

CUBASE

VST

MIDI Echo /
Pitch Shifter



Steinberg

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The MIDI Echo/Pitch Shifter

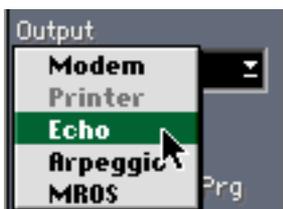
The MIDI Echo/Pitch Shifter is a MIDI equivalent to a regular sound signal processor. It can produce echo, chorus and pitch-shifting type of effects, plus a lot of things you can't do with a normal signal processor.

- Before you open the MIDI Echo/Pitch Shifter, make sure the "Remote Active" box in the Preferences-Key Commands dialog is off (not checked).

Setting up and activating

The MIDI Echo/Pitch Shifter takes MIDI data coming in from any Track with "Echo" selected as MIDI Output, and generates new data according to the settings of the sliders. Proceed as follows:

1. In the Arrange window, locate the Track(s) that you want to send to the MIDI Echo/Pitch Shifter.
2. Pull down the Output pop-up menu for the Track (either in the Track columns or in the Inspector) and select "Echo".



3. Pull down the Panels menu and select "MIDI Echo/Pitch Shifter". The control panel appears.



4. **Activate the MIDI Echo/Pitch Shifter by clicking the “Active” check box in the upper left corner of the window.**
Now, the MIDI Echo/Pitch Shifter will use anything you play on your MIDI instrument (or MIDI data already recorded on the Track) and change it according to the settings of the sliders.
- **You may use more than one Track for input to the MIDI Echo/Pitch Shifter.**

Output, Channel and Instrument



This is where you route the output of the MIDI Echo Pitch/Shifter. Select a MIDI Output and a MIDI Channel, or use the Instrument pop-up menu for selecting an Output/Channel combination.

Sending the Processed MIDI Data to a MIDI Output Port

1. **Pull down the Output pop-up menu and select the port to which you want to send out the processed MIDI data.**
2. **Select the desired MIDI channel with the Chn parameter.**
Now, the MIDI Instruments connected to the selected port will receive the processed MIDI data on the specified MIDI channel.

Sending the Processed MIDI Data back into Cubase VST

1. **Pull down the Output pop-up menu and select MROS.**
MROS is the invisible MIDI cable that runs inside Cubase VST. Performing this step is the same as connecting the output of the MIDI Echo/Pitch Shifter to the input of Cubase VST, as with a MIDI cable.
 2. **Open the MIDI Setup System dialog (from the Options menu) and make sure MROS is activated as an Input.**
This will output the data from the MIDI processor to the recording input of Cubase VST, allowing you to re-record processed Tracks or process data while you record it.
- **Since Cubase VST records on all MIDI channels, the Chn setting doesn't really matter in this case.**

About the Instrument Value

Just like in the Track list and the Drum Map, the Instrument value is a combination of a certain Output and a certain MIDI Channel. You can select any previously defined Instruments with the pop-up, or double click and define a new one.

Turning the MIDI Echo/Pitch Shifter On and Off

This is done by checking/unchecking the Active box in the upper left corner. Unchecked means “Off”.



The MIDI Echo/Pitch Shifter turned off.

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- ❑ **The MIDI Echo/Pitch Shifter can be active even if its dialog box is closed.**
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Using the Sliders

You can change the values for each slider in the following ways:

- **By dragging the “handle”.**
For fine control, press [Shift] and drag the handle.
- **By clicking somewhere on the slider.**
The handle will jump to where you clicked.
- **By changing the numeric value in the box below the slider.**
You may use the mouse buttons, or double click and type in a value.

The changes take effect immediately, and you can use this to “play” the MIDI Echo/Pitch Shifter (and even record your “playing”).

The Parameters

Repeat

The Repeat value is the number of echoes (1 - 64) you get from each incoming note.

Echo

The Echo value is the initial time between delays. The following table shows how certain Echo values correspond to relevant note values.

Echo value	Note Value
192	One bar
96	One half note
48	One quarter note
24	One eighth note
16	One eighth note triplet
12	One sixteenth note
8	One sixteenth note triplet
6	One thirty-second note
4	One thirty-second note triplet
3	One sixty-fourth note

Quantize

Quantize moves the repeated notes to the closest set value.

Vel Dec

This parameter allows you to add or subtract to the velocity values for each repeat so that the echo fades away or increases in volume. Make sure your sound (or sound source) is velocity sensitive.

Echo Dec

This parameter allows you to add or subtract a number of ticks from the echo value for each repeat. This leads to echoes that arrive more and more (or less and less) often, like the sound of a bouncing ball.

Note Dec

The Note Dec parameter allows you to construct arpeggios and harmonies by subtracting or adding some number to the note value for each repeat.

Closing the MIDI Echo/Pitch Shifter

When you are done with the settings, simply close the dialog box.

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- ❑ **This does not turn off the MIDI Echo/Pitch Shifter, it just hides the dialog box.**
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