



Data List





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Multi-Effect Parameters

The multi-effects feature 30 different kinds of effects. Some of the effects consist of two or more different effects connected in series.

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About note values

Some effect parameters (such as Rate or Delay Time) can be set by using note values.

∌₃	Sixty-fourth note triplet	4	Sixty-fourth note	\mathcal{N}_3	Thirty-second note triplet	, I	Thirty-second note
$ ho_3$	Sixteenth note triplet	A	Dotted thirty- second note	4.	Sixteenth note	$ ho_3$	Eighth-note triplet
A.	Dotted sixteenth note)	Eighth note	•3	Quarter-note triplet	♪ i.	Dotted eighth note
J	Quarter note	93	Half-note triplet	Ţ	Dotted quarter note	J	Half note
03	Whole note triplet	J.	Dotted half note	o	Whole note	lioli3	Double-note triplet
٥٠	Dotted whole	lioil	Double note				

NOTE

note

If you set the delay time as a note value, slowing down the tempo will not change the delay time beyond a certain length. There is an upper limit for the delay time so if it is set 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.

DELAY

This is a stereo delay.

Parameter	Value	Explanation
L TmpSync, R TmpSync	OFF, ON	Specifies whether the delay time value of the left/right delay sounds is specified as a note value (ON) or not (OFF).
L DlyTime, R DlyTime	1–1300msec, note	Delay time from the original sound until the left/right delay sound is heard
L Phas, R Phas	NORMAL, INVERSE	Phase of the left/right delay sound NORMAL: Non-inverted INVERSE: Inverted
FdBkMod	NORMAL, CROSS	Selects the way in which delay sound is fed back into the effect NORMAL: The left/right delay sounds are fed back without modification. CROSS: The left/right delay sounds are alternately exchanged when fed back.
Feedback	-98-+98%	Adjusts the amount of the delay sound that's fed back into the effect. (Negative "-" values invert the phase.)
HF Dump	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out (BYPASS: no cut).
Low Gain	-15-+15dB	Gain of the low frequency range
High Gain	-15-+15dB	Gain of the high frequency range
Level	0–127	Output Level

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
	S, M, L, S+M, S+L, M+L, S+M+L	Combination of playback heads to use
Mode		Select from three different heads with different delay times
		S: short
		M: middle
		L: long
	0–127	Tape speed
RepeatRate		Increasing this value will shorten the spacing of the delayed sounds.
Intensity	0–127	Amount of delay repeats

Bass	-15-+15dB	Boost/cut for the lower range of the echo sound
Treble	-15-+15dB	Boost/cut for the upper range of the echo sound
S Pan		Independent stereo location for the short, middle, and long playback heads
M Pan	L64-R63	
L Pan		
Distortion	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
Level	0–127	Output level

REV DLY (REVERSE DELAY)

This is a reverse delay that adds a reversed and delayed sound to the input sound. A tap delay is connected immediately after the reverse delay.

Parameter	Value	Explanation	
Threshold	0–127	Volume at which the reverse delay will begin to be applied	
RevTmpSync	OFF, ON	Specifies whether the delay time value of the reverse delay is specified as a note value (ON) or not (OFF).	
RevDlyTim	1–1300msec, note	Delay time from when sound is input into the reverse delay until the delay sound is heard	
RevFeedBk	-98-+98%	Proportion of the delay sound that is to be returned to the input of the reverse delay (Negative (-) values invert the phase.)	
RevHFDamp	200–8000Hz, BYPS	Frequency at which the high-frequency content of the reverse-delayed sound will be cut (BYPS: no cut).	
Rev Pan	L64-R63	Stereo location of the reverse delay sound	
Rev Level	0–127	Volume of the reverse delay sound	
D1–3 TmpSync	OFF, ON	Specifies whether the delay time value of the tap delay is specified as a note value (ON) or not (OFF).	
Dly1-3 Tim	1–1300msec, note	Delay time from when sound is input into the tap delay until the delay sound is heard	

Parameter	Value	Explanation
Dly3FeedBk	-98-+98%	Proportion of the delay sound that is to be returned to the input of the tap delay (Negative (-) values invert the phase.)
D HFDamp	200–8000Hz, BYPS	Frequency at which the high frequency content of the tap delay sound will be cut (BYPS: no cut).
D1 Pan, D2 Pan	L64-R63	Stereo location of the tap delay sounds
D1 Level, D2 Level	0–127	Volume of the tap delay sounds
Low Gain	-15-+15dB	Gain of the low frequency range
High Gain	-15-+15dB	Gain of the high frequency range
Level	0–127	Output Level

Produces three delay sounds; center, left and right.

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Parameter	Value	Explanation	
L TmpSync, R TmpSync, C TmpSync	OFF, ON	Specifies whether the delay time value of the left/right/ center delay sound is specified as a note value (ON) or not (OFF).	
L DlyTime, R DlyTime, C DlyTime	1–2600msec, note	Adjusts the delay time from the direct sound until the delay sound is heard.	
FeedBack	-98-+98%	Adjusts the amount of the delay sound that's fed back into the effect. (Negative "-" values invert the phase.)	
HF Damp	200–8000Hz, BYPS	Adjusts the frequency above which sound fed back to the effect is filtered out (BYPS: no cut).	
L Level, R Level, C Level	0–127	Volume of each delay	
Low Gain	-15-+15dB	Gain of the low frequency range	
High Gain	-15-+15dB	Gain of the high frequency range	
Level	0–127	Output Level	

OD → DELAY (Overdrive → Delay)

Parameter	Value	Explanation
Overdrive	0–127	Degree of distortion
		Also changes the volume.

Parameter	Value	Explanation
Pan	L64-R63	Stereo location of the overdrive sound
TmpSync	OFF, ON	Specifies whether the delay time value of the delay is specified as a note value (ON) or not (OFF).
DelayTime	1–2600msec, note	Adjusts the delay time from the direct sound until the delay sound is heard.
FeedBack	-98-+98%	Adjusts the proportion of the delay sound that is fed back into the effect.
		(Negative "-" values invert the phase.)
HF Dump	200–8000Hz, BYPS	Adjusts the frequency above which sound fed back to the effect will be cut (BYPS: no cut).
Balanc	D100:0W- D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

DS → DELAY (Distortion → Delay)

The parameters are essentially the same as in "OD \rightarrow DELAY" with the exception of the following one.

Overdrive → Distortion

CHORUS

This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorus sound.

Parameter	Value	Explanation
	OFF, LPF, HPF	Type of filter
Filter		CFF: no filter is used LPF: cuts the frequency range above the Cutoff Freq HPF: cuts the frequency range below the Cutoff Freq
CutoffFrq	200-8000Hz	Specifies the frequency at which the filter cuts a specific frequency region
Pre Delay	0.0–100ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180deg	Spatial spread of the sound

Parameter	Value	Explanation
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

SPACE-D

This is a multiple chorus that applies two-phase modulation in stereo. It gives no impression of modulation, but produces a transparent chorus effect.

Parameter	Value	Explanation
Pre Delay	0.0–100ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180deg	Spatial spread of the sound
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

OD → CHORS (Overdrive → Chorus)

Parameter	Value	Explanation
0 1:		Degree of distortion
Overdrive	0–127	Also changes the volume.
Pan	L64-R63	Stereo location of the overdrive sound
Pre Delay	0.0–100ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Balanc	D100:0W- D0:100W	Adjusts the volume balance between the sound that is sent through the chorus (W) and the sound that is not sent through the chorus (D).
Level	0–127	Output Level

DS → CHORS (Distortion → Chorus)

The parameters are essentially the same as in "OD → CHORUS" with the exception of the following one.

Overdrive → Distortion

PHASER A

This is a stereo phaser. A phase-shifted sound is added to the original sound and modulated.

Parameter	Value	Explanation
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual	0–127	Adjusts the basic frequency from which the sound will be modulated.
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Polarity	INVR, SYNC	Selects whether the left and right phase of the modulation will be the same or the opposite. INVR: The left and right phase will be opposite. When using a mono source, this spreads the sound. SYNC: The left and right phase will be the same. Select this when inputting a stereo source.
Resonance	0–127	Amount of feedback
CrossFdBk	-98-+98%	Adjusts the proportion of the phaser sound that is fed back into the effect. (Negative "-" values invert the phase.)
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

PHASER B

This simulates a different analog phaser than Phaser A.

Parameter	Value	Explanation
Speed	0-100	Frequency of modulation
Depth	0–127	Depth of modulation
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

STEP PHSR (Step Phaser)

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

Parameter	Value	Explanation
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual	0–127	Adjusts the basic frequency from which the sound will be modulated.
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Polarity	INVR, SYNC	Selects whether the left and right phase of the modulation will be the same or the opposite. INVR: The left and right phase will be opposite. When using a mono source, this spreads the sound. SYNC: The left and right phase will be the same. Select this when inputting a stereo source.
Resonance	0–127	Amount of feedback
CrossFdBk	-98-+98%	Adjusts the proportion of the phaser sound that is fed back into the effect. (Negative "-" values invert the phase.)
StpTmpSync	OFF, ON	Specifies whether the modulation rate of the phaser effect is specified as a note value (ON) or not (OFF).
StepRate	0.10–20.00Hz, note	Rate of the step-wise change in the phaser effect
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

FLANGER

This is a stereo flanger. (The LFO has the same phase for left and right.) It produces a metallic resonance that rises and falls like a jet airplane taking off or landing. A filter is

provided so that you can adjust the timbre of the flanged sound.

Parameter	Value	Explanation
		Type of filter
	OFF,	OFF: no filter is used
Filter	LPF,	LPF: cuts the frequency range above the Cutoff Freq
	TIFI	HPF: cuts the frequency range below the Cutoff Freq
CutoffFrq	200-8000Hz	Specifies the frequency at which the filter cuts a specific frequency region
Pre Delay	0.0–100ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180deg	Spatial spread of the sound
Feedback	-98-+98%	Adjusts the proportion of the flanger sound that is fed back into the effect.
		(Negative "-" values invert the phase.)
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

REVERB

Adds reverberation to the direct sound, simulating an acoustic space.

Parameter	Value	Explanation
Туре	ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2	Type of reverb
Pre Delay	0.0–100msec	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time	0–127	Time length of reverberation
HF Damp	200–8000Hz, BYPS	Adjusts the frequency above which the reverberant sound will be cut (BYPS: no cut).
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

LONG REV (LONG REVERB)

This is a very rich sounding reverb with a choice of character.

Parameter	Value	Explanation
Depth	0-127	Depth of the effect
Time	0-127	Time length of reverberation
Pre LPF	16– 15000Hz, BYPS	Frequency of the filter that cuts the high-frequency content of the input sound (BYPS: no cut).
Pre HPF	BYPS, 16–15000Hz	Frequency of the filter that cuts the low-frequency content of the input sound (BYPS: no cut).
Peak Frq	200-8000Hz	Frequency of the filter that boosts/ cuts a specific frequency region of the input sound
Peak Gain	-15-+15dB	Amount of boost/cut produced by the filter at the specified frequency region of the input sound
Peak Q	0.5-8.0	Bandwidth of the filter that boosts or cuts the specified frequency region of the input sound
HF Damp	16– 15000Hz, BYPS	Frequency at which the high- frequency content of the resonant sound will be cut (BYPS: no cut).
LF Damp	BYPS, 16–15000Hz	Frequency at which the low- frequency content of the resonant sound will be cut (BYPS: no cut).
Character	1–6	Type of reverb
Low Freq	200-400Hz	Center frequency of the low range
Low Gain	-15-+15dB	Gain of the low range
High Freq	2000– 8000Hz	Center frequency of the high range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

Parameter	Value	Explanation
		Cutoff frequency of the filter
CutOff	0–127	Increasing this value will raise the cutoff frequency.
		Filter resonance level
Resonance	0–100	Increasing this value will emphasize the region near the cutoff frequency.
Gain	0-+12dB	Amount of boost for the filter output
Mod Sw	OFF, ON	On/off switch for cyclic change
	How the cutof	ff frequency will be modulated
	TRI	Triangle wave
	SQR	Square wave
	SIN	Sine wave
Mod Wave	SAW1	Sawtooth wave (upward)
	SAW2	Sawtooth wave (downward)
	SAW1	SAW2
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05– 10.00Hz, note	Rate of modulation
Depth	0–127	Depth of modulation
Attack	0–127	Speed at which the cutoff frequency will change
	0-12/	This is effective if Modulation Wave is SQR, SAW1, or SAW2.
Level	0–127	Output Level
Level	0-12/	Output Level

SP FILTER (SUPER FILTER)

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

Parameter	Value	Explanation	
	Filter type		
	Frequency ran filter	Frequency range that will pass through each filter	
	LPF	Frequencies below the cutoff	
Filter	BPF	Frequencies in the region of the cutoff	
	HPF	Frequencies above the cutoff	
	NOTCH	Frequencies other than the region of the cutoff	
	Amount of attenuation per octave		
Clama	-12dB	Gentle	
Slope	-24dB	Steep	
	-36dB	Extremely steep	

FIL+DRIVE (FILTER+DRIVE)

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

Parameter	Value	Explanation
		Cutoff frequency of the filter
Cutoff	0–127	Increasing this value will raise the cutoff frequency.
		Filter resonance level
Resonance	0–127	Increasing this value will emphasize the region near the cutoff frequency.
Drive	0–127	Amount of distortion
Level	0–127	Output Level

AUTO WAH

Cyclically controls a filter to create cyclic change in timbre.

Parameter	Value	Explanation
Filter	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.
Manual	0–127	Adjusts the center frequency at which the effect is applied.
Peak	0–127	Width of the frequency region at which the wah effect is applied Increasing this value will make the frequency region narrower.
Sens	0–127	Adjusts the sensitivity with which the filter is controlled.
Polarity	UP, DOWN	Direction in which the filter will move UP: Move toward a higher frequency DOWN: Move toward a lower frequency
TmpSync	OFF, ON	Specifies whether the modulation rate is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0–180deg	Adjusts the degree of phase shift of the left and right sounds when the wah effect is applied.
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

OD/DS → TW (Overdrive/ Distortion → Touch wah)

Parameter	Value	Explanation
Drive Sw	OFF, ON	Turns overdrive/distortion on/off
Туре	OVERDRIVE, DIST	Type of distortion
Drive	0–127	Degree of distortion
DIVC		Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Amp Sw	OFF, ON	Turns the Amp Simulator on/off.

Parameter	Value	Explanation
rarameter	value	-
Amp	SMALL, BUILT- IN, 2-STACK, 3-STACK	Type of guitar amp SMALL: small amp BUILT-IN: single-unit type amp 2-STACK: large double stack- type amp 3-STACK: large triple stack- type amp
TWah Sw	OFF, ON	Wah on/off
Mode	LPF, BPF	Type of filter LPF: Produces a wah effect in a broad frequency range. BPF: Produces a wah effect in a narrow frequency range.
Polarity	DOWN, UP	Direction in which the filter will move UP: Move toward a higher frequency DOWN: Move toward a lower frequency
Sens	0–127	Sensitivity with which the filter is modified
Manual	0–127	Center frequency at which the wah effect is applied
Peak	0–127	Width of the frequency region at which the wah effect is applied Increasing this value will make the frequency region narrower.
Balanc	D100:0W- D0:100W	Volume balance of the sound that passes through the wah (W) and the unprocessed sound (D)
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

LOFI COMP (LOFI COMPRESS)

This is an effect that intentionally degrades the tone character for creative purposes.

Parameter	Value	Explanation
PreFilter	1–6	Selects the type of filter applied to the sound before it passes through the Lo-Fi effect. 1: Compressor off 2-6: Compressor on
LoFi Type	1–9	Degrades the tone character. The tone character grows poorer as this value is increased.

Parameter	Value	Explanation
	0.55	Selects the type of filter applied to the sound after it passes through the Lo-Fi effect.
PostFilter	OFF, LPF,	OFF: no filter is used
HPF	,	LPF: cuts the frequency range above the Cutoff
		HPF: cuts the frequency range below the Cutoff
CutOff	200-8000Hz	Basic frequency of the Post Filter
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

Parameter	Value	Explanation
SaturGain	0–127	Input volume to the saturator
SaturDrive	0–127	Degree of distortion
SaturLevel	0–127	Output volume of the saturator
Comp Depth	0–127	Amount of compression
Comp Level	0–127	Output volume of the compressor
Hi Gain	-12-+6dB	Gain of the high range
Level	0–127	Output Level

DIST (Distortion)

Produces a more intense distortion than Overdrive.

Parameter	Value	Explanation
Drive	0–127	Degree of distortion
	0 127	Also changes the volume.
Tone	0–127	Sound quality of the Distortion effect
Amp Sw	OFF, ON	Turns the Amp Simulator on/off.
	SMALL, BUILT- IN, 2-STACK, 3-STACK	Type of guitar amp
Amp		SMALL: small amp
		BUILT-IN: single-unit type amp
		2-STACK: large double stacktype amp
		3-STACK: large triple stack-type amp
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Pan	L64-R63	Stereo location of the output sound
Level	0–127	Output Level

T-SCREAM

This models the analog overdrive of the past.

It adds a nice amount of overtones without dirtying the

Parameter	Value	Explanation
Distortion	0–127	Degree of distortion
		Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Level	0-127	Output Level

This creates a lo-fi sound.

BIT CRUSH (BIT CRUSHER)

Parameter	Value	Explanation
SampleRate	0–127	Adjusts the sample rate.
Bit Down	0–18	Adjusts the bit depth.
Filter	0–127	Adjusts the filter depth.
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0-127	Output Level

OVERDRIVE

This is an overdrive that provides heavy distortion. The parameters are the same as for "DIST."

SATURATOR

A saturator which distorts the sound is connected in parallel with a compressor, producing a rougher tonal character and boosting the loudness. This also cuts the low-frequency region of the input audio.

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
Lo Bst/Cut	-60-+4dB	These boost and cut each of the
Mi Bst/Cut		high, middle, and low frequency ranges
Hi Bst/Cut		At -60 dB, the sound becomes inaudible. 0 dB is equivalent to the input level of the sound.

Multi-Effect Parameters

Parameter	Value	Explanation
	OFF, ON	Turns the Anti-Phase function on/off for the Low frequency ranges.
LoAntPhSw		When turned on, the counter- channel of stereo sound is inverted and added to the signal.
	0–127	Adjusts the level settings for the Low frequency ranges.
LoAntPhLvI		Adjusting this level for certain frequencies allows you to lend emphasis to specific parts (This is effective only for stereo source.).
MiAntPhSw	OFF, ON	Settings of the Anti-Phase
	0–127	function for the Middle frequency ranges.
MiAntPhLvI		The parameters are the same as for the Low frequency ranges.
	OFF, ON	Turns Low Booster on/off.
Lo BstSw		This emphasizes the bottom to create a heavy bass sound.
	0–127	Increasing this value gives you a heavier low end
Lo BstLvl		* Depending on the Isolator and filter settings this effect may be hard to distinguish.
Level	0–127	Output Level

PITCH SFT (PITCH SHIFTER)

A stereo pitch shifter.

'		
Parameter	Value	Explanation
Coarse	-24-+12 semi	Adjusts the pitch of the pitch shifted sound in semitone steps.
Fine	-100-+100 cent	Adjusts the pitch of the pitch shifted sound in 2-cent steps.
TmpSync	OFF, ON	Specifies whether the delay time value of the delay is specified as a note value (ON) or not (OFF).
DelayTime	1–1300msec, note	Adjusts the delay time from the direct sound until the pitch shifted sound is heard.
Feedback	-98-+98%	Adjusts the proportion of the pitch shifted sound that is fed back into the effect. (Negative "-" values invert the phase.)
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

RING MOD (RING MODULATOR)

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.
		Direction in which the frequency modulation will move
Polarity	UP, DOWN	UP: Towards higher frequencies
		DOWN: Towards lower frequencies
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

AUTO PAN

Cyclically modulates the stereo location of the sound.

Parameter	Value	Explanation
		Modulation wave
		TRI: Triangle wave
		SQR: Square wave
	TRI, SQR, SIN, SAW1, SAW2, TRP	SIN: Sine wave
		SAW1: Sawtooth wave (upward)
Mod Wave		SAW2: Sawtooth wave (downward)
		TRP: Trapezoidal wave
	SAW1	SAW2
	R	
TmpSync	OFF, ON	Specifies whether the rate of modulation applied to the effect is specified as a note value (ON) or not (OFF).
Rate	0.05–10.00Hz, note	Frequency of the change
Depth	0–127	Depth to which the effect is applied
Low Gain	-15-+15dB	Gain of the low range
High Gain	-15-+15dB	Gain of the high range
Level	0–127	Output Level

Drum Kit List

No.	Kit Name
1	LiveAcoustic
2	Solid Rock
3	Metal
4	Cafe Live
5	Fat Drums
6	Punky
7	Compact
8	Modern RnB
9	House
10	Hip Hop
11	Reggae
12	Distorted
13	Studio
14	Arena Rock
15	Groove
16	Pop .
17	Jazz
18	Resonance
19	Filter Drive
20	Dub
21	Effects It!
22	Elec-Drum
23	808
24	909
25	Percussion
26	User Kit
27	User Kit
28	User Kit
29	User Kit
30	User Kit
31	User Kit
32	User Kit
33	User Kit
34	User Kit
35	User Kit
36	User Kit
37	User Kit
38	User Kit
39	User Kit
40	User Kit
41	User Kit
42	User Kit
43	User Kit
44	User Kit
45	User Kit
46	User Kit
47	User Kit
48	User Kit
49	User Kit
50	User Kit

Instrument List

No.	Inst Name
	OFF
0	
1	Hard 1 K
2	Hard 2 K
3	Solid K
4	Deep K
5	Solid 20" K
6	Open 18" K
7	Beech K
8	Soft K
9	Maple K
10	Birch K
11	Resonance K
12	Tronic K
13	House K
14	DnB K
15	Mellbourn K
16	HardStyle K
17	808 K
18	909 K
19	Atk Bass K
20	Mahogany S
21	Mahogany SR
22	Aluminum S
23	Aluminum SR
24	Maple S
25	Maple SR
26	Steel S
27	Steel SR
28	Brass S
29	Brass SR
30	Piccolo S
31	Piccolo SR
32	House S
33	Hop S
34	DnB S
35	Dance S
36	Amb Snap S
37	Buzz S
38	808 S
39	808 Rim
40	909 S
41	909 Rim
42	Synth S
43	Analog S
44	Beech 10"
45	Beech 12"
46	Beech 13"
47	Beech 16"
48	Maple 10"
49	Maple 12"
50	Maple 13"
	· ·

No.	Inst Name
51	Maple 16"
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52	Birch 12"
53	Birch 14"
54	Birch 16"
55	Birch 18"
56	Shallow 10"
57	Shallow 12"
58	Shallow 13"
59	Shallow 16"
60	808 T1
61	808 T2
62	808 T3
63	808 T4
64	909 T1
65	909 T2
66	909 T3
67	909 T4
68	Elec T1
69	Elec T2
70	Elec T3
71	Session HH
72	Session HHE
73	Bright HH
74	Bright HHE
75	Heavy HH
76	Heavy HHE
77	Tamb HH
78	Tamb HHE
79	Proc HH
80	808 HH
81	909 HH
82	Dark Rd
83	Dark RdE
84	Dark RdB
85	Bright Rd
86	Bright RdE
87	Bright RdB
88	Light Rd
89	Light RdE
90	Light RdB
91	Dry Rd
92	Dry RdE
93	Dry RdB
94	Dark Cr
95	Dark CrE
96	Bright Cr
97	Bright CrE
98	Heavy Cr
99	Heavy CrE
100	Thin Cr
101	Thin CrE
701	mm GE

No.	Inst Name
102	China
102	China E
104	Splash
105	Splash E
106	Phasing Cr
107	Reflct Bell
108	Rev Cr
109	Rev Trash
110	808 Cymbal
111	Sleigh Bell
112	Tree Chime
113	Cowbell 1
114	Cowbell 2
115	Wd Block H
116	Wd Block L
117	Bongo H Op
118	Bongo H Slp
119	Bongo L Op
120	Conga Open
121	Conga Slap
122	Timbale H
123	Timbale L
124	Cajon Open
125	Cajon Bass
126	Tamb 1
127	Tamb 2
128	Triangle
129	Triangle Mt
130	Claves
131	Shaker
132	808 Cowbl 1
133	808 Cowbl 2
134	808 Maracas
135	808 Clap
136	909 Clap
137	808 Claves
138	727 Cong H1
139	727 Cong H2
140	727 Conga L
141	CR78 Guir 1
142	CR78 Guir 2
143	727 Quijada

