

# Basic FX Suite

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## Information

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## Basic FX Suite

Basic FX Suite is software consisting of VST3 Plug-ins of various effects and sound processing developed by Yamaha, some of which fully utilize modeling technology. The Basic FX Suite consists of three software components: Sweet Spot Morphing Channel Strip, REV-X, and Guitar Amp Classics. When you install the Basic FX Suite, the following three software programs will be installed.

### Sweet Spot Morphing Channel Strip

This processing effect is a multi effect that features a compressor and equalizer.

### REV-X

This processing effect is a digital reverb platform developed by Yamaha for professional audio devices.

### Guitar Amp Classics

This processing effect features guitar amp simulations developed by Yamaha that fully utilize modeling technology.

#### NOTE

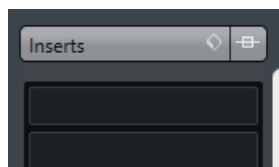
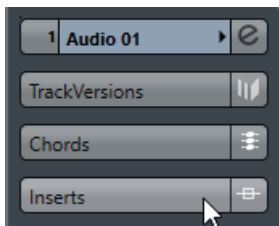
Basic FX Suite components do not support iOS devices, such as iPad.

# How to Open the VST Plug-ins

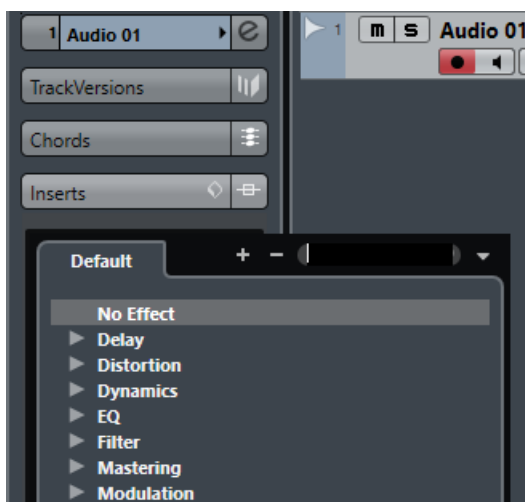
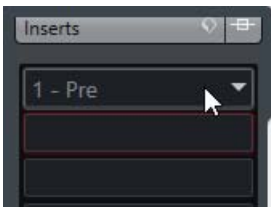
This section covers the two ways with which you can open the VST Plug-ins within Cubase. Please note that the operating procedure will differ depending on the DAW software.

## From the Inspector

1. Click [Inserts] on the far left of the inspector in the Project window to show the insert slot.

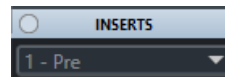
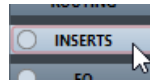


2. Click the insert slot to show the effects selector.

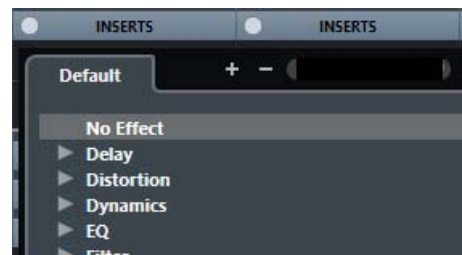
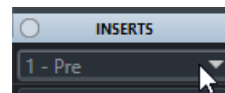


## From the MixConsole

1. [Studio] → [MixConsole] to show the MixConsole.
2. Click [INSERTS] to show the insert slot.



3. Click the insert slot to show the effects selector.



## Select Effects

Select effects from the effect selectors. The included effects are sorted into submenus, from which you can easily find desired effects.

Effects	Category
Sweet Spot Morphing Channel Strip	Dynamics
REV-X	Reverb
Guitar Amp Classics	Distortion

For instructions on using Cubase series programs, refer to the PDF manual, available from [Help] in the Cubase series menu.

# Software

## Sweet Spot Morphing Channel Strip

### Overview

The Sweet Spot Morphing Channel Strip (“Channel Strip” for short) is a multi-effect that combines compression and EQ. Advanced sound engineering know-how is condensed into a number of convenient presets that can be simply and instantly recalled, for professional results.

Note that you cannot use the built-in Channel Strip when the sample rate is set to 176.4 kHz or 192 kHz.

### Controls and Functions

#### Common to Compressor and Equalizer



#### 1 MORPH

Adjusts the parameter of the Sweet Spot Data. You can simultaneously adjust the compressor and equalizer settings which are set to five points around this knob by turning this knob. When you set the knob between two adjacent points, the compressor and equalizer settings will be set to an intermediate value.

#### 2 Sweet Spot Data

Selects the Sweet Spot Data.

#### 3 TOTAL GAIN

Adjusts the total gain of the Channel Strip.

**Range:** -18.0 dB – +18.0 dB

#### 4 Level Meter

Indicates the output level of the Channel Strip.

## Compressor



#### 5 ATTACK

Adjusts the attack time of the compressor.

**Range:** 0.092 msec – 80.00 msec

#### 6 RELEASE

Adjusts the release time of the compressor.

**Range:** 9.3 msec – 999.0 msec

#### 7 RATIO

Adjusts the ratio of the compressor.

**Range:** 1.00 – ∞

#### 8 KNEE

Selects the knee type of the compressor.

Options	Description
SOFT	Produces the most gradual change.
MEDIUM	Results in a setting midway between SOFT and HARD.
HARD	Produces the sharpest change.

#### 9 SIDE CHAIN Q

Adjusts the band width of the side chain filter.

**Range:** 0.50 – 16.00

#### 10 SIDE CHAIN F

Adjusts the center frequency of the side chain filter.

**Range:** 20.0 Hz – 20.0 kHz

#### 11 SIDE CHAIN G

Adjusts the gain of the side chain filter.

**Range:** -18.0 dB – +18.0 dB

#### 12 COMPRESSOR On/Off

Turns the compressor on (lit) and off (dark).

**13 Compressor Curve**

This graph indicates the approximate compressor response. The vertical axis indicates the output signal level, and the horizontal axis indicates the input signal level.

**14 Gain Reduction Meter**

Indicates the gain reduction.

**15 DRIVE**

Adjusts the degree to which the compressor is applied. The higher the value, the greater the effect.  
**Range:** 0.00 – 10.00

**22 HIGH F**

Adjusts the center frequency of the high band.  
**Range:** 500.0 Hz – 20.0 kHz

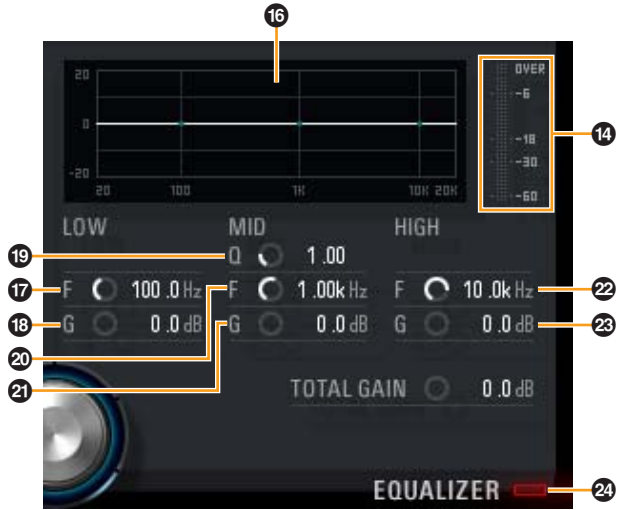
**23 HIGH G**

Adjusts the gain of the high band.  
**Range:** -18.0 dB – +18.0 dB

**24 EQUALIZER On/Off**

Turns the equalizer on (lit) and off (dark).

**Equalizer**



**16 Equalizer Curve**

This graph indicates the characteristics of the 3-band equalizer. The vertical axis indicates the gain, and the horizontal axis indicates the frequency. You can adjust LOW, MID, and HIGH by dragging each handle in the graph.

**17 LOW F**

Adjusts the center frequency of the low band.  
**Range:** 20.0 Hz – 1.00 kHz

**18 LOW G**

Adjusts the gain of the low band.  
**Range:** -18.0 dB – +18.0 dB

**19 MID Q**

Adjusts the band width of the middle band.  
**Range:** 0.50 – 16.00

**20 MID F**

Adjusts the center frequency of the middle band.  
**Range:** 20.0 Hz – 20.0 kHz

**21 MID G**

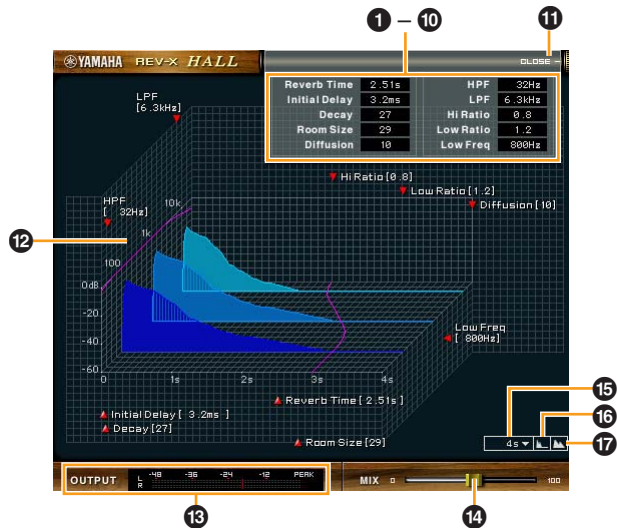
Adjusts the gain of the middle band.  
**Range:** -18.0 dB – +18.0 dB

**REV-X**

**Overview**

REV-X is a digital reverb platform developed by Yamaha for pro audio applications. Three types of REV-X are available: Hall, Room, and Plate.

**Controls and Functions**



This section uses the Hall type of REV-X as an example.

**1 Reverb Time**

Adjusts the reverb time. This parameter links to Room Size. The adjustable range varies depending on the REV-X type.

REV-X type	Range
Hall	0.103 sec – 31.0 sec
Room	0.152 sec – 45.3 sec
Plate	0.176 sec – 52.0 sec

**2 Initial Delay**

Adjusts the time that elapses between the direct, original sound and the initial reflections that follow it.

**Range:** 0.1 msec – 200.0 msec

**3 Decay**

Adjusts the characteristic of the envelope from the moment the reverberation starts to the moment it attenuates and stops.

**Range:** 0 – 63

**4 Room Size**

Adjusts the size of the simulated room. This parameter links to Reverb Time.

**Range:** 0 – 31

**5 Diffusion**

Adjusts the spread of the reverberation.

**Range:** 0 – 10

**6 HPF**

Adjusts the cutoff frequency of the high pass filter.

**Range:** 20 Hz – 8.0 kHz

**7 LPF**

Adjusts the cutoff frequency of the low pass filter.

**Range:** 1.0 kHz – 20.0 kHz

**8 Hi Ratio**

Adjusts the duration of reverberation in the high frequency range by using a ratio relative to the Reverb Time. When you set this parameter to 1, the actual specified Reverb Time is fully applied to the sound. The lower the value, the shorter the duration of reverberation in the high frequency range.

**Range:** 0.1 – 1.0

**9 Low Ratio**

Adjusts the duration of reverberation in the low frequency range by using a ratio relative to the Reverb Time. When you set this parameter to 1, the actual specified Reverb Time is fully applied to the sound. The lower the value, the shorter the duration of reverberation in the low frequency range.

**Range:** 0.1 – 1.4

**10 Low Freq**

Adjusts the frequency of the Low Ratio.

**Range:** 22.0 Hz – 18.0 kHz

**11 OPEN/CLOSE**

Opens and closes the window for adjusting the reverb settings.

**12 Graph**

Indicates the characteristics of reverberation. The vertical axis indicates the signal level, the horizontal axis indicates the time, and the Z-axis indicates the frequency. You can adjust the characteristics of reverberation by dragging the handles in the graph.

**13 OUTPUT**

Indicates the output level of the REV-X.

**14 MIX**

Adjusts the output level balance between the original sound and effect sound.

**Range:** 0% – 100%

**15 Time Axis Setting**

Select the display range of the time (horizontal axis) on the graph.

**Display range:** 500 msec – 50 sec

**16 Zoom Out**

Zooms out the display range of the time (horizontal axis) on the graph.

**17 Zoom In**

Zooms in the display range of the time (horizontal axis) on the graph.

**HINT**

- You can reset certain parameters to their default values by holding the [Ctrl]/[command] key while you click on the appropriate knobs, sliders, and faders.
- You can adjust the parameters more finely by holding the [SHIFT] key while you drag on the appropriate knobs, sliders, and faders.

## Guitar Amp Classics

### Overview

Guitar Amp Classics are guitar amp simulations that make extensive use of advanced Yamaha modeling technology. Four amp types with different sonic characteristics are provided.

Note that Guitar Amp Classics cannot be used when the sample rate is set to 176.4 kHz or 192 kHz.

### Controls and Functions

#### CLEAN



This amp type is optimized for clean tones, effectively simulating the tight brilliance of transistor amplifiers. The tonal character of this amp model provides an ideal platform for recording with multi-effects. It also features built-in chorus and vibrato effects.

##### 1 VOLUME

Adjusts the amplifier's input level.

##### 2 DISTORTION

Adjusts the depth of distortion produced.

##### 3 TREBLE/MIDDLE/BASS

These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

##### 4 PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

##### 5 Cho/OFF/Vib

Turns the Chorus or Vibrato effect on or off. Set to [Cho] to turn the Chorus effect on, or to [Vib] to turn the Vibrato effect on.

##### 6 SPEED/DEPTH

These controls adjust the speed and depth of the Vibrato effect when it is on.

The SPEED and DEPTH controls only work with the Vibrato effect, and are disengaged when the Cho/OFF/Vib control, above, is set to "Cho" or "OFF."

##### 7 BLEND

Adjusts the balance between the direct and effect sound.

##### 8 OUTPUT

Adjusts the final output level.

#### CRUNCH



This is the amp type to use when you want lightly overdriven crunch tones. The CRUNCH model simulates the type of vintage tube amplifiers that are favored for blues, rock, soul, R&B, and similar styles.

##### 1 Normal/Bright

Selects a normal or bright tonal character. The [Bright] setting emphasizes the high-frequency overtones.

##### 2 GAIN

Adjusts the input level applied to the preamp stage. Rotate clockwise to increase the amount of overdrive produced.

##### 3 TREBLE/MIDDLE/BASS

These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

##### 4 PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

##### 5 OUTPUT

Adjusts the final output level.

## DRIVE



The DRIVE amp type provides a selection of distortion sounds that simulate the tonal character of various high-gain tube amplifiers. From mildly overdriven crunch to heavy distortion suitable for hard rock, heavy metal, or hardcore styles, this model offers a wide range of sonic capabilities.

### 1 AMP TYPE

Six amplifier types are provided. Types 1 and 2 feature relatively mild distortion that allows picking nuances to come through naturally. Types 3 and 4 have more pronounced overtones, resulting in a fat, soft tone. Types 5 and 6 deliver wilder, aggressive distortion with a tight attack. The even-numbered amp types have greater presence and range than the odd-numbered types.

### 2 GAIN

Adjusts the input level applied to the preamp stage. Rotate clockwise to increase the amount of distortion produced.

### 3 MASTER

Adjusts the output level from the preamp stage.

### 4 TREBLE/MIDDLE/BASS

These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

### 5 PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

### 6 OUTPUT

Adjusts the final output level.

## LEAD



The LEAD amp type simulates a high-gain tube amp that is rich in overtones. It is ideally suited to playing lead guitar lines that will project well in an ensemble, but it can also be set up for crisp accompaniment tones as well.

### 1 High/Low

Selects the amp output type. The [High] setting simulates a high-output amp, and allows the creation of more distorted tones.

### 2 GAIN

Adjusts the input level applied to the preamp stage. Rotate clockwise to increase the amount of distortion produced.

### 3 MASTER

Adjusts the output level from the preamp stage.

### 4 TREBLE/MIDDLE/BASS

These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

### 5 PRESENCE

Used to emphasize the high frequencies and overtones.

### 6 OUTPUT

Adjusts the final output level.

## HINT

### Using the GAIN, MASTER, and OUTPUT Controls

The tonal character of the DRIVE and LEAD amp types can be adjusted over a wide range via the GAIN, MASTER, and OUTPUT controls. GAIN adjusts the level of the signal applied to the preamp stage, affecting the amount of distortion produced. MASTER adjusts the output level from the preamp stage that is then fed to power amp stage. The GAIN and MASTER control settings have a large effect on the final sound, and the MASTER control may need to be turned up fairly high in order to drive the power stage sufficiently for optimum tone. The OUTPUT control adjusts the final output level from the amp model without affecting the distortion or tone, and is useful for adjusting the guitar's volume without changing any other aspects of the sound.