interested in correcting the intonation, however, but simply in eliminating a clash between the note in question and the chosen chord, hold down the [Alt] key as you double-click. It will then snap to the nearest chord tone, as is your intention, but its offset from the destination pitch will be the same is its offset from the pitch it came from; this is sometimes desirable, as minor imperfections of this kind can contribute towards the creation of rich and vibrant chorus effects.

When you are editing pitch, the blob simply serves as a "handle"; what you should concentrate on is the Pitch Curve within the blob. For the auditory impression – if what you are seeking to avoid is the jarring effect of poor intonation – what is essential is for the "right" part of each note to reside at the "right" pitch.

The fine offset displayed in the Note Inspector, which serves as the basis for any intonation correction resulting from a double click, is based on the path traced by the Pitch Curve throughout the entire duration of the note. Here Melodyne takes a great many musical criteria into consideration – among them, the fact that the central part of a note, as a rule, plays a more decisive role in the listener's perception of pitch than its beginning or end. The Inspector is, in effect, offering a recommendation, which you accept whenever you drag a note with the [Alt] key pressed or double-click on it.

In principle, you can rely on this; once you've double-clicked on a note, it will be in tune.

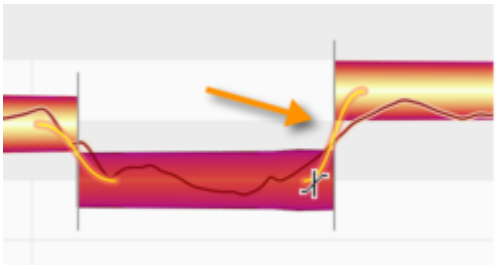
In addition – and this depends ultimately upon genre-determined listening habits or perhaps simply your own taste – you may wish to slice up a problematic note by inserting additional note separations and then double-click on the newly created note fragments. The smaller the fragments, the closer you will get to intonational perfection, though the emotional impact of the performance may suffer in consequence.

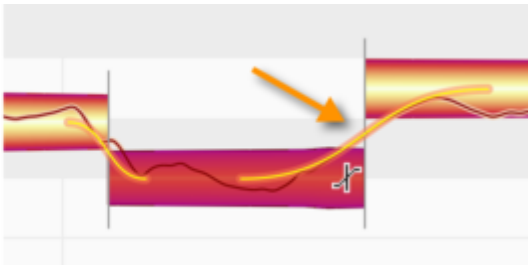
To learn more about the various tuning strategies available – and their application to vocal tracks in particular – and for suggestions as to how the sometimes conflicting demands of perfect intonation and emotional richness can best be reconciled, visit the “Training” section in our Help Center.

Pitch transitions

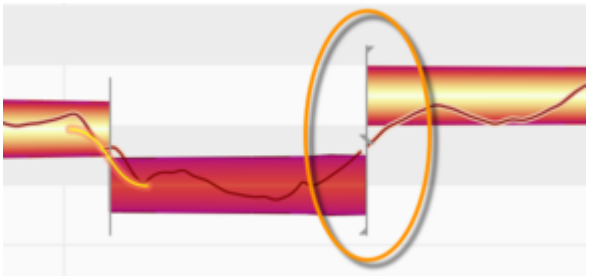
When one note follows another and a tonal relationship between the pair has been detected, the pitch curve is drawn through them, and in the area between them a thick orange line is displayed that represents the pitch transition.

If you position the Pitch Tool over the rear part of a note, click and drag vertically, you can make the pitch transition steeper or less steep.





Pitch transitions only exist between adjacent notes between which there is a soft separation. By clicking on a soft separation with the Separation Type Tool (the sub-tool of the Note Separation Tool), you can transform it into a hard separation, thereby deactivating all association between the two notes and with it the pitch transition.



Resetting individual edits and introducing random deviations

In the Edit > Reset Individual Edits > Pitch cascading menu, you will find a variety of commands that can be used to reverse the effects of particular types of pitch editing, thereby restoring specific aspects of the notes selected to their original state. The commands apply only to the current selection and are grayed out whenever no editing of the type in question has yet been applied to the notes concerned. Note that these commands operate entirely independently of the normal undo function!

With the commands in the Edit > Add Random Deviations sub-menu, you can randomly alter the pitch of the notes currently selected – introducing either slight, moderate or drastic deviations from the original intonation. You can also employ the commands several times in succession to intensify the effect. These commands are useful when, for example, you've doubled a track in order to obtain a fuller or 'fatter' sound. By introducing random deviations, so that the copy is no longer identical to the original, you can simulate more realistically the effect of two performers playing or singing in unison. All these commands affect only the selected notes and are therefore grayed out if no notes are selected.

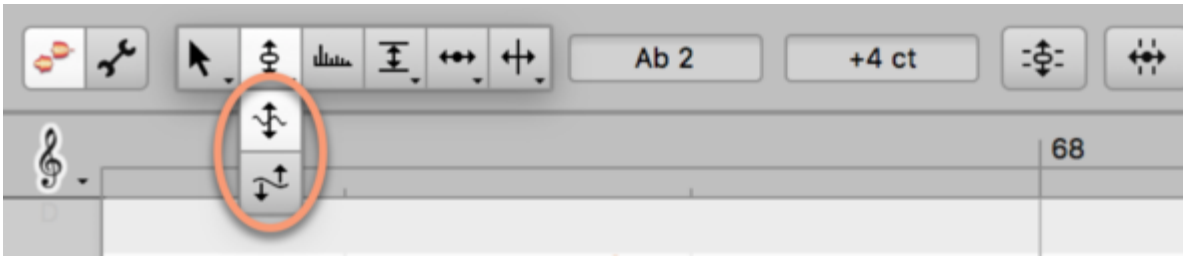
Pitch modulation and drift

The term ‘pitch modulation’ covers rapid and usually intentional variations in pitch such as trills or vibrato. ‘Pitch drift’ is our term for slow fluctuations in pitch of the kind that are usually unintentional and symptomatic of poor technique. You will find the tools for editing these parameters beneath the Pitch Tool in the toolbar.

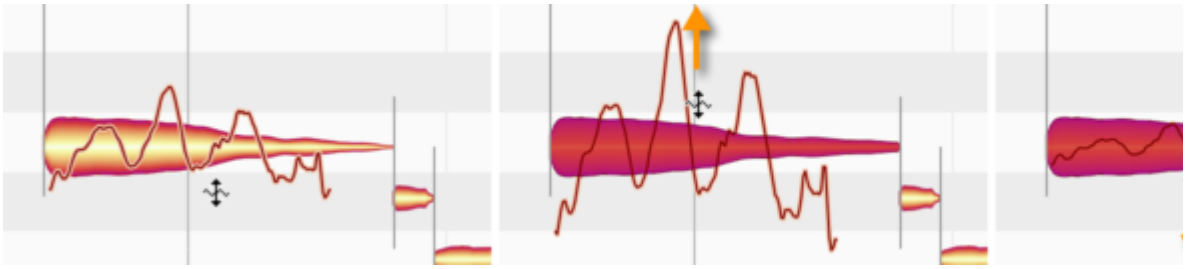
Editing pitch modulation and drift

Select the Pitch Modulation or the Pitch Drift Tool from either the toolbox or the context menu of the Note Editor or by pressing the [F2] key of your computer keyboard.

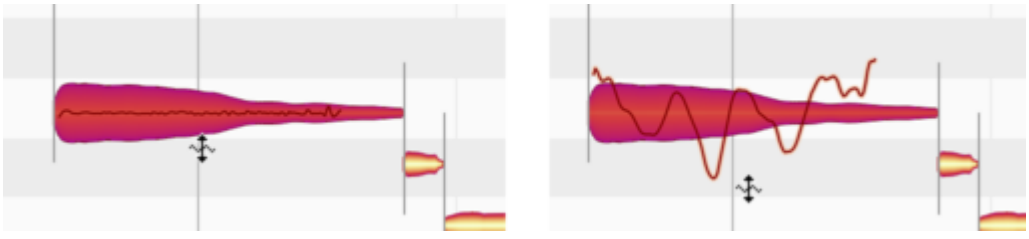
The Pitch Modulation Tool is the first, and the Pitch Drift Tool the second, sub-tool of the Pitch Tool. Press the [F2] key twice in quick succession to select the former and three times in quick succession for the latter. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.) There, if you wish, you can also define separate keyboard shortcuts for all three tools.



With the tool selected, click on a note and – without releasing the mouse button – drag up or down. The note edited could be part of a multiple selection, in which case you will be editing all the selected notes simultaneously. Watch as the pitch curve changes shape.



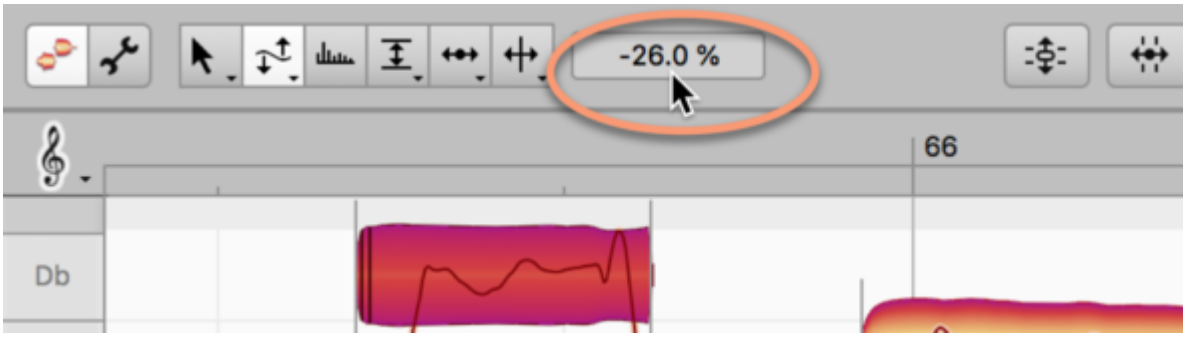
Drag far enough downwards and the modulation or drift are reduced to zero and then inverted.



If you double-click a note with the Pitch Modulation Tool or the Pitch Drift Tool, you will restore the pitch modulation or drift of the original recording, assuming you've changed it, otherwise eliminate it altogether. Subsequent double-clicking toggles between the original modulation or drift and none. If you eliminate altogether both the modulation and the drift, you will get an unnaturally flat monotone that can be suitable for effects.

The inspector for pitch modulation and drift

As an alternative to editing selected notes with these tools, you can enter the desired values in the inspector alongside the toolbar or in the Note Inspector. Drag the existing value to change it or double-click on it and type in the value desired.



With the Pitch Modulation Tool or the Pitch Drift Tool selected, the inspector displays values in percentage terms. 100% represents in this case the original modulation or drift, 0% a straight line, and -100% the same curve inverted with its axis unchanged. If you have selected several notes with different values, a dash is displayed in the box – followed, as you click in the box and drag, by values describing the extent of the relative change.

The Reset commands

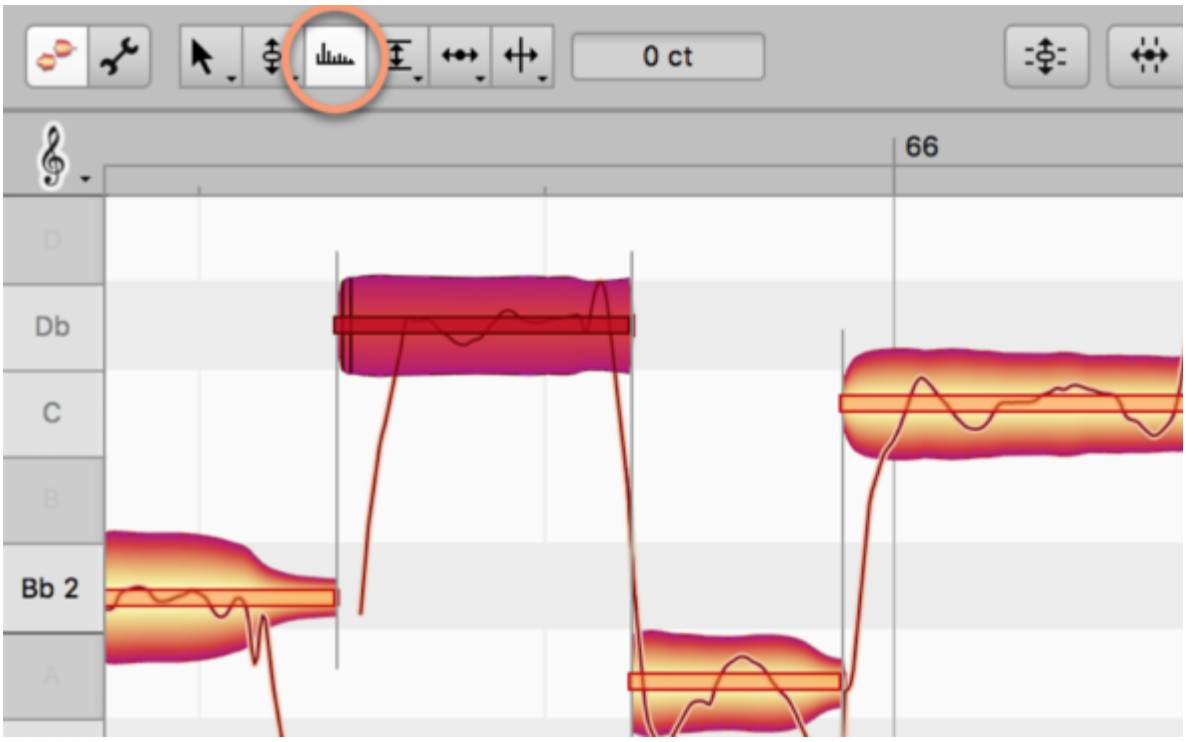
In the Edit > Reset Individual Edits > Pitch cascading menu, you will find a variety of commands that can be used to reverse the effects of particular types of pitch editing, thereby restoring the notes selected in specific respects to their original state. These commands relate always to the current selection and are grayed out if no editing of the type in question has been applied to the selected notes. Note that these commands operate independently of the normal undo function.

Formant Tool

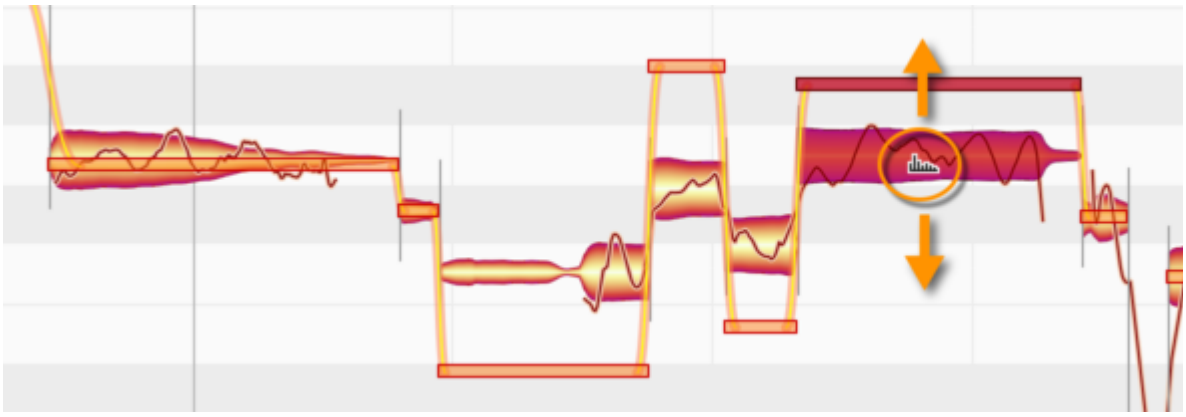
Formants are areas of emphasis or attenuation in the frequency spectrum of a sound that are independent of the pitch of the fundamental note but are found always in the same frequency ranges. They are characteristic of the tone color or ‘timbre’ of each sound source, and interesting effects can be produced by shifting them, such as making a man’s voice sound like that of a woman, and vice versa.

Shifting formants

Select the Formant Tool from either the toolbox or the context menu of the Note Editor or by pressing the [F3] key of your computer keyboard. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.) A beam appears over the blobs indicating the extent (if any) to which the formants have been transposed from their original pitches.



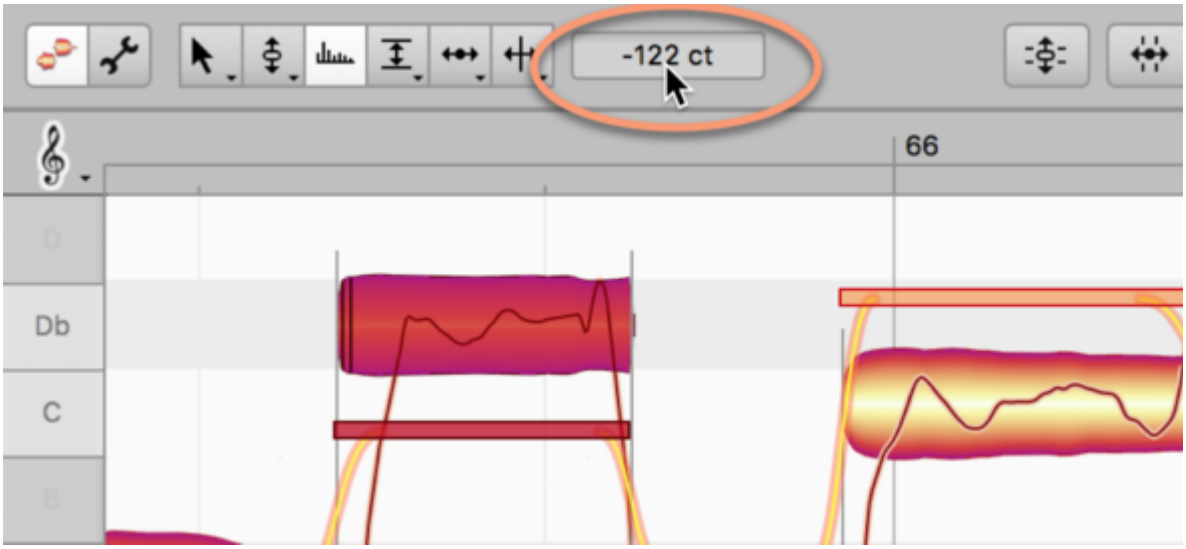
With the tool selected, click on a note and – without releasing the mouse button – drag the mouse up or down. As you do so, the formants will be transposed upwards or downwards, the degree and direction of the movement being indicated by a corresponding vertical movement of the beam.



The beams indicate the distance in cents (100 cents = 1 semitone) by which the formants have been transposed upwards or downwards. You can shift the formants a few cents (for the finest of nuances) or several thousand (for a drastic denaturing of the sound). Double-clicking on a note with the Formant Tool restores its formants (as well as those of any other notes selected) to their original pitches.

The inspector for the formants

As an alternative to editing selected notes with the tool, you can enter the desired values in the inspector, which you will find alongside the toolbox or in the Note Inspector. Drag the existing value to change it, or double-click on it and type in the value desired.

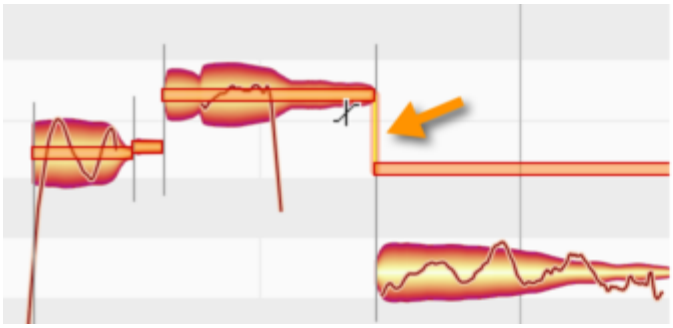


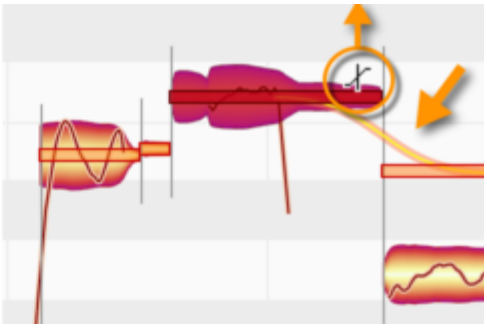
If you have selected several notes that differ in the amount of formant shifting that has been applied to them, a dash is displayed – followed, as you click in the box and drag, by values describing the extent of the relative change.

Formant transitions

A thick orange line appears between the formant beams of adjacent notes as soon as you shift the formants of one note more, or in a different direction, than those of the other. This line represents the formant transition between the two notes.

If you move the Formant Tool to the end of the first note, it changes into the Formant Transitions Tool. Dragging vertically with this tool governs the speed of the formant transition, which is indicated by the steepness of the connecting line.





Formant transitions only exist in the case of adjacent notes between which there is a soft note separation. If you transform this into a hard note separation by double-clicking with the Note Separation Type Tool (the sub-tool of the Note Separation Tool), all association between the notes will be severed and the formant transition between them deactivated.

The Reset commands

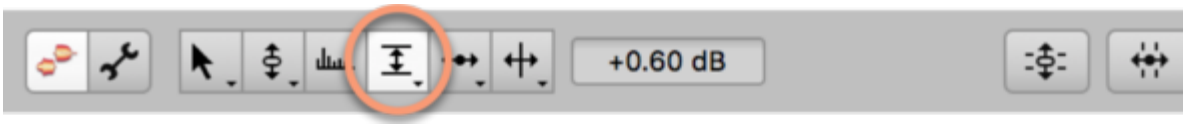
In the Edit > Reset Individual Edits > Formants cascading menu, you will find a pair of commands that can be used to reverse the effects of any shifting of formants or editing of formant transitions you may have performed, thereby restoring the notes selected in these respects to their original state. These commands relate always to the current selection and are grayed out if no editing of the type in question has been applied to the selected notes. Note that these commands operate independently of the normal undo function!

Amplitude Tool

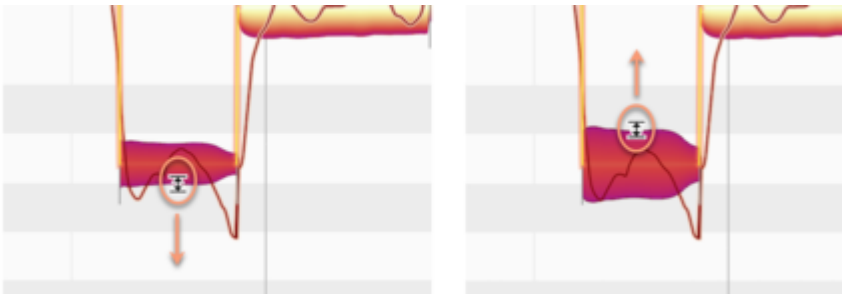
The Amplitude Tool allows you to adjust the amplitude (i.e. volume) of the selected notes, edit the amplitude transitions between them, and mute them.

Editing amplitude

Select the Amplitude Tool from either the toolbox or the context menu of the Note Editor or by pressing the [F4] key of your computer keyboard. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.)



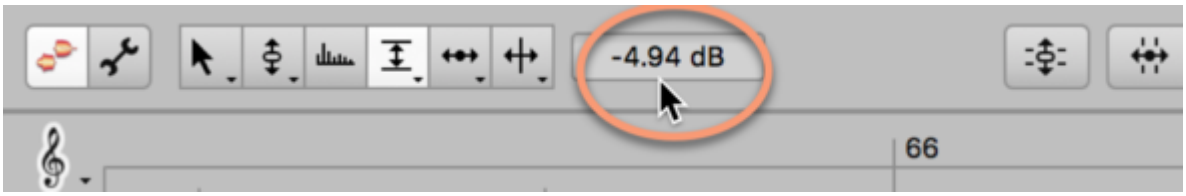
With the tool selected, click on a note (or one of several notes selected) and – without releasing the button – drag the mouse up or down. The vertical depth of the blobs will increase or decease as the notes they represent get louder or softer.



The gearing of the amplitude adjustment is dependent upon the vertical zoom resolution. Press and hold the [Alt] key, to switch to smaller increments for finer adjustment.

Editing amplitude using the inspectors

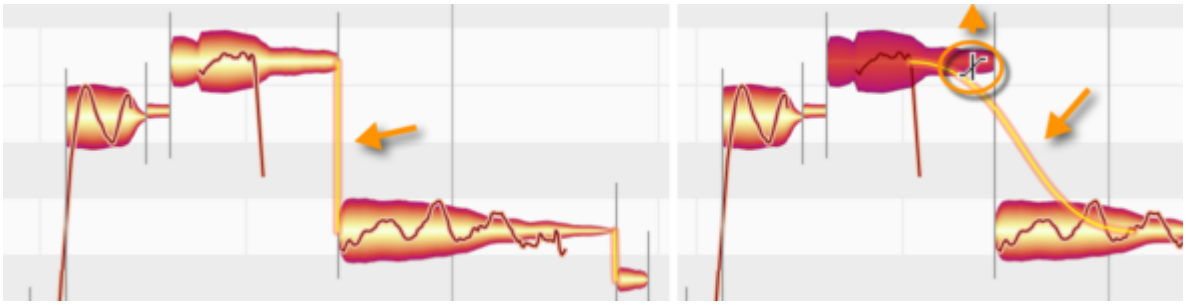
As an alternative to editing selected notes with the Amplitude Tool, you can enter the desired values in the inspector to the right of the toolbar or the Note Inspector. Drag the existing value to change it or double-click on it and type in the value desired. Press and hold the [Alt] key, to switch to smaller increments for finer adjustment.



If you have selected several notes to which different amplitude adjustment has been applied, a dash is displayed in the box – followed, as you click in the box and drag, by values describing the extent of the relative change.

Amplitude transitions

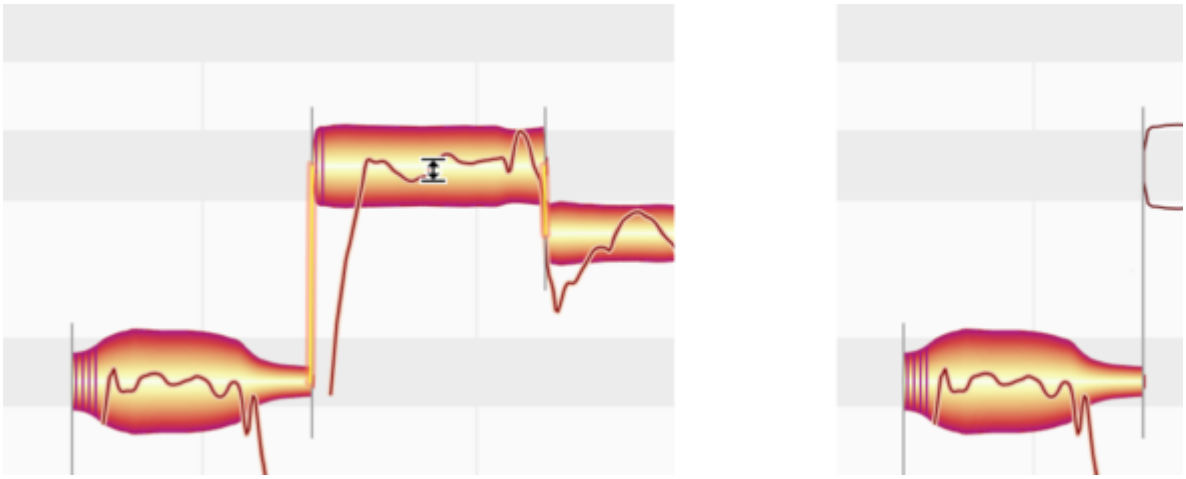
A thick orange line appears between connected notes as soon as you change the amplitude of one note more, or in a different direction, than that of the other. This line represents the amplitude transition between the two notes. If you move the Amplitude Tool to the end of the first note, it changes into the Amplitude Transitions Tool. Dragging vertically with this tool governs the speed of the amplitude transition, which is indicated by the steepness of the connecting line.



Amplitude transitions only exist in the case of connected notes between which there is a soft note separation. If you double-click on the separation with the Separation Type Tool (which you will find beneath the Note Separation Tool in the toolbar), you turn the soft note separation into a hard one, thereby disconnecting the two notes and deactivating the amplitude transition.

Muting notes

Double-clicking with the Amplitude Tool on one or more selected notes mutes them. Only the outline of the blobs is now shown, to indicate that the notes in question have been muted, but you can still select and edit them. A further double-click unmutes the muted notes.



In the Note Inspector, you will find a button marked Note Off for this function. Click once on the button to mute the selected notes. Clicking them a second time unmutes them.

The reset commands

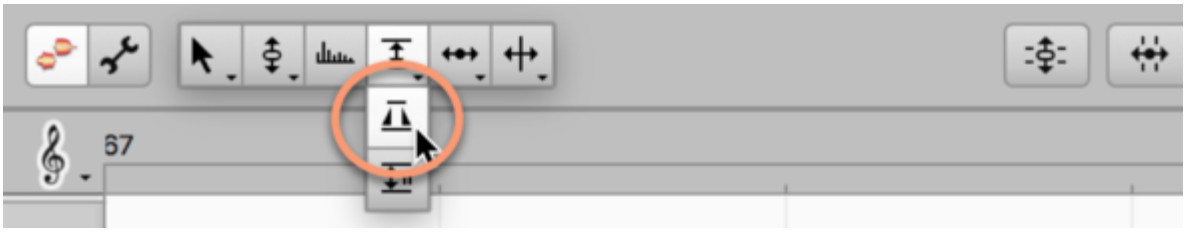
In the Edit > Reset Individual Edits > Amplitude cascading menu, you will find two commands that can be used to reverse the effects of the two types of amplitude editing we have just described (thereby restoring the notes selected in certain respects to their original state) as well as the Unmute command, which is self-explanatory. These commands relate always to the current selection and are grayed out if no editing of the type in question has been applied to the selected notes. Note that these commands operate independently of the normal undo function.

Tools for fades and sibilant balance

Beneath the Amplitude Tool, there are further tools offering still greater control over volume ratios within a track.

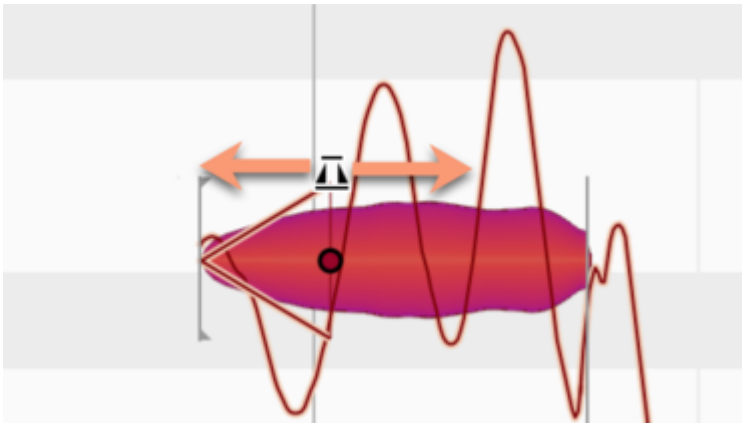
The Fade Tool: Fade-in and fade-out on notes

Activate the Fade Tool from either the toolbar or the context menu of the Note Editor or by pressing the [F4] key on your computer keyboard twice in quick succession. If you would prefer to use some other keyboard combination to activate this tool, you can easily define an alternative from the Shortcuts page of the Preferences dialog.



Using the Fade Tool, you can implement a fade-in at the beginning of a note and – quite independently – a fade-out at the end.

For the former, click with the tool at the left-hand end of a note, hold the mouse button and drag to the left or right. As you do this, a triangular handle will appear, the length of which changes as you move the mouse.



At the same time, the shape of the blob will change, indicating a corresponding change in its loudness contour.

As an alternative to clicking, holding the mouse button and dragging, you can create a new fade by double-clicking. If you double-click on the first half of a note, you will create a fade-in. To create a fade-out, double-click on the second half of the note.

As soon as a fade-in is created, any soft separation between the note in question and the preceding note will be replaced by a hard separation. With a fade-out, a hard separation will be inserted between the note that fades out and the one that follows.

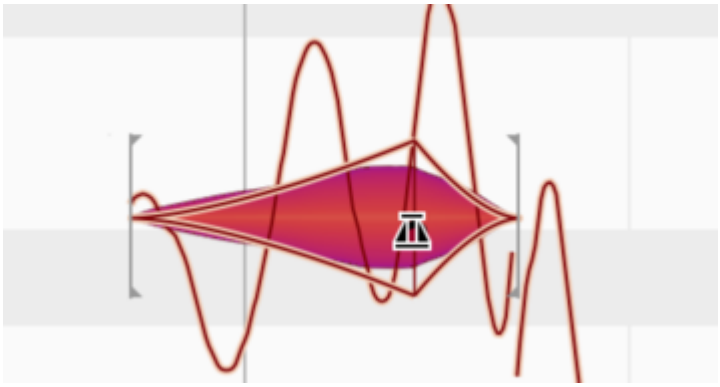
If you double-click on a fade, it is removed and the blob regains its original dynamic contour. An alternative method of restoring the original dynamic contour of a note is by a right-clicking and choosing “Discard Fades” from the context menu. Whichever method you choose, please note that whilst this removes the fade, the hard separation remains in place. To replace this with the original soft separation, you must use the Separation Type Tool.

You can also select and apply fades to multiple notes simultaneously and adjust them simultaneously as well.

To change the length or curve of a fade, proceed as follows:

- To change the length, click on the fade in question and drag to the left or right.
- To change the curve, click on the curve and drag upwards or downwards.

If you drag the end of a fade-in so far to the right that you reach the start of any fade-out that may have been applied to the note, you can still carry on dragging; all that will happen is that the fade-in will be extended and the fade-out shortened accordingly.
You can also make a fade-out longer by extending it leftwards, but in this case no further than the point where it meets any fade-in that may be present.



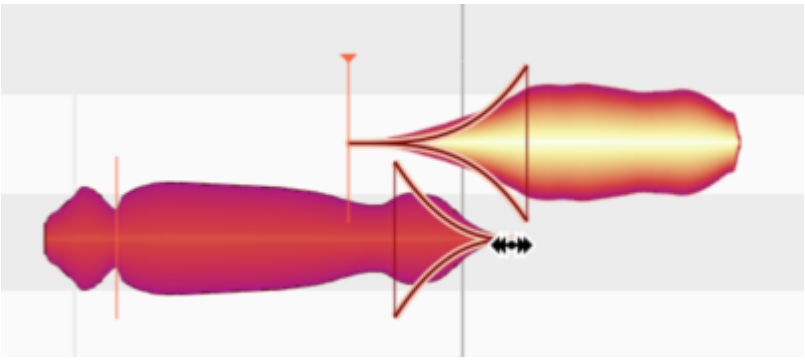
It is not possible for a fade-in and a fade-out to overlap.

Fades in conjunction with other tools

The length of a fade is not defined in milliseconds but tied to the position (set by you) within the note. So if, for example, a note with a fade-out is later lengthened using the Time Tool, the fade-out will be lengthened by the same amount. This gives rise to considerably more musical possibilities – particularly in combination with the other tools – than those afforded by the fixed fades offered by DAWs for regions or clips.

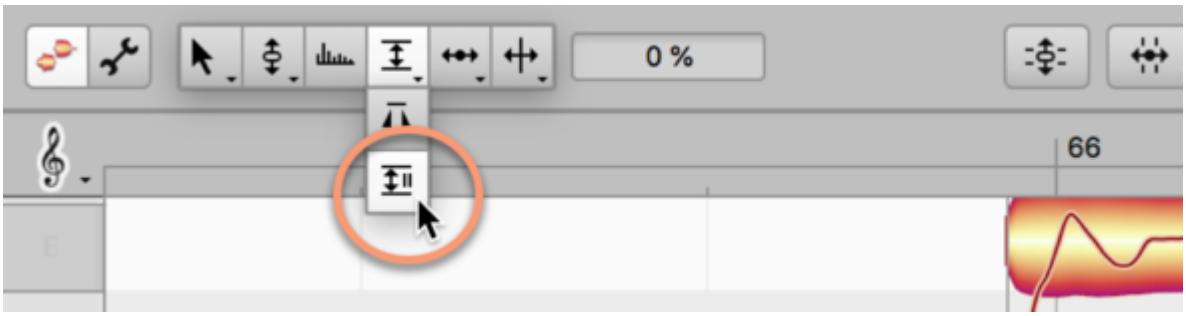
A further example: fade-outs continue, naturally, until the end of the note. If, however, towards the end of a note there is some unwelcome noise on the track, and you wish the fade out to end before this, you can split the note using the Note Separation Tool, delete (or mute) the part of the note to the right of the separation and then apply a new fade out to the part of the note that remains.

As a result of the placing of a fade, a hard separation will automatically be inserted between the note in question and the one that follows. It is therefore easy to create an overlap with the Time Tool between previously adjacent notes and then – using the Fade Tool – create a very musical crossfade between them.



The Sibilant Balance Tool: The management of sibilants and breath noise

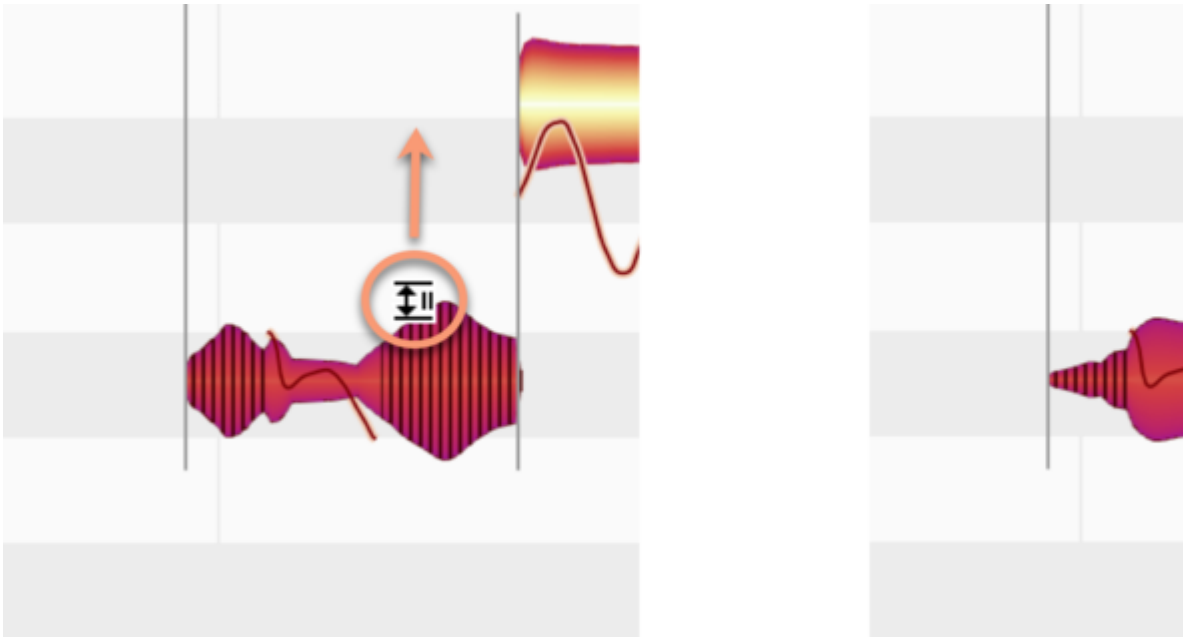
Select the Sibilant Balance Tool from either the tool bar or the context menu of the Note Editor or by pressing the [F4] key on your computer keyboard three times in quick succession. If you would prefer to use some other keyboard combination to activate this tool, you can easily define an alternative from the Shortcuts page of the Preferences dialog.



With the Sibilant Balance Tool, you can control the loudness of the sibilants relative to the other components of the sound. It is only available with the algorithms Melodic or Percussive Pitched; with all other algorithms it is grayed out.

In the case of vocal tracks, Melodyne regards as sibilants not only “s” and “ch” sounds, but also certain other word fragments such as “k” and “t” as well as the sound of the singer inhaling or exhaling between words: those components of the sound, in other words, that lack a definite pitch. Broadly speaking, and if we include instrument tracks, Melodyne regards as sibilants all parts of the signal that consist essentially of noise.

If you drag upwards (positive values) from a note or selection of notes with the Sibilant Balance Tool, you reduce the volume of the pitched components of the sound. If you drag downwards (negative values), it is the sibilants that become quieter.



At the two extreme settings in the case of vocals, you will either hear sibilants and breath noise only (if you drag upwards) or only the pitched components of the sound (if you drag in the other direction). This would admittedly create the impression of a pronounced lisp, but there are certain applications in which such extreme settings make sense (see below).

Double-clicking with the Sibilant Balance Tool sets the parameter to -100%, which is equivalent to maximum attenuation (i.e. muting) of the sibilants; a second double-click, resets the parameter to 0%, thereby restoring the note to its original state.

Please note that in speech or singing it is not the case – from a technical standpoint – that the sound at any given instant is invariably *either* sibilant *or* pitched; sometimes it is a little of both – i.e. the overall sound is a blend of pitched and unpitched components. Fortunately, the Sibilant Balance Tool operates in a way that takes this into account, governing only the noise components of the sound. Such an approach makes eminently good sense musically – fortunately *without* compromising the intuitiveness of the software, as you still see only one blob per note, not two.

Uses for the Sibilant Balance Tool

When individual sibilants become obtrusive (which is more often a problem with some singers than with others – though a poorly designed or adjusted signal chain at the recording stage could be the real culprit), you would ordinarily turn to a de-esser. But adjusting the controls of a de-esser can be tricky, as de-essers invariably act upon the entire signal. This can have a negative influence even upon sibilants that were perfectly OK; furthermore, the pitched components of the sound necessarily feel their influence as well. The Sibilant Balance Tool (with values somewhere between -40% and -10%) takes considerably less time to set up, operates with far greater precision, and also, at the end of the day, delivers acoustically superior results.

In the case of backing vocals or when double-tracking, you could even use settings of around -80%. Heard on their own, the voices affected might appear to lisp, but when the lead vocals are restored to the mix, the overall result is a much tidier sonic image in which – at the ends of words in particular – there is far less of the usual fluttering. This fluttering is most often the main problem with double-tracking, and it becomes even more obtrusive when you apply delays and reverb to the various voices – as you must, in fact, to ensure they sit right in the mix. Very few mouse-clicks are now needed to bring these commonly encountered mixing problems under control; all you have to do, basically, is select all the notes of the backing vocals, then set the sibilant balance to somewhere like -80%.

And a further tip for sound design and mixing: Begin by duplicating the vocal track. On one track, set the sibilant balance to -100% (in which case you will no longer hear any sibilants or breath noise) and on the other track, set the same parameter to +100% (so, on this track, only the sibilants and breath noise will be audible). Now set the same volume level for both tracks in the mixer, so initially you have exactly the same signal as before – only split between two tracks. This leaves you free to make intensive use of the effects chain (delays, reverbs etc.) on the sibilant-free track, and only sparing use – or none whatsoever – on the track containing the sibilants.

Note: Melodyne detects automatically the exact location and length of each sibilant. This means that with the vast majority of vocal tracks, you will no longer need to give the matter any thought; your only concern now will be to find the ideal balance between the pitched and unpitched components of the sound using the Sibilant Balance Tool. Nonetheless, in exceptional cases or for experiments in sound design (and not only with vocals), you may wish, on occasion, to adjust the results of the sibilant detection. To do this, enter Note Assignment Mode and select the Sibilant Range Tool, the use of which is described in detail here.

Timing Tool

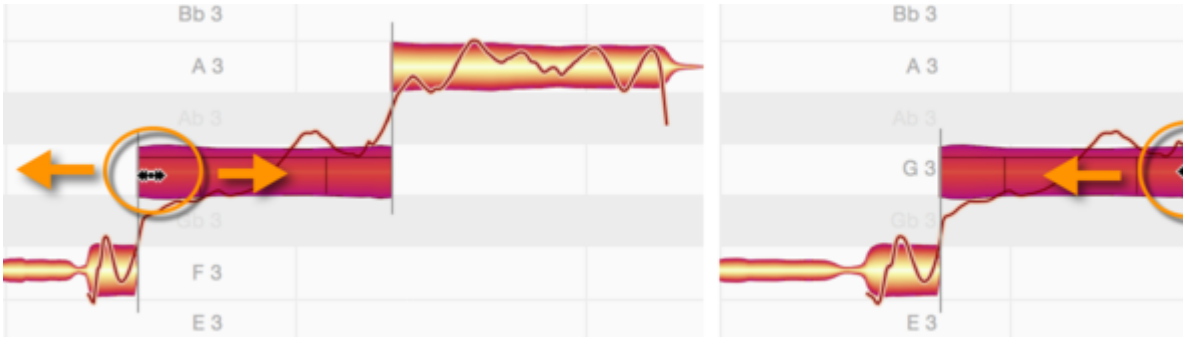
The Timing Tool allows you to edit the horizontal position and length of notes with or without quantization.

Adjusting the beginning and length of notes

Select the Time Tool from either the toolbox or the context menu of the Note Editor or by pressing the 5 key of your computer keyboard. Press the 5 key twice or three times in quick succession to select, respectively, the first or second sub-tools of the Time Tool. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.) There, if you wish, you can also define separate keyboard shortcuts for all three tools.

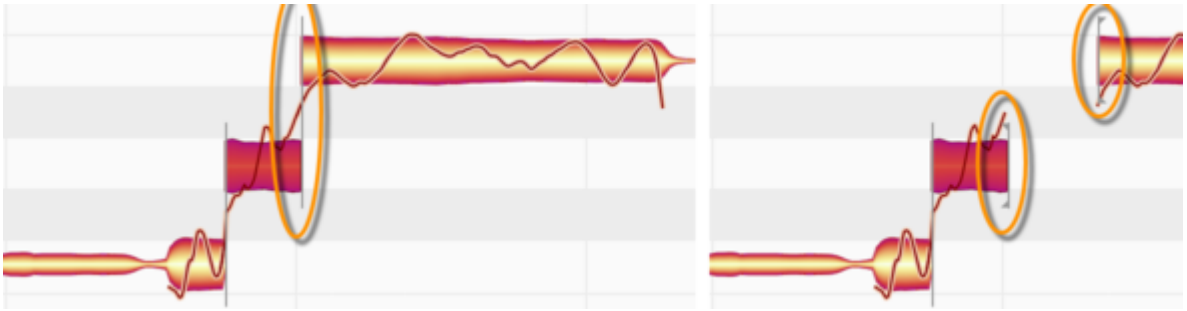


If you click on the left-hand end of a blob and drag, you will stretch or squeeze the beginning of the note. If you click on the right-hand end of the blob and drag, you will stretch or squeeze the end of the note in the same way.
Whatever changes you make will be governed by the current Time Grid setting, unless you choose to override the grid by holding down the [Alt] key in order to permit finer adjustment.



If the note in question is connected to the note or notes adjacent to it – as is likely to be the case if the Melodic algorithm is selected – the end of the preceding note or beginning of the following note will be stretched or squeezed by however much necessary to avoid a gap or an overlap occurring.

A connection of this type between two notes is indicated by a thin vertical line between the corresponding blobs. This warns you that moving the end of the first of the two notes will affect the start of the second, and that moving the start of the second will affect the end of the first. If you do not wish this to happen, use the Separation Type Tool to replace the thin vertical line with a square bracket. Then you will be able to move the start or end of a note without this affecting adjacent notes, in which case a gap or an overlap could occur.



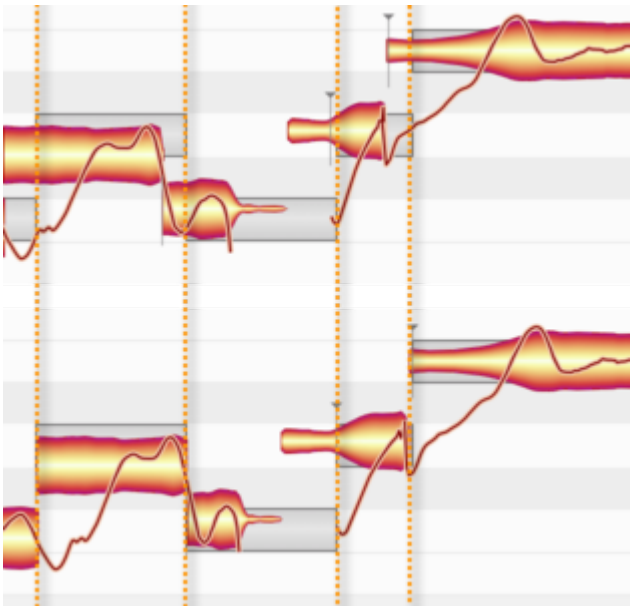
Clicking on and dragging the middle of a blob

Click the center of a note (or of one of a number of selected notes) and drag it to the left or right to move the entire note (or notes) horizontally. Press and hold the [Alt] key during the movement if you wish the time grid to be temporarily ignored to permit finer adjustment.

Please note, however, that if notes are connected – as is likely to be the case when the Melodic algorithm is selected – clicking on the middle of a blob and dragging will only result in the beginning of the note being stretched or squeezed. The behavior in this case is therefore the same as when you click on the beginning of the note and drag.
To simply move the note, without altering its length and without affecting any other notes, switch from soft separations (indicated by thin vertical lines) to hard separations (indicated by square brackets) using the Separation Type Tool (as described above).

Correcting timing with a double-click

If you double-click with the Time Tool on a note (or one of several selected notes), you quantize this (or these) to what Melodyne, in the course of the detection, considered to be the ‘intended’ note (or notes). To see these (displayed as little gray frames beneath the blobs), choose “Options > Note Editor > Show Intended Notes”.



The gray frames are not necessarily (all) aligned with the grid selected in the Bar Ruler. One intended note, for example, might coincide with a line belonging to the 16th note grid, another with one belonging to an 8th note triplet grid, and so on. The result of double-clicking is therefore more ‘intelligent’ musically (and thus, in practice, more suitable) than simple quantization, say, to 8th notes, with which, if you use a MIDI sequencer, you are perhaps more familiar.

There may be applications, however, in which you might actually prefer rigid quantization to a particular uniform grid. In that case, you can achieve the desired result with the Quantize Time macro, the use of which is described in detail in this tour. You will also learn there how note lengths are adjusted during quantization as well as what options exist for the quantization of chords.

Adding random deviations

With the commands in the Edit > Add Random Deviations sub-menu, you can randomly alter the timing of the notes currently selected – introducing either slight, moderate or drastic deviations from the original timing. You can also employ the commands several times in succession to intensify the effect. These commands are useful when, for example, you've doubled a track in order to obtain a fuller or 'fatter' sound. By introducing random deviations, so that the copy is no longer identical to the original, you can simulate more realistically the effect of two performers playing or singing in unison. All these commands affect only the selected notes and are therefore grayed out if no notes are selected.

The reset commands

In the Edit > Reset Individual Edits > Time sub-menu, you will find a number of commands that can be used to reverse the effects of whatever editing has been performed on the timing. These commands apply always to the current selection and are grayed out if no editing of the type in question has been performed on the notes selected. Note that these reset commands work quite independently of the normal Undo command.

Time Handles and Attack Speed

The Time Handle Tool and the Attack Speed Tool are found below the Timing Tool in the toolbar. Their purpose is to allow you to adjust the internal time path and envelope of notes.

How time handles and the Attack Speed Tool work

Time handles are handles you can affix to particular stages in the evolution of a note and drag sideways in order to advance or retard their attainment. In this way, you can accelerate or slow down particular phases of a note's development in order to fine-tune the musical phrasing.

The Attack Speed Tool also affects the speed at which a note evolves: either by stretching and slowing down its early development phase and thereby accelerating its later development, or vice versa.

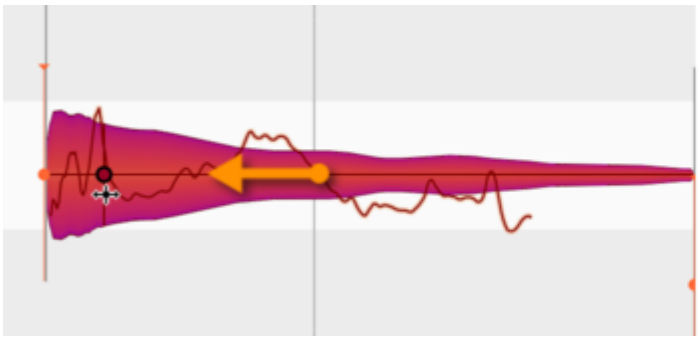
The result is either a slower, softer attack or a faster, harder one. The 'perceived' musical starting point of the note, however, remains unchanged.

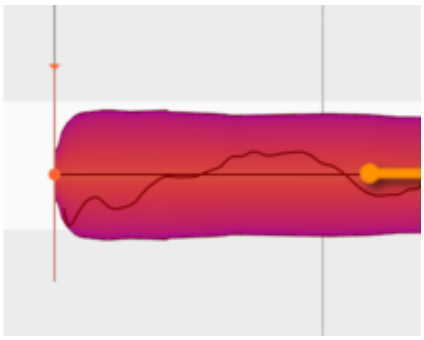
Modifying the evolution of notes using time handles

The Time Handle Tool is the first of the two sub-tools of the Time Tool. To select it, press the [F5] key twice in quick succession. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.) There, if you wish, you can also define separate keyboard shortcuts for all three time tools.



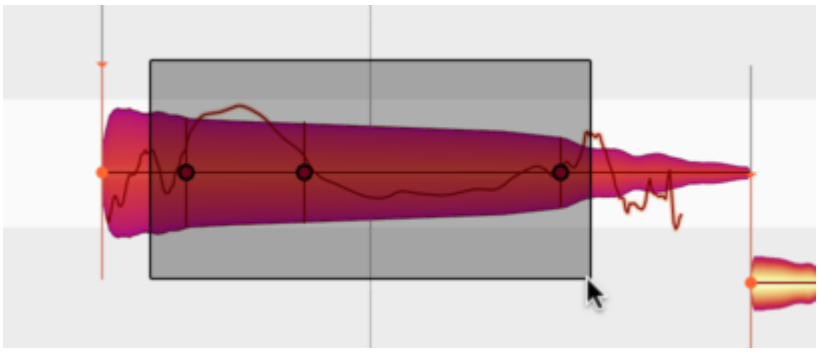
Zoom in on the note you wish to edit, so that you can see it clearly and position the time handles more precisely. Now double-click the point in the note's evolution that you wish to advance or retard. A time handle will appear that you can move forwards or backwards in time by dragging the tool respectively upwards or downwards. Since the overall length of the note remains unchanged, the result is to shorten and accelerate the phase of the note's development lying to one side of the time handle while lengthening and slowing down the phase the other side.





You can attach multiple time handles to a single note, moving each one individually, thereby influencing fine details of the note's evolution. There is no limit to the number of time handles that can be attached to a single note. Melodyne does, however, impose constraints as to how close to one another the handles can be placed. If ever you find you cannot place a time handle exactly where you want it, try a little further along.

If you select multiple time handles using the usual selection techniques, you can move them all en bloc.



Double-clicking on a time handle or a selection of time handles removes them, thereby causing the affected phases of the note to evolve at their original speeds.

By choosing Edit > Reset Individual Edits > Time > Remove Time Handles from the main menu, you can remove the time handles from all the selected notes.

Changing the attack speed of notes

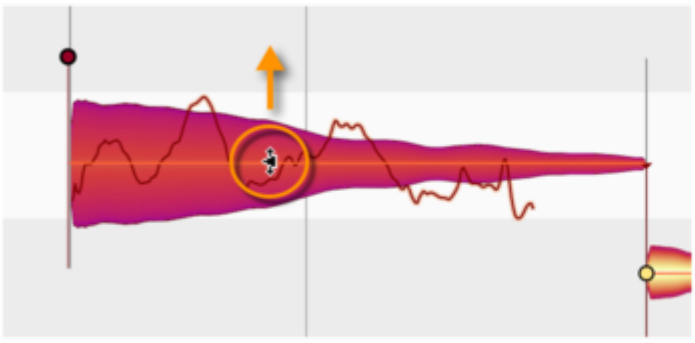
The Attack Speed Tool is the second sub-tool of the Time Tool. To select it, press the [F5] key three times in quick succession. From the Preferences dialog, you can also, if you wish, define a separate keyboard shortcut for this tool.

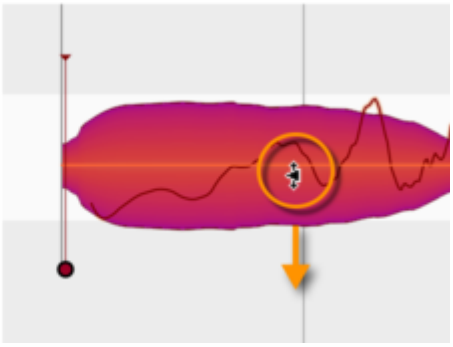
Please note that this tool has no function when the Universal algorithm is selected. You will notice therefore that the corresponding blobs lack handles and that the Attack Speed field in the Note Inspector for these blobs is grayed out.



When you select the Attack Speed Tool, a white dot appears at the start of every note. If you now place the tool anywhere on a note (not necessarily on the dot) and drag vertically, the dot will move up or down.

If you move it upwards, the attack phase of the note will be compressed and play back faster, but the rest of the note correspondingly more slowly. The note will therefore have a harder attack; its peak amplitude will be reached more swiftly.





If you move the point downwards, the opposite will occur. The beginning of the note will be stretched – even beyond its visible starting point – and will play back more slowly, the rest, however, increasingly rapidly. The attack will therefore be softer. Note that the position of the musical start of the note indicated by the orange anchor is not affected by changes in attack speed. The ‘perceived’ start of the note is therefore independent of the attack speed. The end of the note is in all cases unaffected.

You can vary the attack speed of notes individually, in order to accentuate them. You can also, however, select and modify the attack speeds of multiple notes simultaneously and thereby alter the timbre of an entire phrase.

If you double-click on a note or one of a selection of notes with the Attack Speed Tool, the corresponding parameter will return to its neutral (central) position. The same result can be achieved by choosing Edit > Reset Individual Edits > Time > Reset Attack Speed from the main menu.

Combining time handles with the Attack Speed Tool

You can combine the use of time handles with that of the Attack Speed Tool. Altering the attack speed in this case will cause the time handles to move, functioning as a kind of timing master. You can therefore shape the evolution of the note to enhance the phrasing before adjusting the overall timing (so that the note starts faster or more slowly) with the Attack Speed Tool.

Note separation tools

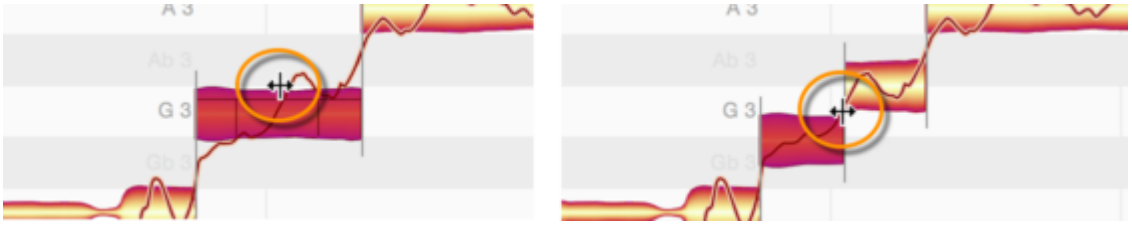
With the Note Separation Tool, you can cut notes as well as removing and moving note separations. With the Separation Type Tool, you can switch between hard and soft separations.

Inserting, moving and removing note separations

Select the Note Separation Tool from either the toolbox or the context menu of the Note Editor or by pressing the [F6] key of your computer keyboard. (If you wish to assign a different shortcut to this tool, you may do so after choosing Melodyne > Preferences > Shortcuts > Editing Tools from the main menu.)



By double-clicking within a note with the Note Separation Tool, you can introduce a note separation and thereby slice the note in two.



Don’t be surprised if the resulting pair of notes move apart in pitch; this is because as soon as the fission occurs a new tonal center is calculated for each of the newly created notes, and their respective tonal centers may differ from the tonal center the notes shared when they were one. In such cases, each therefore moves to a new vertical position based on its newly calculated pitch center.

You can move an existing note separation horizontally simply by dragging it with the Note Separation Tool.

You can double-click a note separation to remove it.

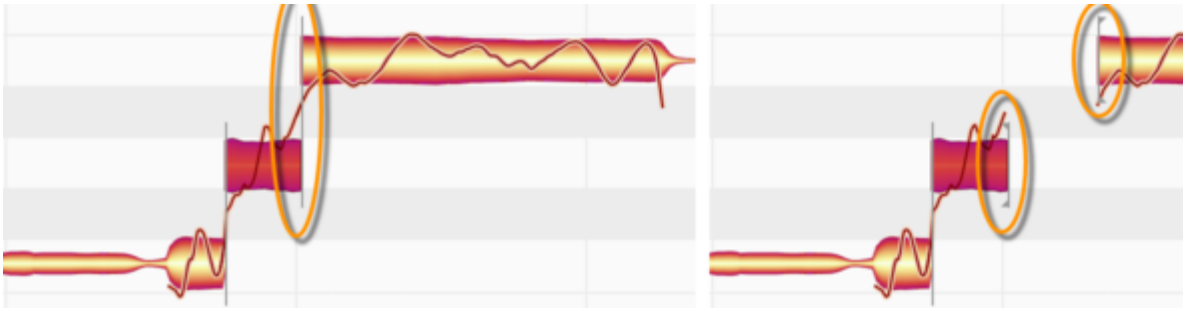
Editing note separations with multiple notes selected

If you select several notes and move a note separation, the note separations of the other selected notes will also be moved. If you double-click one of the note separations to remove it, the note separations of the other selected notes will also be removed.

If you have selected several notes that overlap, you can insert a note separation in the same place in all of them simultaneously as well as move or remove one.

Soft and hard note separations

Depending upon the audio material and the algorithm selected, Melodyne places either soft or hard separations between notes. Soft separations only occur between consecutive notes and provide a link between the notes: if the end of the first note is moved, the beginning of the second note moves along with it, to ensure that no gap opens between them. This helps you preserve phrasing when editing.
The connection between notes also plays a role in the pitch, formant and amplitude transitions between notes: such transitions are only possible in the case of connected notes between which a soft separation exists.
In the case of a hard separation, consecutive notes are independent of one another. This means that changing the length of the first note has no affect upon the position of the second. It also means there are no pitch, formant or amplitude transitions between the two notes.
Soft separations are indicated by a thin vertical line between notes, whereas hard separations are denoted by a bracket.



Switching between hard and soft separations with the Separation Type Tool

The Separation Type Tool is the sub-tool of the Note Separation Tool. It allows you to toggle between hard and soft separations. To select it, press the [F6] key (assigned by default to the note separation tools) twice in quick succession. If you would prefer to use some other key combination, choose Preferences -> Shortcuts -> Editing Tools -> Note Separation Tools and press the keys of your choice. If you wish, you can define separate keyboard shortcuts for each of the two tools.



Double-click on a separation with this tool in order to change its type.

Please note that it is only with certain separations that the option of switching freely between ‘soft’ and ‘hard’ exists.

- Soft separations can always be turned into hard ones.
- Hard separations, however, can only be turned into soft ones if they were soft to begin with and their type has subsequently been changed. An exception to this rule is material detected using the Percussive algorithm; in this case, all separations are initially hard but can be turned into soft ones.

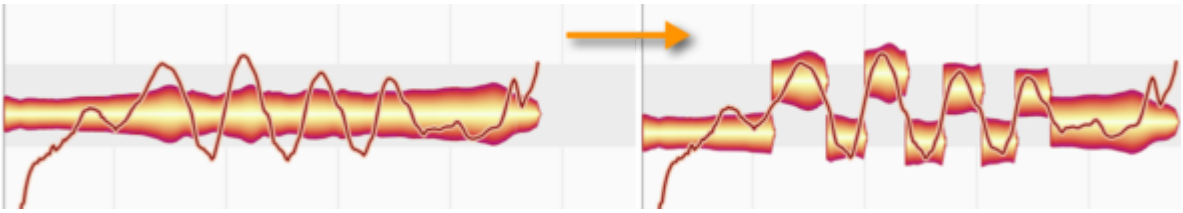
In the context menu: Separate Note

This command separates notes automatically at a point determined by Melodyne. It can be used, for example, to slice up a vocal passage into small segments in order to prepare the way for extremely detailed editing using the tools.

You will find the “Separate Note” command in the context menu of the Note Separation Tool and on the “Shortcuts” page of the Preferences property sheet, where you can assign a keyboard shortcut to it.

In the context menu: Separate Notes as Trills

When the Note Separation Tool is selected, you will find the command “Separate Notes as Trills” in the Note Editor’s context menu. The effect of this is to slice a selection of one or more notes into smaller segments determined by the instantaneous pitch of each note. This is done by inserting note separations into the slopes of the pitch curve as it rises and falls, thereby turning each ‘hill’ and each ‘valley’ of a vibrato into a separate note.



The use of this command allows you, for example, to improve the intonation of a trill, by tuning the notes more closely to their intended pitches, or to rein in an unruly vibrato, by applying the Correct Pitch Macro to its upper and lower extents.

Please note that the fluctuations in the Pitch Curve must be fairly pronounced for the “Separate Notes as Trills” function to have any effect and that it is only available when the Melodic algorithm is active, being grayed out in every other case. If you wish to assign a shortcut to the command “Separate Notes as Trills”, this can be done using the Preferences dialog.

In the context menu: Merge notes

This command is used to merge a *single* note with the one that follows by removing the separation at the end of the note selected.

If more than one note is selected, the command is grayed out.

The Note Inspector

The Note Inspector in the info pane offers you an overview of the parameters of the selected note(s) and allows you to alter the values.

The parameters of the Note Inspector

The Note Inspector brings together the inspector fields that are usually displayed near the toolbar when the various tools are in use. It allows you to see all the most important parameters at a glance and even edit them without having to change tools.



In addition to the data included in the inspector fields, the Note Inspector displays the frequency in hertz as well as a button for the muting of notes.

The editable parameters displayed in the Note Inspector are (from top to bottom):

- the pitch of the selected note in semitones, cents and hertz
- the pitch modulation expressed as a percentage
- the pitch drift expressed as a percentage
- the formant shift in cents
- the amplitude in decibels
- the button for muting and unmuting notes
- the attack speed expressed as a percentage
- the sibilant balance

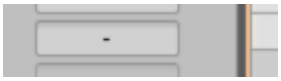
Lower down in the inspector, you can see to which audio file the selected note belongs and which algorithm was used for the detection.

Entering values and handling multiple selected notes

When only one note is selected in the Note Editor, the Note Inspector displays the concrete values for that note.

As a general rule, you can modify all values either by clicking in their respective fields and dragging the mouse pointer upwards or downwards or by double-clicking in the field and typing in a new value.

In the case of the Pitch field, you can enter either an absolute (C3, D4 etc.) or a relative (+2, -1, etc.) value. In the other fields, it is always the absolute value that is adopted.



If you have selected multiple notes, the Note Inspector will only displays concrete values for parameters if these are shared by all the selected notes. Where values differ, a dash “–” is displayed in the relevant field.

If a dash is displayed, by clicking on it and dragging, you can alter the individual values of all the notes selected by the same amount; in this way, for example, you could transpose an entire selection up two semitones. The Scale Snap function, of course, if activated, will govern the eventual destination of the various notes.

As you drag the values, Melodyne remembers the difference between them. This is even true when certain parameters ‘collide’ with their maximum or minimum values; provided you keep the mouse button pressed and drag then in the opposite direction, the initial difference will be restored. Only if you release the mouse button at the point of collision will the initial difference be forgotten.

Alternatively, with multiple notes selected, you can type in a value that will then be assigned to, and thereafter shared by, all the selected notes (whereupon the dash, of course, will disappear).

An exception here is the pitch, as, if you type in the value “2”, for example, all the selected notes are shifted two semitones upwards. If you wish to assign the same pitch to all the selected notes, type in an absolute value, such as “C2”. If the Percussive or Universal algorithms are selected, of course, this has no effect, as these algorithms only know relative pitch.

Copying notes

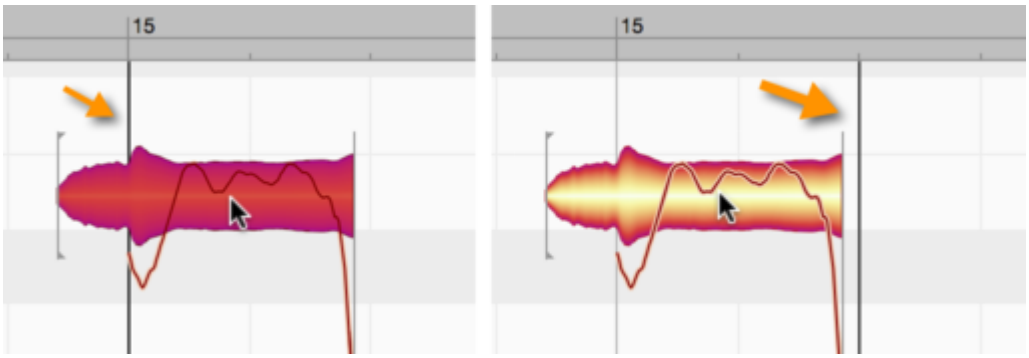
To copy notes in Melodyne, first select the desired notes, then choose Copy from the Edit menu or the context menu of the Note Editor. To insert them, use the Paste command. The following points here need to be noted.

The selection, cursor and grid when copying

When you copy notes to the clipboard using the Copy command, you will notice that the cursor moves to the start of the selection, or, to be more precise, to the quarter-note (crotchet) on the Time Grid closest to the first note of the selection.

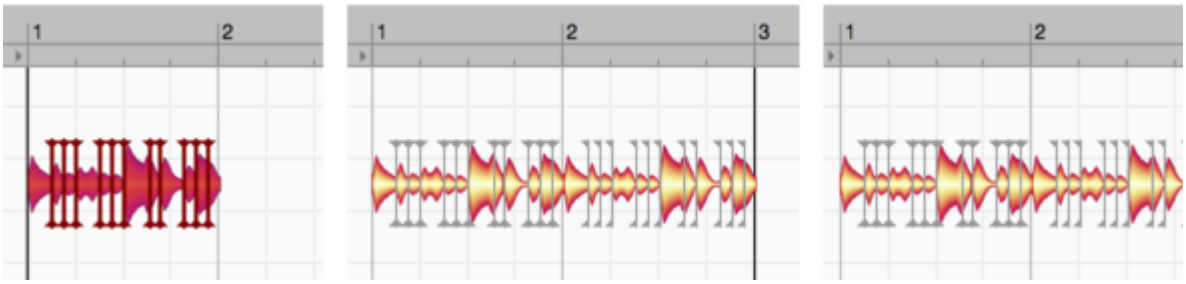
If, with the notes still selected, you use the Paste command, all that appears to happen is that the notes that were selected prior to the paste are now no longer selected and the cursor is now located just after the last of them.

In fact, however, the notes previously selected have been replaced by those on the clipboard. In other words, the notes have been copied onto themselves, with the copies replacing the originals. Admittedly, this may not sound particularly useful, but look at the position of the cursor: it is now aligned with the quarter-note on the Time Grid closest to the last copied note.



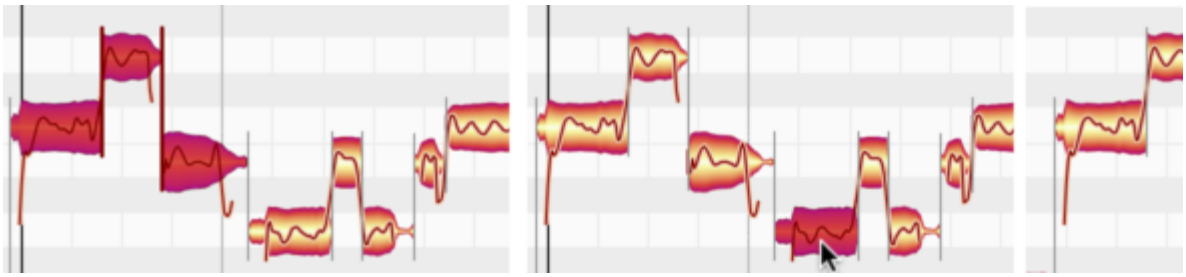
If you now execute a further Paste, the notes on the clipboard will be pasted a second time. This time, however, since no notes were selected, nothing will be replaced. Instead, the newly pasted notes will end up just after those that replaced the originals the first time round.

Their position is now determined by the cursor. And since, after the first paste, this was aligned with a quarter-note on the Time Grid (the first quarter-note after the pasted notes, to be specific), the effect of the second paste is that the original alignment of the notes relative to the gridlines is reproduced exactly, only further along the timeline. This behavior allows you to string together a succession of copies of the same passage, quickly and accurately – in order, for example, to create multiple iterations of a drum loop.

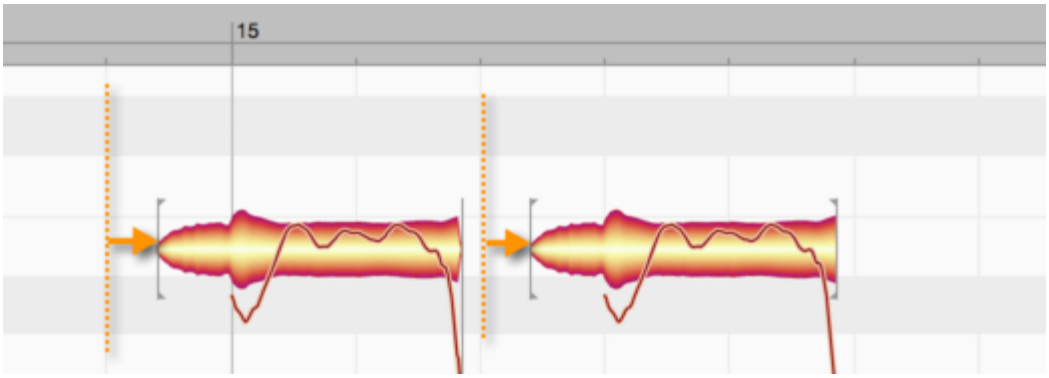


Based on what we have just seen, we can formulate the following rules:

- If any notes are selected when the Paste command is executed, these are replaced by the contents of the clipboard. The pasted notes are stretched or squeezed until they fit exactly the range from the beginning of the first to the end of the last note of the selection. This is illustrated here: on the left are the notes to be copied; in the centre, a single selected note, which serves as the destination of the copy; on the right is the result after the paste is performed: The selected destination note has been replaced and the pasted notes squeezed just enough for them to fit exactly the space it occupied.



- If when the Paste is executed no notes are selected, the cursor determines the point at which the pasted passage begins. The grid settings here play an important role: when copying notes to the clipboard, Melodyne remembers the distance between the first of the copied notes and the nearest grid line. When the paste is repeated at the new cursor position, the offset of the first pasted note to the gridline nearest to *it* will be exactly the same.



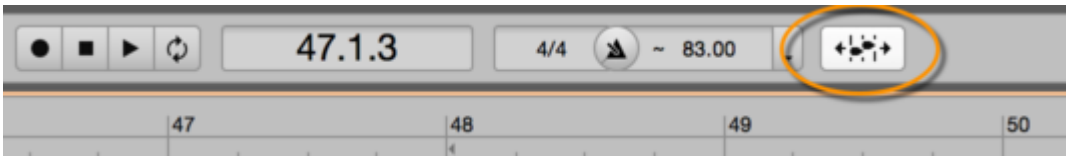
In other words, notes in Melodyne are not copied in such a way that they necessarily coincide with gridlines, because then the subtleties of expression would be lost. Instead, the notes copied retain their respective offsets to the grid. There is an exception, however, to this rule: if, instead of being calibrated in beats, the grid is calibrated in seconds (i.e. if you have selected “Sec” from the Time Grid Settings drop-down menu to the right of the Time Ruler), then the note (or first of a series of copied notes) will begin exactly at the cursor position, with no offset.

- After each paste, the cursor is moved to the first quarter-note following the most recent paste, making it easy to string together multiple iterations of the same passage. Obviously, if you wish, you can move the cursor by hand to some other point on the Time Ruler and make that, rather than the automatically selected quarter-note, the reference point for the next paste. You might want to do this, for instance, to introduce a pause between iterations.

- The pitch of the copied notes is always the same as that of the originals. This is even true when notes are selected, and therefore replaced, when the paste is performed. The length of the passage selected, in this case, is retained but the original pitch of the notes it contained is not. Of course, after performing the paste you can move the notes by hand to any pitches you like.

Tempo adjustment when copying: the Auto Stretch Switch

If notes are selected when the paste is performed, the inserted passage will be stretched or squeezed to fill the available space (i.e. that between the beginning of the first selected note and the end of the last) as we have already seen. But how is the tempo of the copied passage treated when the position of the paste is determined instead by the cursor?



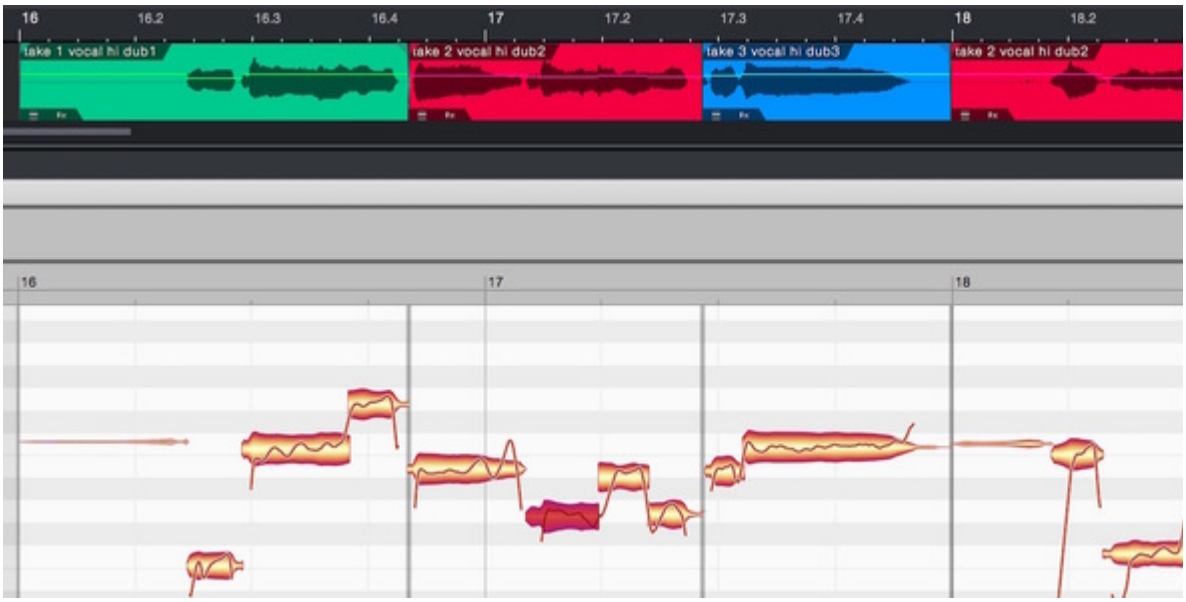
If the tempo at the destination of the paste is different from that of the passage from which the notes were copied, it is the status of the Auto Stretch Switch that determines whether the pasted notes adjust to the tempo of the destination or retain their original tempo. If the Auto Stretch Switch is on, they adjust; if it is off, they do not. So unless you want to change the tempo at the cursor position, you should switch Auto Stretch on before performing the paste.

Copying in an ARA context

Within a clip, you can copy and paste notes without any restrictions. Whether you can copy a note from one clip and paste it into another depends upon whether or not the two clips are accessing the same audio file.

Example: You have sliced up a fairly long drum recording in the DAW into individual clips, sorted these in the DAW arrangement, and are looking at them now in Melodyne's Track Edit Mode. In this case, you can copy and paste notes freely (because they were originally part of one long recording) without paying attention to the clip borders.

If, on the other hand, you have made a collage in the DAW arrangement of snippets taken from different recordings – from successive vocal takes, for instance – and are looking at these in Track Edit Mode, you cannot copy and paste notes with the same freedom. The color assigned to each of the five takes in the following screenshot indicates the take from which it is derived:



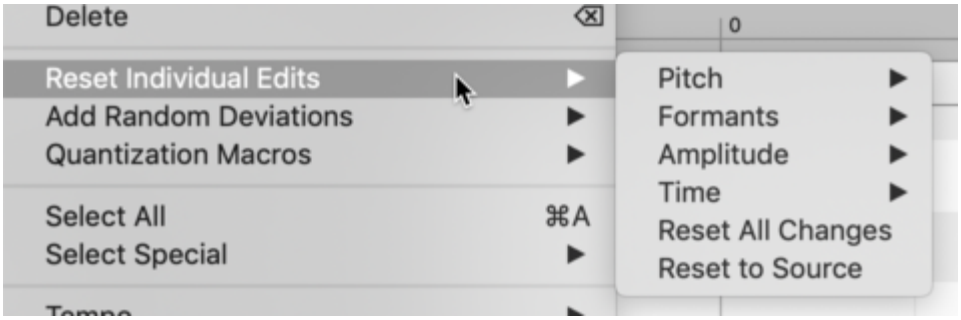
Here you cannot copy the note selected at the beginning of Bar 17 (or, indeed, any other note derived from a red clip) and paste it into Bar 16, because the destination clip is a different color – in this case, green – and is therefore derived from a different recording. You can, however, paste it into Bar 18, because the content there is derived from the same red take.

The Edit menu

Melodyne's Edit menu includes items that allow you to undo entirely the effects of various types of editing and others that add random deviations to the audio material.

Restore Original

The "Restore Original" sub-menu contains commands that nullify entirely the effects of various types of editing.
You will also find in the context menu of the Note Editor whichever of these commands are relevant to the tool you are using at the time.



All the commands (except the last one) apply *only to the notes currently selected* and are grayed out if no editing of the type in question has yet been applied to them. Bear in mind that these commands work independently of the normal "Undo" function.

The effect of the following types of editing can be undone entirely via the Restore Original sub-menu:

Pitch

- the editing of pitch
- the editing of pitch centers
- the editing of pitch modulation
- the editing of pitch drift
- the editing of pitch transitions

Formants

- the editing of formants
- the editing of formant transitions

Amplitude

- the editing of amplitude
- the editing of amplitude transitions
- the application of fades
- adjustments to the sibilant balance
- the muting of notes

Time

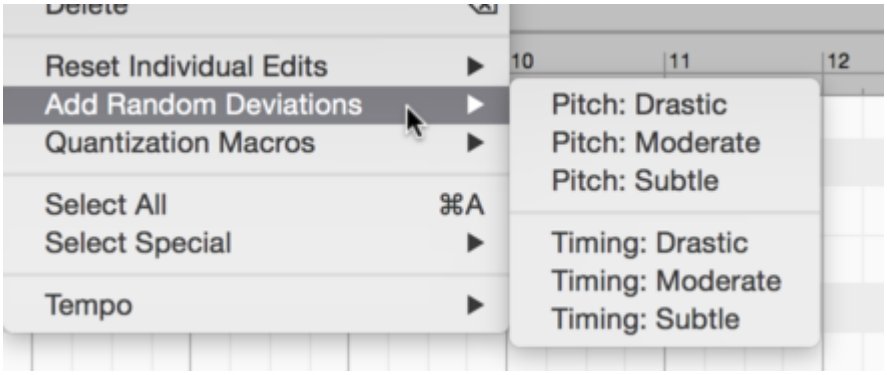
- the editing of timing (position/length of notes)
- the placing of time handles
- the editing of attack speeds

The command “Undo All Changes” undoes entirely the effect of all the types of editing listed above but only applies to the notes currently selected.

The final command, “Undo All Changes to Entire File” has the same effect as “Undo All Changes”, differing only in that it applies even to notes not included in the current selection, thereby restoring the entire file to its original state.

Adding random deviations

The Add Random Deviations sub-menu varies the pitch or timing of individual notes a) drastically, b) by a moderate amount, or c) in a subtle way; within these various limits, the direction and extent of the deviation is determined randomly.



These functions introduce random variation to either the pitch (i.e. the vertical position) or the timing (i.e. the horizontal position) of the selected notes.

This is particularly useful when you have made one or more copies of a single take but do not wish them to be identical either to one other or to the original – the object being, perhaps, to make a single vocalist sound like a choir. Through the addition of a certain amount of random deviation to each copy, you can obtain more natural-sounding results by ensuring that the synchronization of the individual voices is never improbably perfect and that no two copies exhibit identical fluctuations in pitch.

Macros

The commands in this sub-menu open Melodyne's various macro dialogs. The same effect can be obtained by clicking their respective icons, which are to the right of the toolbar above the Note Editor.

Select Special

The effect of the commands in the "Select Special" sub-menu is described in the "Selecting Notes" tour.

Chords and Keys

These commands can be used to trigger an analysis of the chords and keys encountered in the material.

Audio to MIDI

From this tour, you will learn how to save audio notes in Melodyne as MIDI notes.

About Audio-to-MIDI

Melodyne allows you to export audio notes as MIDI notes, in order, for example, to double your vocals with a sound from a software synthesizer.

The MIDI notes are an exact representation of the audio notes in Melodyne. For each audio note, a MIDI note is created with the same position, length and pitch. The velocity of each MIDI note is derived from the amplitude of the audio note it represents.

That is equally true whichever algorithm is used, with a few algorithm-specific exceptions: In the case of vocals, breaths are not exported as MIDI notes; and if you save rhythmic material or material edited with the Universal algorithm as MIDI, all the MIDI notes will share the same pitch but take their position, length and amplitude from their audio equivalents in the rhythm track. You can use this technique, for example, to derive from a drum loop a quantization reference for other MIDI tracks in your DAW.

The generation of MIDI notes from audio material offers a wealth of different creative possibilities. Try it out for yourself!

Exporting MIDI

From the “Settings” menu, choose “Save as MIDI…”. In the file selection box that appears next, you can enter a name and a storage location for the MIDI file.
Now import this file back into your DAW onto a track with a MIDI or software tone generator.

The exported data comprises that of the entire track, even if this is composed of many different audio segments. However the export does not necessarily begin at Bar One but rather, in principle, with the first note on the track. Of course, the export range is expanded to ensure that when the file is imported into the DAW, you do not have to position it with sample accuracy on the audio, but simply align it with the exact beginning of the bar that contains the first note.

Time-stretching, tempo and tempo matching

If you wish to effect tempo changes in an audio event either using real-time time stretching or with the musical mode or audio warp quantization and editing functions, you should do so before you begin editing the event by means of ARA with Melodyne.

As soon as Melodyne is used, the Melodyne algorithms will take over the time-stretching based on the tempo values determined by Cubase (or entered by you manually) for the event.

If Musical Mode does not provide a satisfactory tempo analysis of the audio event – i.e. if the original tempo of the recording on which the event is based is not correctly identified – Melodyne certainly offers a better way of discovering it. In this area, the workflow in the current Cubase is not yet entirely implemented using ARA – unfortunately, this makes things a little laborious as you have to proceed as follows:

– Switch off Musical Mode.
– Switch Melodyne on.

Melodyne will then display two values:



Here you see the song tempo set in Cubase followed by, in brackets, the original tempo of the audio event. Now type the bracketed value manually into the waveform editor or into the Cubase pool.

– Remove Melodyne and reactivate Musical Mode.
Now Musical Mode will act on the basis of the correct value, so the tempo adjustment will be musically correct.

– Subsequently, use Melodyne again to perform the actual editing of intonation, timing, melodies and chords.

Switching to Melodyne studio trial mode

Explore all the possibilities Melodyne has to offer! To do this, simply switch your Melodyne essential, assistant or editor to Melodyne studio trial mode. If you do not have Melodyne, you can download the trial version here.

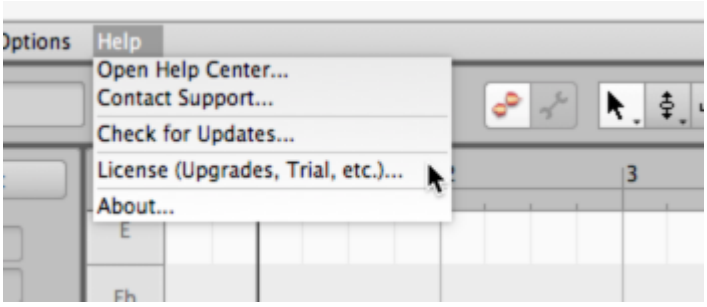
Switching to trial mode

When you switch to trial mode, your Melodyne essential, assistant or editor will be transformed for 30 days – free of charge and without obligation - into Melodyne studio, the largest Melodyne edition, which contains the full range of Melodyne functions. You can use all these functions for 30 days without restriction, exactly as if you had purchased Melodyne studio. Trial mode can only be activated once on the same computer. To switch to trial mode, and each time you launch Melodyne studio during the trial period, you will need an Internet connection.

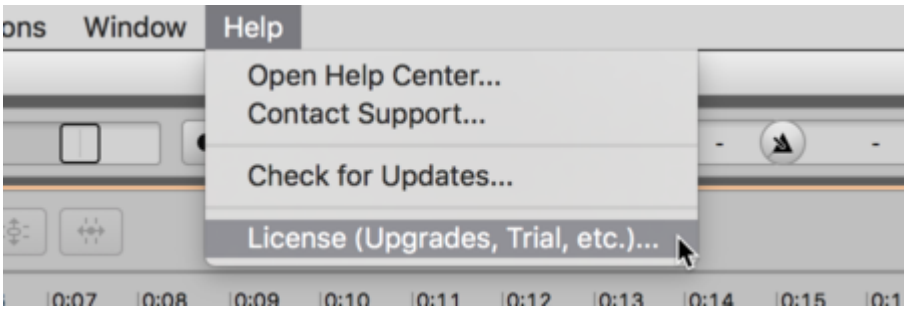
Here's how to activate trial mode:

1) Start Melodyne. Next go to the Help menu and select "License".

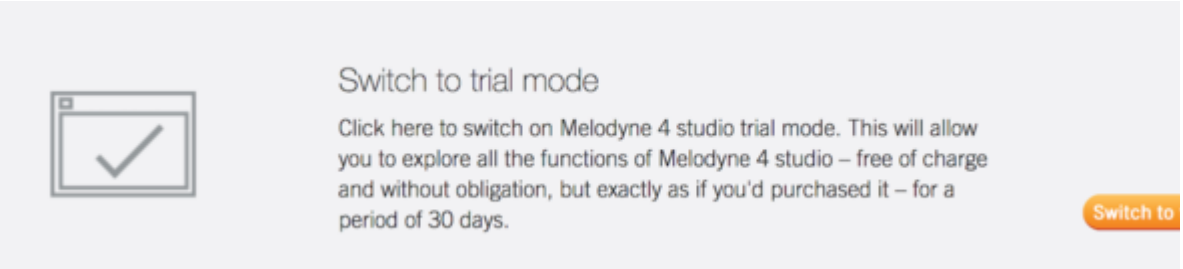
In the plugin:



In the stand-alone implementation:



2) You will be directed to your user account in your browser where you will see your license options. In the "Melodyne studio trial mode" frame, switch to trial mode:

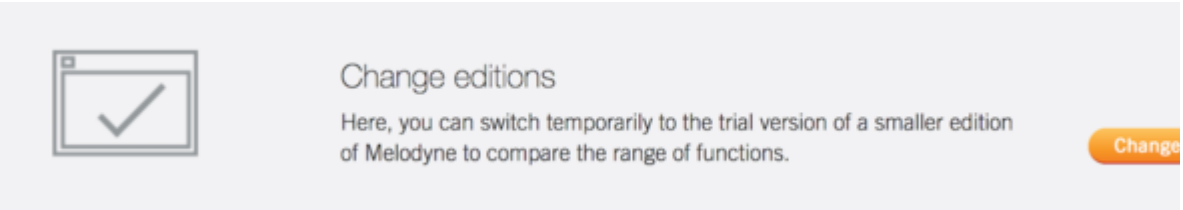


That's all there is to it. Trial mode will remain active for 30 days, so when you return now to Melodyne you will see that the "Melodyne studio" edition is running.

Comparing editions

If you wish, you can switch to a smaller edition in the course of the trial period in order to compare the range of functions offered by the various editions. This could be useful, for instance, if you own Melodyne essential and are wondering which of the larger editions to upgrade to. Easy. Just try them all.

To switch editions, select "License" from the Help menu exactly as before. This will take you back to your user account in your browser, where you will be given the option of switching to one of the smaller editions.



Your choice, however, will only remain effective while Melodyne is actually running. As soon as you restart Melodyne, the full Melodyne studio function set will be restored.

Expiry of the trial period

At the end of the 30-day trial period, Melodyne will automatically revert to your previous edition. Further editing of projects created during the trial period will still be possible, but only using the functions of your previous Melodyne edition. Playback, however, will be unaffected, so none of the work you did during the trial period will be lost.

Convinced?

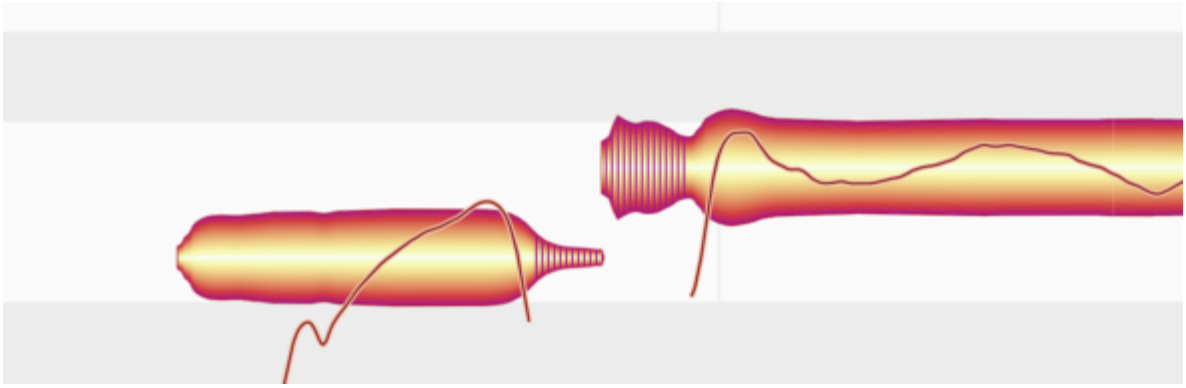
If you wish, you can switch permanently to Melodyne studio at any time during the trial period or thereafter. The requisite upgrade can be obtained from our web shop or from your local dealer.

Melodyne 5: Update guide

The following is a brief summary of all you need to know to get started with the new Melodyne 5. In the individual tours in the Help Center, you will find plenty of exciting tips, tricks and background info to read later, but the best place to begin is here.

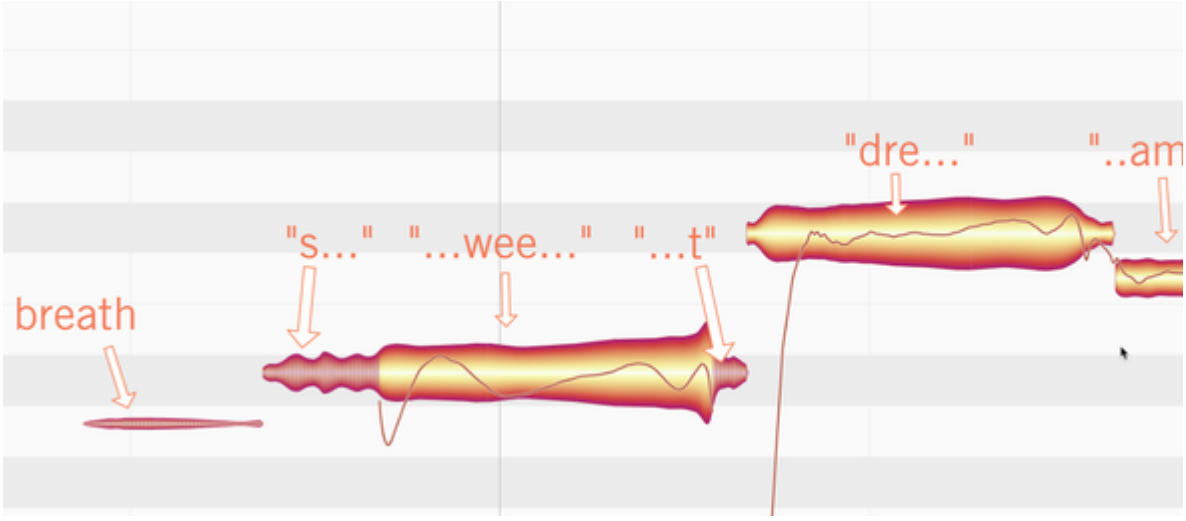
The Melodic Algorithm with Sibilant Detection

First the good news: You don't have to do anything; during its initial analysis of the material (the 'detection'), the algorithm in its default setting automatically separates the pitched from the unpitched (noise-like) components of the sound and thus behaves correctly during the playback. The upshot is better sound, pure and simple.



The extent of any noise-like components that have been detected – we call them 'sibilants' – is indicated by hatching. This is how Melodyne marks not only sibilants proper ("s", "z", "ch" and "zh") but also other unvoiced consonants like "k" and "t" as well as the sound of the vocalist inhaling or exhaling between words.
If any part of the detection seems strange or incorrect to you, you can switch to Note Assignment Mode where you will find the requisite Correction Tools though doing so is seldom necessary.

When you alter the pitch of a note, Melodyne does not alter the frequency of the sibilants, as that would sound unnatural – after all, in real life no singer has the wherewithal to sing one "S" higher than another or pitch the sound of their own breathing. In the display, however, the hatched areas do move up or down with the rest of the blob when the corresponding note is transposed, but they do this solely in the interests of legibility, so that the visual integrity of each syllable is preserved.



The way changes in the length of notes is implemented in Melodyne now also better represents the natural behavior of singers: if a note contains both sibilants and pitched components, the sibilants remain unaltered. When time-stretching is applied to the word “sweet”, for example, it becomes “s-weeeeeeee-t” (not “sss-www-eeeeee-ttt” or anything ghastly like that!).

The case is different where the note in question (or, in this case, the sound to which the blob refers) consists *solely* of sibilants and has no pitched components at all, as is often the case with breath noise: this would certainly be shortened to make room for a time-stretched word invading its space. But here, too, the principle is the same, because if the rest between two words were shorter, the singer would necessarily take a shorter breath. So even when it comes to lengthening or shortening breathing sounds, Melodyne 5 automatically achieves a natural effect.

And once they have been isolated, breaths can be stretched or squeezed using a different algorithm, with results that sound considerably better than those of earlier versions of Melodyne.
Since, however, sibilants often coincide with pitched components, it can happen that breath sounds do sometimes move; when this happens, it is because Melodyne has detected a small pitched element in them that has been transposed, and this fact must naturally be reflected in the display. This should not surprise you.

All editions of Melodyne profit from these improvements – even the entry-level Melodyne essential.

Compatibility with Melodyne 4

When you open projects that were saved by an earlier version of Melodyne, they sound exactly the same in the new version as in the old. This is because when you open old documents, two new functions are initially not activated:

- Sibilants are not detected.
- Pitch centers of notes are still calculated as in Melodyne 4.

The upshot is that everything sounds exactly as it did before, so if you open your old project today with the intention simply of making some minor change to the mix, you do not need to take any special precautions.

If, however, you plan to do substantially more work on the project, taking advantage of the new features of Melodyne 5, you can do so simply by switching on Sibilant Handling on the vocal tracks. This is done by:

- placing a checkmark next to the option “Sibilant Handling” in the Algorithm Inspector in Note Assignment Mode. This will trigger a fresh analysis of the entire track; when this is finished, any sibilants will be marked and the playback algorithm will behave accordingly. This may change the sound, usually for the better. Please note however that Sibilant Detection is only available with the Melodic or the Percussive Pitched algorithm; with all the others, the function is grayed out.

Unfortunately, this function is not available with the edition Melodyne essential. If you want to edit an old Version 4 project taking advantage of the new sibilant functions, you must trigger a fresh detection of the material by clicking the words ‘Melodic’ or ‘Percussive Pitched’ (as appropriate) in the Algorithm menu. Please bear in mind, however, that if you do this, all your previous editing will be lost, so it will seldom be worth it. Another option would be to upgrade to Melodyne assistant; then not only would the entire tool kit be at your disposal but you would also be able to switch Sibilant Handling on and off.

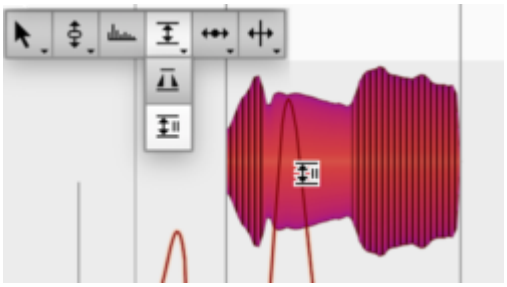
- triggering a recalculation of the pitch center of the notes. To do this, you must enter Note Assignment Mode and ALT-double-click on the relevant notes. While it is replotting the Pitch Curve of each note, Melodyne also recalculates its pitch center. As a result of the improved method of determining the pitch center of each note, the blobs may realign themselves slightly in the vertical plane, with some moving upwards and others down; the results in either case reflect more faithfully the perceived pitch of the notes.

More on the new way of calculating the pitch center.

New tools (not only) for vocals

With Version 5, Melodyne assistant, editor and studio have gained two new tools:

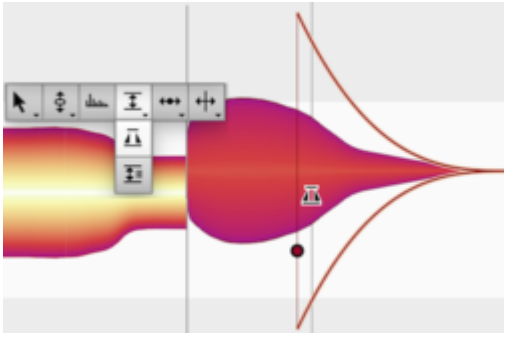
The Sibilant Balance Tool: This governs the ratio between the amplitude of the sibilants and that of the other (pitched) components of the sound. Its uses range from the defusing of problematic sibilants (de-essing) and the rapid adaptation of doubled vocal tracks, to creative sound design and improved mixing options.



The tool is easy to use: Drag downwards to attenuate the sibilants, or upwards to attenuate the pitched components. You can make very fine adjustments but also – when double-tracking, say – mute altogether either the sibilants or the pitched components.
The tool can be used for the detailed editing of single notes or, when multiple notes are selected, to apply the same change throughout an entire passage.

You will find all the details here.

The Fade Tool: With Melodyne 5, you can fade in at the start of a note and/or fade out at the end. No doubt you're familiar with the principle from your DAW. Using the tool is easy: just double-click to insert a fade; then use the left/right arrows to move it, and the up/down arrows to adjust its slope. That's all you need to know.

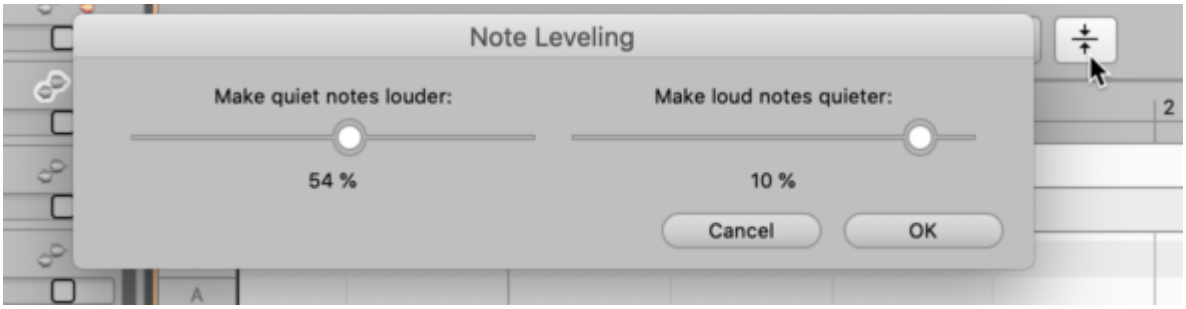


What is much more interesting, however, is that this function increases the control Melodyne offers over the playing dynamics of all types of instrument, because it operates on a per-note basis. So in polyphonic material, for example, you can fade in or out on individual notes within chords. The Fade Tool also makes possible the rapid elimination of extraneous noise in material of all kinds – most notably, polyphonic instrument tracks – as well as providing totally new scope for creativity.

You will find all the details here.

The Leveling Macro

The new Leveling Macro allows you to rein in volume disparities swiftly. Its effect is to reduce differentials between the amplitude of different notes on a track – not only in melodic but also in percussive and even polyphonic material.



The left-hand fader makes the quiet notes louder, whilst the right-hand fader makes the loud notes quieter. With both faders set to 100%, all the notes will have the same amplitude.

Whilst this may sound simple, it can accelerate your workflow considerably – particularly in the case of polyphonic material, as it allows you swiftly and effortlessly to iron out or reduce disparities between the volume levels of different notes within chords.

You can find out more about the Leveling Macro here.

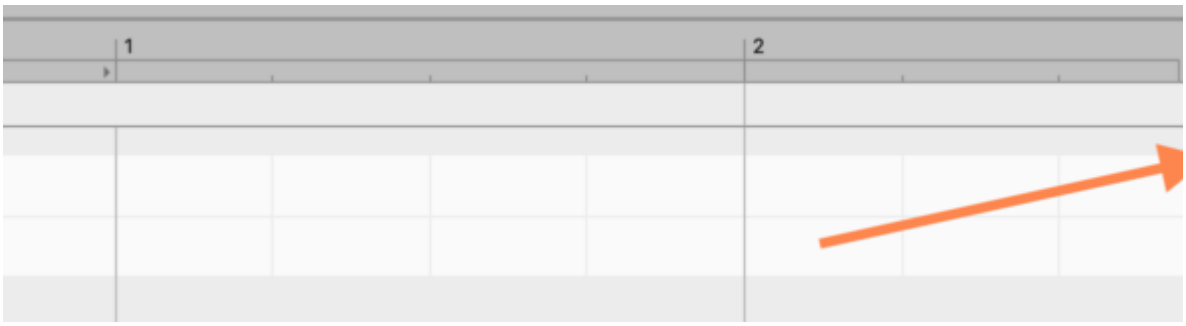
Pitch correction by double-clicking and the Correct Pitch Macro

Whether you double-click on out-of-tune notes to correct intonation errors or use the macro, the new, musically weighted calculation of pitch centers delivers better results. Whereas previously you often had to fine-tune individual notes manually, even after double-clicking or using the macro, now Select All followed by a double-click always results in musically correct intonation. Further editing is now required, at most, in a handful of specific genres to steady-up the beginning or ending of words – and even this can be performed in Melodyne 5 in next to no time.

Both the Correct Pitch macro and double-clicking also profit from the new Chord Track. To an extent you can control, and in an extremely musical manner, not only can the intonation of the notes be improved swiftly but they can also be transposed simultaneously to fit the chords of the song. This allows any instrument track or any sample to accompany any song.

Chord Recognition and the Chord Track

If it is not already visible, click here to show the Chord Track.

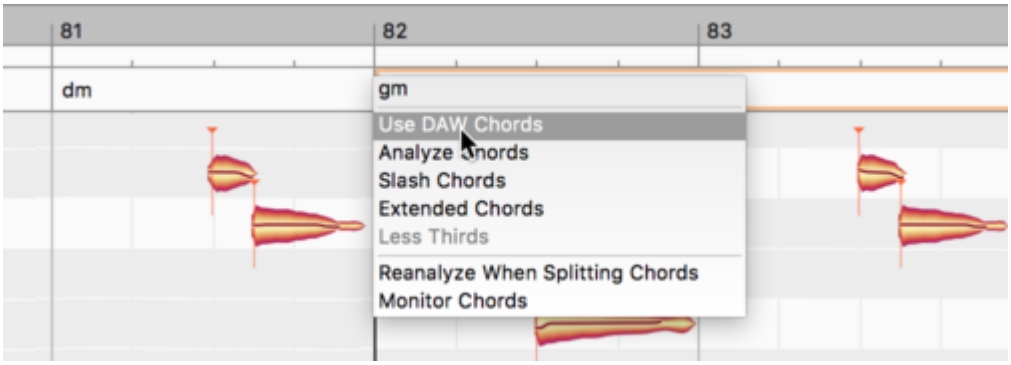


There are now various ways of filling in the chords:

- by hand. If you know the chords, you can just type them in. From the Preferences dialog, you can choose between various chord naming conventions.

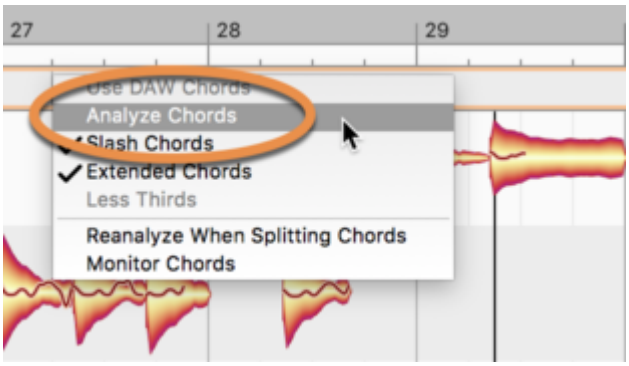


- via ARA: If your DAW is equipped with a chord track and makes it available via ARA, Melodyne can simply take the chords from the DAW. Any subsequent chord changes you make in the DAW will be reflected immediately in Melodyne.

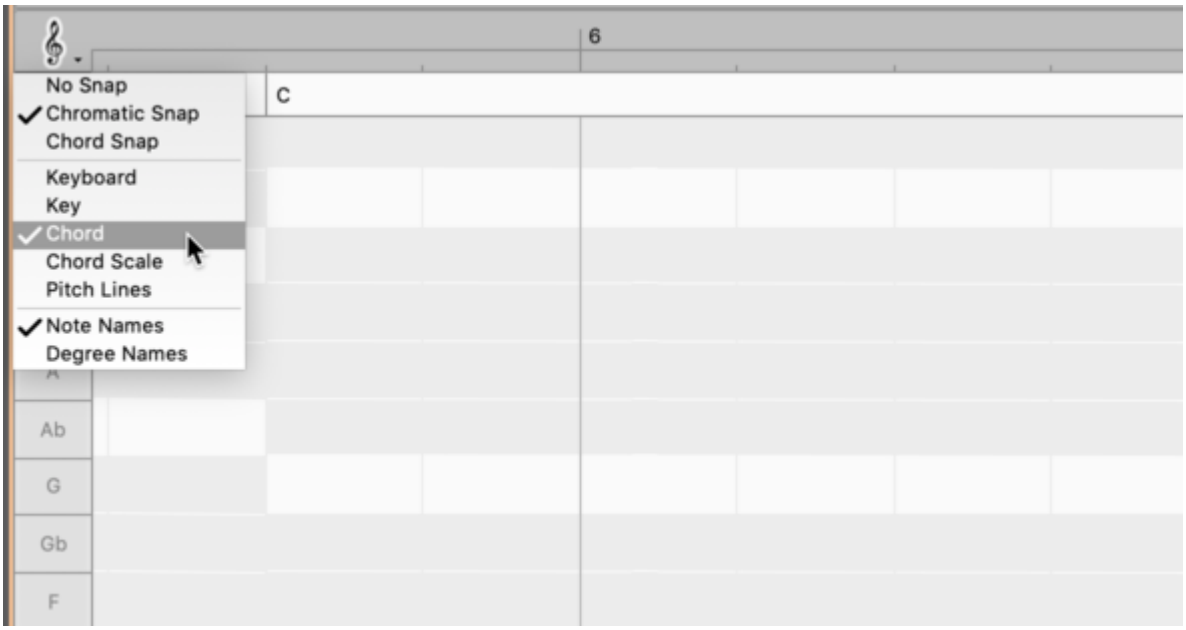


- using the Chord Recognition function. If you do not know what the chords of the song are, Melodyne can find out for you. Select for the purpose tracks with as much harmonic information as possible (e.g. guitar, keyboard or bass) and as little pitch fluctuation as possible (so preferably not vocals); do not include drum tracks.

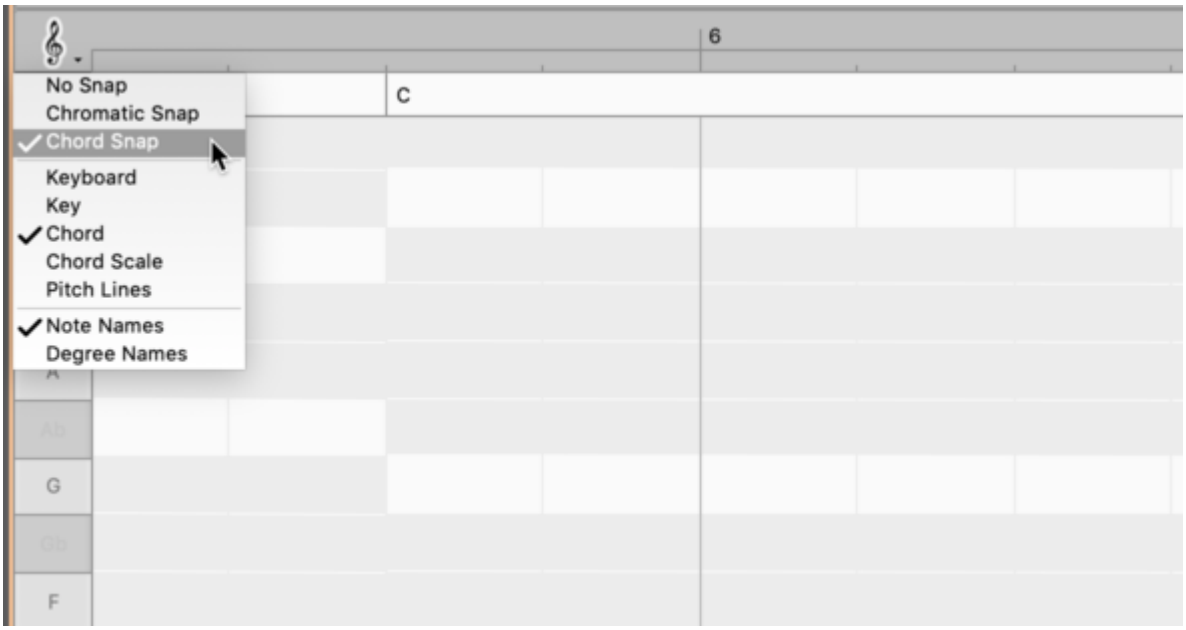
Now right-click on the Chord Track and choose “Analyze Chords”.



Once the Chord Track has been filled in, you can set the Pitch Grid in the note-editing background to reflect the changing harmonies of the song. From this, you can tell at a glance which pitches are, and which are not, suitable destinations for notes.



If you now activate the grid by selecting ‘Chord Snap’, whenever you drag and drop notes they will snap to pitches consistent with the named chord.



The same thing will happen whenever you double-click on a note or selection of notes; each note will move to the nearest pitch consistent with the named chord. It can happen, of course, that two or more notes then come to rest at the same pitch, so it is worth casting a quick eye over the results.

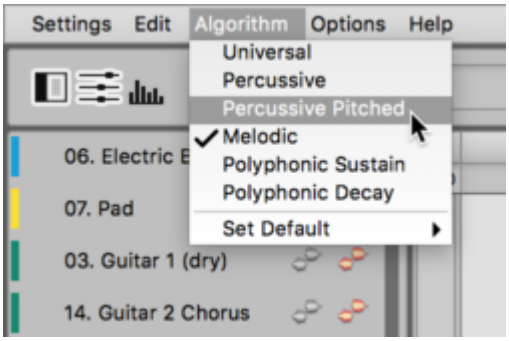
You will find everything relating to chords, the Chord Track and adapting new material to fit the chords here.

The new Percussive Pitched Algorithm

With Version 5, Melodyne has acquired a new algorithm. The Percussive Pitched Algorithm combines the strengths of two of the existing algorithms.

Like the Percussive algorithm, the new algorithm is optimized acoustically for drums and percussion, or – in more general terms – for noise-based material.

In other respects, though, with its display format in which pitches are clearly identified, the Percussive Pitched algorithm is more like the existing Melodic algorithm.



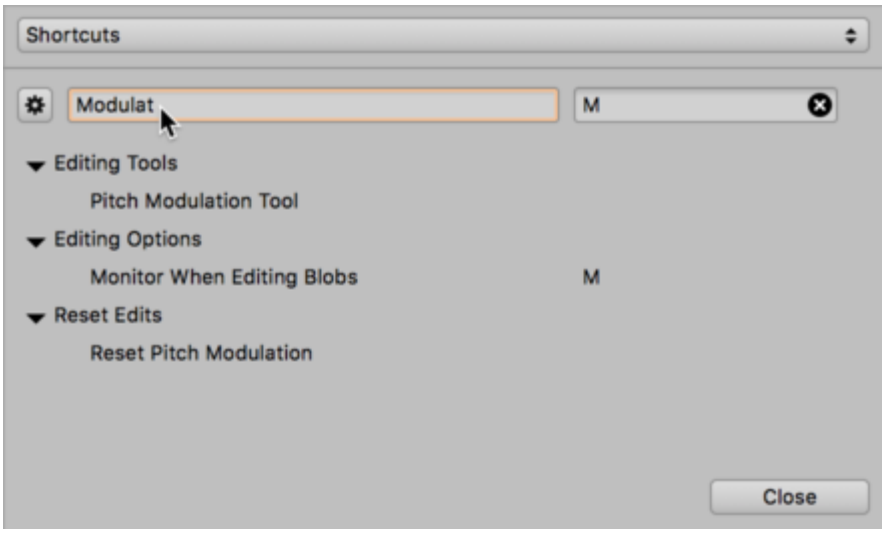
Suitable candidates for the new algorithm are all drum-like instruments that are capable at the same time of producing recognizable melodies: an 808 loop, for example, which in addition to the noise-based snare and hi-hat sounds includes a kick drum tuned to the bass of the song as well as tuned toms. A beatboxer track would be another typical candidate for the new algorithm; there, too, melodic (bass) with percussive (snare) elements are united in one and the same recording.

More on this....

Keyboard shortcuts

In Melodyne, virtually any function can be controlled using a keyboard shortcut. Experienced Melodyne users know how to take advantage of this, and are able to perform tasks considerably more swiftly by using shortcuts tailored to their own specific working habits.

To facilitate the handling of keyboard shortcuts, the Shortcuts page of Melodyne 5's Preferences dialog offers a search function that makes creating your own sets of shortcuts easier and more intuitive.



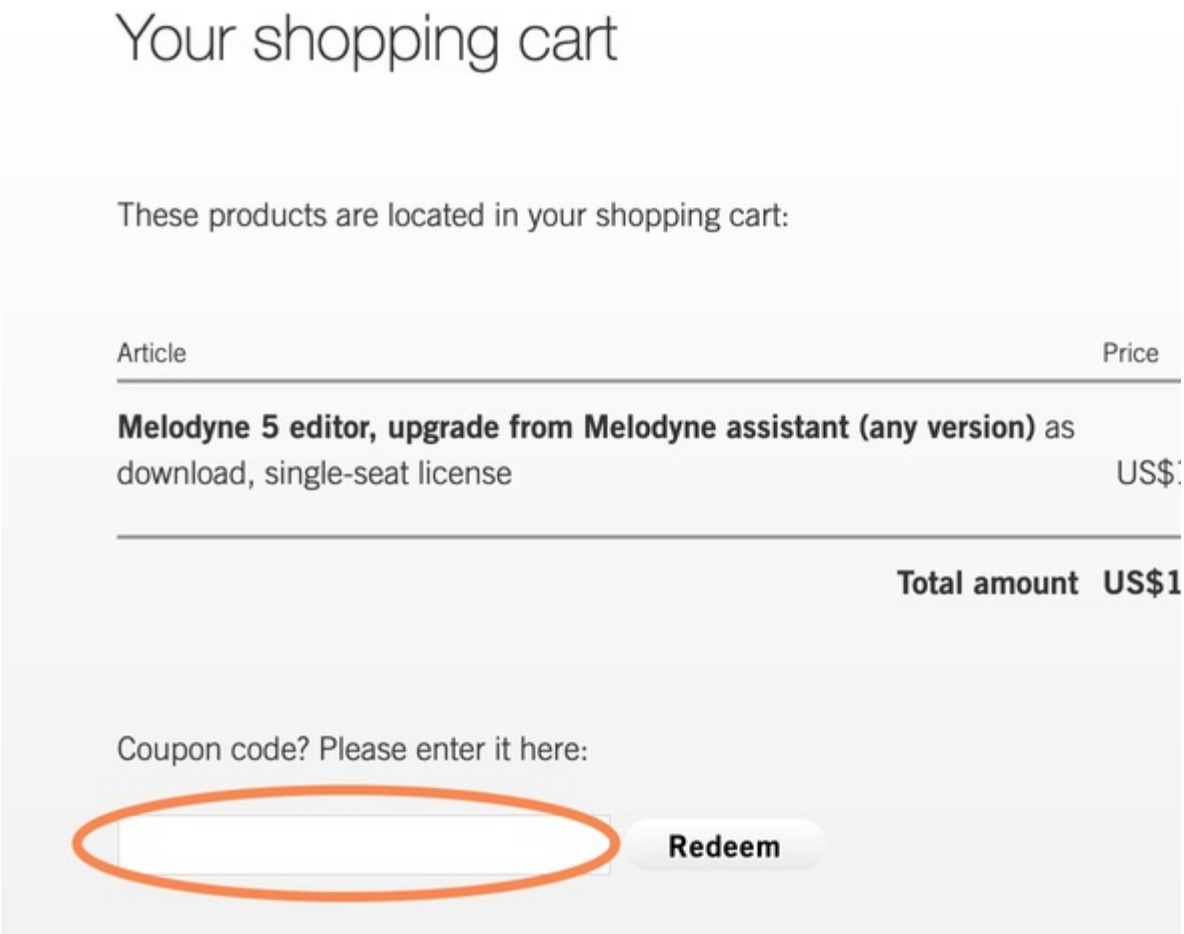
You can find out more about keyboard shortcuts here.

Already own a Melodyne?

If you are already a Melodyne customer and have received a license for Melodyne 5 essential bundled with some other software or hardware product, don't worry; you can use the license in our web shop as a coupon when purchasing any other Melodyne update or upgrade. Here's how it works:

How does the coupon work?

In our web shop, first place the update for your existing Melodyne or the desired upgrade in your shopping cart; then, when you come to pay, enter the serial number of your Melodyne 5 essential as your coupon code and click on "Redeem". The coupon has a value of €/US$ 20.



What if I have already activated my Melodyne 5 essential by mistake?

In that case, you can still use the Melodyne 5 essential serial number as a coupon code. If you do so, however, you will no longer be able to reactivate your Melodyne 5 essential, as use of the coupon voids the license.

Coupons: terms and conditions of use

Anyone who has received a serial number for Melodyne 5 essential as part of some other product bundle can use this serial number on a single occasion as a Melodyne coupon in the Celemony web shop. Use of the coupon in this way voids the Melodyne 5 essential license.

- The coupon is only valid in the Celemony web shop (under www.celemony.com) and only when purchasing Melodyne updates or upgrades or when adding an additional workstation to an existing Melodyne license. The coupon cannot be used for the purchase of any other products. When the coupon is used in the purchase of a product for which it is valid, you will be credited with the amount in question, which will therefore be subtracted from the purchase price.
- The coupon can be redeemed within one year of receipt of the serial/coupon number and in any case within three months of the release of Melodyne 6.
- Only one coupon can be redeemed per purchase transaction in the Celemony web shop. The coupon cannot be exchanged for cash.
- The coupon cannot be used in combination with other coupons and cannot be redeemed for purchases already made.

Version history

Here you will find an overview of all changes introduced by the most recent Melodyne updates.

New in Version 5.4.2

The free update to Melodyne 5.4.2 features optimizations and bug fixes as well as important adaptations to macOS Sequoia. We recommend it to all users.

- macOS Sequoia: Previously, the function “Private Wi-Fi Address” made it necessary to reactivate Melodyne. With Melodyne 5.4.2, the function can be used free from any such inconvenience.
- macOS in general: Scrolling with the trackpad has been revised and improved.
- macOS in general: Changing to another program sometimes gave rise to graphic artifacts.
- ARA and plug-in: Under certain circumstances, opening Melodyne could lead to a crash.

New in Version 5.4.1

The update to Version 5.4.1 contains improvements and bug fixes, which is why we recommend it to all users.

- Language localization: Switching to the French language version no longer worked, the previously selected language was retained.
- Windows: Under certain circumstances on some Japanese, Korean or Chinese systems, Melodyne failed to launch.
- macOS: On some systems, graphic errors could occur after closing the toolbox.
- ARA: It was sometimes impossible to edit the Chord and Key tracks.

New in Version 5.4

The update to Version 5.4 contains improvements and bug fixes, which is why we recommend it to all users.

- Pro Tools and Cubase with ARA: When opening a project with Melodyne, crashes sometimes occurred.
- Pro Tools with ARA: Deleting a clip from a stereo track with Melodyne ARA during playback sometimes led to a crash.
- All versions under Windows: In the event of a faulty connection with the Celemony server, a crash sometimes occurred.
- Studio One with ARA: When using the Fade Tool or closing a session, crashes sometimes occurred.
- ARA: Opening a second tab after opening the Sound Editor sometimes resulted in either a blank user interface or a crash.
- Stand-alone implementation: Under macOS, invoking the Undo function during a copy operation sometimes led to a crash.
- Stand-alone implementation: Crashes sometimes occurred when activating Melodyne.
- Stand-alone implementation: The command “Save and Replace Audio” sometimes resulted in a crash when the audio file being edited was at the same time being used and played back in a DAW.
- Trial version of Melodyne: Interrupting activation under Windows sometimes led to a crash.
- All versions: In the Japanese user interface, an incorrect localization for “Sibilant Handling” was displayed in Note Assignment Mode.
- ARA: The ARA mode is now also displayed correctly in the “About Melodyne” window.
- Stand-alone implementation: Activating the record-enable function via the track view in the Note Editor had no effect on the track pane, where the Record Enable button remained grayed out.

New in Version 5.3.1

The update to Version 5.3.1 contains improvements and bug fixes, which is why we recommend it to all users.

- Pro Tools with ARA: When repeated use was made of the Undo function in Melodyne, under very special circumstances Pro Tools could crash.
- ARA and plug-in: Under certain circumstances, not every note was included in local playback.
- ARA: When creating a new project, the DAW under certain circumstances displayed an error message even though the new project was error-free.
- ARA: When you switched back to Edit Mode from Note Assignment Mode, it could happen that the display scrolled all the way to the top instead of returning to the previous vertical position.
- Studio One: When Studio One was launched, a crash sometimes occurred while the Melodyne plug-in was being scanned.
- Digital Performer: Under rare circumstances, moving blobs could lead to a crash.
- Samplitude: In Melodyne 5.3, it sometimes happened that the ARA files of older projects were muted during playback.
- Stand-alone implementation: In Note Assignment Mode, execution of the “Convert Selection to Connected Sequence” function sometimes led to a crash.
- Stand-alone and ARA: On very high-resolution screens under macOS Monterey, crashes could occur in Full Screen Mode.
- Keyboard shortcuts: The assignments for Track Mode and Clip Mode were erroneously listed under “Editing Tools” instead of “View Configuration”, as they are now.
- Keyboard shortcuts: The Fade Tool and Sibilant Balance Tool now appear directly beneath the Amplitude Tool, which corresponds to the layout in the toolbox.
- Note Assignment Mode: Under certain circumstances when you were editing in Note Assignment Mode, individual notes were not played back.
- Time Handles: When undoing an edit made with the Time Handle Tool, it sometimes happened that the sound of the note in question remained unchanged.
- ARA: When the Universal algorithm was used, a display error (gaps between the blobs) sometimes occurred when blobs were being edited.

New in Version 5.3

The update to Version 5.3 contains improvements and bug fixes, which is why we recommend it to all users. Moreover, Melodyne 5.3 is required for ARA integration into Pro Tools 2022.9.

New features and improvements

- Surround: In both ARA and Transfer modes, Melodyne can now also be used for the editing of tracks in the standard surround formats.
- ARA in Pro Tools: Melodyne 5.3 comes with all the technical prerequisites for ARA integration into Pro Tools from Version 2022.9 upwards and thus makes a significantly improved workflow in Pro Tools possible.
- Preferences: When Melodyne is employed for the first time as a plug-in, it loads the set of keyboard shortcuts corresponding to the DAW you are using.

Bug fixes

- Recording: In the stand-alone implementation of Melodyne, you can now also use a recording device with a mono input (e.g. a MacBook microphone).
- ARA in Cubase: When moving an ARA event to a track that is not selected, the selection in Melodyne is now retained.
- Pro Tools: The position of the playback cursor in Melodyne is now correctly updated even when playback is stopped.
- AAX in Pro Tools: When bouncing/committing, Melodyne now correctly evaluates the offline setting.
- The Correct Pitch macro: When the macro was applied to a very large number of notes simultaneously, Melodyne would sometimes freeze. This no longer happens.
- Preferences: Previously, in ARA mode, the keyboard shortcut for “Playback Selection” was erroneously listed under “Others” instead of under “Transport Bar”. This has been fixed.
- The Note Inspector: The input field for Sibilant Balance now reliably accepts input even when multiple tracks are being edited simultaneously.
- ARA in Cakewalk by Bandlab: Under certain circumstances, Melodyne would crash when loading a session. This has been fixed.
- Ableton Live: The cause of random crashes when Melodyne was running in Live 11.1.1 under macOS Monterey on a Mac with an M1 chip has been detected and eliminated.
- Note editing: The “Restore Original” commands in the Edit menu now behave more consistently in the stand-alone implementation, in the Transfer plug-in and under ARA.

New in Version 5.2

New features and improvements

- Compatibility: In version 5.2, Melodyne now runs natively on Macs with Apple Silicon processors. The Mac version is supplied in Universal Binary format with native code for processors from Intel/AMD and Apple.
- Pitch editing: The scale snap behavior for pitch systems with closely spaced alternate stages has been improved.
- The playback function: In ARA mode and when using the transfer plug-in, you can now trigger playback of the current blob selection using the shortcut Alt+Space. If you would prefer to assign a different key combination to this shortcut, you can do so from the Shortcuts page of the Preferences dialog.
- Cache: The location of Melodyne's internal cache is now displayed in the Preferences dialog in ARA mode too, and you can alter its size.

Bug fixes

- Pitch editing: "Monitor When Editing Blobs" now also functions reliably with the arrow keys when pitch shifting.
- Editing the tempo assignment under certain circumstances led to a crash. Fixed.
- Accidentally dragging a track to the Project Inspector tab under certain circumstances led to a crash. Fixed.
- Changing the pitch reference at high zoom levels under certain circumstances led to a crash. Fixed.
- Moving an inserted note separation under certain circumstances generated an error message. Fixed.
- Scale changes: If the "Tuning and Mode" option is active when using "Notes Follow Scale Changes", notes are now moved correctly.
- Windows: Melodyne's file name extension is now correctly assigned.
- Melodyne essential: The option "Highlight Notes During Playback" has been added to the Options > Note Editor submenu.
- Stand-alone mode: When the Replace Audio command has been used, local playback now correctly reflects the track selection.
- Melodyne essential: The option "Show Fades" that appeared erroneously in the Options menu has been removed.
- The Note Inspector: When algorithms without sibilant detection are in use, the Sibilant Balance parameter is now grayed out.
- Selection: When removing a note separation results in two blobs merging, the resulting blob is now also selected in ARA mode.

New in Version 5.1.1

- Change: A workaround has been integrated for ARA compatibility with Mixcraft 8.
- Fixed: Lead sheets are now exported correctly via MIDI.
- Fixed: In Apple Logic, playback can also now be started reliably from Melodyne.
- Fixed: Under macOS, shortcuts using the “cmd” and function keys are now displayed correctly.

New in Version 5.1

Features and improvements

- macOS 11 Big Sur: Melodyne 5.1 is compatible with macOS 11 Big Sur on Intel-based Macs as well as on ARM-based Macs under “Rosetta”.
- DAW-oriented keyboard shortcuts: We are always looking for ways to make the operation of Melodyne even easier for users of digital audio workstations. That’s why we’ve included sets of keyboard shortcuts customized for Pro Tools, Logic, Cubase and Studio One in Version 5.1. You can choose the set you want from the Shortcuts page of the Preferences dialog.
- Exporting lead sheets: It is now possible to export the contents of the Chord Track as a lead sheet via MIDI; you will find the relevant command in the Chord Track’s context menu.
- Algorithm selection: During ARA operation with Cakewalk, Melodyne’s Select Algorithm menu is now displayed prior to any MIDI export.
- ARA improvements: The interaction with ARA DAWs has been optimized in various ways – partly to ensure compatibility with future DAW versions.
- New keyboard shortcuts: It is now also possible to assign keyboard shortcuts to the following commands: “Show Sibilants”, “Note Leveling”, “Copy Song Data to Note Assignment…” and “Copy Note Assignment Data to Song…”.

Bug fixes

- A keyboard shortcut assigned to “Toggle Cycle Mode” now also works reliably when Melodyne is running as a plug-in and under ARA.
- MIDI export has been improved and muted notes are no longer included in the export.
- Under macOS, keyboard shortcuts using the function keys are now also correctly displayed in the menu.
- The “Set Cycle to Selection” function now also works correctly in Studio One.
- When you stop playback in Pro Tools, the playback cursor in Melodyne now remains where it was when playback was halted, instead of springing back to the previous start position.

New in Version 5.0.2

- Bugfix: The installation program no longer launches under Windows 7, displaying instead a message saying that Windows 7 is not supported.
- Bugfix: In the Note Editor, you can now also place time handles without having to select a note first.
- Bugfix: In the Note Editor, you can now also move note separations without having to select a note first.
- Bugfix: In Samplitude X5, when a new audio file is detected, whichever algorithm is selected as the default is now used.
- Bugfix: There is no longer a delay before newly inserted note separations are displayed in the Note Editor.
- Bugfix: In Cubase (in Transfer mode, i.e. without ARA), Melodyne still displays correctly even if you have changed the size of its window.
- Bugfix: During local playback in ARA mode, overlapping notes are no longer erroneously played back at the comping boundaries.

New in Version 5.0.1

- Bugfix: Use of the “Separate Notes as Trills” command no longer produces occasional artifacts.

User manuals for older versions

Melodyne studio, editor, assistant and essential 4

The user manuals for Version 4 in English, German, French, Japanese and Spanish as PDFs in ZIP archive file format:

Melodyne studio | Melodyne editor | Melodyne assistant | Melodyne essential

These versions were replaced in May 2020 by Melodyne 5 studio, editor, assistant and essential.

Melodyne editor, assistant and essential 2 (singletrack)

The user manuals for Version 2 in English, German, French, Japanese and Spanish as PDFs in ZIP archive file format:

Melodyne editor | Melodyne assistant | Melodyne essential

These versions were replaced at the beginning of 2016 by Melodyne 4 editor, assistant and essential.

Melodyne studio 3

The user manual for Melodyne studio 3 is available here in PDF format:
English | German | French | Spanish | Japanese

This version was replaced at the beginning of 2016 by Melodyne 4 studio.

Ending support for older versions of Melodyne

The following versions of Melodyne are very out of date and no longer compatible with current operating systems. For that reason, support for them was discontinued at the end of 2018. It is no longer possible, therefore, to download, activate or obtain technical support for these versions of Melodyne:

- Melodyne studio versions 1 and 2
- Melodyne cre8
- Melodyne uno
- Melodyne plugin
- Melodyne essential from a Digidesign or E-mu bundle

We have, however, provided links to free updates to the latest versions of all the discontinued products. If you have one of them and have not already received a notification from us to this effect, please contact our support for an update.