CUBASE 6.5
Advanced Music Production System

CUBASE ARTIST 6.5
Music Production System

steinberg

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Welcome

Congratulations and thank you for purchasing Steinberg's Cubase 6.5 or Cubase Artist 6.5.

First released in 1989, Cubase has grown from a classic MIDI sequencer to possibly the most advanced music production system used by countless musicians, producers and composers all over the globe. The Cubase philosophy puts the latest computer and audio technologies at your disposal, inviting you to venture into new artistic territory and give your creativity free reign. Combining the very best sound quality, intuitive handling and a vast range of highly advanced audio and MIDI tools for composition, recording, editing and mixing, the sixth version of the Cubase family condenses over 25 years of Steinberg development into the most cutting-edge set of digital audio workstations anywhere.

Whether you are a professional, a hobby musician, a student or a teacher — Cubase has it all covered and supports you through every stage of music production, from the inception of the first fleeting idea through its development, right to the final mix. And because it has been built to support individual creativity, Cubase owners are among the most successful artists in just about any musical genre or activity conceivable, from engineers recording and mixing rock albums to dance DJs, hip-hop producers, songwriters creating pop hits, film composers scoring for Hollywood blockbusters or anything in between. If you are entirely new to Cubase, you just became a member of this large community of professionals and music enthusiasts! Check out the official Cubase worldwide community at Cubase.net, for tips and tons of other useful information.

If you take a closer look at your software package, you'll notice that we included several trial versions which will further encourage you to push your creative envelope as you explore other Steinberg software titles. Detailed information on the trials is available in the Start Center which automatically runs as soon as you insert the Cubase DVD.

Please do not forget to register on MySteinberg in order to gain access to online support offers and additional exclusive services.

We wish you a lot of musical inspiration working with your brand-new Cubase DAW.

New synths on the block

Phat, phresh and phunky

Ideal for creating fat and funky lead and bass sounds, Retrologue offers those old-school modular synth sounds and biting sonic blocks courtesy of its eight earth-shattering sub-oscillators. Grab your keyboard and start creating memorable hooks with its two multi-oscillators featuring up to eight detunable voices each, plus an earth-shattering sub- and noise-oscillator.

Out-of-this-world atmospheres

Straight from the Steinberg sound lab, Padshop boasts granular synthesis at its finest to create fantastic-sounding spheres and dramatically moving textures which evolve over time. Fasten your safety strap, tweak the knobs and get ready to expand your universe.

Supersonic side-kicks

Filling the floors

DJ-EQ is an easy-to-use three-band equalizer with the typical kill switches you find on professional DJ mixers. It was specially made to recreate the atmosphere of a live floor performance right in your studio.

Create your own blend

Filtering is an art all its own and we just cultivated it: the new MorphFilter effect combines the superior filter types of Steinberg's HALion 4 sound creation system within Cubase. MorphFilter allows you to blend between the classic low, high and band-pass filters heard on countless records.

More insane tones for your guitar

The VST Amp Rack guitar tone suite now features a maximizer and limiter as new stomp box effects, as well as level meters and brand-new signature presets crafted by world-class guitarists from bands the likes of Meshuggah, Emperor, Accept and Die Ärzte.
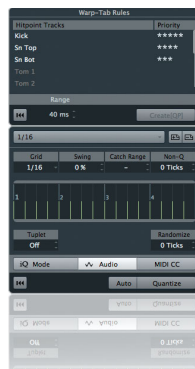
One step closer to perfection

Comp as you are

Cubase's already impressive lane comping system just got better! Tailored closely to the requests of our professional users, we optimized the comping workflow by introducing a dedicated Comp tool. Handy click-and-drag features give you the results you want in a more intuitive and faster way.

Warp this way

Cubase 6.5 fuses the hitpoint and AudioWarp system and embeds warp quantizing directly into the dedicated quantize panel. By creating warp markers straight from hitpoints, single audio loops or the entire arrangement can be non-destructively quantized with a single mouse click. Lock those grooves together!

Intercommunication 2.0

Connect to the cloud

Upload sounds and mixes directly from Cubase to your SoundCloud account, and share your original music with your social networks. Collaborate and distribute within the cloud and bask in the spotlight!

Size does matter

Cubase 6.5 now integrates the lossless FLAC audio compression codec throughout the application. Import and export FLAC files in a breeze and save up to 60% disk space when recording audio tracks in real time using the FLAC format!

ReWire 64-bit support

Cubase 6.5 now connects your favorite ReWire client applications in a pure 64-bit environment under Windows and Mac OS X!

Ni hao ma?

Cubase 6.5 is the first Cubase version ever to provide the entire user interface in simplified Chinese. We welcome our Chinese-speaking friends around the world!

Working with the New Features

Introduction

This chapter describes in detail the features that have been added or changed since the release of Cubase 6.0.

Working with Lanes

The Lanes and Comping functionalities have undergone a major revision. Therefore, the following sections contain a revised version of the corresponding text taken from the "Working with tracks and lanes" chapter in the Operation Manual.

To show the lanes for a track, click the corresponding "Show Lanes" button in the track list.
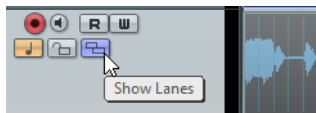
Lanes are handled differently for audio and MIDI.

- Audio

  Each audio track can only play back one single audio event at a time. Therefore, you only hear the take that is activated for playback.

- MIDI

  Overlapping MIDI takes can be played back simultaneously. There is no playback priority between lanes on a MIDI track.

Editing Operations

Soloing Lanes

You can solo individual lanes by activating the corresponding button in the track list. Only one lane can be soloed at a time.

Auditioning Takes on Lanes

Select the Object Selection tool, and [Ctrl]/[Command]-click on an audio event or a MIDI part. Playback starts from the position where you click.

Cutting Events or Parts on Lanes

- To cut single events or parts, select the Object Selection tool, and [Alt]/[Option]-click.
  If you cut a MIDI part and the cut position intersects one or several MIDI notes, the result depends on the "Split MIDI Events" option in the Preferences dialog (Editing–MIDI page).

- To cut all events or parts on all lanes, perform the cut on the main track.

Adjusting the Borders Between Takes

- To adjust the border between two takes on a lane, position the mouse pointer over the border and drag to the left or right.
  This way you can fine-tune your edits.

- To adjust the border between two takes on all lanes, drag the border on the main track.

Adjusting the Length of Takes

- Drag the resize handles of the takes to adjust their length.

Moving the Content within Takes

- To move the content of the selected audio event or MIDI part within its boundaries, hold down [Ctrl]/[Command]-[Alt]/[Option] and drag.
  This can be used to correct the timing of a take. However, this is not possible if the entire clip is contained in the event.

Selecting Events or Parts on Lanes

- To select an event or a part, click on it.

- To select several events or parts, hold down [Shift] and click, or draw a selection rectangle around the events or parts.

Activating Events or Parts on Lanes

When you move the mouse pointer over an event that overlaps another event, an additional smart spot becomes available in the middle of the lower border.

- For audio, this toggles between "to front" and "to back".
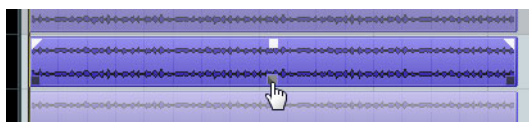
- For MIDI, the corresponding part is muted/unmuted, without changes to the other parts.
  This allows you to edit multiple parts that sound at the same time, which is useful when working with drum recordings on different lanes, for example.
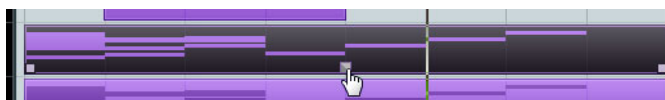
Range Selection Tool Operations

- To glue cuts, select a range that spans all the cuts that you want to glue, and double-click.
  The gluing affects all the lanes of a track.

Comping

When recording vocals or instrument performances, you often record the same material several times and then assemble the best parts of the recordings into a final take. This process is often referred to as comping. The recorded takes usually contain very similar material and have the same start and end positions.

Comping can be done in the Project window and in the Audio Part Editor. However, some functions are only available in the Project window.

⇨ If you work with stacked events on an audio track and you mute an event, the result depends on the "Treat Muted Audio Events like Deleted" setting in the Preferences dialog (Editing–Audio page): When deactivated, the entire section is muted and you hear nothing. When activated, the event behind the muted event is played back. For comping operations, it is recommended to keep this option deactivated.

Assembling a perfect take

1. Select the Comp tool.

2. Listen to the recording and cut it into smaller sections.

3. Listen to the takes in the different sections and bring the best ones to the front.

4. Arrange and edit the material on your lanes until the takes are aligned the way you want them.

The Comp Tool

In comping, similar material on multiple lanes is modified together. Therefore, the Comp tool affects all events on all lanes simultaneously.

Activating and Deactivating

▪ Click on an event or a part on a lane.

The behavior is slightly different for audio and MIDI:

- For audio events this means "to front/to back".
- For MIDI parts, this means both to front/to back and mute/unmute.
  However, this only applies for parts that have the same start and end positions. The playback state for other parts, for example, for longer parts that play at the same time, is unchanged.

Selecting

▪ Hold down [Shift] and click on an event or a part.

Auditioning

▪ Press [Ctrl]/[Command] to activate the speaker tool and click on an audio event or a MIDI part. Playback starts from the position where you click.

Cutting

▪ To cut through events on all lanes, [Alt]/[Option]-click on an event on a lane or on the main track.

Adjusting the Borders

▪ To adjust the border for all events or parts that share this border, click on the border and drag.

Resizing

- To resize all events that have the same start and end positions, drag the resize handles on an event on a lane or on the main track.

  Resizing is constrained to the end or start of the adjacent events. This ensures that you do not create overlaps accidentally.

Range Editing (Project Window Only)

You can create a range by clicking and dragging on a lane in the Project window. When you release the mouse, the following happens:

- The events on all lanes are cut at the range borders.
- On the lane on which you clicked, the events that lie within the range are activated.
- If possible, events on lanes are merged within the range. For this to work, the audio events must be adjacent without gaps or fades, and the material itself must match.

⇨ If you click and drag on the main track instead of a lane, the events are moved.

Final Steps

When you have finished working on lanes, there are several functions that you can use to finalize your work.

Deleting Overlaps (Audio Only)

You can remove the overlaps in a selection using the "Delete Overlaps" command on the Advanced submenu of the Audio menu. This command puts the active takes on a single lane and removes any takes found in the background.

Cleaning Up Lanes

This command cleans up overlaps between events by distributing them on new lanes, where necessary. If a track contains empty lanes, these are removed.

- Open the context menu for the track and select "Clean Up Lanes".

Creating Tracks from Lanes

This command converts each lane into a new audio track. The created tracks are placed below each source track and are selected. All inactive events are muted.

- Open the track list context menu, and select "Create Tracks from Lanes".

  If you open the context menu for the main track, new tracks are created for all its lanes. If you open the context menu for a lane, tracks are created for the selected lanes.
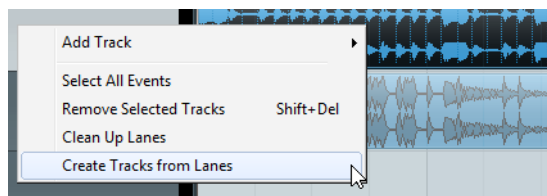

Bouncing MIDI

When you have edited the MIDI takes to your liking, you can create one single MIDI part from these takes.

- Select all the parts on the lanes in the Project window, open the MIDI menu and select "Bounce MIDI".

AudioWarp Quantizing

With Cubase 6.5, AudioWarp quantizing has become easier and more intuitive.

The "AudioWarp Quantize" option on the "Advanced Quantize" submenu of the Edit menu was removed. Instead, you can now find an "AudioWarp Quantize" button on the Quantize panel, and on the toolbars of the Project window and the Audio Part Editor. If this button is activated, clicking the Quantize button on the Quantize panel applies AudioWarp quantizing.
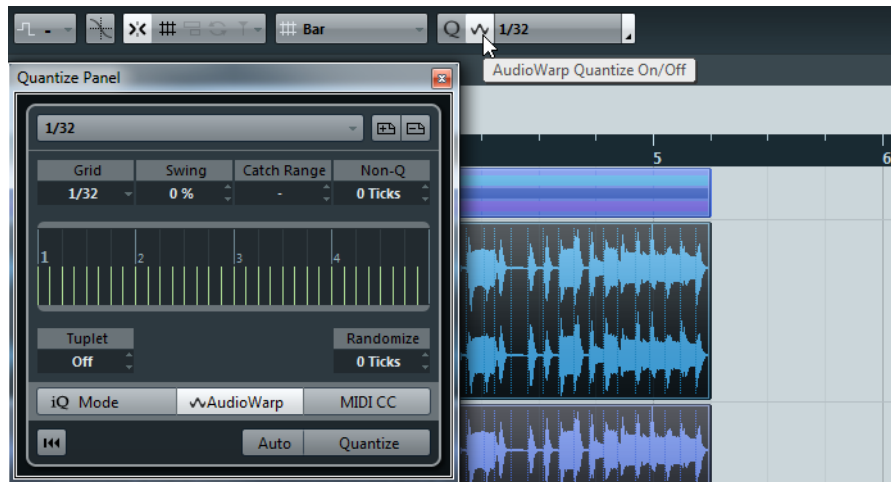
AudioWarp quantizing works as follows: The content of the audio events is quantized by aligning the warp tabs in the audio events to the defined quantize grid.

The following happens:

- Warp tabs are created at hitpoint positions. If no hitpoints are available, they are automatically created. Furthermore, warp tabs are created at every event start and end.

- The audio sections between the warp tabs are stretched or compressed to fit into the corresponding time interval.
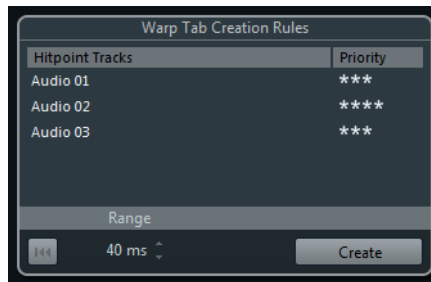
AudioWarp quantize prevents warp tabs from ending up on the same position. If conflicts occur, only one of the warp tabs is quantized. For example, if you use a quantize value of 1/4 on audio that is based on sixteenth notes, the warp tabs at the quarter-note positions are quantized to the grid, and the remaining warp tabs are moved keeping the relative distances between the warp tabs.

Applying AudioWarp Quantizing to Multiple Audio Tracks (Cubase only)

Cubase 6.5 introduces an additional approach for AudioWarp quantizing multiple audio tracks. In addition to slicing the audio events and using the slices for quantizing, you can now choose to create and use warp tabs. Note, however, that phase coherence is only preserved when you use slices.

To quantize multiple audio tracks using the AudioWarp quantize function, proceed as follows:

1. Create hitpoints for at least one on the audio tracks that you want to quantize, create an edit group for the tracks, and select an event on one of the tracks.

2. Open the Quantize panel and set up the options in the "Warp Tab Creation Rules" section.

The following parameters are available:

Parameter	Description
Priority	Click and drag to specify a value. The track with the highest priority is used as the reference for AudioWarp quantizing. This means that the hitpoint positions for this track are used to align all tracks to the defined grid.
Range	Specifies the minimum distance between two hitpoints on different tracks. Hitpoints that are located within this range are considered as marking the same beat. The following applies: The hitpoint of the track with the highest priority is used. If tracks have the same priority, the first hitpoint in the range is used.

3. Click the Create button.

4. Set up the other parameters on the Quantize panel.
   These are described in detail in the chapter "Quantizing MIDI and audio" in the Operation Manual.

5. Make sure that the AudioWarp button is activated, and click the Quantize button.
   AudioWarp quantizing is applied to all the tracks in the edit group.

AudioWarp Quantizing Selection Ranges

AudioWarp quantizing can also be applied to selection ranges in the Project window and in the Sample Editor.

AudioWarp quantizing selection ranges is similar to quantizing complete tracks, with the following differences:

▪ All warp tabs within the selected range are subject to being moved by quantizing.

▪ When a warp tab is moved, the stretch factor of the audio material between the two warp tabs to the left and the right of this tab changes.
   To avoid moving transient positions that lie outside the selection range, additional warp tabs are created at the closest hitpoint positions outside the range.

Sample Editor Improvements

Some editing improvements have been made to the Sample Editor. These are available when the AudioWarp tab is open and the Snap button is activated.

- If hitpoints are available, the Range Selection and Free-Warp tools snap to the hitpoint positions and/or warp tabs.

- The hitpoint positions are indicated with small triangles at the top of the waveform display.

Effects

Cubase 6.5 features two new effects: DJ-Eq and MorphFilter. Furthermore, several enhancements were made to the VST Amp Rack effect.

DJ-Eq

DJ-Eq is an easy-to-use 3-band parametric equalizer. The Low, Mid, and High parameters allow you to cut or boost the corresponding frequency band. The buttons below the knobs are the equivalents of the kill switches on typical DJ mixers and let you disable the corresponding frequency band.

MorphFilter

MorphFilter lets you mix low-pass and high-pass filter effects, allowing for creative morphings between two filters. The two effect shapes to be used are selected with the buttons above and below the display. In the upper row, you can choose between several high-pass and band-reduction filter shapes. In the lower row, you can select a low-pass or a band-pass filter shape.
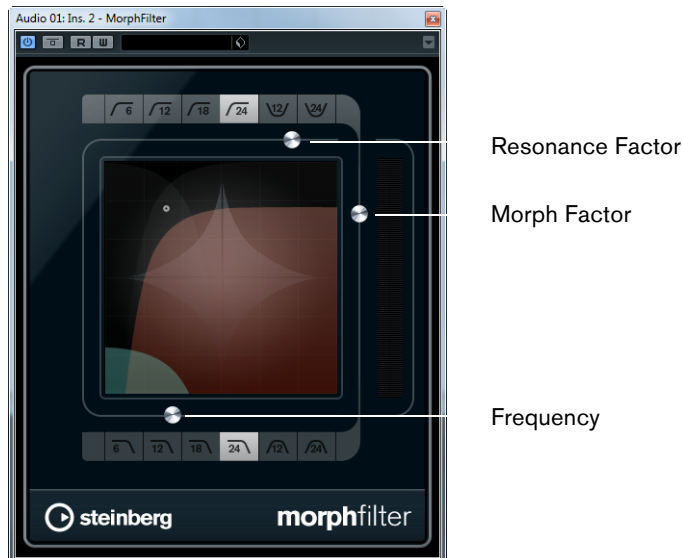
The "Resonance Factor" slider adds a ringing effect to the filtered sound.

The "Morph Factor" slider lets you mix the output between the two selected filters.

The Frequency slider adjusts the cutoff frequency of the filters.

VST Amp Rack

Input/Output Level Meters

The new level meters are located on the left and the right of the Master section. The meters show the signal levels of the guitar that is connected to your computer.

The rectangle on the input meter on the left indicates the optimum incoming level range for your recordings. In the compact view, the input and output level is indicated by two LEDs at the top left and right.

Stomp Box Effects

Two new stomp box effects are available: Limiter and Maximizer. Both effects can be inserted in the Pre-Effects and the Post-Effects sections.

- Use the Threshold and Release parameters of the Limiter effect to maintain consistent instrument levels.
- Use the Maximizer to maximize the level of your guitar.

VST Instruments

Cubase 6.5 comes with two new VST instruments: Retrologue and Padshop. These are described in detail in separate PDF documents, which can be accessed via the "?" button on the plug-in interface.

FLAC Support

FLAC stands for Free Lossless Audio Codec, an audio format similar to MP3, but lossless. Audio sources encoded to FLAC are typically reduced to 50–60% of their original size. FLAC is an open-source format.

With Cubase 6.5, you can import and export files in FLAC format using the regular import and export functions. You can also select FLAC as recording format in the Project Setup dialog. Furthermore, you can manage, preview, and import FLAC files using the MediaBay. This also includes the use of attributes, which are stored in the FLAC files via iXML.

Due to the significantly smaller file sizes, the FLAC format is perfect for sharing projects and the corresponding audio material via the internet, FTP, DropBox, etc.

Uploading Your Music to SoundCloud

You can upload your projects directly to SoundCloud. Proceed as follows:

1. On the File menu, open the Export submenu, and select "Audio Mixdown".

2. In the "Post Process" section, select "Upload to SoundCloud".
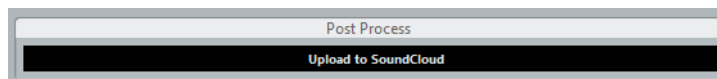
3. Click the Export button.

4. Connect with SoundCloud to proceed with your upload.