Operation Manual

Basic FX Suite

EN

steinberg

Contents

Information

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Basic FX Suite

Basic FX Suite is software consisting of VST3/AAX/AU Plug-ins of various effects and sound processing developed by Yamaha, some of which fully utilize modeling technology. 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

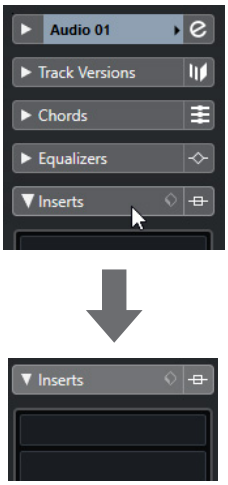
Basic FX Suite components do not support iOS devices, such as iPad.

How to Open the Plug-ins

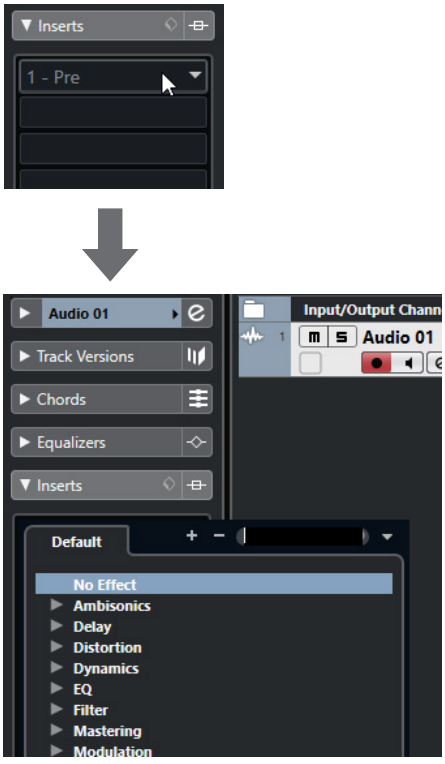
This section covers the two ways with which you can open the VST Plug-ins within Cubase. Please note that the operating procedure will differ depending on the DAW software.

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.**

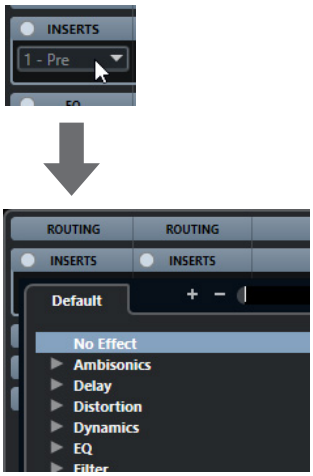


From the MixConsole

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 more detailed instructions on using Cubase series programs, refer to the Cubase operation manual.

> **AU plug-ins/AAX plug-ins**
> For details on how to open a plug-in, refer to the instruction manual of the corresponding application.

Software

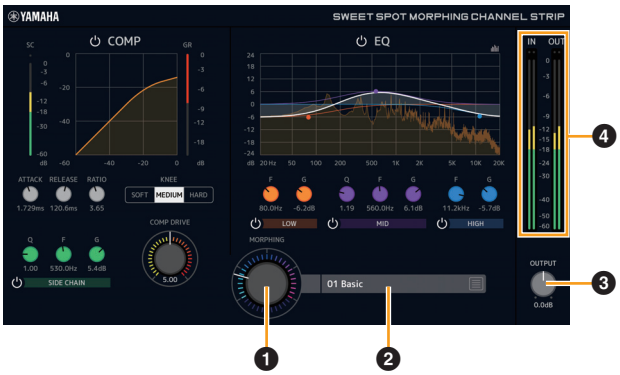
Sweet Spot Morphing Channel Strip

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.

Controls and Functions

Common to Compressor and Equalizer



❶ MORPHING

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.

❷ Sweet Spot Data

Selects the Sweet Spot Data.

❸ OUTPUT

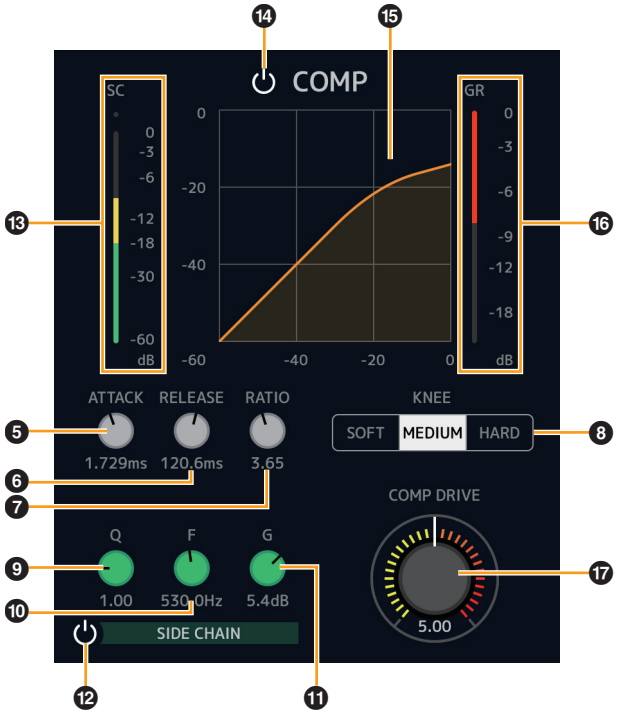
Adjusts the total gain of the Channel Strip.

Range: -18.0 dB – +18.0 dB

❹ Level Meters

Indicates the input and output levels of the Channel Strip.

Compressor



❺ ATTACK

Adjusts the attack time of the compressor.

Range: 0.092 msec – 80.00 msec

❻ RELEASE

Adjusts the release time of the compressor.

Range: 9.3 msec – 999.0 msec

❼ RATIO

Adjusts the ratio of the compressor.

Range: 1.00 – ∞

❽ 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.

❾ SIDE CHAIN Q

Adjusts the band width of the side chain filter.

Range: 0.50 – 16.00

❿ SIDE CHAIN F

Adjusts the center frequency of the side chain filter.

Range: 20.0 Hz – 20.0 kHz

⓫ SIDE CHAIN G

Adjusts the gain of the side chain filter.

Range: -18.0 dB – +18.0 dB

⑫ SIDE CHAIN On/Off
Turns the side chain on (lit) and off (dark).

⑬ SC Meter
Indicates the trigger signal level for the side chain.

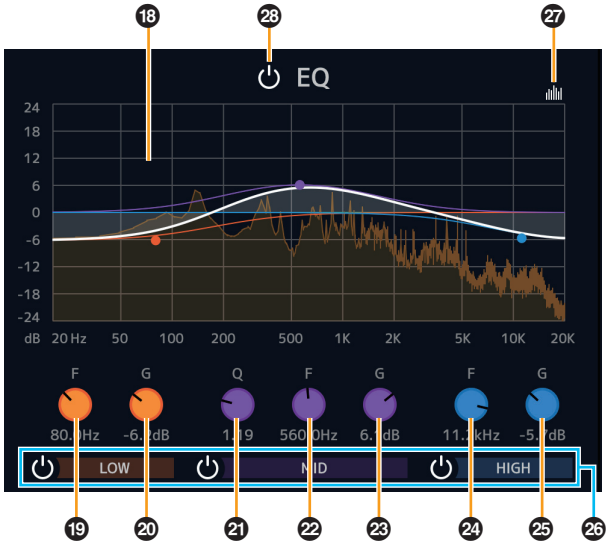
⑭ COMPRESSOR On/Off
Turns the compressor on (lit) and off (dark).

⑮ 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.

⑯ Gain Reduction Meter
Indicates the gain reduction.

⑰ DRIVE
Adjusts the degree to which the compressor is applied. The higher the value, the greater the effect.
Range: 0.00 – 10.00

Equalizer



⑱ 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.

⑲ LOW F
Adjusts the center frequency of the low band.
Range: 20.0 Hz – 1.00 kHz

⑳ LOW G
Adjusts the gain of the low band.
Range: -18.0 dB – +18.0 dB

㉑ MID Q
Adjusts the band width of the middle band.
Range: 0.50 – 16.00

㉒ MID F
Adjusts the center frequency of the middle band.
Range: 20.0 Hz – 20.0 kHz

㉓ MID G
Adjusts the gain of the middle band.
Range: -18.0 dB – +18.0 dB

㉔ HIGH F
Adjusts the center frequency of the high band.
Range: 500.0 Hz – 20.0 kHz

㉕ HIGH G
Adjusts the gain of the high band.
Range: -18.0 dB – +18.0 dB

㉖ EQ Band On/Off
Turns each EQ band on (lit) and off (dark) individually.

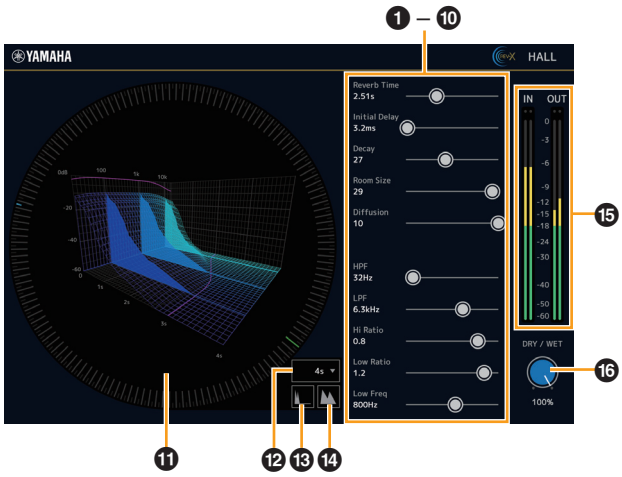
㉗ Spectrum Display On/Off
Turns the Spectrum Display of the Equalizer Curve on (lit) and off (dark).

㉘ EQ On/Off
Turns the equalizer on (lit) and off (dark).

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.

❶ 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

❷ 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

❸ Decay

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

Range: 0 – 63

❹ Room Size

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

Range: 0 – 31

❺ Diffusion

Adjusts the spread of the reverberation.

Range: 0 – 10

❻ HPF

Adjusts the cutoff frequency of the high pass filter.

Range: 20 Hz – 8.0 kHz

❼ LPF

Adjusts the cutoff frequency of the low pass filter.

Range: 1.0 kHz – 20.0 kHz

❽ 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

❾ 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

❿ Low Freq

Adjusts the frequency of the Low Ratio.

Range: 22.0 Hz – 18.0 kHz

⓫ 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.

⓬ Time Axis Setting

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

Display range: 500 msec – 50 sec

⓭ Zoom Out

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

⓮ Zoom In

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

⓯ Level Meters

Indicates the input and output levels of the REV-X.

⓰ DRY/WET

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

Range: 0% – 100%

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.

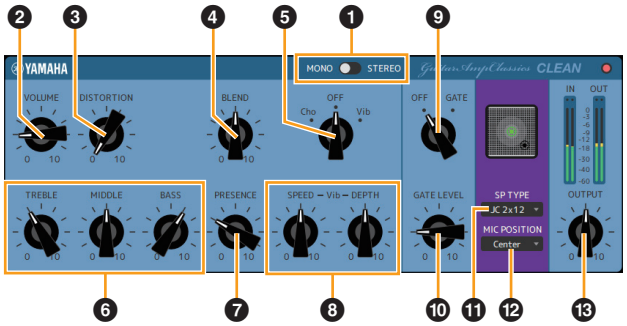
Guitar Amp Classics

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.

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.

❶ MONO/STEREO Selector Switch (only when inserting into a stereo channel)

Switch between stereo and mono. In STEREO, the signal input with stereo is processed by Guitar Amp Classics as it is. In MONO, the stereo signal input is mixed into monaural and then processed by Guitar Amp Classics.

❷ VOLUME

Adjusts the amplifier's input level.

❸ DISTORTION

Adjusts the depth of distortion produced.

❹ BLEND

Adjusts the balance between the direct and effect sound.

❺ 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.

❻ TREBLE/MIDDLE/BASS

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

❼ PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

❽ 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."

❾ OFF/GATE

Turns the noise gate on and off.

❿ GATE LEVEL

Adjusts the gate level.

⓫ SP TYPE

Select the type of cabinet. For the characteristics of each type, refer to the Cabinet types and characteristics at the end of this document.

Type and configuration: BS 4 × 12", AC 2 × 12", AC 1 × 12", AC 4 × 10", BC 2 × 12", AM 4 × 12", YC 4 × 12", JC 2 × 12"

⓬ MIC POSITION

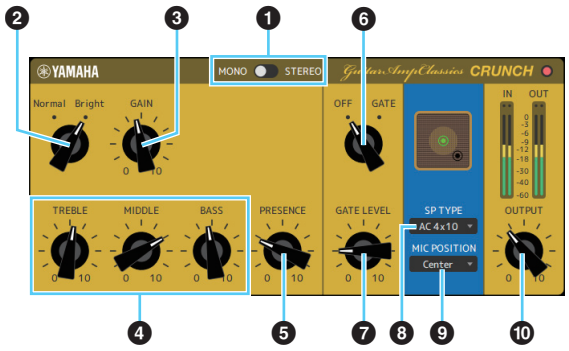
Selects the position of the virtual microphone for placement in front of the cabinet. You can also select the microphone position by clicking on the speaker image.

Position	Description
Center	Microphone placement aiming at the center of the speaker cone.
Edge	Microphone placement aiming at the edge of the speaker cone.

⓭ 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.

❶ MONO/STEREO Selector Switch (only when inserting into a stereo channel)

Switch between stereo and mono. In STEREO, the signal input with stereo is processed by Guitar Amp Classics as it is. In MONO, the stereo signal input is mixed into monaural and then processed by Guitar Amp Classics.

❷ Normal/Bright

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

❸ GAIN

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

❹ TREBLE/MIDDLE/BASS

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

❺ PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

❻ OFF/GATE

Turns the noise gate on and off.

❼ GATE LEVEL

Adjusts the gate level.

❽ SP TYPE

Select the type of cabinet. For the characteristics of each type, refer to the Cabinet types and characteristics at the end of this document.

Type and configuration: BS 4 × 12", AC 2 × 12", AC 1 × 12", AC 4 × 10", BC 2 × 12", AM 4 × 12", YC 4 × 12", JC 2 × 12"

❾ MIC POSITION

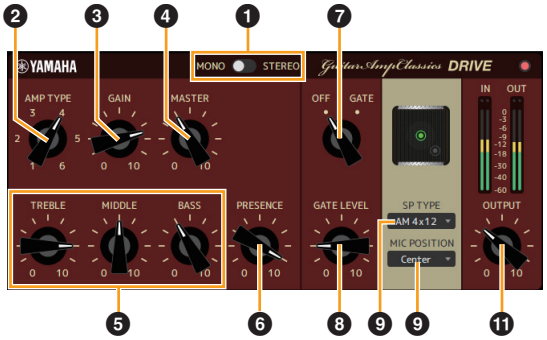
Selects the position of the virtual microphone for placement in front of the cabinet. You can also select the microphone position by clicking on the speaker image.

Position	Description
Center	Microphone placement aiming at the center of the speaker cone.
Edge	Microphone placement aiming at the edge of the speaker cone.

❿ 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.

❶ MONO/STEREO Selector Switch (only when inserting into a stereo channel)

Switch between stereo and mono. In STEREO, the signal input with stereo is processed by Guitar Amp Classics as it is. In MONO, the stereo signal input is mixed into monaural and then processed by Guitar Amp Classics.

❷ 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.

❸ GAIN

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

❹ MASTER

Adjusts the output level from the preamp stage.

❺ TREBLE/MIDDLE/BASS

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

❻ PRESENCE

Can be adjusted to emphasize the high frequencies and overtones.

❼ OFF/GATE

Turns the noise gate on and off.

❽ GATE LEVEL
Adjusts the gate level.

❾ SP TYPE
Select the type of cabinet. For the characteristics of each type, refer to the Cabinet types and characteristics at the end of this document.

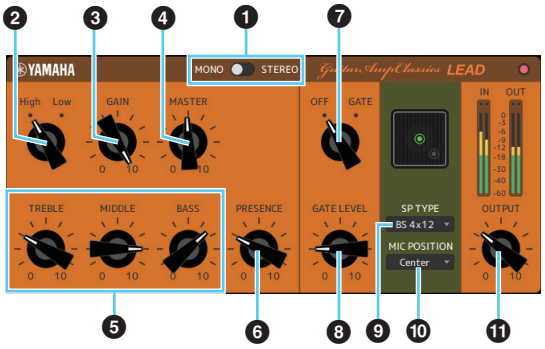
Type and configuration: BS 4 × 12", AC 2 × 12", AC 1 × 12", AC 4 × 10", BC 2 × 12", AM 4 × 12", YC 4 × 12", JC 2 × 12"

❿ MIC POSITION
Selects the position of the virtual microphone for placement in front of the cabinet. You can also select the microphone position by clicking on the speaker image.

Position	Description
Center	Microphone placement aiming at the center of the speaker cone.
Edge	Microphone placement aiming at the edge of the speaker cone.

⓫ 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.

❶ MONO/STEREO Selector Switch (only when inserting into a stereo channel)
Switch between stereo and mono. In STEREO, the signal input with stereo is processed by Guitar Amp Classics as it is. In MONO, the stereo signal input is mixed into monaural and then processed by Guitar Amp Classics.

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

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

❹ MASTER
Adjusts the output level from the preamp stage.

❺ TREBLE/MIDDLE/BASS
These three controls adjust the amplifier's tonal response in the high, middle, and low frequency ranges.

❻ PRESENCE
Used to emphasize the high frequencies and overtones.

❼ OFF/GATE
Turns the noise gate on and off.

❽ GATE LEVEL
Adjusts the gate level.

❾ SP TYPE
Select the type of cabinet. For the characteristics of each type, refer to the Cabinet types and characteristics at the end of this document.

Type and configuration: BS 4 × 12", AC 2 × 12", AC 1 × 12", AC 4 × 10", BC 2 × 12", AM 4 × 12", YC 4 × 12", JC 2 × 12"

❿ MIC POSITION
Selects the position of the virtual microphone for placement in front of the cabinet. You can also select the microphone position by clicking on the speaker image.

Position	Description
Center	Microphone placement aiming at the center of the speaker cone.
Edge	Microphone placement aiming at the edge of the speaker cone.

⓫ 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.

Appendix

Cabinet types and characteristics

SP TYPE	Characteristics	Speaker configuration
BS 4 × 12	British flat stack type with rich cabinet resonance.	4 × 12"
AC 2 × 12	American combo type cabinet, featuring a clear tone for versatile use in various music genres.	2 × 12"
AC 1 × 12	American combo type cabinet, featuring a clear tone for ensemble use.	1 × 12"
AC 4 × 10	American combo type cabinet, featuring a bright tone reminiscent of more traditional guitar sounds.	4 × 10"
BC 2 × 12	British combo type cabinet, ideal for distortion sounds and featuring a wide range with broad treble response.	2 × 12"
AM 4 × 12	American stack type cabinet, ideal for matching with high-power amplifiers and featuring a clear sound contour.	4 × 12"
YC 4 × 12	Yamaha F series combo type cabinet, featuring a rich midrange and a mild high range.	4 × 12"
JC 2 × 12	Japanese combo type cabinet, ideal for clean sounds, and featuring a rich mid-high range plus modulation effects.	2 × 12"

Manual Development Group

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