

# SPD-SX

SAMPLING PAD

Effect Guide

Roland

# Master Effect List

The SPD-SX provides four types of master effect.

While performing, you can turn the [CONTROL 1] knob or [CONTROL 2] knob to vary the master effect.

## FILTER

This applies a filter effect.

TYPE	Explanation	[CONTROL 1] knob	[CONTROL 2] knob
SIMPLE LPF	A filter that passes only the low-frequency range.	Changes the cutoff frequency.	Changes the resonance level of the filter.
SIMPLE BPF	A filter that passes only a specific frequency range.		
SIMPLE HPF	A filter that passes only the high-frequency range.		
LPF+SYNC MOD	A filter that passes only the low-frequency range, with added modulation that's synchronized to the current kit tempo.		
BPF+SYNC MOD	A filter that passes only a specific frequency range, with added modulation that's synchronized to the current kit tempo.		
HPF+SYNC MOD	A filter that passes only the high-frequency range, with added modulation that's synchronized to the current kit tempo.		

You can make detailed settings for the master effect by using the "MSTR FX EDIT" quick menu that's shown in the MASTER EFFECT screen.

The following parameters can be edited for each TYPE.

Parameter	Value	Explanation
TYPE	LOW PASS, BAND PASS, HIGH PASS	Filter type Frequency range passed by each filter LOW PASS: Frequencies below the cutoff BAND PASS: Frequencies in the region of the cutoff HIGH PASS: Frequencies above the cutoff
SLOPE	-12, -24, -36 dB	Filter slope (damping characteristics; amount of damping per octave) -36 dB: Extremely steep -24 dB: Steep -12 dB: Gentle
RATE SYNC SW	OFF, ON	OFF: Specify the modulation (MOD RATE) as a numerical value. ON: Specify the modulation (MOD RATE) as a note.
MOD RATE	0–100, note (p. 6)	Rate of modulation
MOD DEPTH	0–100	Depth of modulation
LFO WAVE	TRI, SINE, SAW, SQR	How the cutoff frequency will be modulated. TRI: Triangle wave SINE: Sine wave SAW: Sawtooth wave SQR: Square wave

## DELAY

This applies a delay effect.

TYPE	Explanation	[CONTROL 1] knob	[CONTROL 2] knob
STEREO NORMAL	A stereo delay.	Changes the volume of the delay.	Changes the proportion of delayed sound that's fed back to the input.
STEREO SYNC	Delay is applied in synchronization with the current kit tempo.		
PAN↵	A tap delay effect, with quarter-note delay panned to L/R.		
PAN↵	A tap delay effect, with dotted eighth-note delay panned to L/R.		
PAN DOUBLE	A delay effect with dotted eighth-note delay panned to L/R and doubled.		

You can make detailed settings for the master effect by using the “MSTR FX EDIT” quick menu that’s shown in the MASTER EFFECT screen.

The following parameters can be edited for each TYPE.

Parameter	Value	Explanation
TYPE	NORMAL, PAN	NORMAL: A simple delay PAN: A delay with the delay time panned to the L/R channels
SYNC SW	OFF, ON	OFF: Specify the delay time (DELAY TIME) as a numerical value. ON: Specify the delay time (DELAY TIME) as a note.
TIME	0–1300 ms, note (p. 6)	Delay time (the time by which the sound is delayed)
TAP TIME	0–100%	Delay of the L-channel Considering the R-channel delay time as 100%, this adjusts the L-channel delay time.
LOW CUT	FLAT–800 Hz	Frequency at which the low range will be cut If you choose the FLAT setting, LOW CUT will not be applied.
HIGH CUT	700 Hz–FLAT	Frequency at which the high range will be cut If you choose the FLAT setting, HIGH CUT will not be applied.
DIRECT LEVEL	0–100	Volume of the direct sound

## S.LOOP

This loops a short interval of the input sound (Short Loop).

While sound is playing, press the [S.LOOP] button; the sound at that moment will be played as a short loop.

TYPE	Explanation	[CONTROL 1] knob	[CONTROL 2] knob
MANUAL	The short loop will be turned on/off manually.	Changes the rate of the short loop.	Changes the volume of the short loop.
AUTO <sub>1</sub>	The short loop will turn on/off within a quarter note.		
AUTO <sub>2</sub>	The short loop will turn on/off within an eighth note.		
AUTO <sub>3</sub>	The short loop will turn on/off within a sixteenth note.		
AUTO FREERUN	The short loop will automatically turn on/off within the interval specified by RATE.		

You can make detailed settings for the master effect by using the "MSTR FX EDIT" quick menu that's shown in the MASTER EFFECT screen.

The following parameters can be edited for each TYPE.

Parameter	Value	Explanation
MODE	MANUAL, AUTO	Specifies how the short loop will operate. MANUAL: The short loop will be turned on/off manually. AUTO: The short loop will be turned on/off automatically.
RATE SYNC SW	OFF, ON	OFF: The rate of the short loop will be specified as a numerical value ON: The rate of the short loop will be specified as a note
RATE	0-127, note (p. 6)	The rate at which the short loop will repeat
TIMING	1ST HALF, 2ND HALF	The timing at which the short loop will occur when MODE is "AUTO" 1ST HALF: Loop the first half of the interval specified by RATE. 2ND HALF: Loop the second half of the interval specified by RATE.

## FX

This applies the effect of the specified TYPE.

TYPE	Explanation	[CONTROL 1] knob	[CONTROL 2] knob
THRU	No effect will apply.	---	---
STEREO DELAY	A stereo delay.	Adjusts the volume of the delay.	Adjusts the amount of delayed sound that's fed back to the input.
SYNC DELAY	Applies a delay that's synchronized to the current kit tempo.		
TAPE ECHO	A classic tape echo effect.	Adjusts the tape speed.	Adjusts the amount of repetition for the echo sound.
CHORUS	Applies chorus.	Adjusts the volume of the chorus.	Adjusts the depth of modulation.
FLANGER	A stereo flanger. This produces a metallic resonance reminiscent of a jet airplane taking off or landing.	Adjusts the rate of modulation.	Adjusts the depth of modulation.
STEP FLANGER	The pitch of the flanger sound will change in steps.	Adjusts the rate of modulation.	Adjusts the rate of pitch change.
PHASER	A stereo phaser. This creates modulation by adding a phase-shifted copy to the original sound.	Adjusts the rate of modulation.	Adjusts the depth of modulation.
STEP PHASER	A phaser effect that changes in steps.	Adjusts the rate of modulation.	Adjusts the rate of stepwise change.
EQUALIZER	Modifies the tonal character.	---	---
COMPRESSOR	Makes the overall volume more consistent by limiting loud sounds and boosting soft sounds.	---	---
FILTER	Applies a filter effect.	Adjusts the cutoff frequency.	Adjusts the rate at which the cutoff frequency will change.
FILT+DRIVE	A low-pass filter with overdrive; cuts the high-frequency range, and adds distortion.	Adjusts the cutoff frequency.	Adjusts the amount of overdrive distortion.
ISOLATOR	An equalizer that drastically reduces the volume, creating unique effects by cutting the volume of specific frequency regions.	Adjusts the amount of boost/cut in the low-frequency range.	Adjusts the amount of boost/cut in the high-frequency range.
TOUCH WAH	Applies a wah effect by varying a filter according to the volume of the performance.	Adjusts the sensitivity at which the filter will change.	Adjusts the center frequency at which the wah effect is applied.
DISTORTION	An effect that produces long sustain by distorting the sound.	Adjusts the volume balance between the direct sound and the effect sound.	---
RING MOD	Generates bell-like sounds by applying amplitude modulation (AM) to the input signal.	Adjusts the depth of amplitude modulation.	Adjusts the frequency at which modulation is applied.
PITCH SHIFT	Shifts the pitch of the original sound.	Adjusts the amount of pitch shift.	Adjusts the proportion of pitch-shifted sound that is fed back to the input.
VIBRATO	Applies vibrato.	Adjusts the vibrato rate.	Adjusts the vibrato depth.
REVERB	Applies reverberation.	Adjusts the volume of reverb.	---
SLICER	By repeatedly cutting the sound, this creates the sensation that a rhythmic backing phrase is impressed on the sound.	Adjusts the rate at which the sound is cut.	---

You can make detailed settings for the master effect by using the "MSTR FX EDIT" quick menu that's shown in the MASTER EFFECT screen.

For each TYPE of the FX group you can make settings for the same parameters as the Kit effects.

For details on the parameters for which settings can be made, refer to the "Kit Effect List" (p. 6).

\* Parameters that are assigned to the [CONTROL 1] knob or [CONTROL 2] knob are not shown in the screen for detailed settings.

# Kit Effect List

The SPD-SX provides 20 types of kit effect.

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## About note value

Some effect parameters (such as RATE or TIME) can be set in terms of a note value.

If the corresponding parameter's RATE SYNC SW is "ON," the setting can be specified as a note value, and the effect will be synchronized with the current kit tempo.

Note:

	Thirty-second note		Quarter note
	Sixteenth note		Half-note triplet
	Eighth-note triplet		Dotted quarter note
	Dotted sixteenth note		Half note
	Eighth note		Dotted half note
	Quarter-note triplet		Whole note
	Dotted eighth note		

When "RATE SYNC SW" is set to "OFF," a numerical value can be set for the relevant items.

\*The note values that can be selected will differ depending on the effect type.

\*If you specify the delay time as a note value, slowing down the tempo will not change the delay time beyond a certain length. This is because there is an upper limit for the delay time; if the delay time is specified as a note value and you slow down the tempo until this upper limit is reached, the delay time cannot change any further. This upper limit is the maximum value that can be specified when setting the delay time as a numerical value.

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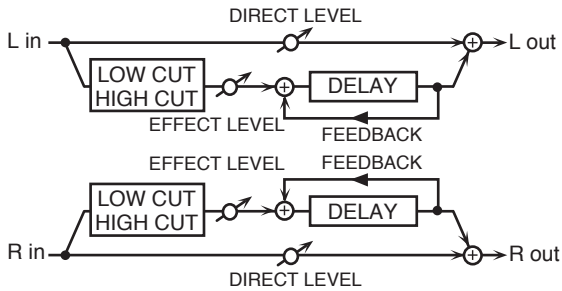
## THRU

The effect won't be applied.

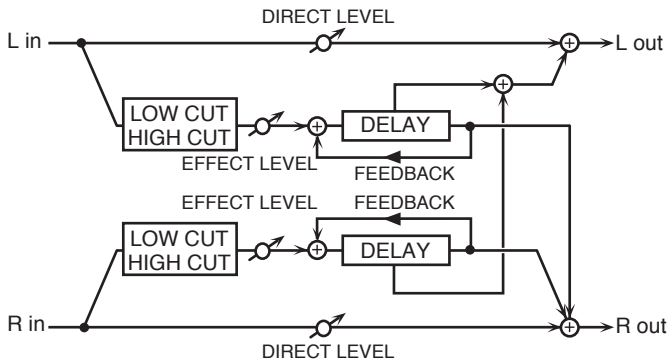
## STEREO DLY

This is a stereo delay.

TYPE: NORMAL



TYPE: PAN



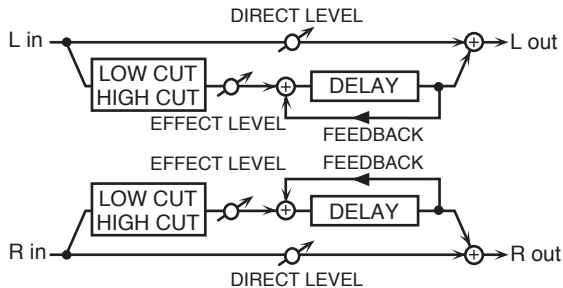
Parameter	Value	Explanation
TYPE	NORMAL, PAN	NORMAL: A simple delay PAN: A delay with the delay time panned to the L/R channels
TIME	0–1300 ms	This determines the delay time.
TAP TIME	0–100 %	L channel delay time Assuming that the delay time of the R channel is 100%, this adjusts the delay time of the L channel.
FEEDBACK	0–99 %	Adjusts the amount of the delay sound that's fed back into the effect.
LOW CUT	FLAT–800 Hz	Frequency at which the low-frequency range will be cut With the FLAT setting, LOW CUT will not be applied.
HIGH CUT	700 Hz–FLAT	Frequency at which the high-frequency range will be cut With the FLAT setting, HIGH CUT will not be applied.
EFFECT LEVEL	0–100	Volume of the delay sound
DIRECT LEVEL	0–100	Volume of the direct sound

## SYNC DELAY

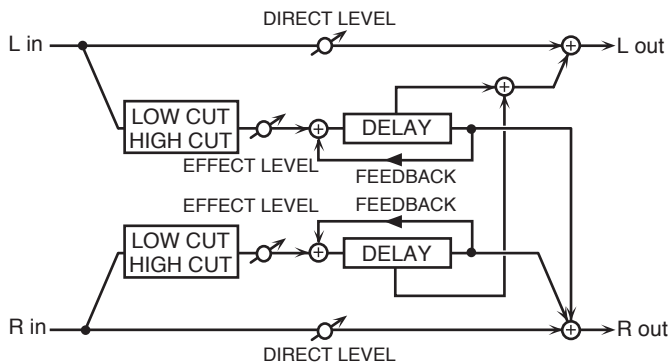
This is a stereo delay.

The delay time is set in terms of a note value.

TYPE: NORMAL



TYPE: PAN

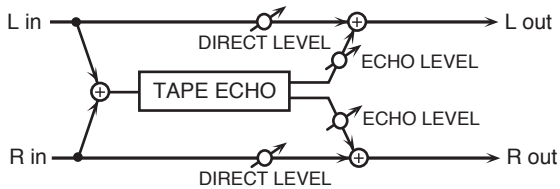


Parameter	Value	Explanation
TYPE	NORMAL, PAN	NORMAL: A simple delay PAN: A delay with the delay time panned to the L/R channels
TIME(TEMPO)	Note	This determines the delay time.
TAP TIME	0–100%	L channel delay time Assuming that the delay time of the R channel is 100%, this adjusts the delay time of the L channel.
FEEDBACK	0–99%	Adjusts the amount of the delay sound that's fed back into the effect.
LOW CUT	FLAT–800 Hz	Frequency at which the low-frequency range will be cut With the FLAT setting, LOW CUT will not be applied.
HIGH CUT	700 Hz–FLAT	Frequency at which the high-frequency range will be cut With the FLAT setting, HIGH CUT will not be applied.
EFFECT LEVEL	0–100	Volume of the delay sound
DIRECT LEVEL	0–100	Volume of the direct sound



## TAPE ECHO

A virtual tape echo that produces a realistic tape delay sound. This simulates the tape echo section of a Roland RE-201 Space Echo.

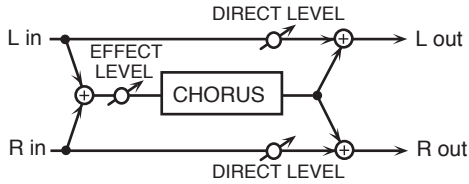


Parameter	Value	Explanation
MODE	S, M, L, S+M, S+L, M+L, S+M+L	Combination of playback heads to use. Select from three different heads with different delay times. S: Short M: Middle L: Long
REPEAT RATE	0-127	Tape speed Increasing this value will shorten the spacing of the delayed sounds.
INTENSITY	0-127	Amount of delay repeats
BASS	-15-+15 dB	Boost/cut for the lower range of the echo sound
TREBLE	-15-+15 dB	Boost/cut for the upper range of the echo sound
HEAD S PAN	L64-CENTER-R63	Independent panning for the short, middle, and long playback heads
HEAD M PAN		
HEAD L PAN		
TAPE DIST	0-5	Amount of tape-dependent distortion to be added This simulates the slight tonal changes that can be detected by signal-analysis equipment. Increasing this value will increase the distortion.
W/F RATE	0-127	Speed of wow/flutter (complex variation in pitch caused by tape wear and rotational irregularity)
W/F DEPTH	0-127	Depth of wow/flutter
ECHO LEVEL	0-100	Volume of the echo sound
DIRECT LEVEL	0-100	Volume of the direct sound
LEVEL	0-100	Output level

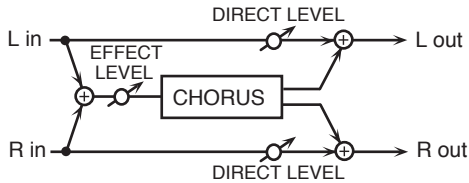
## CHORUS

This applies a chorus effect.

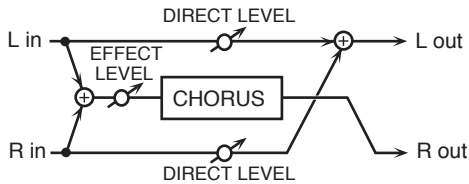
MODE: MONO



MODE: STEREO 1



MODE: STEREO 2



Parameter	Value	Explanation
MODE	MONO, STEREO 1, STEREO 2	MONO: A chorus that outputs the same sound to the L/R channels STEREO 1: A stereo two-stage chorus that adds a separate chorus sound to the L/R channels STEREO 2: The original sound is output to the L-channel, and the effect sound to the R-channel.
RATE	0–100	Frequency of modulation
DEPTH	0–100	Depth of modulation
PRE DELAY	0.0–40.0 ms	Time from when the original sound is output until the effect sound is output
LOW CUT	FLAT–800 Hz	Frequency at which the low-frequency range will be cut With the FLAT setting, LOW CUT will not be applied.
HIGH CUT	700 Hz–FLAT	Frequency at which the high-frequency range will be cut With the FLAT setting, HIGH CUT will not be applied.
EFFECT LEVEL	0–100	Volume of the effect sound
DIRECT LEVEL	0–100	Volume of the direct sound

## FLANGER

The flanging effect gives a twisting, jet-airplane-like character to the sound.

Parameter	Value	Explanation
RATE SYNC SW	OFF, ON	OFF: Specify the modulation (RATE) as a numerical value. ON: Specify the modulation (RATE) as a note value.
RATE	0–100, note	Frequency of modulation
DEPTH	0–100	Depth of modulation
MANUAL	0–100	Center frequency at which the effect is applied
RESONANCE	0–100	Amount of resonance (amount of feedback)
SEPARATION	0–100	Spaciousness of the sound
LOW CUT	FLAT–800 Hz	Frequency at which the low-frequency range will be cut With the FLAT setting, LOW CUT will not be applied.
EFFECT LEVEL	0–100	Volume of the effect sound
DIRECT LEVEL	0–100	Volume of the direct sound

## STEP FLNGR

This is a flanger in which the flanger pitch changes in steps. The speed at which the pitch changes can also be specified in terms of a note value of a specified tempo.

Parameter	Value	Explanation
RATE SYNC SW	OFF, ON	OFF: Specify the modulation (RATE) as a numerical value. ON: Specify the modulation (RATE) as a note value.
RATE	0–100, note	Frequency of modulation
STEP SYNC SW	OFF, ON	OFF: Specify the pitch change (STEP RATE) as a numerical value. ON: Specify the pitch change (STEP RATE) as a note value.
STEP RATE	0–100, note	Rate (period) of pitch change
DEPTH	0–100	Depth of modulation
MANUAL	0–100	Center frequency at which the effect is applied
RESONANCE	0–100	Amount of resonance (amount of feedback)
SEPARATION	0–100	Spaciousness of the sound
LOW CUT	FLAT–800 Hz	Frequency at which the low-frequency range will be cut With the FLAT setting, LOW CUT will not be applied.
EFFECT LEVEL	0–100	Volume of the effect sound
DIRECT LEVEL	0–100	Volume of the direct sound

### PHASER

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A phase-shifted sound is added to the original sound and modulated.

Parameter	Value	Explanation
TYPE	4 STAGE, 8 STAGE, 12 STAGE	Number of stages in the phaser
RATE SYNC SW	OFF, ON	OFF: Specify the modulation (RATE) as a numerical value. ON: Specify the modulation (RATE) as a note value.
RATE	0–100, note	Frequency of modulation
DEPTH	0–100	Depth of modulation
MANUAL	0–100	Center frequency at which the effect is applied
RESONANCE	0–100	Amount of resonance (amount of feedback)
SEPARATION	0–100	Spaciousness of the sound
EFFECT LEVEL	0–100	Volume of the effect sound
DIRECT LEVEL	0–100	Volume of the direct sound

### STEP PHASR

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This is a stereo phaser. The phaser effect will be varied gradually.

Parameter	Value	Explanation
TYPE	4 STAGE, 8 STAGE, 12 STAGE	Number of stages in the phaser
RATE SYNC SW	OFF, ON	OFF: Specify the modulation (RATE) as a numerical value. ON: Specify the modulation (RATE) as a note value.
RATE	0–100, note	Frequency of modulation
STEP SYNC SW	OFF, ON	OFF: Specify the step-wise change (STEP RATE) as a numerical value. ON: Specify the step-wise change (STEP RATE) as a note value.
STEP RATE	0–100, note	Rate of the step-wise change in the phaser effect
DEPTH	0–100	Depth of modulation
MANUAL	0–100	Center frequency at which the effect is applied
RESONANCE	0–100	Amount of resonance (amount of feedback)
SEPARATION	0–100	Spaciousness of the sound
EFFECT LEVEL	0–100	Volume of the effect sound
DIRECT LEVEL	0–100	Volume of the direct sound

## EQ

This adjusts the tone as an equalizer.

Parameter	Value	Explanation
LOWCUT FREQ	FLAT-800 Hz	Frequency at which the low-frequency range will be cut With the FLAT setting, LOW CUT will not be applied.
LOW GAIN	-20+20 dB	Adjusts the low frequency range tone.
PKG1 FREQ	20.0 Hz-10.0 kHz	Center frequency of PKG1
PKG1 Q	0.5, 1, 2, 4, 8, 16	Width of PKG1 Higher values make the width more narrow.
PKG1 GAIN	-20+20 dB	Amount of boost/cut for PKG1
PKG2 FREQ	20.0 Hz-10.0 kHz	Center frequency of PKG2
PKG2 Q	0.5, 1, 2, 4, 8, 16	Width of PKG2 Higher values make the width more narrow.
PKG2 GAIN	-20+20 dB	Amount of boost/cut for PKG2
HI GAIN	-20+20 dB	Adjusts the high frequency range tone.
HICUT FREQ	700 Hz-FLAT	Frequency at which the high-frequency range is cut With the FLAT setting, HIGH CUT will not be applied.
LEVEL	-20+20 dB	Output level

## COMPRESSOR

Flattens out high levels and boosts low levels, smoothing out fluctuations in volume.

Parameter	Value	Explanation
THRESHOLD	-48-0 dB	Adjusts the volume at which compression begins.
ATTACK	0-100	Sets the time from when the input exceeds the THRESHOLD until the volume starts being compressed.
RELEASE	0-99	Adjusts the time after the signal volume falls below the THRESHOLD Level until compression is no longer applied.
RATIO	2:1-100:1	Compression ratio
KNEE	SOFT, HARD	The sound's attack at the moment that compression begins to be applied.
MAKE UP	0+24 dB	Adjusts the output gain

### FILTER

This is a filter with an extremely sharp slope. The cutoff frequency can be varied cyclically.

Parameter	Value	Explanation
TYPE	LOW PASS, BAND PASS, HIGH PASS	Filter type Frequency range that will pass through each filter LOW PASS: Frequencies below the cutoff BAND PASS: Frequencies in the region of the cutoff HIGH PASS: Frequencies above the cutoff
CUTOFF	0-127	Cutoff frequency of the filter
RESONANCE	0-127	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
SLOPE	-12, -24, -36 dB	Filter slope (damping characteristics; amount of damping per octave) -12 dB: Gentle -24 dB: Steep -36 dB: Extremely steep
RATE SYNC SW	OFF, ON	OFF: Specify the modulation (MOD RATE) as a numerical value. ON: Specify the modulation (MOD RATE) as a note.
MOD RATE	0-100, note	Rate of modulation
LFO WAVE	TRI, SINE, SAW, SQR	How the cutoff frequency will be modulated. TRI: Triangle wave SINE: Sine wave SAW: Sawtooth wave (upward) SQR: Square wave
MOD DEPTH	0-100	Depth of modulation

### FILT+DRIVE

This is a low-pass filter equipped with overdrive. It cuts the upper range and adds distortion.

Parameter	Value	Explanation
CUTOFF	0-127	Cutoff frequency of the filter Increasing this value will raise the cutoff frequency.
RESONANCE	0-127	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
DRIVE	0-127	Amount of distortion
LEVEL	0-100	Output level

### ISOLATOR

This is an equalizer which cuts the volume greatly, allowing you to add a special effect to the sound by cutting the volume in varying ranges.

Parameter	Value	Explanation
LOW	-60+4 dB	These boost and cut each of the low frequency ranges.
MID	-60+4 dB	These boost and cut each of the middle frequency ranges.
HIGH	-60+4 dB	These boost and cut each of the high frequency ranges.
LEVEL	0-100	Output level

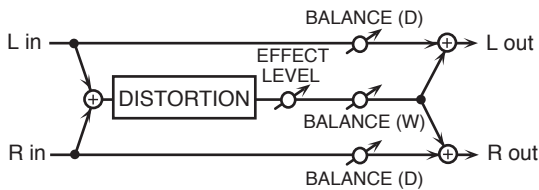
## TOUCH WAH

This produces a wah effect by modifying the filter in correspondence with the volume of the performance.

Parameter	Value	Explanation
MODE	LPF, BPF	Type of filter LPF: The wah effect will be applied over a wide frequency range. BPF: The wah effect will be applied over a narrow frequency range.
POLARITY	DOWN, UP	Sets the direction in which the frequency will change when the touch wah filter is modulated. DOWN: The filter will change toward a lower frequency. UP: The filter will change toward a higher frequency.
SENS	0–100	Adjusts the sensitivity with which the filter is controlled.
FREQUENCY	0–100	Center frequency at which the wah effect is applied
PEAK	0–100	Adjusts the amount of the wah effect that will occur in the range of the center frequency. Set a higher value for Q to narrow the range to be affected.
EFFECT LEVEL	0–100	Volume of the effect sound
DIRECT LEVEL	0–100	Volume of the direct sound

## DISTORTION

This effect distorts the sound to create long sustain.



Parameter	Value	Explanation
TYPE	MID BOOST, CLEAN BOOST, TREBLE BST, BLUES OD, CRUNCH, NATURAL OD, OD-1, T-SCREAM, TURBO OD, WARM OD, DISTORTION, MILD DS, MID DS, RAT, GUV DS, DST+, MODERN DS, SOLID DS, STACK, LOUD, METAL ZONE, LEAD, '60S FUZZ, Oct FUZZ, MUFF FUZZ	Selects the type of distortion.
DRIVE	0–120	Amount of distortion
BOTTOM	-50+50	Adjusts the tone for the low frequency range.
TONE	-50+50	Tone quality of distorted sound
EFFECT LEVEL	0–100	Volume of the effect sound
BALANCE	D100 : 0W–D0 : 100W	Volume balance between the direct sound (D) and the effect sound (W)

### RINGMOD

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This is an effect that applies amplitude modulation (AM) to the input signal, producing bell-like sounds. You can also change the modulation frequency in response to changes in the volume of the sound sent into the effect.

Parameter	Value	Explanation
FREQUENCY	0–127	Adjusts the frequency at which modulation is applied.
SENS	0–127	Adjusts the amount of frequency modulation applied.
POLARITY	UP, DOWN	Determines whether the frequency modulation moves towards higher frequencies (UP) or lower frequencies (DOWN).
LOW GAIN	-15–+15 dB	Amount of boost/cut for the effect sound's lower range
HIGH GAIN	-15–+15 dB	Amount of boost/cut for the effect sound's upper range
BALANCE	D100 : 0W–D0 : 100W	Volume balance between the direct sound (D) and the effect sound (W)
LEVEL	0–100	Output level

### PITCHSHIFT

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A stereo pitch shifter.

Parameter	Value	Explanation
PITCH	-24–+24	Adjusts the pitch in semitone steps.
FINE	-50–+50	Amount of pitch change 100 steps of FINE are equivalent to one step of PITCH.
FEEDBACK	0–100%	Adjusts the proportion of the pitch shifted sound that is fed back into the effect.
EFFECT LEVEL	0–100	Volume of the effect sound
DIRECT LEVEL	0–100	Volume of the direct sound

### VIBRATO

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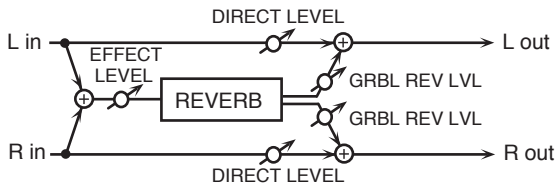
This effect adds vibrato sound.

Parameter	Value	Explanation
RATE	0–100	Frequency of vibrato
DEPTH	0–100	Depth of vibrato



## REVERB

Adds reverberation to the sound, simulating an acoustic space.



Parameter	Value	Explanation
TYPE	AMBIENCE, ROOM, HALL 1, HALL 2, PLATE	Type of reverb
REVERB TIME	0-99	Time length of reverberation
PRE DELAY	0-100	Adjusts the delay time from the direct sound until the reverb sound is heard.
LOW CUT	FLAT-800 Hz	Frequency at which the low-frequency range will be cut With the FLAT setting, LOW CUT will not be applied.
HIGH CUT	700 Hz-FLAT	Frequency at which the high-frequency range will be cut With the FLAT setting, HIGH CUT will not be applied.
DENSITY	0-10	Density of the reverberation
EFFECT LEVEL	0-100	Input volume of the reverberation
DIRECT LEVEL	0-100	Volume of the direct sound
GRBL REV LVL	0-100	Output volume of the reverberation

## SLICER

By applying successive cuts to the sound, this effect turns a conventional sound into a sound that appears to be played as a backing phrase. This is especially effective when applied to sustain type sounds.

Parameter	Value	Explanation
PATTERN	0-15	Timing at which the sound is cut
RATE SYNC SW	OFF, ON	OFF: Specify the frequency (RATE) as a numerical value ON: Specify the frequency (RATE) as a note value
RATE	0-100, note	Rate at which PATTERN is to be repeated
ATTACK	0-127	Speed at which the level changes between steps

**Roland**