Operation Manual Version 3.4





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About Cubasis 3

Thank you for purchasing Cubasis 3 from Steinberg! Cubasis 3 is Steinberg's streamlined, multitouch sequencer for iPad, iPhone, and Android tablets and smartphones. Specially designed for quick and easy operation, Cubasis makes recording, editing and mixing a breeze.

Record tracks in CD audio quality, and edit your music with the Key and Sample Editors, while the included mixer and audio effects polish your song to perfection. Cubasis comes loaded with dozens of virtual instrument sounds which can be played in real time using the virtual keyboard and drum pads.

Cubasis' projects can even be opened in Cubase under Windows and macOS! Cubasis places touch-intuitive production tools in your hands, opening up a new world of possibilities for your creativity.

Creating a Song

Create your own piece of music from scratch following these simple steps:

1. Create a new project

Open the MediaBay. Choose Projects and tap one of the empty project templates.

2. Add drum loops

Select the MIDI or Audio category in the MediaBay. Hit the Preview button to listen to a loop. Drag and drop a loop onto a track or double tap it to place it on a new track.

3. Adjust the tempo

The tempo display at the top allows for tempo and signature modifications.

4. Load instruments

Select a MIDI track. To create a new one, tap the + ADD button and select MIDI. Tap the instrument icon and tap an instrument in the MediaBay list to load it.

5. Record instruments

Tap the Keys button. You can switch between the keyboard and drum pads. Hit the Record button, wait for the counter to show 1.1.1 and start playing. Make sure your current track has recording enabled. To stop recording, hit the Record or Play button.

6. If you have made a mistake, open the Tools panel and hit the **Undo** button.

7. Add audio

Tap the + ADD button and select Audio to create a new audio track. Record on it using your microphone.

As with the MIDI track, audio files from the MediaBay can be imported into the track.

8. Different recording methods

Drag the playhead to where you want to start recording. Activate the cycle button to play or record in a loop.

9. Track Inspector

Open the Inspector for advanced options auch as modifying your instrument, adding effects, adjusting track volume, pan, configuring hardware etc.

10. Events

The notes and waveforms you have created are arranged within events. You can move them around, fade them in or out, edit them by double tapping and much more.

11. Mix your song

The Mixer manages all your tracks' volume and pan, effects and other parameters. Each channel in the Mixer represents one track.

12. Mixdown

Cubasis saves your work automatically, so all there is left to do is export your finished project. Open the MediaBay and select the Mixdown category. Choose your desired file type; your project will appear in the file list after mixdown is completed.

13. Share your work

Tap the Share button and choose your preferred method.



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118.0 BPM

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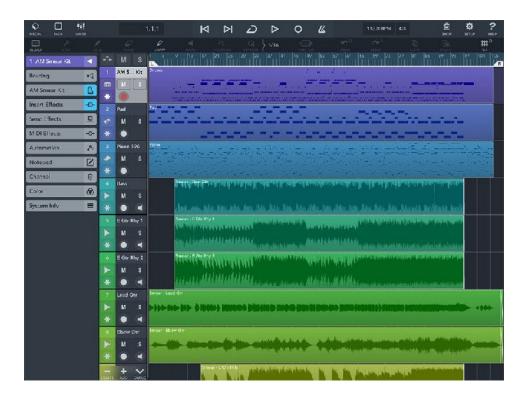




Project View

Tracks

Cubasis workflow is based on tracks. You can think of a track as an instrumentalist in a band or an orchestra.



There are three types of tracks:

- A **MIDI** track (also called instrument track) has one virtual instrument of your choice assigned to it and offers a flexible way of recording and editing notes. Tapping the instrument icon on a track brings up the instrument rack with the default <u>Micro Sonic</u> (sampled instruments) instrument. From the list, you can select other instruments such as <u>Micrologue</u> (synthesizer), MiniSampler, Classic Machines, or third-party Audio Unit or Inter-App Audio instruments.
- An Audio track contains wave forms (e.g. microphone recordings, imported or pasted audio files).
- A **Group** track creates a sub mix of several audio or MIDI tracks and applies the same effects to them. A group track contains no events as such, but displays settings and automation for the corresponding group. Each group track has a corresponding channel in the Mixer. Individual tracks can be added to a group track via the routing tab of the group track, or from within the input display of individual channel strips in the mixer.

Events

Any content within the tracks is arranged within rectangular blocks, which are referred to as events.

- Select a single event by tapping it.
- **Move** events by dragging them with your finger. They can also be moved into another track of the same type.
- Adjust an event's gain (volume) by dragging the top centred white handle vertically.
- · Dragging the top left / right handles horizontally fades the event in / out.
- · Adjust the length of your event by dragging the bottom left / right handle horizontally.
- To edit an event's content, double tap it.

Note: For more options, see the Tools chapter.

Ruler

The vertical lines and numbers on the ruler indicate the bars and beats (measures). The ruler holds the playhead (black vertical line) and two locators. To position the playhead, slide anywhere on the ruler.

Navigation

- **Move** around by dragging your finger across the screen.
- Pinch to zoom in / out. Vertical zoom is performed on the left column (track list).
- Tap and hold a track to move it.

Locators

The left and right locator in the ruler provide an easy way to work with a specific part of your song.



- Activating the cycle button makes playback and recording loop between the two locators.
- Optionally, you can restrict the length of your song to the part enclosed by the locators when exporting (mixdown).
- Tap and hold an event to set the locators to encompass the selected event.
- Tap and hold a locator for a second to move both locators together.

Tempo

Tap the panel displaying the tempo and signature values to bring up the tempo settings.

- To adjust the song tempo quickly, tap and slide the tempo display. Using the + and buttons allows tempo adjustments with up to a tenth BPM precision. Alternatively, tap your desired tempo on the Tap Tempo button.
- The signature option offers values ranging from 3/4 to 7/4.

Track management

The three buttons below the track list allow you to delete the selected track or add Audio, MIDI or group tracks. Also, you can duplicate tracks with all their events, settings, effects and parameters (except for IAA instances).

Mute

Use this button to toggle whether your selected track is muted and therefore excluded from playback.

Solo

Soloing a track (or a group of tracks) mutes all other tracks.

There are global Mute and Solo buttons above the track list and the mixer's global panel. Tapping one of them mutes / solos all tracks. If one or more tracks are already muted or on solo, it will reset these settings first.

Follow playhead

When enabled, the view will automatically jump to the playhead's position when it leaves the screen.

Record Enable

Setting a track to Record Enable lets Cubasis know that you wish to record on this track. You can have multiple tracks Record Enabled at a time, which allows for recording on multiple tracks simultaneously.





118.0 BPM

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Monitoring (audio tracks only)

Monitoring outputs the audio input of your track routed through the track's effects.

In order to prevent feedback, monitoring only works if hardware (e.g. headphones, a microphone or an audio interface) is connected.

Freezing tracks

Depending on the scope of your project, your device may consume more CPU capacity than it can provide, which results in stuttering / crackling playback. Tracks can be frozen by tapping the freeze button. This action disables the track and creates an audio track clone of it, which consumes less processing power during playback.



- The clone track has all applied effects, volume and pan parameters mixed into the waveform. These cannot be edited (apart from applying new effects and parameters).
- The same applies to MIDI tracks. All MIDI notes are exported into an audio format and inserted into the clone track as audio material.
- To unfreeze a track, press the freeze button again or delete the clone audio track. Any edits you made on the audio track are lost because they are not transferred to the original track.
 Note: There is a setup option to keep the clone track when you unfreeze the original track.
 Note: Another setup option allows you to apply your mixdown settings when freezing tracks, in order to automatically normalize them or to apply the locators.
 Note: Unfreezing is only available as long as the original (disabled) track is not deleted.

Transport Panel

The transport panel at the top center of your screen is used for basic playback and recording control.

Play button

Tapping the Play button starts playback (with the black vertical **playhead** indicating the current position in your song). During playback it shows a **stop button**. Tapping it again pauses playback (the playhead stops and stays at its current position).

Skip forward button

Skipping forward positions the playhead at the next locator's position or the end of your project (the end of the bar holding your last event).

Skip backward button

Tapping this button does the exact opposite of skipping forward.

Cycle button

Toggles whether playback is looped between the two locators, i.e. when the playhead reaches the right locator it automatically jumps back to the left.

Record button

Starts / stops recording. To specify which track(s) you want to record on, use Record Enable.

Metronome button

Turns the metronome (click on every beat) on / off. Adjust metronome and precount settings in the setup screen.

Time Display

The display to the left of the transport buttons indicates the current position of the playhead. The first figure refers to the bar, the second one to the current beat (1/4 note within the current bar) and the third to the position within the beat, measured in 1/16 notes. Tap the display to switch to a minute:second.millisecond view.

Tempo

Tap the display showing the BPM (beats per minute) count and a signature (e.g. 4/4). Slide across the number in the tempo category. For more precise tempo adjustments, use the + / - buttons. Alternatively, you can tap your desired tempo on the Tap Tempo button.

Recording Modes

Tap the tempo display to see the four available recording options, which you can combine.

- **Punch in:** Recording will only start once the playhead reaches the left locator.
- Punch out: Recording will stop once the playhead reaches the right locator, but playback will continue.
- **Pre-Roll:** The song will be played back during precount.
- Count in: The metronome will be audible during precount



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Tools

The Tools panel offers the following options for modifying events and notes:

Select

Use this button and draw out a selection rectangle to select multiple events or notes. Tap this button again to deactivate it and to enable other options.

Split

Splits selected events. The playhead's position sets the split point.

Glue

Merges selected MIDI events into one.

Erase

Deletes selected events.

Draw

Tap and hold to create a new event. Slide to the right to determine its length.

Mute

Toggles whether currently selected events are muted.

Undo

Reverts your last action(s). A small overlay panel briefly shows the action being undone. Long-tap this button to display a list of the complete undo history. Tapping an item in this list reverts the project back to the selected point in time.

Note: Cubasis saves up to 500 undo steps, which are always available, even after loading another project. Audio editor related undo steps are an exception, the amount of available undo steps depends on the file size. The redo (but not the undo) history is discarded after another project is loaded.

Redo

Redoes your last undone action(s). A small overlay panel briefly shows the action being redone. Long-tap this button to display a list of the complete redo history. Tapping an item in this list forwards the project back to the selected point in time.

Copy

Copies selected events and notes into clipboard.

Note: Copying and splitting audio events duplicates their audio file. Therefore, editing a copied event will leave the original unchanged. However, copying events with large file sizes may result in longer processing times.

Paste

Pastes events and notes from clipboard into your project, starting at the playhead.

Transpose / Pitch Shift

- MIDI: Transposes notes on a semitone and octave scale.
- Audio: Pitch shifts audio material by cents, semitones or octaves. You can set the pitch shift quality by selecting either the Mobile, Efficient (2x CPU) or Pro (4x CPU) algorithm, the last of which grants you additional tweaking options:
 - Formant Shift: Formant correction is only available for the Pro algorithm, where Cubasis automatically sets the formant shift to the current transposition pitch factor (for example factor























2.0 if transposition is set to +1 octave). Changing the shift can yield interesting effects, but usually the default shift is the desired one for vocals.

Formant Order: The formant order sets the order of the spectral envelope estimation. The default is set to 128 which works fine for most material. For high pitched material the order should be lowered, and vice versa for low pitched material it should be raised.

Note: When time-stretching and pitch shifting an audio event at the same time, both tools must use the same algorithm.

Quantize

Quantizes all selected notes (or notes within selected events). The following options are available:

- **Grid**: Sets the note length according to which the selected notes will be quantized. Values range from 1/1 to 1/64 notes (D = dotted; T = triplet).
- Auto Quantize: If enabled, Cubasis will automatically quantize recorded MIDI notes according to settings specified in the quantize menu. Aside from immediately tapping Undo after recording, notes cannot be de-quantized later on.
- Note ends: If enabled, note lenghts are also quantized.
- **Swing**: The higher the swing value, the the more off grid your notes will be quantized, making them sound more human.

Snap

Controls the dimensions of the grid which the playhead, events, event handles, notes and note lengths snap to, ranging from bars to 1/64 notes, including dotted and triplet modifiers. The chosen snap grid applies to the arranger's and the MIDI, audio and automation editor's grids.

Long-tap this button to toggle between OFF and the previously selected grid value.

Note: When snap is disabled, notes and events will snap to a resolution of 960 ppqn (parts per quarter note) which is as precise as a 1/3840th note.

Stretch

The time-stretch tool is available for audio and MIDI events. It affects the duration, but not the pitch. The following options are available:

- **Manual**: Select Manual and drag the left or right event handles (triangular shape) for precise timescale adjustments.
- Auto: Only available for audio events. Auto will read the audio file's embedded tempo information and stretch the event to match your song's tempo. Factory audio loops have the correct tempo embedded and will automatically adjust to the project's tempo when imported.
- **Clear:** Reset to the original event length.
- **Algorithm**: Only available for audio events. *Mobile* uses the least amount of CPU power, but the quality is much better with *Pro*, which requires more processing resources. When time-stretching and pitch shifting an audio event at the same time, both tools need to use the same algorithm.

Custom / imported audio files might not contain the tempo information readable by Cubasis (iXML), in which case Auto stretching leaves the event unchanged. To achieve the desired tempo syncing, follow these steps:

- Import the audio file. Select the Stretch tool and tap Auto and see whether the audio event has changed in length.
- If nothing happened, go to the <u>Sample Editor</u> and select the BPM button to the right of the editor.
- Enter the audio file's original tempo. You can find out the original tempo by doing the following:
 - Look up the audio file in the MediaBay. Tap the Preview button.
 - Tap the Tempo display in the <u>Transport</u> panel. While the file is playing, use the Tap Tempo button to determine the tempo.
 - When you're done, don't forget to set the song back to its previous tempo or simply hit Undo.
- Enter the tempo in to the dialogue that pops up when tapping the BPM button.
- Go back to the Stretch tool and try again.







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Limitations of time-stretch and pitch shift

Please note that the performance of real-time time-stretch and pitch shift depends on many factors such as the device model you use as well as the sample rate, the hardware latency project setting, the number of tracks and instruments and effects used in your project. In addition, using inter-app data streaming technologies such as Audiobus, Audio Unit and Inter-App Audio along with a number of assigned instrument apps has a significant impact on the performance of your device.

Depending on what device model you are using, the number of tracks that contain time-stretch or pitch shift and the complexity of your project, will sooner or later provoke performance limits.

There are several options to improve performance if you encounter performance limits with time-stretch and pitch shift:

- Select <u>Setup</u> / Audio and increase the Hardware Latency (iOS) or Engine Buffering (Android).
- For best CPU efficiency select Stretch > Auto > Mobile.
- For best resulting quality select Stretch > Auto > **Pro** and freeze individual tracks or the entire project.
- Use the <u>Freeze</u> function to render tracks into audio tracks.

Keyboard and Pads

Tapping the Keys button in the top menu brings up Cubasis' on-screen keyboard and drum pad controller.



In the top left corner of the Keyboard window, you can toggle between keys and pads, as well as turn the **sustain pedal** and **pitch wheel** (left) on / off. The wheel's pitch bend range can be adjusted in the instrument rack for Micro Sonic, MiniSampler or Micrologue.

Note: If you have <u>Micrologue</u> or an <u>Audio Unit</u> selected as your current instrument, you can use the **mod wheel** (right) to control modulation parameters directly. For Micro Sonic, MiniSampler and Classic Machines, the mod wheel is disabled.

L			
	C1	C2	C3

To set the position of your keyboard, drag the light region in the miniature keyboard. Sliding the left or right marker changes the keyboard's range.

Chord Buttons

Tapping one of the buttons labelled 1-12 at the top plays all the keys that are assigned to this button. It could be a chord, or any arbitrary number of keys. You can assign keys to a chord button by following these steps:

- Tap the *EDIT* button to the left of the chord buttons.
- · Select the chord button that you wish to reconfigure.
- · All assigned keys are pressed and highlighted in blue. Tapping a key toggles it.
- Once you're done, tap the EDIT button again.

Note: The chord buttons are saved with a track and therefore change when selecting another track.

Drum and Chord Pads



If you have a drum kit selected, the pads play drum samples; any other instrument plays chords. Reassigning chords or samples is very simple:

- Tap the Edit button.
- Select the pad that you want to reprogram.
- Choose a sample from the list, or customize your chord: The key tone for your chord is determined by
 one of the keys on the vertical keyboard and the octave by the +/- buttons. There are 10 modes to
 choose from, most of them with multiple inversions (root, 1st, 2nd...) that can be selected via the +/buttons.

Note: Pad assignment is track specific, therefore deleting a track will discard all changes.

Pad Mapping Copy and Paste



Transfer pad mappings between tracks and even projects by using the copy / paste button located in the pads' toolbar menu to the right; these buttons are only visible when in pad edit mode.

Note Repeat

When Note Repeat is enabled, holding a key or pad creates a pattern. Tap the Note Repeat button in the toolbar and select a note value from the menu to the right between 1/2 and 1/64 (also available as triplets).

MiniSampler Instruments

If you have a custom <u>MiniSampler</u> instrument selected, you can toggle between **drum** and **chord** mode, allowing your instrument to either act as a drum kit or chromatic instrument. Open pad edit mode to bring up the toggle menu.



Micro Sonic

Micro Sonic is a condensed version of HALion Sonic, Steinberg's premier VST workstation. It allows you to browse and customize more than 150 production-ready kits and sampled instruments in Cubasis 3. To load Micro Sonic, tap the instrument icon in a MIDI track or in the Inspector's instrument tab.

	EHreiggs:	POLYFHONE PREVIEW
	A TACK RELEAS 3a 1.3 0.55 AU RD 0.55 1.3 3a	CT major A2 start
	POLYFHONY 16 32 18 64 89 96 112 12	-3 ma 7 Ad minor
	PB RANGE 3 4 5 6 7 8 9 10 11 12	
🙈 🔗 🖻		

List Browser

Tap the LIST / BROWS button to open a list of all available Micro Sonic instruments. Tap an instrument to load it. You can also switch to the next / previous instrument by tapping the arrow icons on the title bar.

Preview

Preview an instrument by using the note pads (monophone) and chord pads (polyphone).

Attack / Release

Drag the A (attack) or R (release) circle horizontally and the envelope will adjust accordingly. *Note: The attack and release values cannot be automated.*

Polyphony

Polyphony defines the maximum number of notes that the track plays back simultaneously. This limit is set to ensure smooth performance. Having a high polyphony with lots of effects might cause playback stuttering and clipping, while a low polyphony causes certain notes to end too soon. If the number of notes played exceeds the polyphony parameter, the notes triggered the longest way back are faded out, making space for new ones. The value can be set from 1 (where every note stops the previous one) up to 128 voices.

Pitch bend range

Adjusts the pitch bend range of your instrument in semitones (1 - 12).

Note: When exporting to MIDI, Cubasis doesn't write the pitch bend range to MIDI files. It must be set manually in the app that you import the MIDI file into.

Instrument categories

Find your instruments easier by jumping to your desired category first. Tap a category and the instrument browser will automatically select the first instrument within that category.

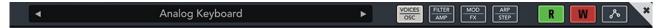
Micrologue

Micrologue is a virtual synthesizer for Cubasis, based on the award-winning Retrologue VST instrument. Its key features include

- two carefully modeled oscillators + noise oscillator.
- a filter and amplifier.
- modulation LFO.
- modulation wheel integration.
- smooth chorus and delay effects.
- a 16-step arpeggiator (in-app purchase).

To load Micrologue, tap the instrument icon in a MIDI track, open the Micro Sonic instrument browser and choose an instrument in the **Micrologue** category. Now that Micrologue is assigned to the track, it will open every time you tap the instrument icon in the track.

First, let's focus on the top panel:



List Browser

Tap this button to open a list of all available Micrologue instruments. Tap an instrument to load it. You can also switch to the next / previous instrument by tapping the arrow icons on the left / right on the title bar.

Save Preset

Tap and enter a name if you want to save your current configuration as a new micrologue instrument (preset), making it available in the instrument browser. Pressing *Save Preset* again overwrites your current preset. To save it under a different name, tap the instrument name on the display.

Page selection

Micrologue's interface consists of four control sets which are explained in detail in the next four chapters. These pages can be selected by swiping horizontally, by tapping one of the 4 dots at the bottom, or one of the 4 page buttons in the tool bar:

- Voices / Oscillators
- Filter / Amplifier
- Modulation / FX
- Arpeggiator / Steps (in-app purchase)

Automation

- **Read**: When enabled, all automation data on this instrument is read and applied during playback.
- Write: Activate this button to record automation data live during playback / recording.
- Automation: Tap this button to open the <u>Automation Editor</u> with the first Micrologue parameter selected.



Voices / Osc



Voice

- Glide On / Off: Allows you to bend the pitch between notes that follow each other. You achieve the best results in Mono mode.
- Glide Time: Specifices how long it takes to bend the pitch from one note to the other.
- Mono / Poly: Switches between monophonic and polyphonic playback.
- Voices: When using polyphonic playback, the number of voices is limited to the value you specify.

Main

- Octave: Adjusts the pitch in octave steps.
- **Pitchbend Down / Up**: Sets the range of the pitch modulation that is applied when you move the pitchbend wheel.

Osc 1 and Osc 2

- Wave: Allows you to select the oscillator's waveform.
- Volume Osc 1: Adjusts the level.
- Coarse: Adjusts the pitch, in semitones.
- **Fine**: Finetunes the pitch, in cents.

Noise

- Noise On / Off: Toggles the noise generator. *Note: This parameter cannot be automated.*
- Volume Noise: Adjusts the level of the noise generator.

Filter / Amp



Filter

- **Envelope**: Adjusts the cutoff modulation of the filter envelope. Negative values invert the modulation direction.
- **Velocity**: Determines how much the output level depends on velocity. When the control is set to 0, the sound is always played with its full amplitude. Higher values reduce the level for lower velocities.
- ADSR: These faders set attack time, decay time, sustain level, and release time of the filter envelope.
- Cutoff: Adjust the cutoff frequency of the 24dB low-pass filter.
- **Resonance**: Emphasizes the frequencies around the cutoff. For an electronic sound, increase the resonance. At higher resonance settings, the filter self-oscillates, which results in a ringing tone.
- **Key Follow:** Allows you to adjust the cutoff modulation using the note number. Set this parameter to positive values to raise the cutoff with notes above the center key (C3). Use negative values to lower the cutoff with notes above the center key. At +100 %, the cutoff follows the played pitch exactly.

Amplifier

- **ADSR**: These faders adjust attack time, decay time, sustain level, and release time of the amplifier envelope.
- Level: Adjusts the level of the voice.
- **Velocity**: Determines how much the output level depends on velocity. When the control is set to 0, the sound is always played with its full amplitude. Higher values reduce the level for lower velocities.

Mod / FX



LFO

Micrologue integrates two independent triangle LFOs. The first LFO is used to add permanent pitch, filter, and pulse width modulations to the sound. The second LFO is controlled by the modulation wheel and modulates the pitch to create a vibrato effect.

- Rate: Controls the frequency of the modulation, that is, the speed of the LFO.
- Pitch: Allows you to adjust the influence of the LFO on the pitch.
- Cutoff: Allows you to adjust the influence of the LFO on the filter cutoff.
- **PWM**: Allows you to adjusts the influence of the LFO on the pulse width of the oscillators when set to a square waveform.

Modulation Wheel

The modulation wheel is located on your virtual keyboard to the right hand side of the pitch wheel. You can control the effect it will have on the following parameters:

- Vibr Frequ: Sets the frequency of the vibrato LFO.
- Vibr Depth: Allows you to adjust the intensity of the vibrato.
- · Cutoff: Allows you to adjust the influence of the modulation wheel on the filter cutoff.

Chorus

- On / Off: Activates / deactivates the built-in chorus effect.
- · Rate: Specifies the frequency of the pitch modulation.
- Depth: Sets the intensity of the pitch modulation.
- Mix: Sets the level balance between the dry and the wet signal.

Delay

- On / Off: Activates / Deactivates the built-in ping-pong delay effect. The left and right input channels are mixed and sent to hard-panned left and right delays.
- Time: Specifies the delay time in fractions of beats. The right audio channel is set to half the time automatically to create the so-called ping-pong effect.
- Feedback: Sets the overall amount of feedback for the left and right delay. Feedback means that the output of the delay is fed back to its input. Depending on the amount you set, the echoes repeat more or less often. At a setting of 0% you hear one echo. At a setting of 100% the echoes repeat infinitely.
- Mix: Sets the level balance between the dry and the wet signal.

Arp / Step (in-app purchase)

LIST BRCWS	(Bells Arp		×		FILTER MOD AMP PX	ARP STEP	M 🛯 🖉
ON 1	2 1	4 5		7	9 10	11	12 12		15 10
	7 3	0 0	-12	3	7 10)	-12 -2	7	0 -2
uco 🚺	2 3	4 5		× 6	9 10		12 13	14	15 10
ON		-2122	NEXT BEAT	ON ON		0.0 aPM	- 4 1 1 A - 4 - 4 - 4	50, 100, 150	COPY STEPS STEPS
OFF	NEW CHORD		SORT 🖨	OFF OFF		1/16	-0- -10 -0 swing	GATE SCALE	LOCK STEPS STEPS
Steinberg									micrologue

On the Arp/Step page, you can find Micrologue's arpeggio section, which is available as in-app purchase. To show the arpeggio section (in-app purchase), tap the Arp/Step button.

- Step On/Off switches: Activate/Deactivate the steps.
- Pitch: Displays the transpose value fields under the steps, which can be changed individually.
- **Vel/Length**: The Vel/Length section is where you set up the steps of the arpeggio and specify their velocities. The height of a step represent its value. The width of a step represents its gate length. To make changes, tap a step and drag up or down, and/or move it to the left or right.
- Legato: The Legato buttons below the step buttons allow you to introduce a legato between 2 steps.
- Arp On/Off: Activates/Deactivates the arpeggiator.
- Mode: Determines how the notes are played back.
 - If **Step** is selected, the last note that is received triggers a monophonic sequence.
 - If **Chord** is selected, the notes are triggered as chords.
 - If **Up** is selected, the notes are arpeggiated in ascending order.
 - If **Down** is selected, the notes are arpeggiated in descending order.
 - If **Up/Down 1** is selected, the notes are arpeggiated first in ascending, then in descending order.
 - If **Up/Down 2** is selected, the notes are arpeggiated first in ascending, then in descending order. This mode depends on the set Key Mode:
 - If Key Mode is set to Sort, the highest and the lowest note are repeated.
 - If Key Mode is set to As Played, the first and the last note are repeated.
 - If **Down/Up 1** is selected, the notes are arpeggiated first in descending, then in ascending order.
 - If **Down/Up 2** is selected, the notes are arpeggiated first in descending, then in ascending order. This mode depends on the set Key Mode:
 - If Key Mode is set to Sort, the highest and the lowest note are repeated.
 - If Key Mode is set to As Played, the first and the last note are repeated.
 - If **Random** is selected, the notes are arpeggiated in random order.
- Restart Mode
 - If this is set to **Off**, the phrase runs continuously and does not restart at chord or note changes.
 - **New Chord** restarts the phrase on new chords. Note: The phrase does not restart upon notes that are played legato.
 - New Note restarts the phrase with each new note that you play.
- **Trigger Mode**: Determines at which moment the arpeggiator scans for new notes that you play on the keyboard.
 - If **Immediately** is selected, the arpeggiator scans for new notes all the time. The phrase changes immediately in reaction to your playing.
 - If **Next Beat** is selected, the arpeggiator scans for new notes at every new beat. The phrase changes in reaction to your playing on each new beat.
 - If **Next Measure** is selected, the arpeggiator scans for new notes at the start of new measures. The phrase changes in reaction to your playing on each new measure.

- **Key Mode**: Defines whether the order in which the notes are played on the keyboard affects the playback of the phrase.
 - If **Sort** is selected, the notes are played in the order of the selected pattern. The chronological order does not have any influence.
 - If **As Played** is selected, the notes are played in the order in which you play them on the keyboard.
- **Octave**: Extends the phrase playback to include higher or lower octaves. Positive settings extend the playback to higher and negative settings to lower octaves.
- Loop: If this option is activated, the phrase plays in a loop.
- Hold: Allows you to prevent the phrase from stopping or changing when the keys are released.
 - If **Off** is selected, the phrase changes as soon as you release a key. The phrase stops immediately when you release all keys.
 - If **On** is selected, the phrase plays to the end, even if the keys are released. If Loop is activated, the phrase repeats continuously.
- **Sync**: Synchronizes the phrase to the tempo of Cubasis.
- **Tempo/Tempo Scale**: Defines the rate at which notes are triggered, that is, the speed at which the phrase is running. In addition to the Tempo parameter, this gives you further control over the playback speed. You can specify a value in fractions of beats. You can also set dotted and triplet note values. For example, if you change the Tempo Scale setting from 1/16 to 1/8, the speed is cut in half. If you set it to 1/32, the speed is doubled. Other values increase or decrease the speed accordingly.
- **Swing**: Shifts the timing of notes on even-numbered beats. This way, the phrase gets a swing feeling. Negative values shift the timing backward, and the notes are played earlier. Positive values shift the timing forward, and the notes are played later.
- **Gate Scale**: Allows you to shorten or lengthen the notes of the phrase. At a value of 100 %, the notes play with their original gate length.
- Lock Steps: Allows to lock the Arp page to play the same arpeggio for different sounds.
- **Copy / Paste Steps**: Allows to copy the current Arpeggiator steps, to paste them to another Micrologue preset.
- **Reset Steps:** Reset the arpeggiator section to default settings.

MiniSampler

The MiniSampler not only offers a series of factory presets, but it enables you to create custom instruments. It can also load custom instruments (.cbi files) that were created with MiniSampler in earlier versions of Cubasis. To assign MiniSampler to a track, follow these steps:

- Tap the instrument icon in the Inspector's instrument tab or directly on the track head.
- Open the instrument browser and select the MiniSampler category.
- Factory and your user MiniSampler presets will appear in this list.

Note that for percussion instruments, the three HiHat keys F#1, G#1 and A#1 (according to the General MIDI standard) comprise a **mute group**, which means that triggering one of these notes will stop the others.



Basic Control Window

- **Pitch Bend Range**: Adjusts the pitch bend range of your instrument in semitones (1 12). Note: When exporting to MIDI, Cubasis doesn't write the pitch bend range to MIDI files. It must be set manually in the app that you import the MIDI file into.
- Volume: Adjusts your instrument's volume in dB.
- Attack / Release: As in Micro Sonic, adjust your instrument's attack (A) and release (R) values by sliding the controls horizontally. Note: The attack and release values cannot be automated.
- Save Envelope as Default: Applies the current attack / release values to your instrument every time it is loaded on a MIDI track. This button is only visible for user instruments, not for factory instruments.
- Polyphony: Defines the maximum number of notes that the track plays back simultaneously. This limit is
 set to ensure smooth performance. Having a high polyphony with lots of effects might cause playback
 stuttering and clipping, while a low polyphony causes certain notes to end too soon. If the number of
 notes played exceeds the polyphony parameter, the notes triggered the longest way back are faded out,
 making space for new ones. The value can be set from 1 (where every note stops the previous one) up
 to 128 voices.
- List Browser: Opens a list of all available instruments. Tap an instrument to load it. In the "My Presets" folder, buttons for renaming, sharing and deleting the selected preset (instrument) are available.

To open the MiniSampler editor, tap the Edit button at the bottom of the window.



Recording Samples

- Select the Record tab in the left column and choose your desired input device.
- When using headphones, enabling monitoring can be handy.
- On the keyboard below, select a key you'd like to record your sample for. It will be highlighted in red. To set the



light area or the triangles in the miniature keyboard. Sliding the left or right marker changes the keyboard's range.

When you're all set, hit the **Record Button**. Press it again to stop recording.

A new wave file has now been created in the Audio / My Samples folder in the MediaBay. To repeat the process, simply select a different key.

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Importing Samples

- Select the **Import** tab in the left column.
- Navigate to your desired directory.
- Drag an audio file of your choice to the desired key on the keyboard, or double tap it to assign it to the selected (red) key.

Arranging Samples

Each sample is assigned to a root key (colored) that plays the sample with its original pitch. All keys within the colored range will be pitched accordingly (keys below the root key will have a lower pitch and vice versa).

- To set the lowest or highest key, grab the left or right edge of the range and drag it.
- To move the root key (including the whole range), tap and hold the sample's range, then drag it horizontally.
- Double tap the left or right edge of a range to extend it as far as possible (until the next range or the lowest or highest key).

To select a sample for editing, simply tap its root key on the keyboard (tapping any other key will leave the editing view unchanged).

Editing Samples

Tap the **Edit** tab to the left and you will find a sample editor similar to the one used for editing Audio Events. Use horizontal swiping and pinching gestures to move your view or to zoom it in and out.

The editor will always show the sample of the last pressed root key.

The following tools are available:

- Select: By default, the area between the two selection locators is always selected. Tap the Select option to select the whole area you are currently viewing. Any of the processing tools below apply to the selected area.
- Trim: Erases all audio material around your selection.
- **Erase**: Erases all selected material.
- **Reverse**: Reverses the selected part of your sample, which makes it sound backwards when played.
- **Normalize**: Normalizing a file will change its general volume by setting the peaks to 100% without clipping. If a quiet waveform has no high peaks, normalizing it increases its overall gain (volume) until its highest levels have reached their maximum.
- Fade: Fades your selection in or out.
- Save to Media: Saves the currently selected sample as a wave file in the <u>MediaBay</u> Audio directory.

On the left hand side:

- Loop Sample: Enables a loop range within your sample. Upon entering that range, your sample will infinitely loop between the start (S) and end (E) marker until released. Move either marker to extend or shorten the loop range. Drag the loop icon at the top to move the whole range. Slide horizontally across the cross-fade envelopes to adjust their length.
- · Sample Gain: Adjusts your sample's volume level.

File Management

MiniSampler instruments are saved globally. Changes made to an instrument will affect all projects this instrument is used in!

- To **rename** a sample, tap its base key on the keyboard, then tap its name at the top of the editor screen to rename it.
- The **Delete** button to the right of the name will remove the sample from your custom instrument's keyboard. The original audio file will remain in the MediaBay.
- Deleted instruments can be recovered from the trash folder.

Note: The maximum file size for any custom instrument is 200 MB (50 MB per sample). Cubasis will automatically alert you when recording or importing beyond said limit.

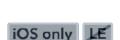
Note: Factory presets cannot be edited.

Audio Unit instruments

Third party apps with Audio Unit functionality can be selected as instrument plug-ins that integrate directly into the Cubasis workflow. Find more information in the <u>Audio Units</u> chapter.

Inter-App Audio instruments

Inter-App Audio is a universal routing system for iOS, allowing you to route audio, MIDI and effects between Cubasis (host) and compatible node apps. Find more information in the <u>Inter-App Audio</u> chapter.





iOS only

Cubasis

Routing

0

All

Off

1/2

- To learn how to set up a MIDI via WiFi connection, read here.
- **External ports**: Selecting a specific port will only receive from or send to this device or app.
- Tracks: Other MIDI tracks can be selected as input or output as well. The limitation is that a track can only output to (or input from) one other track.
- MIDI Effect multi-output ports: If a MIDI Effect that has multiple outputs is loaded in any iOS only MIDI track, its outputs are listed here also.

CoreMIDI

Connection

CoreMIDI

App or

Hardware

CoreMIDI

On iOS, MIDI from external hardware

MIDI over WiFi

Follow these steps to establish a WiFi MIDI connection with your computer:

- If your computer runs Windows, download and install rtpMIDI.
- Create a new local WiFi network (how to: Mac, PC) and connect your device to it.
- In Cubasis, choose a track, open the Inspector and set "Network Session" for the ports.
- On the Mac, launch Audio MIDI Setup via Spotlight and create a network session. Select your device and hit Connect. On Windows, use rtpMIDI.
- Run Cubase or any other desktop DAW and set up its MIDI properties to respond to MIDI input from your WiFi network session. Now you can trigger notes in your desktop DAW using your mobile device.

Inspector

The track inspector allows for advanced track control. To open the inspector, tap the symbol on the far left of your screen which is colored according to your selected track. To directly access specific options within the inspector, tap any of the handles below.

To change a track's **name**, tap the top panel displaying it. The arrow symbol on its right hand side hides the inspector.

Routing (MIDI tracks)

This section offers options for configuring connected MIDI hardware. The following settings are available for both MIDI IN and OUT.

Port selection

- All Inputs / Outputs: The track will send to or receive from any connected device (or app on iOS).
- Audiobus apps: Connects to MIDI devices or apps routed via Audiobus. •
- **Network session**: This option will appear if you are connected to a WiFi network.

(e.g. a keyboard) is received by every CoreMIDI compatible app that is running in the background. Keep in mind that the other app must continue to run in the background, most apps have a "background audio" setup option. Cubasis processes (and forwards, see MIDI Thru) the MIDI events it receives, but it cannot control what other apps should (or should not) receive directly from the hardware. It is necessary to configure the MIDI input and output settings in every app depending on the desired routing.





iOS only

iOS only

iOS only

Virtual MIDI

CoreMIDI

App

CoreMIDI

App

iOS only



MIDI Thru

MIDI Thru forwards all incoming MIDI events directly to the specified output device, thereby re-channelizing them to the configured output channel. The following example illustrates a possible MIDI Thru workflow:

- Select an external keyboard as MIDI input port, e.g. on channel 1.
- Select a CoreMIDI compatible background app as output port, e.g. on channel 2.
- Activate MIDI Thru.
- In the background app, set Cubasis as input port and configure a specific sound for channel 2.
- · For your current track, set No Instrument in the MediaBay.
- Result: The external keyboard that sends on channel 1 will only trigger the background app on channel 2.

Warning: Using MIDI Thru in combination with Virtual MIDI may lead to feedback loops, as Virtual MIDI blindly connects to all background apps that support this feature. In this event, use the MIDI panic button.

MIDI panic button

In the rare event of MIDI notes hanging, use the MIDI panic button in the Routing tab to instantly silence all MIDI events triggered within Cubasis and any hardware connected through the MIDI ports.

Channels

- All: Routes all MIDI events from / to this track, regardless of their channel.
- 1-16: Only routes MIDI events with the specified channel number.

Routing (audio tracks)

Input

Toggle between mono and stereo input mode for connected Audio equipment. If it doesn't support stereo recording, only the Mono option is available.

Additionally, <u>Audiobus</u> is available when turned on.

Note: If Stereo is selected but not available, Cubasis will not record on the track.

Multiple audio outputs

MIDI and audio tracks can be assigned to up to 24 individual outputs (12 stereo pairs) simultaneously. The number of available outputs depends on capability of the connected audio hardware. If no audio interface is connected, only 2 output channels (stereo pair 1/2) are available.

To assign specific outputs, tap the **Output** panel (showing Stereo Out by default) in the **Routing** section and toggle stereo outputs via the buttons in the output popup. This popup window can also be called up by tapping the output display in the channel in the mixer.

Note:

- If multiple outputs are assigned to a single track, the output panel will display a plus sign, for example "1/2+".
- Only the master channel (= the stereo output 1/2) has insert effects.
- The send effects only route to the master channel.





iOS only





Instrument



This panel displays the name of the selected MIDI track's instrument. Tapping it brings up the instrument rack.

If an Audio Unit instrument with **multiple outputs** is selected, the panel expands and reveals options for MIDI channel selection, output bus selection, and a button to automatically add as many tracks as the instrument has outputs. You can find more details in the <u>Audio Units</u> chapter.

Insert effects



The insert effects section allows to add up to eight insert effects independently for each track. By default, a <u>StudioEQ</u> parametric equalizer with 4 bands for each channel is assigned to each track as well as the multifunctional <u>Channel</u> Strip effect suite.



The order of the effects can be **rearranged** by tapping, holding and moving an effect vertically.

The blue **pre/post-fader line** defines which effects are applied pre (above the line) and post (below the line) the track's volume and pan faders. The line can be dragged by moving its handle.

If **<u>side-chaining</u>** is enabled for an effect, its slot expands and shows the side-chaining source track, a gain slider to adjust the side-chain input signal gain, and a pre/post icon which can be tapped to toggle if the source track's signal should be taken before or after applying the track's volume.

Send effects

There are 8 global send effect buses which all tracks have access to. The level in which send effects are applied to a track can be adjusted for each track individually.

A section's color indicates the current status of its effects:

- Light blue when effects are active
- Dark gray when effects are present but inactive
- Light gray when no effects are present

Learn about adding effects here.

MIDI effects



MIDI effects can be added to instrument tracks, generating MIDI patterns. Depending on the effect and your settings, they are generated

based on your keyboard input (e.g. arpeggiators), based on the notes in a MIDI event, or based on their internal programming (e.g. step sequencers)

Note: Currently, only external AudioUnit (AU) MIDI effects are available for selection.

Learn how to use MIDI effects in the <u>MIDI Effects</u> chapter.



Automation

This section lists all recorded automations.

- Tap the e button next to a parameter to open the Automation Editor.
- Use the On / Off button to toggle existing automation.

The icon's color indicates the current automation mode:

- Red when the track is in write mode
- Green when the track is in read mode
- Dark gray if automation exists but is not read
- Light gray if no automation exists

Notepad

Notepad allows you to enter notes about the track, song lyrics or other information. Tapping the empty space in the notepad inspector section opens the notepad rack view, where you can enter, paste or view text. In addition, the notepad rack has two buttons to increase or decrease the text size.

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Automation

Volume

Stereo ... Volume

Stereo ... Volume

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Channel

Displays your selected track's channel as it appears in the mixer. The following controls are available:

- Pan fader: Slide horizontally to adjust your track's stereo pan.
- **Volume** fader: Slide the volume fader vertically to set the track's gain. The volume levels during playback or recording are visually shown on its right hand indicator. The display at the bottom of the channel shows the fader's value in decibels (negative values mean a decrease in volume). Note: The pan and volume faders' value can be reset by double tapping them.
- Mute: Use this button to toggle whether the channel's track is muted and therefore excluded from playback.
- **Solo**: Soloing a track (or a group of tracks) excludes all the other tracks from playback.
- **Read**: When enabled, all automation data on this track is read and applied during playback.
- Write: Activate this button to record automation data live during playback / recording. More information on automation can be found here.
- Monitoring (audio tracks only): Monitoring outputs the audio input of your track routed through the track's effects.

Note: In order to prevent feedback, monitoring only works if hardware (e.g. headphones, a microphone or an audio interface) is connected.

Setting a track to Record Enable lets Cubasis know that you wish to record on this track. You can have multiple tracks Record Enabled at a time, which allows for recording on multiple tracks simultaneously.

Color

If a track but no events are selected, tapping a color changes the selected track's color. If events are selected, it changes the event's colors independently of the track.



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System info

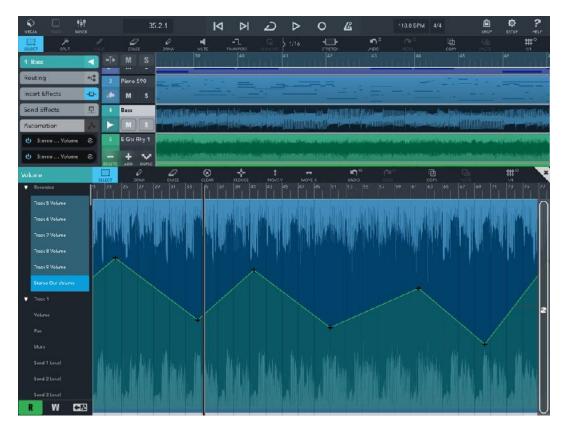
• **CPU**: Shows the total CPU usage of all of the device's CPU cores in real-time, used by all apps and the operating system.

DSP: Shows the measures the time duration that a rendering cycle takes, divided by the buffer duration (the time available to perform rendering). Factors that negatively impact the DSP usage are the number and sophistication of instrument and effect plug-ins, the number of of simultaneous notes and events, higher polyphony, lower latency, and other apps running in the background.

With Multi-core Processing *disabled*, rendering is performed on the system's single ultra high priority audio thread, which means that a DSP peak of 100% always results in a drop-out (crackling).

When Multi-core Processing is *enabled*, rendering is performed in engine threads and a short peak of 100% doesn't always mean that there is a drop-out, because the engine's buffers might have been able to prevent it. A dropout will only occur if DSP is 100% for longer than the extra guard buffer is set to.

Automation allows you to record certain parameter changes of tracks, instruments and effects during playback. You can view and edit these changes via automation curves in the automation editor:



To open the automation editor, follow these steps:

- Open the track Inspector.
- Find the tab labeled Automation.
- The slots below display all automated parameters applied to the selected track, the send effects and the master channel. Select one to open the editor.

Alternatively, the automation button in the title bar of the <u>Mixer</u>, <u>Effect Rack</u>, or <u>Instrument Rack</u> takes you directly to the editor.

Automation editing

The following tools are available for full automation curve manipulation:

- Select: To select a single point, tap it. Selecting multiple points is done by tapping the Select button and dragging out a rectangle touching the points you want to select. Note: Double tap inside the editor to select all points.
- Draw: Allows you to draw custom automation curves and overwrite existing automation data. The
 point density corresponds to the selected grid size in the tools menu.
- Erase: Deletes all selected automation points.
- **Reset all:** Deletes all automation points for the current parameter and resets its value.
- Reduce: Reduces the point density of the current selection. Tap the Reduce button multiple times to
 reduce the curve down to the most relevant points. Note: To reduce CPU load and make editing easier, it
 is recommended to reduce the amount of points to the needed minimum after automation recording.
- Move vertically: Selected points can only be moved vertically.

Move horizontally: Selected points can only be moved horizontally.
 Note: You can move points freely in all directions by selecting and dragging them.

Finding and configuring parameters

The drop-down menu to the top left of the editor displays all automatable parameters (global and track-specific). Parameters with existing data are highlighted.

- **Read**: When enabled, all automation data on this parameter is applied during playback and mixdown.
- Write: Activate this button to record automation data live during playback / recording. The slider on the right displaying the value at the current playhead position can be used for automation recording. When write mode is on, simply hit Play and move it vertically. *Note:* The read / write buttons toggle the status of the current track / effect as well as the parameter selected.
- **Goto source**: Closes the editor and takes you to the selected parameter's configuration window (e.g. mixer / micrologue / effect rack). From there, the write / read buttons can also be toggled directly.

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MIDI Automation

MIDI parameters can be drawn and edited in the Key Editor.

List of automation parameters

All instrument and effect parameters can be automated, with the following exceptions:

- Micro Sonic: Attack
- Micro Sonic: Release
- MiniSampler: Attack
- MiniSampler: Release
- The Inter-App Audio and Audiobus protocols don't support automation. However, you can control some of the parameters of your IAA/Audiobus apps using MIDI CCs, provided that the app supports MIDI CC messages.

The MediaBay stores all Cubasis-related files such as projects, instruments, audio files, MIDI files, mixdowns and deleted files.

File list

٩	🕻 ВАСК	Name 🔺	Date	Size
► Audio	🚞 Allen More Drums	Alive Kit AM Bridge	02.12.19 09:33	901 B
T MIDI	💼 Classic Machines	Alive Kit AM Chorus A	02.12.19 09:33	610 B
🗋 Instruments	🛅 Drum Loops	Alive Kit AM Chorus B	02.12.19 09:33	610 B
Frojects	🖿 My MIDI Files	Alive Kit AM Fill 1	02.12.19 09:33	252 B
≯ Mixdown		Alive Kit AM Fill 2	02.12.19 09:33	293 E
📋 Trash		Alive Kit AM Intro	02.12.19 09:33	608 E
		T Alive Kit AM Verse A	02.12.19 09:33	496 E
		Alive Kit AM Verse B	02.12.19 09:33	582 B
		Brit Winter Kit AM Bridge	02.12.19 09:33	1.1 KB
		NEW PROJECT INPOST EURICIANS SHARE MENVRADER TRANSF		

The file list shows category, name, type, modification date and size of all files used in Cubasis. All files are automatically organized according to their extension (file type). The following directories are available:

- Audio: All "raw material" audio files are stored here, e.g. microphone recordings, audio drum loops and imported audio files. Supported formats are: .wav, .m4a, .mp3, .ogg and .flac.
- MIDI: Contains all .mid files, including a wide range of MIDI drum loops.

Audio and MIDI content is split into two subfolders (Drum loops and My audio / MIDI files). Drag and drop a file into the arranger to place it, or double tap it.

Factory audio drum loops automatically match your song's tempo when imported into the project. Learn more about tempo matching <u>here</u>.

- **Instruments**: Tap an instrument to load and apply it to the selected instrument track. If you have an audio (or no) track selected, a new instrument track will be created. Instruments are split into six groups: Audio Units, Inter-App, Classic Machines, Micro Sonic (sampled), Micrologue (synthesizer) and MiniSampler (custom instruments).
- Projects: Cubasis refers to songs as projects. All your work is stored here, among a few project templates by Cubasis. Double tap any project file to open it, tap a template to create a new project, or simply drag it into the arranger.
 Note: A project consists of a folder which includes a .cbp file (Cubasis Project File) and its associated

wave and backup files. You can also open these files using Cubase on your desktop computer.

- **Mixdown**: A mixdown is a complete exported project, all of which are stored here. You can simply re-import these files into your project if you wish, just like you would with files in the Audio or MIDI list.
- **Trash**: Deleting a file will move it to the trash folder. Double tapping a file in the trash folder restores it to its appropriate location. Tap and hold the delete button to empty the trash. *Note: Deleting files in the trash folder will erase them from memory permanently; this process can not be undone.*

You can **drag and drop** files by tapping and dragging a file icon in the MediaBay or tapping and holding a file anywhere in the file list.

- Delete files by dragging them into the trash folder or onto the Delete button.
- · Drag projects into the Templates folder to convert them to templates.

- Drag audio or MIDI files into the arranger to place them into an existing or a new track.
- Drag any file into another folder or sub folder to move it.

Tap the top of a column in the MediaBay browser to **sort** your files according to the desired attribute.

Supported file formats

Cubasis lists and supports files with the following extensions:

- .cbp (Cubasis Project)
 .cbi (MiniSampler instrument preset)
 .vstpreset (Micrologue preset)
 .preset (Effect or AU preset)
 .wav
 .wav
- .cml (MIDI Learn preset)
 .mp3

Mixdown

Choose the mixdown category and tap Create Mixdown.

The following file formats are available:

- WAV: Uncompressed audio format, 16-bit, Stereo, 44kHz, high quality and file size
- **FLAC**: Free Lossless Audio Codec, open source audio format with up to 60% lower file sizes than WAV.
- **M4A**: Compressed audio AAC format, lower quality and file size (handy for quick sharing over the internet)
- MIDI: Stores notes and project parameters only, no audio material. Can be opened with any scoring software or DAW. Although instruments are matched as closely to the General MIDI standard as possible, playback will differ on each system, depending on the instrument library used. MIDI files have a pitch bend range of +/- 2 semitones by default.
 Note: Effect parameters are not included in MIDI files.

Note: The 4 mixdown options (mixdown between locators, include effect tail, separate files for tracks, normalize) are ignored for MIDI export.

The following options are available:

- Mixdown between locators limits the exported audio file to the area enclosed by the left and right locator.
- **Include effect tail** is turned on by default. It includes the sound created by effects after the end of your song and extends it. Turning this off can be handy for creating loops (where the end seamlessly transitions into the beginning).
- Create separate files for tracks can be useful for creating a library of sound effects, loops or other song elements.
- Normalize performs a normalization to 0dB on the final product.

Import

On **iOS**, the import button offers several options to import files into the MediaBay:

- AudioShare: Allows to import audio files via the AudioShare app.
- **iTunes**: Allows you to import songs from your iTunes music library.
- Files: Allows you to import files from various locations (including iCloud Drive) via the Files app.

On **Android**, a file import dialog opens, that allows you to select multiple files (via long tap) to import. Selecting folders is not possible.

Note: Imported files will be placed into corresponding folders, according to their file type.

Note: You can import files (all supported formats) directly from the **Dropbox** app. Simply hit the ... icon in the file viewer and select Export. From the list of available apps, choose Cubasis 3.





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Share

There are multiple options for sharing or exporting files. WiFi connection is recommended.

On **Android**, the default Android share dialog appears, giving you a multitude of options like Android Beam, other apps, Google Drive and more, depending on what other apps you have installed.

On **iOS**, a popup offers 3 options:

- Email
- AudioShare Allows to export audio files to the AudioShare app.
- **More**: The default iOS share dialog offers a multitude of options such as AirDrop, Files App and other apps installed on your device such as Dropbox or Google Drive.

Projects that contain audio files are compressed into a .zip file containing the .cpb (Cubasis Project) and all of its wav files.

Tool buttons

New Project

Tap this button to create a new Cubasis project.

Duplicate

Tap this button to create a duplicate of a file.

New Folder

Tap this button to create a new folder.

Rename

Allows to rename files or folders.

Move

Select a file or a folder, then tap the Move button to start the move mode. The selected item turns violet and the move button starts to blink. Navigate to the destination folder and tap the Move button again to move the file or folder there. Press the cancel button to terminate the operation.

Autoplay

Enable this button to playback available audio previews.

Delete

Moves the selected file to the Trash folder.

Deleting files in the Trash will permanently erase them from memory; this process cannot be undone.

Double tapping a file in the trash, or dragging and dropping it into another folder, restores it.

Export to external hard drives

Cubasis can save files onto an external hard drive that is supported by your device, allowing to backup and transfer your work with just a few simple steps:

- Select a project or file.
- Tap the **Share** button.
- Select the hard drive companion app. The project including its audio material will be saved to the external hard drive.



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Brand New Day

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Add Tags

Save to Files

Save to Dropbox



Export to Cubase

To open a Cubasis project in Cubase, follow these steps:

- Share your project via the ZIP option and transfer it to your computer via AirDrop, Files App or iTunes File Sharing
- The project arrives as a .zip file, containing a .cpb (Cubasis Project) file and all audio files used in the project.
- Make sure that the Cubasis Importer (a free Cubase extension) is installed on your computer.
- Unzip the file and launch Cubase.
- In the Cubase menu, go to File -> Import -> Cubasis.
- A file browser dialog will appear. Select the .cpb file.

Direct access to the Cubasis directory

Instead of using the MediaBay's Import and Share button, files can be copied to and from the MediaBay by copying them to and from the *Cubasis* 3 directory directly. This can be handy for backup purposes (e.g. to copy the whole *Cubasis* 3 directory to a thumb drive), or for importing or exporting a large number of files or whole directories. The MediaBay in Cubasis is a 1:1 representation of the *Cubasis* 3 directory. The procedure is a bit different on iOS and Android but it works on both platforms.

Note: Any file that you place directly in the Cubasis 3 directory will be processed and sorted into the right sub folder automatically, provided that the file format is <u>supported</u> by Cubasis. For example, if you place a zip file that contains a project in the Cubasis 3 directory, Cubasis will (at the next launch or after a few seconds) unzip the file and place the project in the Projects sub folder.

Note: Be careful when deleting files from the Cubasis 3 directory from a file manager app, they cannot be retrieved anymore. Only files deleted via the MediaBay's Delete button in

Cubasis will go to the Trash first.

Important: If you delete Cubasis from your device, iOS and Android will also delete all the files in the MediaBay (your projects, audio and MIDI files, instruments etc.), so don't forget to backup your Cubasis data regularly. On Android 10 and later, a popup will give you the option to "**Keep app data**" (recommended).

Access through the iOS Files app

Launch the *Files* app from your iOS home screen, tap *Browse* (not *Recents*), then go to *"On My iPad"* (or *"On My iPhone"*) and *Cubasis 3*. In addition to moving, copying and sharing files, the *Files* app can even zip file and folders (long tap, then tap *Compress*).

Do you want to uninstall this app? Keep 53.25 MB of app data.	Cubasis 3		
	Do you want to u	ninstall this app?	
Cancel OK	Keep 53.25 N	/IB of app data.	
		Cancel	ОК



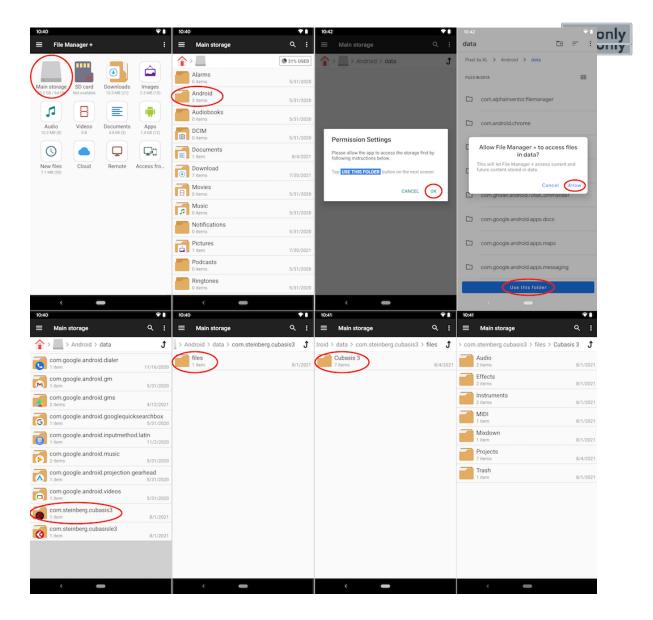
Access through an Android file manager

Android's native Files app cannot access the Cubasis 3 directory, but most file manager apps from the Play Store can (many of them are free apps). The location of the directory can vary slightly depending on the device manufacturer, but it's basically:

/Android/data/com.steinberg.cubasis3/files/Cubasis 3

In some apps, the base *Android* folder is located in a "Main storage" or "Internal shared storage" folder, or in "storage/emulated/0" in others. When you access the *data* folder for the first time, the file manager will probably ask your permission to access this protected system folder.

This series of screenshots illustrates the process using the File Manager Plus app:



Access through the macOS Finder

Follow these steps to access the MediaBay from your Mac:

- Connect your iOS device to your Mac with the USB cable.
- On the Mac, open a Finder window, go to Locations and tap your iOS device.
- Click the *Files* tab and click *Cubasis 3* in the list of apps. The MediaBay directories will be displayed in the list on the right.
- · Drag and drop a file from another Finder window into the list to import it into the MediaBay.
- To save a folder to your Mac, drag and drop it to its target location into another Finder window.

Favourites										
 iCloud Drive AirDrop 	My iPhon iPhone 12 Pro		8.53 GB Avai	lable) · 57 %	6					
Applications Desktop	General Mu	ic Movies	TV Shows	Podcasts	Audiobooks	Books	Photos	Files	Info	
 Downloads 	Name			Size			Date !	Nodified		
Locations	v 🖪 Cubasis 3									
	🚞 Audio			6.5 MB			Yeste	rday at	09:13	
🗍 My iPhone 🗈	Effects			7 KB			26.11	.2020 at	23:22	
_	📄 Inbox			Zero KB			02.05	5.2021 at	06:54	
Tags	Instruments			2.8 MB			25.11	.2020 at	07:43	
	MIDI			Zero KB			25.11	.2020 at	07:43	
	Mixdown			6.8 MB			02.05	5.2021 at	06:56	
	Projects			539.4 MB			Yeste	rday at	09:13	
	Trash			Zero KB				5.2021 at		
	> 🔇 Cubasis LE 3									

Access through iTunes File Sharing

Follow these steps to access the MediaBay from your Windows PC:

- Connect your iOS device to your computer with the USB cable.
- Open iTunes and select your iOS device in the *Devices* category.
- Click the *Apps* tab and choose *Cubasis 3* in the list of apps. The MediaBay directories will be displayed in the list on the right.
- Drag and drop a file into the list or use the *Add* button to import a file into the MediaBay.
- To save a folder to your computer, select it and hit the *Save to* button. Alternatively, drag and drop it to your desktop or into a Windows Explorer window.

Audio	
Effects	
Instruments	
iii Midi	
Mixdown	
Projects	
Trash	
	Fifects Instruments Instrument

Android storage location

Android only

On Android, Cubasis stores its files in an app-specific directory which is only accessible by Cubasis and certain file manager apps from the Play Store. It cannot be accessed by the Android *Files* app.

This new storage location was introduced with Cubasis 3.3.2 to comply with Google's mandatory new storage requirements. When **updating** from an earlier Cubasis version to Cubasis 3.3.2 or later, a dialog guides you through the process of **copying the MediaBay data** from the old to the new storage location, i.e. from the legacy Cubasis 3 folder to the new app-specific directory.

Cubasis Data Location Change
Due to new Android requirements, the storage location for all app data changes.
• Be sure to activate "Keep app data" when deleting the app and don't forget to backup regularly
Your Cubasis files will be copied to the new directory now.
Complete
Next

After this process is completed successfully and you see all your files in the MediaBay, we recommend that you **delete the old Cubasis 3 folder** using a file manager app, unless you want to keep it as a backup. The legacy "Cubasis 3" folder is no longer accessed by Cubasis 3, which means that placing a file inside it will no longer make it appear in the MediaBay. Instead, use the <u>Import</u> button to copy files from an external location into the MediaBay. To delete the Cubasis 3 folder using the Android Files app, scroll down to "Internal storage", tap the dots next to "Cubasis 3", then tap Delete. The exact wording and layout may vary depending on the device manufacturer. The following sequence of screenshots illustrates the process in the Files app on an Android 11 Google device:

6:19 🛈			₽ 🛙	6:19 0	9	۵ 🗣	6:19 (9		€ 0	6:19 🚱	₹ 1
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Video	205			Interna	il storage		Interna	al storage				
Video 0 B	io				Alarms May 31, 2020	:	-	Alarms May 31, 2020		:	Alarms May 31, 2020	0
		er			Android May 31, 2020	:	-	Android May 31, 2020		:	Android	
Apps	s				Audiobooks May 31, 2020	:	-	Audiobooks May 31, 2020		:		0
3.1 GB			:		Cubasis 3 3 hours ago		-	Cubasis 3 3 hours ago		:	-	۲
\$	3	ð			Cubasis LE 3 Nov 3, 2020	:	-	Cubasis LE 3 Nov 3, 2020	Select		Delete 1 folder permanently? This is permanent and cannot be undone. 18 files inside the folder will also be	0
Favorites		Safe folder			DCIM May 31, 2020	:	-	DCIM May 31, 2020	Move to Copy to		permanently deleted.	0
STORAGE DEVI	rices				Documents May 31, 2020	:	-	Documents May 31, 2020	Rename	_	X Cancel Delete	
44 GB	3 free	-			Download 2 days ago	:	-	Download 2 days ago	Delete permanently Folder info		Download 2 days ago	0
	er storage se cloud storage	and developer files			Movies May 31, 2020	:	-	Movies May 31, 2020		-	Movies May 31, 2020	0
	☆ Clean	বি Browse		-	Music	:	-	Music		:	Music	\sim
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If the process of copying your Cubasis data to the new location **fails**, insufficient **free disk space** is the most probable cause. Cubasis requires as much additional disk space as the legacy *Cubasis 3* folder takes up (at least until copying succeeds and you delete it manually). To free additional disk space, open the Android Settings app and go to Storage. The exact wording and layout of this Settings page may vary depending on the device manufacturer. The "Manage storage" button offers several options to clean up and make more space. Tapping "Other apps" shows you a list of apps and the amount of storage they require, helping you to decide if there are any memory hungry apps that you no longer need. Likewise, the other categories allow you to view and delete files that take up a considerable amount of disk space. Once you're done, launch Cubasis 3 again to restart the process of copying from the old to the new storage location.

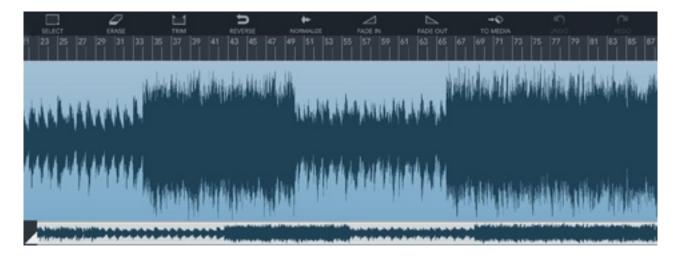
6:23	G @	÷ 0
÷	Storage	۹ (۵
	20.26 GB Used of 64 GB Manage storage	32% used
≡	Smart Storage	
L	Photos & videos	0.24 GB
J	Music & audio	0.61 GB
÷	Games	0.00 GB
	Movie & TV apps	0.17 GB
	Other apps	6.5 GB
-	Files	0.00 GB
Ŧ	System	13 GB

Should the process of copying your Cubasis data fail multiple times, an additional option appears which is called: "Abort - I am aware of the consequences and will

import the existing data through the MediaBay". If you enable it, Cubasis will no longer show the "Cubasis Data Location Change" dialog at launch, which means that you can continue to work with Cubasis, but your MediaBay might be empty. There are two ways to manually copy your old Cubasis 3 data into the MediaBay now. Either use the <u>Import</u> button in the MediaBay to import individual files, or use a <u>file manager app</u> to copy the

/Android/Cubasis 3 directory to the new location:

/Android/data/com.steinberg.cubasis3/files/Cubasis 3.



Double tap an audio event to enter the Sample Editor.

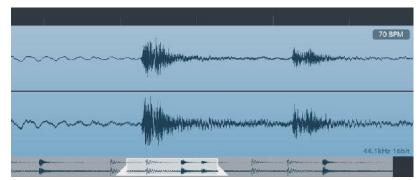
Miniature panel



The top grey panel shows the entire waveform of your audio file. The marked region is displayed in the main window. Drag the left or right marker to zoom in / out and drag the region to adjust your view's position.

Ruler

Between the main and miniature panel lies the ruler, which includes a playhead and two selection locators. Use these to adjust the selection within your audio event, which is marked blue. Depending on the your current time display setting (in the transport panel), the ruler will either display time in seconds or bars / beats.



Editing stretched / transposed audio

Since time-stretching works non-destructively, the audio editor will show and play back every audio event in its original time scale without any time-stretching or pitch shifting applied.

Play button

Sitting in the top left corner of the Sample Editor, the play button plays back the file that is currently being edited in the Sample Editor.



Tools

To the left, there is a list of tools available to manipulate your audio file:

- **Select**: By default, the area between the two selection locators is always selected. Tap the Select option to select your whole Sample Editor view (the area between the top two markers). Any of the processing tools below apply to the selected area.
- Trim: Erases all audio material around your selection.
- **Erase**: Erases all selected material.
- **Reverse**: Reverses the selected part of the audio event, which makes it sound backwards when played.
- **Normalize**: Normalizing a file will change its general volume by setting the peaks to 100% without clipping. If a quiet waveform has no high peaks, normalizing it increases its overall gain (volume) until its highest levels have reached their maximum.
- Fade: Fades your selection in or out.
- Use the **split** tool (available in the general Tools menu) to precisely split an event with the Sample Editor playhead.

Save to Media

Saves the current audio event as a wave file in the <u>MediaBay</u> Audio directory. Use it to save changes in audio files, save new microphone recordings or make audio material available for use in other projects.

Saving to MediaBay writes the event's current tempo information into the resulting WAV file (iXML format).

Rename

Tap the event's name in the top left corner of the Sample Editor to bring up the rename dialog.

BPM button

On the right of the audio editor the audio file's tempo is displayed.

- If the audio file has no embedded tempo information (iXML), it will show the project's current tempo. Tap the button and enter the audio file's original tempo.
- Once the audio file has the correct information, you can sync it to the song's tempo with Time-stretch, using Auto mode. More detailed instructions <u>here</u>.

Key Editor

 Pad
 Image: Pad
 Imag
 Imag
 Imag</

Double tap a MIDI event to enter the Key Editor.

Navigation

Move around by sliding your finger across the screen. Pinch to zoom in or out. Both horizontal and vertical movements are recognized by Cubasis.

Interactive piano-roll

- Tap a key to play the selected instrument.
- During playback, keys on the piano-roll are highlighted according to the notes played.
- · Notes selected in the MIDI editor will highlight the corresponding keys on the piano-roll.

Ruler

Tap and slide on the ruler to position the playhead.

Tools

The Key Editor uses most of the same tools as the arranger; Select and Draw are its main modes.

Select Functions	Draw Functions
 Select / deselect note: Tap the note Select multiple notes: Tap-hold and drag out a band-box or tap more notes to add them to the selection Select all notes: Double tap Deselect all notes: Tap in an empty space Move notes: Select, then drag the notes Adjust length: Drag the arrow icon to the right of the note 	 Adjust length: Hold after creating a note and move the finger horizontally or use the arrow icon on existing notes Move note: Drag a selected note (tapping will delete it)

All tools explained:

• Select: To select a single note, tap it. To select multiple notes, tap and hold an empty space, then drag out a rectangle touching the notes you want to select. Move selected notes by dragging them.

Note: Double tap inside the Key Editor to select all notes. Tap in an empty space to deselect all notes.

- **Split**: Splits selected notes in two. The playhead's position sets the split point.
- Erase: Deletes all selected notes.
- **Draw**: Using this tool and tapping anywhere on the Key Editor's view will place a note. Hold after placing it to adjust its length. Tapping a note deletes it. Also, draw lets you quickly draw out your note's velocities in one go. Slide your finger across the velocity field and the bars instantly adapt the drawn values.
- Mute: Mutes or unmutes the selected notes.
- **Undo**: Reverts your last action(s). A small overlay panel briefly shows the action being redone.
- **Redo**: Repeats the step(s) you've previously undone. A small overlay panel briefly shows the action being redone.
- **Copy**: Copies selected notes into clipboard. These can be inserted into any MIDI event.
- **Paste**: Pastes notes from clipboard into your event, starting at the playhead's position.
- **Transpose**: Transposes notes on a semitone and octave scale.
- Quantize: Quantizes all selected notes. The button to its right brings up quantization options.
- **Snap**: Specifies the dimensions of the grid which notes, note lenghts (and the playhead) snap to (ranging from bars to 1/64 notes).

The MIDI editor provides 6 additional editing utilities for notes:

- Lock: Disables view movement and zoom. When editing a specific part only, this prevents accidental scrolling.
- · Velocity: Adjust the velocity of selected notes by swiping upwards / downwards.
- Transpose: Selected notes can only be moved vertically.
- Move: Selected notes can only be moved horizontally.
- Length: Selected notes can be changed in length.
- Preview: Turn preview on to play back selected, triggered or moved notes.

Apart from the preview and lock buttons, the above tools are only active while being touched. Tap and hold them while swiping anywhere within the Key Editor with another finger to use them.

Rename

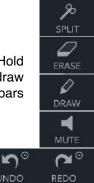
Tap the event's name in the top left corner of the Key Editor to bring up the rename dialog.

Parameters

The parameter field of the Key Editor controls MIDI parameters, which can be automated to change in value during playback. To open parameter editing, tap the field, which will enlarge it and display a list with all available parameters.











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Parameters with existing data are highlighted. Select a parameter from the list on the left to view and edit it.

- To input or edit data for a parameter, use Select / Draw / Erase from the tools menu. The density of automation points will correspond to the selected grid size.
- Once you're done editing, tap the upper note area. •

Consider the following when customizing your parameters:

- Micro Sonic only reacts to the parameters velocity, pitch bend and sustain (CC64).
- Micrologue only reacts to velocity, pitch bend, sustain (CC64) and modulation (CC1). •
- Aftertouch, program change and other CC parameters can be useful for third-party plug-ins and MIDI output, but are ignored by Cubasis' internal instruments.

The following parameters are available:

Velocity ٠

- CC 8 Balance ٠ CC 9
- Pitch bend Aftertouch
- CC 10 Pan

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- Program change
- CC 64 Sustain
- CC 0 Bank select •
- CC 1 Modulation
- CC 2 Breath •
- CC 3 6 •
- CC 7 Volume

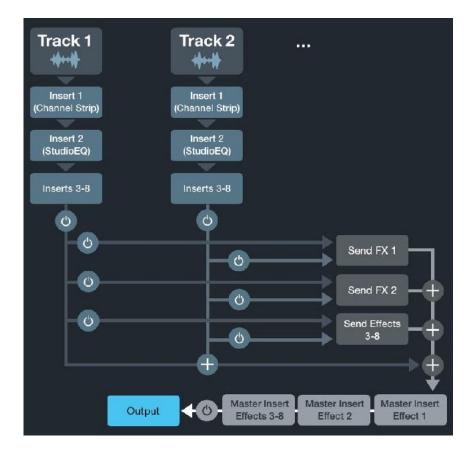
- CC 12 119 •
- CC 120 All sound off
- CC 121 Reset controls

CC 11 Expression

- CC 122 Local controll
 - CC 123 All notes off

MIDI CC and MIDI messages are fundamentally different from automation, which is applied to a track, separate from its MIDI data.

Effect routing



The above diagram illustrates the audio routing of Cubasis.

Insert effects

The insert effects section allows to add up to eight different insert effects independently for each audio or MIDI track. By default, a StudioEQ equalizer with 4 bands for each channel is assigned to each track as well as the multifunctional Channel Strip effect suite.

You can change the position of insert and send effects by moving them to a different slot. To do so, tap and hold the effect to be rearranged and drag it to another slot.

A section's color indicates the current status of its effects:

- Light blue when effects are active
- · Dark gray when effects are present but inactive
- · Light gray when no effects are present

Send effects

There are 8 global send buses that all tracks have access to. The level in which send effects are applied to the mix can be adjusted for each track.

Inse	ert Effects	-0-
U	StudioEQ	e
U	Chorus	e
¢	Channel Strip	e
U	ShelfEQ	e
	Tap to Add Effect	

What is the difference between inserts and sends?

An insert effect only affects one track. A send effect applies to all tracks, but you can adjust the send level for each track individually.

Master insert effects

Similar to the insert effects section, the master inserts section allows to add up to eight different insert effects for the stereo out channel strip. Below the assignable insert effects a built-in post-fader Brickwall Limiter is available in order to reduce occasional peaks in the signal. To add master inserts, use the mixer. Tap the "**e**" button on the Stereo Out channel and apply steps 4 and 5 in the list below.

Adding and Adjusting Effects

- 1. Select the track you wish to add an effect to.
- 2. Open the track Inspector.
- 3. Two panels labelled Insert Effects and Send Effects will appear. Tap one of your choice.
- 4. Tap one of the slots and choose your desired effect from the list popping up to the right. Choosing None unloads the current effect (discarding all its parameters).
 - Tap the On / Off button to enable / disable the effect.
 Note: For send effects, this button will only toggle the send feed from this track to the effect. To toggle the effect itself, use the On / Off button in the Effect Rack.
 - **Send level**: Adjust the amount that this track sends to the effect using the blue fader. Affects the selected track only.
- 5. Tap the "e" button or the effect name to open the effect rack.

Rearranging effects

You can change the position of insert and send effects by moving them to a different slot (of the same track). To do so, tap and hold the effect to be rearranged, and drag it vertically to another slot.

Pre- and post-fader effects

To change the number of pre-/post fader slots, tap and drag the blue separator line up or down. Effects above the line are applied before the track's volume and pan is applied. Effects below the line are applied after the track's volume and pan.

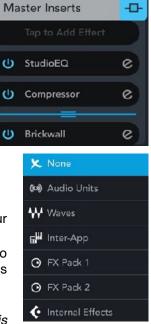
Default Inserts

There are two insert effects placed into each track for quick access, the Channel Strip and StudioEQ effect.

Side-chaining

Side-chaining refers to the routing of a track's audio output to another track's effect. In practice, the most common use case is to achieve a pumping sound used by many genres of music like pop, techno, hip hop. This can be achieved by using a compressor (like the one in the Channel Strip effect) on a track that contains pads or vocals for example, and selecting a drum or bass track as the side-chain input. The pads/ vocals track's volume will be reduced whenever the drum/bass track's volume peaks over a certain threshold, thereby creating a pumping effect. This is just one of many use cases, as the Channel Strip's noise gate also has a side-chain input, as do many third-party (Audio Unit on iOS) effects (compressors, gates, equalizers etc.).

The side-chaining button appears in the effect rack's tool bar for effects that have a side-chaining audio input, such as the Channel Strip and certain Audio Unit effect plug-ins. Tapping it shows a list of tracks, where a track for the input signal can be selected. Tapping it again, disables it. Tapping the small arrow allows the selection of a different track for input.





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Effect Rack

The Effect Rack gives you full control over every effect in Cubasis.

- Read: When enabled, all automation data on this effect is read and applied during playback.
- Write: Activate this button to record automation data live during playback / recording.
- Automation: Tap this button to open the <u>Automation Editor</u> with the current effect parameter selected.
- On / Off: Toggles whether the current effect is active.
- **Side-chaining**: This button is visible for effects that have a side-chaining audio input. It allows you to toggle side-chaining and select an input track.
- **MIDI input:** This button is visible for effects that have a MIDI input port. It allows you to select a MIDI track as input. Typical use cases are Autotune and Vocoder effects, such as **Waves Tune RT**.

Many linear effects feature a **Mix** fader. This parameter controls the percentage of processed sound that is mixed to the original signal.

Note: Non-linear effects are dependent on dynamic parameters, as opposed to linear effects. The compressor is a prime example of non-linear signal processing, as the amount of gain reduction depends on the current volume level.

Audio Unit effects

Third party apps with Audio Unit functionality can act as instrument or effect plug-ins that integrate directly into the Cubasis workflow. Find more information <u>here</u>.

Inter-App Audio effects

Inter-App Audio is a universal routing system for iOS, allowing you to route audio, MIDI and effects between Cubasis (host) and compatible node apps in realtime. Find more information <u>here</u>.

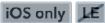
Effect presets

Press the Presets button to the top left of the rack and a list of presets will open below. Tap a preset to load it and apply it to your effect. Cubasis features factory presets for both internal effects and FX packs.

- Save: Save the current parameter setting as preset.
- Share: Share a preset via apps like Dropbox, Google Drive, Mail, iCloud, and more.
- **Delete**: Delete the selected preset.
- Rename: Select a preset and tap the e icon next to it to rename it.
 Note: Presets are not visible in the MediaBay. Deleted presets can be restored from the Trash folder with a file manager app (such as the Files app on iOS).







Channel Strip



The channel strip module is an effect suite hard-wired into every channel and contains the following effects:

- Cut Filter: A basic low and high cut filter covering the entire audible frequency spectrum.
- Noise Gate: Offers the same functionality as the Noise Gate insert effect with the additional option to use a sidechain filter which uses a filtered version of the input signal as reference for the noise gate to work with.
 - Hit **SC** to activate the internal sidechain filter. If external side-chaining is enabled for the Channel Strip (via the button in the effect rack's tool bar), both the Noise Gate and the Compressor will use the side-chain input signal from the other track.
 - Use the Freq and Q knobs to shape the reference signal.
 - Toggle **Listen** to only hear the filtered reference signal.
- **Compressor**: Works like the Compressor insert effect with the **Make Up** parameter allowing to raise the overall output signal after compression. This parameter as well as the compressor's **Release** can be set to automatically adjust during playback. It also supports **side-chaining**.
- **Saturator**: Can be used to add character and warmth or slight distortion to your sound, emulating analogue reel-to-reel or tube processing techniques.
 - Choose between Tape or Tube model emulation.
 - Adjust the distortion factor with the **Drive** knob.
 - Set the effect's frequency range with the high and low EQ knobs.
 - The **Gain** knob controls the output level of the effect.

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Master Strip



The Master Strip Plug-in Suite allows you to make individual tracks and complete projects sound excellent in an intuitive and creative way right within Cubasis. Expand or reduce the stereo width of your audio with the Stereo Imager, monitor and compress specific frequency ranges with the included Multiband Compressor, then use the Loudness Maximizer to boost the overall level of your final mix to perfection.

Multiband Compressor

Multiband Compressor allows a signal to be split into three frequency bands. You can specify the level, bandwidth, and compressor characteristics for each band.

- **On/Off**: Activates/Deactivates Multiband Compressor and its corresponding sections.
- **Graphical Display**: To define the frequency range of the different frequency bands, use the handles at the top of the display.

To attenuate or boost the gain of the frequency bands by $\pm 15 \, dB$ after compression, use the handles at the top of each frequency band.

- Threshold: Signal levels above the set threshold (-60 to 0 dB) trigger the compressor.
- Ratio: Sets the amount of gain reduction applied to signal above the set threshold.
- **Output** :Sets the output gain.

Stereo Imager

The Imager module allows you to expand or reduce the stereo width of your audio in up to three bands. This way you can independently adjust the stereo image in defined frequency domains.

- On/Off: Activates/Deactivates Stereo Imager and its corresponding sections.
- **Graphical Display**: To define the frequency range of the different frequency bands, use the handles at the top of the display.

To attenuate or boost the gain of the frequency bands by $\pm 15 \, dB$ after compression, use the handles at the top of each frequency band.

- Width: Allows you to control the stereo width per band.
- **Pan**: Allows you to pan the signal left/right.
- **Output**: Sets the output gain.

Loudness Maximizer

Loudness Maximizer raises the loudness of audio material without the risk of clipping. The plug-in provides two modes, Classic and Modern, that offer different algorithms and parameters.

- On/Off: Activates/Deactivates Loudness Maximizer.
- Classic: Classic mode provides the classic algorithms which is suited for all styles of music.
- **Modern**: In Modern mode, the algorithm allows for more loudness than in Classic mode. This mode is particularly suited for contemporary styles of music.
- **Optimize**: Determines the loudness of the signal.
- **Soft Clip**: If this button is activated, Maximizer starts limiting or clipping the signal softly. At the same time, harmonics are generated, adding a warm, tube-like characteristic to the audio material.

- Mix: Sets the level balance between the dry signal and the wet signal.
- **Output**: Sets the maximum output level.

RoomWorks SE



The RoomWorks SE plugin is available to all users registered at MySteinberg.

RoomWorks is a high quality digital reverb simulation plugin. It has the following parameters:

- **Predelay**: The amount of time before the onset of reverb. This allows you to simulate larger spaces by increasing the time it takes for first reflections to reach the listener.
- Reverb Time: Reverb time in seconds in which the effect is audible.
- **Diffusion**: This affects the character of the reverb tail. Higher diffusion is smoother while less diffusion can be clearer. This emulates changing the types of surfaces in a room (brick vs. carpet for instance).
- EQ Lo / Hi Level: This affects the decay time of low / high frequencies. Normal room reverb decays quicker in the high and low frequency range than in the midrange. Lowering the level percentage will cause low / high frequencies to decay quicker. Values above 100% will cause low / high frequencies to decay longer than the midrange.
- Mix: Determines the blend of dry (unprocessed) signal to wet (processed) signal.

Reverb

PRE-DELAY	IAI	REVERSIME		
PRE-IJELAY				
	1.69 s	36 ms	70 %	50 %
	(169 s)		\bigcirc	So %
	REVERBITIME	PRE-DELAY	BRIGHTNESS	MIX
Steinberg				re verb

Reverb simulates a certain type of space (e.g. room, hall) surrounding your sound and reflecting it.

- **Predelay**: Period of time before the effect sets in. In larger halls, it often takes a fraction of a second before the reflected sound is audible.
- **Time**: Amount of seconds in which the reverb is audible. The more time, the larger the emulated space seems.
- **Brightness**: The brighter your reverb, the more higher frequencies are emphasized and vice versa. This is useful for setting the right atmosphere.

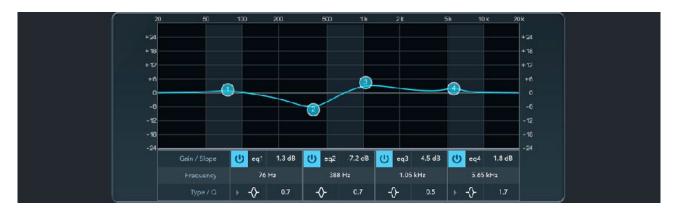
Delay

	Timing	ł		1		ιų.	Dotted	50 % 	
	Beat	1/4 1	78 1	- <u>1</u> e	1/32 1	1/64 I			
	Feedback	0 10 1 1 1 1			70 80 9 1 1 1 1	0 100%	52 %		
)steinberg								Мік	de

Delay repeats your sound, creating an echo effect.

- **Time**: Normal leaves the beat unchanged, whereas Dotted extends it by 50%; Triplet changes the 1/4 meter to 1/3.
- Beat: Sets the interval of the delay, which also depends on the song tempo.
- Feedback: Higher feedback increases the number of delays and therefore the duration of the effect.

StudioEQ



The 4-band equalizer (EQ) controls the strength of all audible frequencies within your sound, allowing you to cut or boost various frequencies. For this purpose, 4 bands are provided, displayed as number handles (1-4) on the graph and their properties specified in the columns labeled eq 1-4 below.

- **On / Off**: Provides the option to turn off unneeded bands.
- Gain / Slope: (y-axis) Volume alteration of your band's frequency. Values above 0 dB result in a boost, negative values in a cut.
- Frequency: (x-axis) Determines the band's center frequency.
- **Type**: EQ bands 1 and 4 can act as parametric, shelving, or high/low-cut filters, while EQ bands 2 and 3 are always parametric filters.
- **Q**: The Q-Factor controls the bandwidth. Reduce it for filtering accross broader frequency spectrums, or turn it up for more precise control.

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- Double tap a number handle to reset its corresponding band.
- · Pinch on a number handle to adjust its Q-Factor.



ShelfEQ

The Shelf-Equalizer simply lets you control the strength of low (Bass) and high (Treble) frequencies within your sound.

Compressor



The Compressor is useful for mastering tracks as well as your whole song. While it lowers peaks in your wave material that might otherwise cause clipping, it allows you to raise the general gain of your song, therefore adding more power to the final product.

- Threshold: If your sound is louder than the threshold level, it gets reduced.
- **Ratio**: Determines the amount of sound reduction, e.g. if your ratio is 1:6 and your sound reaches 6dB above the threshold limit, it will be reduced by 1dB.
- Attack / Release: Specifies the amount of time it takes to reach full compression / to get back to 0% compression afterwards.

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• **Output**: Determines the volume level of your processed sound.

15.0 dB				-4.0 dB
- ₁ -	In Level		-6 dB	
2 2	Reduction		-15 dB	I I I I I I I I I I I I I I I I I I I
2 2				
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	Attack	0 10 20 30 40 50 CO 7C 40 90 1CO % 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 %	
	Alack	and the second se	20 /8	
		0 10 20 30 40 50 60 70 80 90 160% 1 1 1 1 1 1 <u>1 1 1</u> 1 1 1 1 1 1 1 1 1 1		
	Relaase		4C %	
Drivo				Output

Limiter

The Limiter lets you fine-tune your sound's gain (volume).

- Drive: Multiplies your audio signal before entering the limiter.
- Attack / Release: Specifies the amount of time it takes to reach the highest limitation level and how long the effect lasts afterwards.
- Output: See compressor.

Brickwall Limiter

In Level				
Reduction		-	-2 cB	
Out Level			-8 cB	
Threshold			-8.4cB	
Release	000 I		613.9ms	
⊙ steinberg				brickw

The Brickwall Limiter ensures that audio signals (even short ones) always stay below a set limit without creating audible artefacts.

- **Threshold**: Sets the lowest input level in dB where reduction kicks in. If the input signal exceeds the threshold, the gain is reduced.
- **Release**: Specifies the duration the reduction lasts after the input signal falls below the threshold.
- Gain Reduction: If this level indicates constant limiting, try raising the threshold or lowering the overall gain level of the input signal, as the Brickwall Limiter is primarily designed for cutting occasional signal peaks.

Note: By default, a Brickwall Limiter is placed at the end of the audio signal chain, i.e. as the last master insert. To access it, open the mixer and tap the "**e**" button on the Stereo Out channel.

Ma	Master Inserts		
	Tap to Add Effect		
U	StudioEQ	e	
U	Compressor	e	
υ	 Brickwall	e	
		e	

Noise Gate

	In Level		-7 dB	ingni ze zeni h
Ξ Ξ	Reduction		-0 dB	
			io's	
	Range		- 81 %	
		D 10 20 30 40 50 20 7C 40 90 10 1 1 1 <u>1 1</u> 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Attack		18 %	
		D 10 20 30 40 50 60 7C 80 90 10 T 1 1 T 1 T 1 1 1 <u>1 1</u> 1 T T 1 1 T 1	co %	
	Release		54 %	
		Constant of the second s		
Threshold				Output

The Noise Gate filters out audio signals below certain volume levels, reducing unwanted noise artefacts in the process.

- Threshold: If your sound is quieter than the threshold level, it gets reduced.
- **Range**: Determines the amount of sound reduction by the gate. For example, set the range to 50% to half the gain of all signals below the gate threshold.
- Attack / Release: Specifies the amount of time it takes to reach full gating / to get back to 0% gating afterwards.
- **Output**: See compressor.

Spin FX



The Spin FX unit offers a wide variety of DJ-like style breaks, tape stops, stutters and filter effects that can be triggered live and recorded via the <u>Automation</u> **Write** mode.

- **Time Grid**: Sets the measurement that all effects will be relative to. Selecting the sixteenth note for instance will make every effect play four times as fast / short as the quarter note.
- Filter: Works like the Filter insert effect. See below for more information.
- DJ (Red): Includes a Backspin, two Scratch and four Tape Stop / Start effects.
- Stutter / Slur (Green): Generates a slice of the current audio stream as long as the selected measurement relative to the time grid and repeats it as long as the button is pressed. Pressing 2 or 4 will stretch the audio by said factors.
- Cycle (Blue): Repeats the next 1 / 2 / 4 beats.
- Staccatto / Mute (Yellow): Either toggles the audio on / off every beat or mutes it entirely.

Filter



Using the Filter, you can cut off either high or low frequencies of your sound and control its resonance.

- The **cursor** controls cutoff and resonance at the same time. The higher vertically, the higher the resonance. When moved to the right, the cutoff gets higher.
- **HP** (Highpass): Only lower frequencies are dampened. The sound remains unchanged if the cursor is positioned at the far left.
- **BP** (Bandpass): Enables low and high cutting, the sound remaining unchanged if the cursor is in the middle of the pad.
- LP (Lowpass): The opposite of Highpass; high frequencies are dampened. Move the cursor to the far right for the original sound.

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Chorus

50 %		50 %
	0.05 1	
Depth		— — — Mix cho rus

The Chorus effect enriches your sound by having multiple sources playing it (e.g. ensemble) with frequency modulation.

- **Depth**: The amplitude of the modulation. More depth means a higher pitch discrepancy within your sound.
- Rate: A higher rate increases the modulation speed.

Flanger

Flanging your sound takes the chorus effect to the next level, creating a metallic sweeping effect.

- Depth: See Chorus.
- Rate: See Chorus.
- Feedback: Feedback controls the intensity of the resulting sweep effect.

Phaser

Similar to the Flanger, the Phaser creates a sweeping effect, sounding even more synthetic and extraterrestrial.

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50 %			50 %
	Rate	20.00 Hz 1 00 Hz	
	P 10 20 30 40 50 60 7C 80 90 F 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 100 % 50 %	
Depth Steinberg			Mix pha

Amp Sim



The Amp Simulator digitally emulates a physical amplifier (such as guitar or bass amps). 8 different models are available.

- Drive: Increases the sound level, creating an overdrive effect.
- Treble: Determines the amount of high frequencies.



Overdrive

The Overdrive effect adds distortion to your sound by clipping it.

- Drive: Determines the distortion intensity.
- Gain: Controls the resulting volume level.

Phase Inverter

This utility inverts the phase of your track, i.e. it flips the audio signal vertically. It can be useful for detecting phase shifts or other unwanted side effects as a result of stereo recording.

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Cubasis FX Packs



Two effect packs are available for purchase in the In-App Shop:

- FX Pack 1: Plug-in suite with 6 delay & reverb effects
- FX Pack 2: Plug-in suite with 6 classic vintage effects

Any purchased item will be linked to your Apple ID. If you switch to another device or can't find your items enabled in the Effect Rack, simply hit the **Restore purchased** button in the Shop.

FX Pack 1

Tape Delay



Simulation of a vintage 4-head analog tape delay.

- Time: Delay time. If the Sync parameter is set to On, the delays time is set by using various note values.
- Sync On / Off: By activating Sync, the delay repeats are synced to the tempo set in your host application.
- **Feedback**: Feedback controls the number of delay repeats.
- Vintage: Amount of vintage "color" and tape flutter.
- Head 1: Delay level 1 (output is panned left).
- Head 2: Delay level 2 (output is panned right).
- Head 3: Delay level 3.
- Head 4: Delay level 4.
- Pan 3+4: Varies the panning of delays 3 & 4 from center hard left / right.
- Vol 3+4: Varies the volume of delay outputs 3 & 4.
- Mix: Wet / dry mix.

Stereo Delay

•	DAMP	FEEDBACK	TIME	BALANCE MIX	•
	1		120.00		
			DELAY ms/sec/bpm		_
	9	- Ø-			- 8
					-
	50 %	50 %	SYNC _	50 % 50 %	
۲	30 %	30 %	31110-	50 70 50 70	۲

A stereo-in / stereo-out delay.

- Delay: Delay time. If the Sync parameter is set to On, the delay time is set by using various note values.
- **Feedback**: Feedback controls the number of delay repeats. For minimum feedback set the slider to the mid position. By moving the slider to the left or right "cross delay" is applied, where left output feeds back into right input or vice versa.
- Sync On / Off: By activating Sync, delay repeats are synced to the tempo set in your host application.
- Balance: Ratio of left delay time to right delay time.
- Damp: High-cut filter to soften delay repeats.
- Mix: Wet / dry mix.



Long Delay

A mono in / stereo out delay that allows to set delays of up to four seconds.

Delay:Delay time. If the Sync parameter is set to On, the delay time is set by using various note values.

- Sync On / Off: By activating Sync, delay repeats are synced to the tempo set in your host application.
- Feedback: Feedback controls the number of delay repeats.
- Balance: Ratio of left delay time to right delay time.
- Damp: High-cut filter to soften delay repeats.
- Mix: Wet / dry mix.

Stereo Width



A stereo width enhancer with 4 modes.

- Mode: Selects between four modes of stereo width enhancement:
 - Adjust: Adjust existing width of stereo signal.
 - Swap: Like Adjust but swaps left and right channels.
 - Comb: A stereo comb filter effect.
 - Haas: Synthesizes stereo width by delaying one channel.
- Delay: Delay time (not used in Adjust and Swap modes).
- Width: Overall width adjustment.
- Low / Mid / High: Width adjustment for low / mid / high frequencies.
- Out: Output level trim.

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Non-Linear Reverb



A "gated" reverb with a sharp cutoff.

- **Time**: Length of reverb tail. It also allows you to change the sound from dense early reflections to a trashy, grainy 80s-type reverb.
- Low EQ: Low-cut EQ.
- **High EQ**: High-cut EQ.
- Mix: Wet / dry mix.

Early Reflections



A short, dense reverb for simulating small acoustic spaces or close proximities and to thicken / blur sounds.

- **Time**: Length of reverb tail. It also allows you to change the sound from dense early reflections to a trashy, grainy 80s-type reverb.
- Low EQ: Low-cut EQ.
- **High EQ**: High-cut EQ.
- Mix: Wet / dry mix.

FX Pack 2

Pan & Tremolo



Autopan and Tremolo effect as used in vintage electric pianos.

- Rate: Sweep rate.
- Phase: Relative phase of left and right channel amplitude modulation to vary from tremolo to autopan.
- Shape: Shape of modulation waveform from thin pulase, through sine, to fat pulse.
- Mix: Wet / dry mix.

Rotary Speaker



Simulation of a rotary speaker cabinet with high and low rotors.

- Rate: Master speed control: Stop, Slow, Fast.
- Dirt: Amount of overdrive.
- Lo / Hi: Crossover frequency between low and high rotors.
- Width: Stereo width.
- **Tone**: Adjust the tone of the overdriven signal.
- **Hi / Lo Speed**: Speed of high and low rotor.
- Hi / Lo Acc: Acceleration of high and low rotor.
- Mix: Wet / dry mix.

Bit Reduction



Digital "Lo Fi" quality degradation.

- Mode: Sets whether the bit depth is fixed or depends on the signal level (Linear or Companding).
- Rate: Simulated sample rate.
- **Depth**: Sample bit depth.
- Slew Rate: Maximum rate of change waveform for a soft, wooly distortion.
- Mix: Wet / dry mix.

TalkBox



Modulated vowel formant filter.

- Rate: LFO Modulation rate (Optional temo sync).
- Depth: LFO Modulation depth.
- Vowel: Center setting: Vowel produced when there is no modulation.
- Attack: Rate of response to a rising input signal level.
- Release: Rate of response to a falling input signal level.
- EG Amt: Amount of vowel modulation by input signal level.

Wah Pedal



An Auto-Wah effect.

- Rate: Modulation rate (optional tempo sync).
- **Depth**: Modulation depth.
- Pedal: Adjusts filter frequency.
- Mode buttons:
 - Auto: Envelope controlled wah effect.
 - Pedal: No modulation, pedal parameter sets frequency.
 - Mod: LFO modulation. Rate parameter controls the modulation rate.
- Resonance: Sets the amount of filter resonance.
- Tracking: Adjusts envelope tracking speed in Auto mode, and envelope rate modulation in Mod mode.

Enhancer



Psycho acoustic spectrum shaping.

- High Depth: High frequency boost, combined with mid cut.
- High Tune: High / mid tune.
- Low Depth: Low frequency boost.
- Low Tune: Low frequency tune.

Waves Plug-ins

Waves, the world's leading manufacturer of effect processors celebrate their 25th anniversary and debut on iOS with a fine selection of pro-grade plug-ins - exclusively available through in-app purchases in Cubasis.

Any purchased item will be linked to your Apple ID. If you switch to another device or can't find your items enabled in the Effect Rack, simply hit the **Restore purchased** button in the Shop.



Waves L1 Ultramaximizer

The Waves L1 UltraMaximizer combines an advanced peak limiter, a level maximizer, and a highperformance re-quantizer (IDR). It maximizes both the level of the digital signal and the resolution of the final file. L1 UltraMaximizer introduces between 64 and 96 samples of latency, depending on the Domain setting. Generally, L1 UltraMaximizer should be the last processor in your signal flow or workflow.



Peak limiter section

- Input fader: Controls input level of the plugin. Range: -infinity 0 dB
- Threshold: Sets the level at which the peak limiter will begin to act on the input signal. Range: -30 dB 0 dB
- Release: Range: 0.01 ms 1000 ms
- Auto release: Dynamically chooses the optimal release value for a wide-ranging input. RMS and peak transients are analyzed and reacted to differently

IDR Section

- **Quantize**: Controls the final bit depth of the L1 output. It is not related to the input bit depth.
- **Dither**: This controls the Type of dithering process (i.e., Type1, Type2, or none)
- **Shaping**: Select between the three noise shaping options. (i.e., Moderate, Normal, or Ultra)
- **Release**: Sets the time it takes for gain adjustment to return to 0 when energy falls below the threshold. Range: 1 ms – 10,000 ms
- **Domain**: Sets how peaks will be measured and processed. Set this based on how the signal will be exported, reproduced, and replayed.

Waves Q10 Paragraphic Equalizer

The Q10 is a multiband paragraphic equalizer that provides up to ten bands of flexible equalization. It provides very large Q values and large boosts and cuts, so it is a very effective tool for surgically removing problematic harmonic noises.

Controls

• **Input level**: Adjusts the input to the EQ section. Range: -infinity – 0.0 dBFS

iOS only



睂

SHOP



- **Band select**: To select a band, click on a band marker in the graph or Band ID button in the parametric section. To turn a band in on or off, click on the parametric On/Off button or double-click on the marker.
- Gain: Adjust the Gain knob vertically or drag vertically on a band marker to adjust gain. Range: ±18 dB
- **Frequency**: Adjust gain with the paragraphic knob or by moving a band marker sideways. Range: 16 Hz 21,357 Hz
- Q: Adjusts Q value. Range: 0.5 30
- Filter Type: Choose between bell, low or high shelf, low or high pass and proportional. Ctrl/CMD + click on a marker in the graphic to toggle to a filter type. The shaded area on the graphic display indicates how the filters are affecting the signal. It is color-coded to reflect the selected band.
- Output Gain: Range -24 dB +12 dB. Trim used to move.
- Link: The L/R sides of a channel can be controlled together or independently. The Link button sets this behavior.

Waves AudioTrack

AudioTrack combines an EQ, Gate, and Compressor in a single plugin. It functions like the channel EQ and dynamics sections on a mixing console.



EQ Section

The AudioTrack four-band EQ can be controlled with both parametric and graphic controls.

- Input level: Adjusts the input to the EQ section. Range: -infinity 0.0 dBFS
- **Band select:** To select a band, click on a band marker in the graphic display or toggle through the bands with the Band ID button. To turn a band on or off, click on the band On/Off button or double-click on the band marker.
- Gain: Drag vertically over the Gain knob or over a band marker to adjust gain. Each band offers 18 dB of boost or cut with variable Q for bells, and a 12 dB-per-octave response for shelf or pass filters.
- Frequency: Adjust gain with the paragraphic knob or by moving a band marker sideways. Range: 16 Hz - 21,357 Hz
- **Q**: Adjusts Q value. Range: 0.5 30

• **Filter Type**: There are five filter types: Bell, Hi-Pass (Low-cut), Low-Shelf, High-Shelf, and Low-Pass (Hicut). Available filter types vary according to the selected band.

The shaded area on the graphic display indicates how the filters are affecting the signal. It is color-coded to reflect the selected band.

Dynamics Section

- **Threshold**: The gate will close or the track gain will be attenuated when input approaches this value, according to the values in the other controls. Range: -infinity 0 dB
- Floor: Defines the maximum amount of gain attenuation that the gate will apply when closing. Range: -infinity 0 dB
- **Attack**: Determines the time it takes for the gate to open when energy goes over the threshold. Range: 0.1 ms 1000 ms
- Release: Sets the time it takes for the gate to close. Range: 1 ms 10,000 ms

Compressor / Expander Section

- **Threshold**: Compressor threshold is set with the yellow control in the center part of the section. Range: -55 dBFS 0 dBFS
- **Ratio**: Defines how the gain will be adjusted as the threshold is approached. Values below 0.5:1 and 1:1 will result in gain boost (expansion); values between 1:1 and 40:1 will result in gain reduction (compression). Range: 0.5:1:1 1:40
- Attack: Attack time determines how long it will take for the gain adjustment to reach its target. Range: 0.1 ms 1000 ms
- **Release**: Sets the time it takes for gain adjustment to return to 0 when energy falls below the threshold. Range: 1 ms – 10,000 ms

Waves Tune Real-Time

Waves Tune Real-Time is an audio processor that allows for correction and manipulation of pitch in vocal performances. It detects the signal's pitch, determines what the target pitch should be, and then corrects to the nearest legal note—in real time. The plugin does not process polyphonic sounds.



Quick Start

- 1. Insert the Waves Tune Real-Time plugin onto the vocal track. We recommend that it is your first insert on the track.
- 2. Set global parameters such as Range and Scale.
- 3. Audition the incoming vocal and adjust the Note Transition control. Begin by setting Note Transition to the lowest value that does not result in quantization between notes. You may then want to back off a bit from this setting.
- 4. Adjust the Speed in the same manner. Under normal circumstances, set Speed to the lowest value that does not produce quantization artefacts.
- 5. To use another track's MIDI output as target pitch, activate the *Target Pitch* button, then tap the MIDI Input button in the effect rack's toolbar and select a MIDI track.

Using Waves Tune Real-Time as an instrument that enhances note quantization:

- 1. To create a quantization effect, you'll usually want to turn off the Vibrato control. If, however, the incoming vocal contains wide vibrato, turn on the Vibrato control and set the Vibrato Depth to 0.
- 2. Set the Speed and Note Transition controls to their minimum values.

Target Pitch

When Target Pitch is selected, a note played by another MIDI track forces the target pitch of the vocal note. You can actually "play" the pitch of the vocalist's performance. Target Pitch can be used in real time for correcting or as an artistic effect.

An example: If the plugin detects A4, and you play C4, then the vocal will be shifted up. The speed of the correction is determined by the Speed and Note Transition controls. An incoming note that is not within the Range cannot be pitched shifted.

To set this up, activate the Target Pitch button, then tap the MIDI Input button in the effect rack's toolbar and select a source MIDI track.

Correction Controls

- Speed: Sets the correction speed, in milliseconds. Range: 0.1 ms to 800 ms, logarithmic, in 0.1 ms steps
- Note Transition: Note Transition is when a new pitch is introduced from a previous one. It determines how fast correction will be applied. Range: 0.1ms to 800 ms
- Link: Ties together the movement of the Speed and Note Transition controls.
- **Tolerance**: Two controls set the threshold and delay at which Note Transition to takes place. Resolution: Cents and Time.
- **Cents**: This value is added to the internal threshold (50 cents) that triggers pitch correction. Range: 0 cents to 40 cents.

- **Time**: Sets the amount of time that a note must hold, after pitch detection, before correcting pitch. Range: 0 ms to 300 ms
- **Important**: Defining the correct scale of the song will make most legal notes "wider" and protect them from glitches between neighboring notes. Large Tolerance settings may yield unwanted results in a section of a scale where two consecutive half notes are legal. Often a singer adds short nuances in pitch. Setting values that are too high might "enforce" or flatten correction, and defeat what the singer had intended. When there are large intervals between legal notes, higher settings probably will not affect the performance.
- Vibrato On/Off: On: Note transition will not affect natural vibrato. Off: Note transition will affect natural vibrato.
- Vibrato Depth: When Vibrato is On and Depth is set to 100%, the natural vibrato will be preserved, even at fast Note Transition values. When Vibrato Depth is set lower than 100%, frequency modulation is reduced. A zero value will flatten pitch. Values higher than 100% exaggerate the frequency modulation aspects of the vibrato. Range: 0% to 100%.
- Correction On/Off: Turns all correction On or Off.
- **Correction %**: Sets how much of the detected correction (to the closest legal note) will be applied to the signal.
- **Correction Meter**: Shows the target note and indicates how much correction is required (in cents) to reach this note.
- Formant Correction: For quantizing effects, you may choose to not use formant correction. This can create the sounds often associated with pitch shifters: "Chipmunks" voice when pitching up, and the opposite when pitching down.
- Meters: The plugin includes the input (IN) and output (OUT) meters standard to Waves plugins. -28 dBFS to 0 dBFS

Global Settings

- **Reference Pitch**: Reference Pitch control adjusts the overall tuning offset for any scale. Range: +/- 100 cents (415.3 Hz to 466.16 Hz.)
- **Root and Scale**: These define the root note for the selected scale. The default scale is a Major scale.
- **Range**: Restricts Waves Tune Real-Time's detection/correction to a specified tonal range (bass, baritone, tenor, soprano etc.), bypassing correction of notes outside that range. This avoids unnecessary vocal processing beyond the desired notes.
- **Important**: Any Note detected outside the Range will be bypassed. No correction will be applied.

Waves H-Delay Hybrid Delay

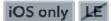
From slap-back echo, ping-pong delay, and tempo-sync with modulation, to filtering, flanging, phasing, and more, Waves H-Delay delivers real old school effects, controlled by a super intuitive interface.



Controls

- **Delay**: Sets the delay time. Range: 1 ms to 3500 ms or BPM multiple (e.g. 1/4 note, 1/8 note, 1/16 note, etc.).
- **Sync**: Sets whether delay time is based on to the host tempo or set manually using time (ms) or BPM multiplier.
- **Depth**: Sets the amount of modulation to be applied. Range: 0 to 100.
- **Rate**: Sets the modulation LFO cycle rate. In BPM or Host Sync mode, the value is a multiplier of the BPM. In MS Sync mode, the rate value is expressed in Hz. Range: 0.1 to 6000 Hz or BPM multiples
- Phase: Reverses the phase for the LR delay lines.
- **Ping Pong**: Activates Ping Pong delay effect mode, spreading the repeats over the stereo image.
- **Feedback**: Sets the amount of feedback signal back into the delay, which controls the level and amount of repeats. At settings of 100 to 200, it controls the delay repetition buildup (which can be used as an "endless" loop). Range: 0% to 200%.
- LP / HP Filters: Controls the Low-pass and High-pass filters frequency cutoff. Range: Off, 20 Hz to 20 kHz
- Filter Link: Use the Link rotary control to move the HP and LP filters together, which makes them work as a Band Pass filter.
- **Dry/Wet Mix**: Controls the amount of the Dry unprocessed signal (0) vs the processed Wet signal (100). Range 0 to 100.
- **Analog**: Sets the analog character preset, which influences noise and saturation. Range: Off, Mode 1 to 4.
- LoFi: Activates the LoFi effect, which influences the frequency response of the delay line.
- Output: Controls the output level. Range: -18 to dB +18 dB.
- **Tap Pad**: Sets the delay time based on your clicks on the pad. Delay Time is set as the interval between the last two clicks. In Host and BPM Sync modes, the delay time will be quantized to the nearest note value.

MIDI Effects



MIDI effects can be added to instrument tracks and will generate patterns based on your keyboard input, MIDI notes or their internal programming. They can be added in the Inspector's <u>MIDI Effects</u> panel.



Note: Only Audio Unit plug-ins can be assigned as MIDI effects, there are no internal MIDI effects yet.

Some MIDI effects feature **multiple output ports**, which can be selected as track input MIDI ports in the Inspector's <u>Routing</u> panel.

Use case examples

Playing an arpeggiated pattern on the keyboard:

- · Load a Micrologue synth.
- Add an arpeggiator MIDI effect via the Inspector.
- Use the on-screen keyboard or an external MIDI input to play chords which are directly translated into arpeggiated patterns.

Recording patterns into MIDI events:

- Do the steps above, then enable the Rec to Track option.
- · Press Record and play chords. The MIDI region will record the arpeggiated pattern as MIDI notes.

Programming MIDI chord notes to play arpeggios when played back / exported:

- Program / record MIDI notes into a MIDI region.
- Add a MIDI effect to the corresponding instrument track.
- Make sure the Rec to Track button is disabled.
- Tweak the settings inside the effect to your liking.
- Play back / export / freeze the track.

Programming a drum pattern with a step sequencer effect:

- No MIDI input or keyboard is required when using a step sequencer effect, as it generates MIDI signals on its own. Use the MIDI thru button to use keys or drum pads independently.
- Add the MIDI effect to the instrument track.
- Program a rhythm into the step sequencer effect. Make sure it uses the General MIDI standard (GM) to trigger the correct samples.
- Play back. If you'd like to further use the pattern as MIDI material, once again enable Rec to Track and press Record. The instrument track will record the pattern as MIDI notes.

Controls

The following two buttons found at the top right of each effect configure the track's behavior regarding MIDI effects. These two settings are not per MIDI effect, but for all MIDI effects of the track.

• Rec to Track: When enabled, notes played on the keyboard or pads will be recorded as the MIDI patterns generated by the MIDI effect. MIDI notes on an instrument track will remain unchanged by the effect.

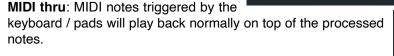
 Keys
 Track
 Track
 Output

 Image: Strack
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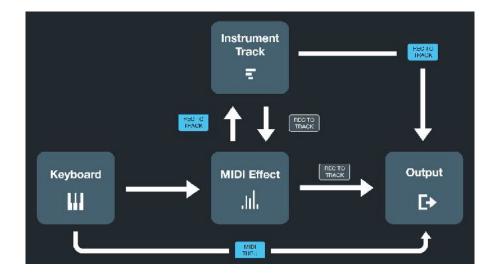
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The image below illustrates the signal flow surrounding MIDI effects.



The mixer is used for controlling and adjusting the output parameters of your tracks to achieve the best mix for your project.



Each **channel** represents one track of your project. Its name is displayed at the bottom.

Use the two finger pinch gesture or the S, M or XL buttons (available on tablets only) to change the **width** of the channel strips in the mixer.

On tablets, you can hold and drag the upper bar up or down to change the overall height of the mixer.

Channels

Each channel holds the following controls:

- Pan fader: Slide horizontally to adjust your track's stereo pan.
- **Volume** fader: Slide the volume fader vertically to set the track's gain. The volume levels during playback or recording are visually shown on its right hand indicator. The display at the bottom of the channel shows the fader's value in decibels (negative values mean a decrease in volume). Note: The pan and volume faders' value can be reset by double tapping them.
- **Mute**: Use this button to toggle whether the channel's track is muted and therefore excluded from playback.
- Solo: Soloing a track (or a group of tracks) excludes all the other tracks from playback.
- **Read**: When enabled, all automation data on this track is read and applied during playback.
- Write: Activate this button to record automation data live during playback / recording. More information on automation can be found here.
- Effects: Use this button to add effects to your track. This article explains how.
- **Monitoring** (audio tracks only): Monitoring outputs the audio input of your track routed through the track's effects. Note: In order to prevent feedback, monitoring only works if hardware (e.g. headphones, a microphone or an audio interface) is connected.
- Setting a track to **Record Enable** lets Cubasis know that you wish to record on this track. You
 can have multiple tracks Record Enabled at a time, which allows for recording on multiple tracks
 simultaneously.







Output Routing

MIDI and audio tracks can be assigned to up to 24 individual outputs (12 stereo pairs) simultaneously. The number of available outputs depends on capability of the connected audio hardware. If no audio interface is connected, only 2 output channels (stereo pair 1/2) are available.

To assign specific outputs, tap the Output display (showing 1/2 by default) and toggle stereo outputs via the buttons in the output popup. This popup window can also be called up by tapping the output panel in the inspector's routing section.

Note:

- If multiple outputs are assigned to a single track, the output panel will display a plus sign, for example "1/2+".
- Only the primary master channel (= the Stereo Output 1/2) has insert effects.
- The send effects only route to the primary Stereo Output 1/2 channel.

Master channel

The last channel to the right of your screen (labelled 1/2 Stereo Out) represents all of your project's channels combined and routes to the first stereo output pair (channels 1 and 2). Consequently, it cannot be soloed or recorded on. You can add up to eight master insert effects, that are applied to the whole mix.

For more information, see the Effects chapter.

Note: By default, a post-fader Brickwall Limiter is assined in order to reduce occasional peaks in the signal.

Metronome output

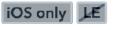
The metronome button is only available on the master channel and additional output channels. This option allows you to select the output destination(s) of the metronome. For instance, to output the metronome only on channel 5, select output 5 & 6 and either pan the metronome to the left (in the setup menu), or pan the output bus 5 & 6 to the left.





1	₽	1/2+	





iOS only LE

LE

The setup menu holds various options for customizing your workflow.

Project Setup

	-	-		
	Project	Sample Rate		Bit Resolution
	General		kHz 48 🔻	Bit depth of audio recordings and mixdown
	User Interface	Undo History Size		
►	Audio	Clear History	100 🔻	
Ξ	MIDI			
ш	Keys/Pads			
12	Metronome			
>	Mixdown / Freeze			

Sample Rate

Your project's sample rate can be set to 44.1, 48 or 96 kHz. New projects have the recommended default values of 48 kHz (or 44.1 kHz if supported by your iOS device).

Increasing this value only makes sense if an audio device is connected that supports the higher sample rate.

When you switch the project's sample rate or import an audio file which is not in the project's sample rate, Cubasis prompts you to convert the audio file(s). It is highly recommended to go forward with the conversion because it results in better quality and lower CPU consumption. However, if you must continue working and cannot wait for the conversion (which can take up to a few minutes depending on the audio file length), you can skip it. Cubasis will convert the files during playback in real-time, resulting in reduced quality and higher CPU consumption.

Note:

- Higher sample rates / bit depths result in larger file sizes and considerably higher CPU consumption which can lead to stuttering during playback! For common projects we recommend using 44.1 or 48 kHz at 24 bit.
- Mixdown is rendered to a WAV file with the project's sample rate and bit depth.
- Different device models support different sample rates. Some devices only support 48 kHz, unless external hardware is connected. 96 kHz is only available if audio hardware that supports this sample rate is connected.

Bit Resolution

This setting only affects audio recordings and mixdown. Possible bit depth values are 16, 24 and 32 bit. Increasing this value only makes sense if an audio device is connected that supports the higher bit rate, or if you wish to create a mixdown with a higher amplitude resolution.

Undo History Size

The size of the available undo history can be configured, from 50 to 500 steps. Once the undo history reaches the selected size, the oldest undo step will be discarded with each new editing action.

The Clear History button immediately deletes the whole undo history of the current project.

General Setup

Project	Arm Selected Track	Keyboard Shortcuts
🖻 General	<u>ل</u>	Open List Default Preset 🔻
III User Interface	Return to Start Position on Stop	Playhead Scrubbing
► Audio	ڻ ا	৩
₩ Keys/Pads		
🔏 Metronome		
>> Mixdown / Freeze		

Arm Selected Track

If enabled, selecting a track will automatically enable recording on it and vice versa. Manually armed tracks will not be influenced by this.

Keyboard Shortcuts

Connect any Bluetooth or cable keyboard to your device or use a keyboard cover for your tablet. Choose between the default (mobile optimized) or the more traditional Cubase preset. Tap the "Open List" button to display a multi-page list of all the possible keyboard shortcuts. On iOS, hold down the command key for a few seconds to display a handy overlay that lists the most important shortcuts. The following table lists the shortcuts and their corresponding actions:

Keyboard Shortcut	Action
Esc, ^ or back button	Close view
Enter 🚽	Open MIDI or audio editor
Space	Play / Pause
R	Record
L	Cycle
с	Metronome
,	Rewind. Hold the Alt (Option) key for reeling.
•	Forward. Hold the Alt (Option) key for reeling.
- and +, or g and h	Zoom horizontally in and out. Hold Shift $ heta$ for vertical zoom.
↑ and ↓	Previous / next track, or select the event or note above / below. Hold Shift $ cdot$ to multi-select.
← and →	Previous / next event or note. Hold Shift $\hat{\mathbf{\Omega}}$ to multi-select.
Cmd ೫ (or Ctrl) + N	New MIDI track. Add Alt for new audio track. Add Shift $\hat{\mathbf{\Omega}}$ for new group track.
Cmd ೫ (or Ctrl) + A	Select all events of a track. Press again to select all events on all tracks.
Cmd ೫ (or Ctrl) + Z	Undo. Hold Shift
Cmd ೫ (or Ctrl) + C	Сору
Cmd ೫ (or Ctrl) + V	Paste
Cmd ೫ (or Ctrl) + X	Cut
Cmd ೫ (or Ctrl) + S	Split
Cmd ೫ (or Ctrl) + G	Glue
Q	Quantize
S	Solo the track. Hold Shift $\hat{\mathbf{\Omega}}$ to solo all tracks.
м	Mute the track. Hold Shift $\hat{\Omega}$ to mute all tracks.
D	Duplicate track

Keyboard Shortcut	Action
Backspace 🗵	Delete the event or note. Hold Shift $\hat{\mathbf{\Omega}}$ to delete the track.
Р	Locators to event selection
Alt + L	Toggle MIDI learn mode

Return To Start Position On Stop

When playback is stopped, the playhead jumps back to the position it originally started at.

Playhead Scrubbing

If enabled, moving the playhead (by sliding on the ruler) will play a short snippet of the song at the playhead's position.

User Interface Setup

Project	Background Color	Screen Mode
🗊 General	Grey 🔻	Tablet XL 🔻
🖽 User Interface	Low Waveform Quality	Show Zoom Panel
► Audio	ڻ ا	•
		Audiobus Panel Position
₩ Keys/Pads		Right 🔻
<u>//</u> Metronome		
>> Mixdown / Freeze		

Background Color

Choose between a bright, grey and dark background color on the arranger.

Screen Mode

Allows to choose a preset to change the size and arrangement of the Cubasis user interface.

Low Waveform Quality

If enabled, audio events in the track list are displayed with a lower detail level, which reduces the CPU and disk load. If you experience stuttering during playback or scrolling, enable this setting.

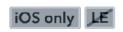
Show Zoom Panel

Toggles the zoom panel in the bottom right corner of the arranger and the editors. Use the panel's arrow buttons to choose between horizontal and vertical zoom, and the slider to quickly set the zoom level in steps.



Audiobus Panel Position

Choose your desired location of the Audiobus overlay panel (bottom / left / right).



Audio Setup

E Project	Background Audio		Latency		
🗊 General		U	Total: 28.9 ms 🥐	5.3 ms	•
🔛 User Interface	Studio Quality		Multi-core Processing		
► Audio	iOS "measurement" mode minimizes the amount of system-supplied signal processing	U	U Extra Guard Buffer	Default	•
	Bluetooth / AirPlay		Audio Recording Offset Compensation		29 ms
₩ Keys/Pads	Output Device	U		Cal	ibrate
🔏 Metronome	Play Audio Tracks While Recording		Input Gain		50%
> Mixdown / Freeze	Enable this for looper-like behavior	U			

Background Audio

If background audio is switched on, Cubasis playback will continue in the background, even if you press the home button or start another app. Combined with MIDI, background audio provides a set of useful possibilities:

- Play live to a Cubasis backing track with another music app.
- Play live to music coming from another app with Cubasis instruments.
- Press the sleep / wake button to switch off your screen during a long playback.

Note: Enabling background audio consumes battery power significantly, even if your screen is turned off, other apps are running or Cubasis is not active triggering any sounds. To quit Cubasis (and subsequently background audio), double tap the home button, tap and hold the Cubasis app icon, then select the red minus symbol.

Latency

The latency value sets the system's audio buffer length in milliseconds. Possible values range from around 1.3 ms (64 samples at 48 kHz) to 43 ms (2048 samples at 48 kHz), depending on the sample rate. Lower latency values are useful for recording or playing an instrument or vocals live, but negatively impact performance. Select a high latency for best performance when arranging or mixing complex projects, or whenever crackling occurs and the DSP meter (in the Inspector) reaches its maximum.

iOS only

The question mark button brings up a breakdown of the total I/O latency. This enables you to identify what makes up the largest part of the total latency. Note that on Android, device I/O latency is unknown, only system and guard buffer latencies will be displayed.

Note: As this is an iOS wide setting that applies to all apps, only the first audio app you have launched is permitted to change it. If altering the latency in Cubasis is impossible, another audio app is blocking access. This can be solved by either using the other app to change the latency or by quitting all apps and launching Cubasis first.

Multi-core Processing

In most situations, Cubasis will perform best if audio rendering is distributed over all CPU cores. Multi-core rendering yields the most performance benefit when playing projects with many tracks and effects on devices with many CPU cores. However, it comes with additional latency because an extra "guard buffer" is required for multi-core rendering. Setting the guard buffer to "low" makes it the same length as the system's audio buffer (which, on iOS, is the value set for "Latency" above). Default is twice the length of the system's buffer, high is 4x and max is 8x.

If you experience crackling noise and high DSP meter levels (in the Inspector), increase this value, but be aware that this also increases the latency between input (e.g. pressing a keyboard key, or audio monitoring) and audio output.

On Android, the question mark button next to the total latency brings up a breakdown of the total I/O latency. This enables you to identify what makes up the largest part of the total latency. Note that on Android, device I/O latency is unknown, only system and guard buffer latencies will be displayed.

Studio Quality

On iOS, enabling this mode minimizes all input and output signal processing that is normally applied by iOS. This can significantly reduce the output volume and the gain of audio recordings.

On Android, this setting only minimizes the input signal processing (output is unaffected) and maximizes the system's sample rate conversion quality, in case automatic sample rate conversion must be applied.

Audio Recording Offset Compensation

The I/O loopback latency inherent in every system leads to audio recordings being out of sync with the metronome on the track. If this value is set to the exact loopback latency of your device (and external hardware setup), audio recordings will be in sync without the need of manually nudging recorded audio events to the right position.

Tap the **Calibrate** button and follow the instructions to automatically set this value.

Bluetooth / AirPlay

Enables Bluetooth / AirPlay transmission.

- As both Bluetooth and AirPlay conflict with audio recording, this option will automatically be turned off once you start audio recording.
- · Both services operate with fairly high latency.
- **Bluetooth**: Make sure you have turned on Bluetooth in your device settings and paired your device with a Bluetooth accessory (headphones / speakers).
- **Airplay**: If an AirPlay device is connected via WiFi, an additional popup will allow you to select it. Everything else is configured in your device's iOS settings.

Play audio tracks while recording

If enabled, existing audio events on a track are audible while recording or monitoring on the track.

By default, this setting is disabled which means that audio events on this track won't be played if monitoring is enabled of if the track is being recorded on.

Input Gain

Adjust the input gain scale with this slider if the recorded audio material is too quiet or if clipping occurs although the track's volume is set to 0dB or less. On iOS, the input gain slider is only enabled if an audio device that supports input gain scaling is connected (some devices also support internal microphone gain adjustment).

Output Device

A list of all possible output devices to route the audio output to.

Input Device

A list of all possible input devices to receive the audio input from.

MIDI Setup

Project	MIDI Input Only for Armed Track	MIDI Learn
General	<mark>ى</mark>	U Learn Presets
E User Interface	Note Coloring	Mackie Control / HUI
► Audio	Track Color 🔻	U Ports
T MIDI	MIDI over Bluetooth	Send MIDI Clock
₩ Keys/Pads	Host	U
🥂 Metronome	Ableton Link Not connected	
> Mixdown / Freeze	Settings	

MIDI input Only for Armed Track

If turned on, this option limits MIDI input signals to record-enabled tracks only, e.g. if you are playing on an external keyboard, it will only be registered if its corresponding track has recording enabled.



Android only

Android only

Send MIDI Clock

If MIDI clock is activated, the following signals are sent to all the connected MIDI devices and background apps:

- MIDI clock is sent continuously during playback.
- MIDI start, continue and stop messages are sent when playback is toggled.
- The MIDI song position pointer is sent when the playhead is positioned.

Note:

- MIDI clock can only be used to synchronize MIDI data, not digital audio.
- Cubasis does not support receiving MIDI clock parameters from other devices.

Note Coloring

Choose which coloring scheme is applied to notes in the Key Editor: Track color, velocity value or key.

MIDI over Bluetooth

The MIDI over Bluetooth LE (low energy) functionality lets Cubasis send or receive MIDI data to or from other Bluetooth-enabled devices. The following combinations are possible:

- iOS device \rightarrow iOS device
- iOS device ↔ Mac
- Compatible MIDI hardware ↔ iOS device

To set up a connection, first make sure that Bluetooth is turned on in the device's settings.

There are two ways to connect with another MIDI device:

- **Host** mode will open a selection window showing discoverable devices. Once paired with a client, the paired device will become selectable as MIDI input / output in the Inspector's Routing section. Best used when utilizing Cubasis as central DAW with MIDI hardware or a second iOS device as client.
- As Client, turning on Advertise MIDI Service makes your iOS device visible to other devices seeking a connection. Once you've confirmed the host device's pairing request and a connection is established, select the host device as MIDI input / output in the Inspector's Routing section. Best used when connecting to a second host iOS device or Mac.

Note: Although Host and Client mode differ in their initial setup and application, both are capable of sending and receiving MIDI data.

Note: You can only pair with one Bluetooth device at a time. Your iOS device will appear as a standard MIDI device that any application can communicate with.

Ableton Link

Link is a technology that keeps devices in time over a local network. It provides tempo and beat synchronization between multiple devices, or between multiple apps running on the same device. More information and a list of supported mobile apps, desktop apps and hardware can be found at <u>https://</u>www.ableton.com/en/link/products.

To sync via Link, turn on WiFi and Bluetooth on all devices, enable the Ableton Link option on all devices, and optionally enable start/stop sync.

Note: Link does not sync the absolute song position, but it syncs the beat position inside a bar. For example, one device could be at bar.beat position 1.3.3 and another device at 99.3.3.

Note: On Android there is an additional latency slider, because an Android app cannot know the device's I/O latencies (that stem from the DAC, mic, speaker etc.). Recommended practice is to enable Link, start metronome playback on both devices, and adjust the slider until the metronome ticks match.

Note: Ableton Link is not available on Chrome OS.

MIDI Learn

MIDI learn allows you to map any hardware button, knob, fader or other control that sends MIDI CC or MIDI note messages, to a button, knob or fader in Cubasis. This is useful if your MIDI controller doesn't support the Mackie Control or HUI protocols (also sometimes called DAW mode), in order to create a custom mapping.

LE







First off, make sure that your MIDI controller is in **MIDI mode**, *CC mode*, or sometimes called *CTRL mode*. If it's in Mackie, HUI or DAW mode, it cannot be used for MIDI learn, but for Mackie control (see the next chapter).

To start mapping your controls, simply tap the **Learn** button (or press Alt + L on your keyboard) to enable learn mode. This will automatically enable MIDI Learn and create a new user preset if you had not created one yet. In learn mode, all Cubasis controls that can be assigned get a green overlay. There are even some additional overlays in the track list that map the action of selecting the previous or next track (see the green arrow buttons in the screenshot). Tap a green overlay (e.g. a volume fader) and it will turn red. Move a hardware control (e.g. a fader) to create a mapping. The overlay will turn orange and the MIDI key or CC value will be displayed. Tap the X icon to delete the mapping. All mappings are **automatically saved** in the currently selected user preset. In Learn mode, four global buttons are displayed in the upper right corner:

- Exit deactivates MIDI-Learn mode.
- **Reset** clears all mappings in the selected user preset. Be careful, this cannot be undone and the preset will be empty.
- Selected Track Mode will only show overlays on the selected track in the track list and the mixer. When you assign a control in this mode, it will always control the selected track. This is useful with controllers that have only one fader and knob, to always control the selected track's volume and pan, for example. It can even be used to control the selected track's effects (like StudioEQ) and instruments (like Micrologue). With selected track mode disabled, the assignments are made for a specific track number, for example volume of track number 7.



Android only

• **Catch-Up Mode** is only available for volume and pan. Imagine that you select a track that has its volume at 0dB in Cubasis, but your hardware MIDI controller's fader is currently at its min position. When you start moving the fader up, the track's volume will immediately jump to a very low volume value like -100dB. To prevent this, enable catch-up mode before assigning the mapping. This means that the track's volume won't change until the hardware fader's value will match (or catch up to) the track's volume, which is 0dB in our case. This will result in a smooth volume change from the moment your hardware fader reaches its 0dB position.

Note: Controls of a MIDI device that has been declared a Mackie or HUI port cannot be used for MIDI learn. Make sure to deselect the Mackie or HUI tags in the Mackie Ports popup first.

Note: On Android, port selection is not available yet, which means that it's not possible to use multiple MIDI controllers at the same time for MIDI learn.

The **Presets** button brings up the list of presets. The top entry lets you create a new user preset. Below it, factory presets are listed first, and user presets are listed below. There is an important distinction:

A factory preset contains a ready-to-use mapping for one specific MIDI controller. Double tapping a factory preset opens a list of MIDI input ports, because it must be mapped to a MIDI port. You have the option to either **Create** a new user preset from the factory preset, or to **Merge** it with the currently selected user preset. Imagine that you have 2 MIDI controllers connected, in which case you would want to map each one's preset to its port, by merging them into one user preset.

	MIDI Learn Presets
=	Create New Preset
*	Akai MidiMix
*	Korg nanoKontrol 2
#	Novation Launch Control XL
-	

 A user preset contains mappings to specific ports, which means that it could contain mappings to multiple MIDI

controllers that are connected at the same time. For example, CC42 of MIDI controller A could be mapped to volume, while CC42 of MIDI controller B could be mapped to pan at the same time. However, port IDs are device specific and cannot be automatically matched to the ports of another tablet or smartphone. So, if you use the **Share** button to copy your preset (.cml file) to another device, make sure to tap the **Apply to Port** button on the other device to apply your user preset to one MIDI port. Mappings that are done in **Learn** mode are automatically saved in the currently selected user preset.

Mackie Control / HUI

Many hardware MIDI controllers support the widely used Mackie "MCU" protocol, or its predecessor, the HUI protocol. In this case, doing MIDI learn manually is not necessary, since the Mackie protocol goes beyond MIDI learn by also sending MIDI output to the controller, like fader position for motor faders, or track information for controller displays.

To start off, read your controller's user manual and set it to *Mackie* mode, *HUI* mode, or also sometimes called *DAW* mode. If there are multiple Mackie modes to choose from, select the *Mackie Cubase* mode.

Tap the **Ports** button in the Cubasis MIDI setup and tap both the input and the output port of your MIDI controller once, which will set them to Mackie mode. To switch to HUI mode, tap the ports again. Tap them a third time to disable Mackie control, thereby making the controller available for MIDI learn.

If you have a device with **more than 8 faders**, it probably has multiple MIDI ports. In that case, tap the first input and output ports to declare them as *Mackie*. Then tap the second pair of ports, which will declare them as "Mackie 9-16", thereby changing the first ports to "Mackie 1-8", which refers to the track numbers of course. The bank buttons can be used to move all faders 8 tracks left or right.

Note: Not all features of the Mackie and HUI protocols are supported by Cubasis yet. Let us know on the forum if you're missing a specific control, as we are looking to improve Mackie control support in future updates.

Note: On Android, port selection is not available yet, which means that it's not possible to use multiple Mackie or HUI controllers at the same time. Also, MIDI learn and Mackie Control cannot be used at the same time on Android yet.



Keys / Pads Setup

White Keys Touchable Between Black Keys

This allows white keys to be touched in the area between the black keys. Turn this mode off to make touches in the upper area apply to the nearest black key (which allows for easier playing on black keys / swiping).

Velocity Sensitive

When enabled, Cubasis detects note velocity upon touch of a key or pad. Keys are loudest when touched at the bottom; Pads attain the highest velocity at the center.

Transpose

Transposition shifts notes that are played on the keyboard or received via MIDI input up or down, to a maximum of +/- 24 semitones (2 octaves).

Label All Keys

Enable this setting to show labels for all keyboard keys (C to B) instead of just the C.

Metronome Setup

Volume / Pan

Volume and pan are applied to all metronome clicks, even to precount (which is still active even when you have turned the metronome off).

LE

iOS only

iOS only

Mixdown / Freeze Setup

Project	Real-time Mixdown and Freeze				Unfreeze Deletes Audio Track		
🗈 General		Activate if mixdown or freeze was i					C
II User Interface	FLAC Compression Level				Track Freeze Uses Mixdown Settings	A	
► Audio			5	•		Apply mixdown settings to track freeze	U
	M4A Bitrate						
₩ Keys/Pads			128	•			
<u> </u> Metronome							
>> Mixdown / Freeze							

Real-time Mixdown and Freeze

Using real-time mixdown helps inter-app routing to stay stable during mixdown and improves the accuracy and timing of your rendered song.

Unfreeze Deletes Audio Track

Normally, the clone track is deleted when you unfreeze a track. Disable this setting to keep the clone track. This can also be handy for creating a quick mixdown of just one track by freezing and immediately unfreezing it.

FLAC Compression Level

The FLAC compression levels range from 0 (fast decoding, large file size) to 8 (slow decoding, small file size). They do not have any impact on quality, as the exported files are lossless representations of the original audio data.

M4A Bitrate

The bit rate determines the quality of an .m4a mixdown. The higher the bitrate, the higher the quality and file size, respectively.

Track Freeze Uses Mixdown Settings

Allows to apply the mixdown settings such as "Normalize" or "Mixdown between locators" to track freeze. In addition, the Settings button enables the direct access to the mixdown settings.

iOS Settings for Cubasis 3

Reset

Located in the iOS Settings app under the Cubasis 3 tab. If a corrupted project file prevents Cubasis 3 from loading properly when launched, use the reset toggle which will force Cubasis 3 to load an empty project on launch.



Third party apps with Audio Unit (AU) functionality can act as instrument or effect plugins / addons that integrate directly into the Cubasis workflow. As with StudioEQ or a Microsonic instrument for instance you can find them in the instrument browser and the effects menu under the *Audio Units* category.

iOS only LE



- Instrument: Open the Instrument Browser by either tapping the instrument icon on your MIDI track or in the <u>Inspector</u>. Find the Audio Units category (only visible when you have at least one Audio Unit instrument installed) and select an app.
- Multi-output instrument: Some Audio Unit instruments feature more than one audio output. This is useful for distributing drum samples or instrument layers over multiple tracks, in order to mix them differently (volume, pan, effects...). Selecting a multi-output AU instrument routes its first output to the "main" track that holds the AU. Tracks that refer to the same AU (but to different outputs of this AU) are indicated by a double icon, a line pattern background, and they have the same color as the main track. There are three easy ways to add tracks for the other outputs, which are linked to the "main" AU track and don't use any additional resources:
 - Open the Inspector's Instrument panel and tap the "Add x Tracks" button, which displays the number of tracks that will be added in order to have one track per output. Note that the Inspector's Instrument panel will only expand if an AU instrument that features multiple outputs is selected.



- Or simply tap the <u>Add MIDI Track</u> button to add a track for the next instrument output.
- Or manually create a new track, go to the *Audio Units* folder, tap the **Multi-out Instances** folder and select the AU instrument from the list of already loaded multi-output AU instruments in the project.
- Effect: Open the track Inspector. In Insert Effects or Send Effects find the Audio Units category (only visible when you have at least one Audio Unit effect installed) and select an app.
- **MIDI effect:** Audio Unit plug-ins can function as MIDI effects, to be used for instance as arpeggiators or step sequencers. Find out how to use them in the <u>MIDI Effects</u> chapter.

Audio Unit presets

Press the Presets button to the top left of the rack and a list of presets will open below. Tap a preset to load it and apply it to your audio unit effect. Instrument presets will be shown in the regular instrument browser.

- **Save**: Save the current parameter setting as a preset.
- Share: Share a preset via apps like Dropbox, Mail, iCloud, etc.
- **Delete**: Delete the selected preset.
- Rename: Select a preset and tap the e icon next to it to rename it.

Note: Presets are not visible in the <u>MediaBay</u>; deleted presets can be restored via the Files App, AirDrop or iTunes File Sharing.

Audio Unit automation

Like other instruments and effects, Audio Unit parameters can be automated. Press the green **Read** or red **Write** button in order to create or edit automation for the Audio Unit track. Find more information on automation here.

Limitations of Audio Units

- The maximum number of Audio Units that can be loaded in a project depends on the device. Memory and CPU limits can be exceeded by loading only a few resource-hungry Audio Unit plug-ins, which can result in stuttering during playback, or errors when loading the plugin.
- Loading a complex Audio Unit plugin can take some time, even on newer devices, because for the device it's like loading a complete app inside of Cubasis.
- Sometimes, an Audio Unit plugin produces an error, never loads, or crashes. In this case, quit Cubasis and all audio apps from the app switcher and restart it.

iOS only LE

Inter-App Audio

Inter-App Audio (IAA) is a universal routing system for iOS, allowing you to route audio, MIDI and effects between Cubasis (host) and compatible node apps in realtime. There are three basic types of nodes:

- Effects can be set as insert or send effects.
- · Instruments are assigned to a MIDI track and automatically receive MIDI from Cubasis.
- Generators are inputs for audio tracks.

To use an Effect node in Cubasis, follow these steps:

- 1. Select the track you wish to add an effect to.
- 2. Open the track Inspector and select the the Insert or Send effects panel.
- 3. Tap one of the slots and choose Inter-App. A list of available effect apps will appear. Select one to assign it.
- 4. Tapping the app icon in the effect slot will take you to the app. From here you will be able to customize the effect and control Cubasis remotely.

To use an Instrument app, follow these steps:

- 1. Tap the instrument icon on your desired MIDI track.
- 2. Open the instrument browser to the left and expand the category Inter-App. Select an instrument of your choice.
- 3. Once the instrument app is connected to Cubasis, the icon lights up and you are able to play the instrument on your Cubasis keyboard like any other. Tapping the icon will take you to the app directly for customization of the sound. Note: Instrument node apps cannot send MIDI information to Cubasis via Inter-App. To record MIDI from another app, use CoreMIDI instead.

To use Audio input, do the following:

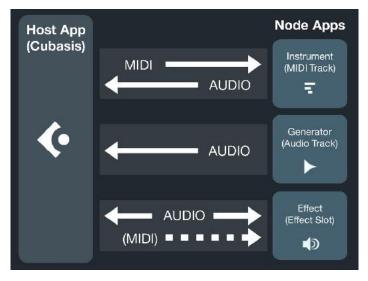


- 1. Select an audio track.
- 2. Open the Inspector and open the Routing panel.
- 3. Tap Input source (Mono by default) choose Inter-App. A list of available apps will appear.
- 4. After assigning an app, its icon and name will appear in the input slot. Tap the icon to switch to the app.
- From here you can remotely record the generator's audio into Cubasis. Some generator apps can also act as instruments; however, they may only be connected **once**.
 Note: Monitoring must be enabled on Inter-App audio tracks.
 Background Audio must be enabled for both apps.

Signal route

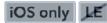
The diagram below illustrates the Inter-App Audio connection types and routes.

- **Instrument**: Receives MIDI from Cubasis and transmits audio back (not the other way round).
- Generator: Sends Audio only to Cubasis (no MIDI).
- Effect: Receives, processes and sends Audio. Some effects can receive MIDI data from Cubasis.



Limitations of Inter-App Audio routing

- The maximum number of Inter-App Audio connections depends on the device. Connections are severed without notice by iOS in low memory situations.
- Connection sometimes fails if the node app is already running due to a bug in iOS. As a rule of thumb, quit all audio apps, launch Cubasis and then connect Inter-App Audio nodes. Don't launch node apps manually before launching Cubasis.
- Connected node apps don't always appear in the app switcher. This is an iOS issue which can lead to connections failing. As a workaround, launch the node app manually from the home screen, then open the app switcher and swipe up to quit it.
- Cubasis can only interact with node apps via Inter-App Audio; it cannot be selected as an input in another host app.
- Inter-App Audio routing performs best with a sample rate of 44.1 kHz. Other values might lead to crackling noise.
- Even if an app is listed multiple times, only a single connection can be made to it at a time.



Audiobus is a signal transfer app, allowing you to route audio material as well as MIDI between Cubasis and other compatible apps in realtime.

APPS	SETTINGS	HELP				Ē
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	772					
			MIDI		MIXER	

Using Audiobus, you can

- record / input audio and MIDI from other apps.
- output audio and MIDI from Cubasis to other apps.
- use additional effects processing apps when routing sound between Cubasis and other apps.

Having launched the Audiobus app, tap either the input or output port and choose Cubasis. You can add multiple apps to the input port.

- Using Cubasis as INPUT allows other apps to record Cubasis' stereo audio output.
- Set Cubasis as OUTPUT and other Audiobus apps can be selected as audio input source in the Cubasis track inspector. Audiobus tracks are always stereo. In the second field you can select an input app of the ones available.



When Audiobus is active, it provides an overlay interface for easy inter-app control. When Cubasis is in the background, it offers the following means of remote control:

- Switch to Cubasis
- · Rewind: Returns the playhead to the beginning of bar 1
- · Play / Pause: Also stops recording
- Record: Starts playback and recording; pressing it again only stops recording but continues playback

Follow these steps to record audio from another app into Cubasis:

- 1. Launch the Audiobus app
- 2. Select one or more input apps (optionally an effects app) and launch them



- 3. Set Cubasis as the output app and tap to run it
- 4. Each Audiobus app has automatically created a corresponding track in Cubasis
- 5. If you haven't loaded any music yet, turn on the metronome or load a few drum loops in order to stay in sync with your project while recording
- 6. Switch to one of the input apps
- 7. In the Audiobus overlay interface, tap the Cubasis icon, then tap the record button to start recording
- 8. Press the play button to stop recording and playback
- 9. Switching back to Cubasis, you can take a look at your recording, adjust the playhead position and modify your song before continuing recording.

MIDI via Audiobus

To route MIDI signals via Audiobus, select the MIDI page after launching the Audiobus app, then follow the same instructions as above.

MIDI Hardware

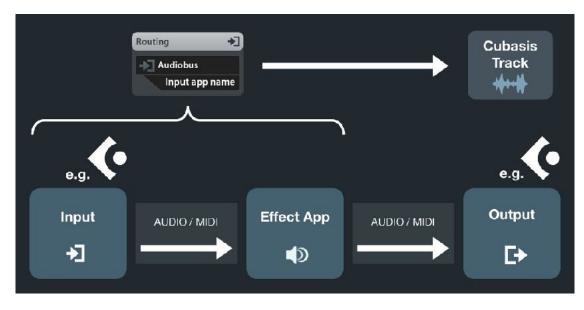
Audiobus can potentially handle all MIDI routing, including MIDI hardware. Connected MIDI hardware will be listed alongside Audiobus compatible apps.

Note: While Audiobus MIDI can run parallel to CoreMIDI and Virtual MIDI, they cannot be used on the same track simultaneously.

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	Select MIDI Sen	der		
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Signal route

The diagram below illustrates the Audiobus connection types and routes.



- Audiobus transmits audio as well as MIDI signals.
- Signals travel from input to effect to output.
- Cubasis can be set as input, output or both.
- If Cubasis is selected as output, either the effect app will appear as possible Audiobus input or the input directly, if no effect is present.

Note: To route MIDI via Audiobus, simply launch the Audiobus app, select the **MIDI** page at the bottom. As an alternative method, add a MIDI track and configure MIDI in the <u>Inspector's</u> Routing panel.

For more information on the Audiobus app, please visit <u>www.audiob.us</u>.

Cubasis 3.4

FAQ (Frequently Asked Questions)

Tracks

Q: What is a MIDI track?

An Instrument (MIDI) track has one virtual instrument of your choice assigned to it and offers a flexible way of recording and editing notes.

Q: How do I assign instruments to it?

Tapping the instrument icon on a track brings up the instrument rack Micro Sonic, which offers a selection of instruments in its instrument browser. Tap an instrument to load it.

Q: What is an Audio track?

An Audio track contains audio files (waveforms), such as microphone recordings and imported or pasted audio files.

Q: How do I edit Audio material?

The Tools panel offers various re-arranging options as well as Pitch Shift and Time-stretch. For more precise editing, double tap an audio event to open the Sample Editor.

Q: How do I add and remove tracks?

There are three buttons on your track list (below all tracks, if there are any). Tap the -DELETE button to delete your selected track, or choose the + ADD to add a new audio or MIDI track. Alternatively, you can double tap an empty spot in the track list or drag & drop an instrument from the MediaBay. Press the duplicate button to create a copy of the selected track, including all its properties.

Q: How do I rename a track?

Open the track Inspector. Tap the top panel with your track's color and a rename dialog will pop up.

Q: Where do I find the mixer?

The mixer button is located at the top left of your screen. Tapping it will bring up as many channels as there are tracks in your project, along with an additional master channel.

Recording

Q: How do I record using the keyboard?

Create a MIDI track. Make sure that recording is enabled on it. Tap the Keys button, which brings up the keyboard. You can toggle between the keyboard and drum pads, depending on what you wish to record with. Tap the Record button and start playing. Once you're done, tap it again.

Q: How do I use the metronome?

Tap the metronome button next to the record button to switch it on / off. The click gain can be adjusted in the setup menu.

Note: If you record audio material with the metronome turned on, make sure you use earphones, or the metronome clicks will be recorded into your project.

Q: How do I change my project's tempo?

Tap the display showing the BPM (beats per minute) count and a signature (e.g. 4/4). Slide across the number in the tempo category. For more precise tempo adjustments, use the + / - buttons. Alternatively, you can tap your desired tempo on the Tap Tempo button.







File handling

Q: Why is there no save button?

Cubasis automatically saves your work every 30 seconds, after every recording, when it's closed and when you turn off the display. If you don't want your file to be overwritten, open the MediaBay, select your project and tap the Duplicate button, which will duplicate your project in its current state. You can always go back to that state by loading the duplicated project.

Q: How do I create a new project?

Open the <u>MediaBay</u> and tap the "New Project" button at the bottom, or select the Projects folder, go to Templates and double tap one of the project templates.

Q: How do I export a project from Cubasis?

Open the <u>MediaBay</u> and select the Mixdown category. Tap Create Mixdown and choose the desired format. The exported file will be placed in the mixdown category, regardless of file type.

Q: How do I import files from another device or the cloud?

There are several methods to import a file into the MediaBay:

• Copy into the Cubasis 3 folder

Use any file manager app (such as the Files app on iOS) to copy files into the Cubasis 3 directory (on Android it's /Android/data/com.steinberg.cubasis3/files/Cubasis 3). Cubasis will automatically sort the files into the respective folders and list them in the MediaBay.

- **ZIP files** are unpacked automatically by Cubasis.
- Device to device transfer AirDrop on iOS, or Android Beam can be used to quickly transfer files between two devices that support the same standard.
- Cloud drives Cloud services such as Dropbox, Google Drive or iCloud (iOS only) can be used to transfer files between devices and to open them with Cubasis.
- iTunes File Sharing

The Finder on a Mac or iTunes on a PC can be used to access the Cubasis folder.

iOS only

Import button

Tap the MediaBay's import button to import files from the Files app, the Music app or AudioShare on iOS.

Q: How do I open a Cubasis project with Cubase on my computer?

- · Install the Cubasis Importer for Cubase on your computer
- Transfer the project to your computer via your preferred sharing method.
- The project arrives as .zip file, containing a .cpb (Cubasis Project) file and all audio files used in the project.
- Unzip the file and launch Cubase.
- In the Cubase menu, go to File -> Import -> Cubasis.
- A file browser dialog will appear. Select the .cpb file.

Effects

Q: How do I add effects?

Open the <u>Inspector</u>. Choose Insert or Send Effects. Tap a slot and choose your desired effect type. Tap the e icon to modify your effect.

Q: What is the difference between insert and send effects?

Insert effects apply to the selected track only; Send effects are global. To learn about effect types in general, read <u>here</u>.

Q: What is a compressor or a limiter?

This chapter explains all effect types and how they work.

Troubleshooting

Q: Why do I hear nothing?

- Readjust your device volume by using the volume buttons at the side of your mobile device.
- Make sure your track is not muted.
- Open the mixer. Make sure all channel's volume faders are adjusted properly. To reset a fader, double tap it.
- If none of the above helps, try to quit Cubasis from the app switcher and restart it, or restart your device.

Q: Why is nothing being recorded?

Make sure that the track you want to record on has recording enabled. Also, make sure Cubasis has permission to access the microphone:

- On iOS, open the Settings app, scroll down to Cubasis 3 and enable Microphone.
- On Android, open the *Settings* app, go to Apps, All Apps, Cubasis 3, Permissions, Microphone, and set it to *Allow*.

Note: If you are using external recording equipment, check whether it is set up for your track. Open the Inspector and choose MIDI Connections or Audio input (depending on the track type). Flick through the options available until the name of your connected hardware appears.

Q: I want to install Cubasis on another device. Do I have to pay again for it?

No. If you are using the same account (Apple ID or Google account) on the store (App Store or Play Store) for both devices, installing another copy will cost you nothing. Simply open the App Store or Play Store and search for Cubasis 3. The store remembers your purchase, displays a download icon instead of a buy button and lets you install the app for free again.

Q: If I delete Cubasis, do I lose all of my work?

Yes on iOS, no on Android. On iOS, deleting an app removes all of its locally stored data too and you would have to manually backup your files to retain them. There are many ways to backup, such as AirDrop, the iOS Files app, iTunes File Sharing, iCloud, Dropbox, Google Drive and more.

On Android 8 and 9, deleting an app retains its folder (/Android/data/com.steinberg.cubasis3/files/Cubasis 3) on the disk. On Android 10 and later, when deleting an app, you are presented with the option to "keep app data".

Q: I'm having performance issues.

There are many different ways to increase your device's performance:

- Use the DSP meter in the Inspector to get a realtime impression of Cubasis' current Digital Signal Processing load.
- Go to Setup → Audio, set the latency to the largest value (iOS only), enable multi-core processing and set the guard buffer to max.
- If you are working with a large project containing a lot of notes, try the decreasing the polyphony of the track's instruments.
- Freeze tracks.
- When using pitch shift or time-stretch, set the algorithm to Mobile.
- Combine effects: Avoid using multiple insert effects of the same type. Try using one send effect for multiple tracks, if possible. You can still adjust the each track's mix individually. The reverb effect is a prime example, as it requires the most CPU and is best used as a send or even a master insert.
- Quit apps running in the background. To terminate an app, open the app switcher and swipe an app up to quit it.
- Airplane mode is recommended to minimize CPU load even more.
- Plugging in your device's power adapter may increase its speed since it might not be trying to save battery power.

Learn about all the new features introduced in Cubasis 3!

Cubasis 3.4

Ableton Link Support

Make Cubasis on multiple iPad, iPhone and Android devices play in time together. Jam with others who run Link-enabled apps on their devices. Sync Cubasis with multiple applications on the same device... and much more.

MIDI Recording Workflow Improvements

A long tap on the locator range lets you instantly place the locators in a new position to quickly start your recording. Use the Chord Buttons to instantly create great-sounding chord sequences at your finger tips, while recording melodies in one go. MIDI time-stretch lets you easily change the speed of MIDI events.

State Save / Total Recall Improvements

Cubasis 3.4 makes sure you will find the project in the exact same state as when you left the app last time. The editors remember the zoom level and position for each audio and MIDI event, allowing you to instantly continue with your edits. The same goes for the arranger, the mixer channel width, the setup choices you've made and more.

75+ Improvements and Bug Fixes

This update includes many improvements which deliver the best possible performance with the utmost stability.

Cubasis 3.3.4 Android only

Improvements and Bug Fixes

This update fixed a bug of the 3.3.3 release on Android.

Cubasis 3.3.3

Improvements and Bug Fixes

This update fixed a bug that occurred with iOS 15 along with a few other minor issues.

Cubasis 3.3.2 Android only

 Android-only Cubasis now follows Google's new scoped storage requirements and stores MediaBay data in an appspecific directory.

Cubasis 3.3.1

• Improvements and Bug Fixes This update fixed several bugs of the 3.3 release.

Cubasis 3.3

• MIDI Learn, Mackie Control (MCU) & HUI protocol support

Easily control Cubasis remotely, via your external controller. Enable MIDI Learn and simply move a knob or fader on your controller to assign it to a selected parameter. What's more, you can load existing presets for your controller or save your own. And if your controller provides Mackie Control (MCU) or HUI protocol support, you're covered right away too.

Audio Unit Instrument Multi Out support iOS only

Audio Unit Multi Output support lets you quickly assign the single instrument sounds of a drum kit to individual outputs, or allows you to route individual instruments to discrete channels.

Sidechain support

Use a few simple taps to create that classic, warm pumping sound we all love when listening to many genres of music — be it hip hop, pop, heavy techno... you name it. Create punchy kicks, make vocals stand out in the mix, separate frequencies from each other and much more.

• Extended MIDI routing iOS only

Make use of extended MIDI routing options to create inspiring tracks in a snap. Modulate vocals to make them sound robotic, using the new extended MIDI routing options alongside our Waves Tune RT IAP or a third-party vocoder iOS app, manipulated via an existing MIDI track. Explore even more creative possibilities via advanced MIDI track-to-track routing options.

Improvements

Cubasis 3.3 includes many improvements which deliver the best possible performance with the utmost stability.

Cubasis 3.2.1

Improvements and Bug Fixes

This update fixed several bugs of the 3.2 release.

Cubasis 3.2

Keyboard Shortcut and Mouse Support

Speed up your workflow with simple keyboard shortcuts to record, play, navigate, edit and more, creating great tracks at lightning speed. Cubase shortcuts and mouse support are included.

Waves Tune Real-Time IAP iOS only

Your ultimate real-time pitch correction tool for vocals. A dream tool that helps vocalists stay in tune while singing, feel confident, and focus on the emotion of their performance. Waves Tune Real-Time provides smooth, natural-sounding vocal pitch correction, instantly and automatically. And it's exclusively available through Cubasis in-app purchase on iOS.

Waves H-Delay Now Included in Waves Plug-in Bundle IAP iOS only

From classic old school PCM42-style effects like filtering, flanging and phasing, to slap-back echo, pingpong delay and tempo-sync with modulation, H-Delay delivers the goods. Controlled by a super-intuitive interface that lets you get straight down to business, it is exclusively available in the Waves Plug-in Bundle IAP, including a free update for existing users!

Multicore-rendering and improved Audio Unit performance

Cubasis gives you the freedom to use many more third party Audio Unit instruments and effects plug-ins simultaneously than ever before. Multicore rendering support exploits the potential of newer devices to their utmost.

45+ Improvements

Cubasis 3.2 provides many more user-requested improvements and fixes throughout the application. For the complete list of improvements, issues and solutions please visit the Cubasis forum.

Cubasis 3.1.2

Audio input device selection Android only

This setup lets you select the audio input source on Android devices.

• Improvements and Bug Fixes This update includes more than 35 improvements and bug fixes.

Cubasis 3.1.1

• Improvements and Bug Fixes This update fixed several bugs of the 3.1 release.

Cubasis 3.1

• Master Strip Plug-in Suite Make your tracks sound excellent with this pro-grade mastering plug-in suite.

Audio Recording Offset Compensation

Use the all-new offset compensation to let Cubasis auto-sync your recordings with the metronome, keeping you right in time.

Performance Improvements and Maintenance

With extensive performance improvements under the hood and many bug fixes, Cubasis 3.1 is designed to work even faster and smoother.

Cubasis 3.0.2

MiniSampler

Create your own sampled instruments with Cubasis on iPhone and iPad.

- Apple Pencil Support Use Apple Pencil on your iPad to edit even more precisely in Cubasis.
- Improvements Enjoy the best performance, speedy operation and rock-solid stability.

Cubasis 3.0.1

• Improvements and Bug Fixes This update fixed more than 35 bugs of the initial release.

Cubasis 3.0

- Universal app support Create your songs with Cubasis on iPhone and iPad.
- Cubasis 3 for iPhone
 A fully equipped DAW, quick and easy to navigate, on your iPhone.

 Group tracks
- Process, edit and mix tracks as though they were a single track.
- Full-screen mixer, zoom modes and level metering Easily extend the mixer up to full-screen size and more.
- New look, same feel Creating mobile music is easier, faster, more efficient and enjoyable.
- Free Cubasis 2 in-app purchase transfer Freely transfer previous in-app purchases from Cubasis 2 to Cubasis 3.
- 960 pulses per quarter note
 Enjoy MIDL aditing with finant level of datail and provision
 - Enjoy MIDI editing with finest level of detail and precision.
- Up to eight re-arrangeable insert and send effects Use up to eight re-arrangeable effects and change pre/post fader positions.
- **75 new effects presets** Make new tracks sound great, with an inspiring selection of ready-to-use presets.
- Undo reinvented with History List Comfortably jump back and forth between earlier versions of your project.
- Redesigned instruments and effects Enjoy improved user interfaces for more precise operation.
- Updated audio, MIDI and automation editors File editing is quicker and more efficient.
- Improved MediaBay Create folders, move files, share your music and more with ease.
- UI scale presets for iPhone and iPad Quickly change the size and arrangement of the Cubasis user interface.
- Overdub and looper recording modes
 Choose the perfect mode for your recording task.
- MicroSonic instruments refill Get creative with this great library of expressive instruments.

- Vertical event coloring Easily keep visual track of the individual parts of your arrangement.
- AU MIDI effects automation The controls and switches of your AU MIDI plug-ins can move automatically.
- Micrologue ARP (IAP) automation Get more creative with the Micrologue ARP, now supporting automation.
- Don't stop the music Enjoy playback to continue, while performing undo, redo and more.
- Improvements

Enjoy the best performance, speedy operation and rock-solid stability.