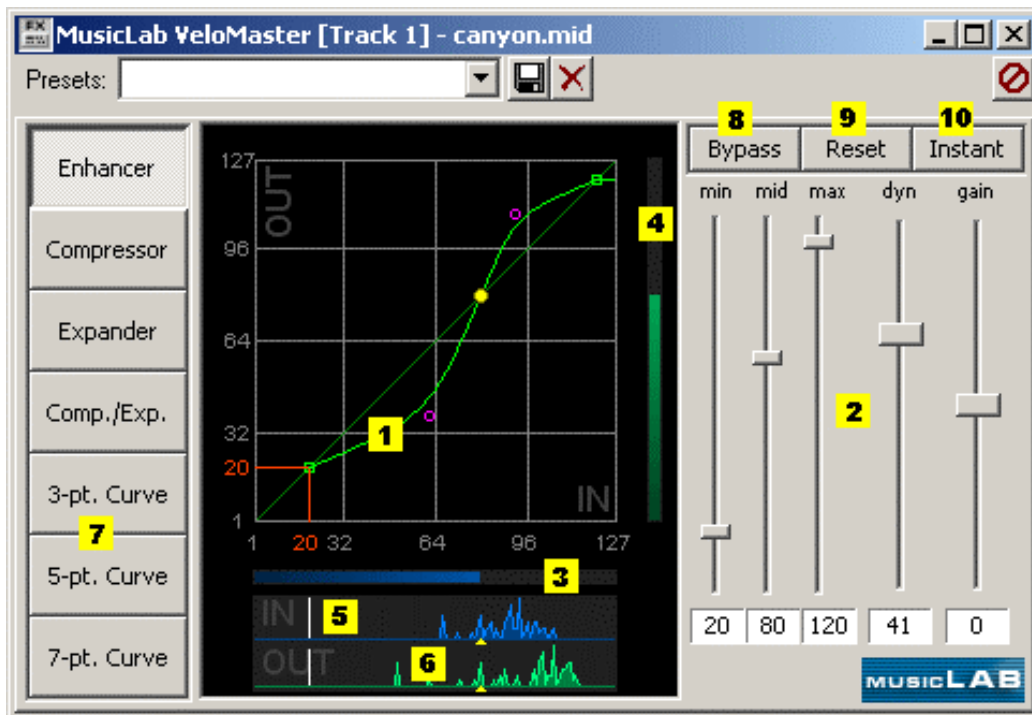




# MusicLab VeloMaster version 1.2



## User's Manual

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# VeloMaster

## VeloMaster MIDI FX plug-in for Cakewalk

VeloMaster plug-in is a real time MIDI dynamics processor with interactive graph. The plug-in works with note velocity and lets you drastically modify the dynamics of your MIDI track or MIDI keyboard, similarly to using enhancer, compressor, limiter, expander, gate or velocity curve. Its convenient interface with real-time indicators and mouse adjustable curve lets you quickly and easily achieve the desired sound.

### Overview

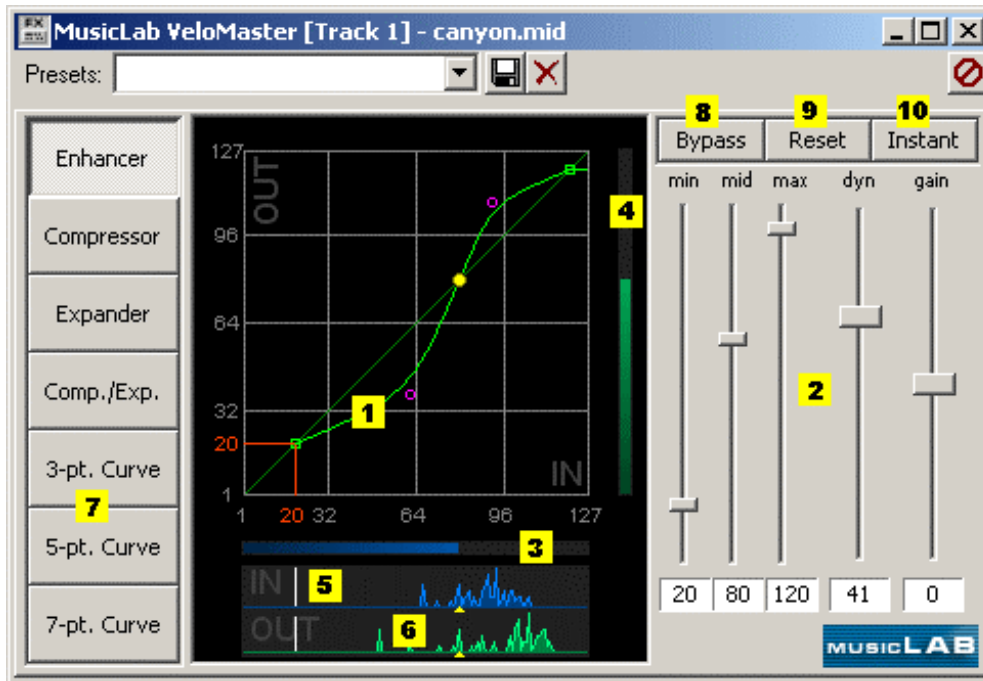
Everybody knows how time consuming the velocity editing procedure may be, especially if your tracks are played manually. You have to work with large massifs of notes and a monotonous routine, simply because there's no way of automatically modifying the velocity dynamics. The standard features of any sequencing software are not enough to perform this.

MusicLab VeloMaster plug-in works with note velocity and lets you perform various types of dynamic changes with convenient visual feedback. By manipulating the interactive velocity curve of the plug-in you can in a few seconds modify the dynamics of the whole track (increase or reduce the difference between loud and soft notes), use it similar to working with compressor, limiter, expander or gate (change velocity of too soft or too loud notes), as well as quickly adjust a track for using with another patch. Also you can use VeloMaster as adjustable velocity curve for your MIDI keyboard.

### Features

- Automated non-trivial changing of MIDI note velocity in real time
- Enhancer, compressor, limiter, expander and gate function implementation in MIDI velocity domain
- 3 types of free curve available to satisfy all your needs in velocity programming
- Working as adjustable velocity curve for your MIDI keyboard
- Visualization of input and output velocity
- Visualization of a current note velocity as a jumping point on the curve
- Input and output velocity histograms
- Saving all the adjustments in presets and CW documents.

## Interface overview



1. The velocity-transforming curve with draggable points for curve defining.
2. Sliders for parametric curve defining.
3. Horizontal indicator (blue), reflecting input velocity of notes played from a track or MIDI gear.
4. Vertical indicator (green), reflecting output velocity transformed by your changes of the velocity curve.
5. Input velocity histogram (i.e. statistics of relative number of notes with various velocity values – the more notes are present, the higher the blue bar is in the value point on the indicator).
6. Output velocity histogram (the resulting statistics).
7. Buttons for processor type and free curve type selecting.
8. Bypass button for comparing adjustments with initial sound.
9. Reset button for initiating the curve.
10. Instant button for switching between instant (using playback stop/start) and delayed (using playback MIDI buffer adjustable in Cakewalk Global options) reaction of the plug-in to the adjustments.

## Dynamics processors

All the dynamics processors include an interactive graph that lets you draw the curve that defines the threshold levels and ratios. You modify the dynamics by moving the points on the curve with a mouse or changing parameters with a slider. All processors include **gain** parameter that increases/reduces overall output velocity by a set value

### Enhancer

The Enhancer modifies the track's dynamics (increases/reduces the difference between loud and soft notes). Its parameters include:

**min** – sets the lowest output velocity value

**mid** – sets the input velocity point that stays without transformation (notes having higher velocity value are considered "loud", while notes with lower velocity value are considered "soft")

**max** – sets the highest output velocity value

**dyn** – modifies the dynamics (positive values emphasize the loud notes and weaken the soft ones, while negative values reduce the difference between loud and soft notes up to "-100" when all notes have the same output velocity value set in the mid parameter)

### **Compressor/Limiter**

The compressor reduces note velocity values that are higher than a **threshold** level by a set **ratio** value.

In the case of maximum ratio value a compressor works as a **limiter**, which prevents the note velocity from exceeding a given threshold level.

### **Expander/Gate**

The expander expands the range of note velocity values that fall below a given **threshold** level by a set **ratio** value.

In the case of maximum ratio value, an expander works as a **gate**, which eliminates the notes having velocity value lower a given threshold level.

### **Compressor/Expander**

The Compressor/Expander combines a **compressor** and an **expander** into a single effect.

### **Free curve 1, 2 and 3**

The velocity-transforming curve with 3, 5 and 7 draggable points.

## **Using VeloMaster as a dynamics processor for a MIDI track**

- Assign VeloMaster to a track the same way you assign MIDI FX Plug-ins in Cakewalk® (Track/Effects/MusicLab/VeloMaster).
- Open plug-in's window by double clicking on its name.
- Select a dynamics processor or free curve type by pressing the corresponding button.
- Play the sequencer.
- Adjust the curve using a mouse or sliders auditioning the resulting dynamics changes. The plug-in will transform the out velocity value of notes according to the curve you create.

You may test the velocity response of your patch by right clicking on a draggable point on the curve. All notes will now have the same output velocity value equal to the one at the mouse position on the graph. That allows you to easily adjust the necessary levels of velocity value for effective curve editing (low and high levels, threshold value, etc.)

If you are satisfied with the sounding, stop the sequencer, select the track and Apply MIDI Effects.

### **To apply the VeloMaster to MIDI data in offline mode:**

1. Select the data to be affected.
2. Choose MIDI Effects/MusicLab/VeloMaster from the Edit menu or from the pop-up menu to open the plug-in's dialog box.
3. Set the parameters.
4. Click OK.

## **Using VeloMaster as velocity curve for MIDI keyboard**

You may use VeloMaster as an easily adjustable velocity curve while recording the track from your MIDI keyboard. To do this:

- assign the plug-in to the track,
- turn off "echo" effect in Cakewalk (select "none" Options/Project/MIDI Input, Echo mode), otherwise you'll be hearing the doubled sound of the same note causing chorus type effect,
- while playing your keyboard adjust the form of the curve in the plug-in to get the most suitable velocity response from the keys,
- record your part,
- select the track and Apply MIDI Effects,
- if necessary create the preset of the curve for future use.

## **Troubleshooting**

**Problem:** Velocity histogram and yellow point on the curve are not shown.

**Solution:** This feature are available only with supported Cakewalk builds. Check <http://www.musiclab.com/download/releases> for VeloMaster update which supports your Cakewalk product. Version 1.2 supports SONAR® 1.0-2.0, Pro Audio 8, 9, Home Studio 9.

## **Contacting MusicLab**

Web site: <http://www.musiclab.com/>

Technical support: <mailto:support@musiclab.com>

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