



FR-8X

Roland

Tone & Drum Kit List

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Orchestra Tone List

No.	Name	Tone Controlled by
Piano		
0001	NaturalPiano	Keyboard
0002	SuperiorPian	Keyboard
0003	ClassicPiano	Keyboard
0004	UprightPiano	Keyboard
0005	Rock Piano	Keyboard
0006	RD Piano	Keyboard
0007	Brite Piano	Keyboard
0008	European Pf	Keyboard
0009	Mild Piano	Keyboard
0010	Piano+String	Bellows+ Keyboard
0011	Piano+Choir	Bellows+ Keyboard
0012	Honky Tonk	Bellows+ Keyboard
0013	MonoAcPiano	Keyboard
0014	Ac Piano	Keyboard
0015	Oct.Piano	Keyboard
E. Piano		
0016	Wurly	Keyboard
0017	El.Piano	Keyboard
0018	EP Heaven	Bellows+ Keyboard
0019	Phase Clav	Keyboard
0020	Harpys w	Keyboard
Chromatic Percussion		
0021	Vibe	Keyboard
0022	Marimba w	Keyboard
0023	Xylophone w	Keyboard
0024	Celesta	Keyboard
0025	Music Box	Keyboard
Organ		
0026	Organ Flute	Bellows
0027	Chapel Organ	Bellows
0028	Church Organ	Bellows
0029	Mid Pipe	Bellows
Accordion		
0030	Harmonica	Bellows
0031	Mute Harm	Bellows
Acoustic Guitar		
0032	Nylon Guitar	Keyboard
0033	Steel Guitar1	Keyboard
0034	Steel Guitar2	Keyboard
0035	Nylon-str.Gt	Keyboard
0036	Cimbalon	Keyboard
0037	Atmosphere	Bellows+ Keyboard
0038	Nylon&Steel	Keyboard
0039	Ac.Guitar	Keyboard
0040	Banjo	Keyboard
0041	Mandolin	Keyboard

No.	Name	Tone Controlled by
Electric Guitar		
0042	Clean Solid	Keyboard
0043	Warm Drive	Keyboard
0044	JC Chrus Gt	Keyboard
0045	Jazz Guitar	Keyboard
0046	JGuitar Scat	Bellows+ Keyboard
0047	PedalSteel	Bellows+ Keyboard
0048	Overdrive	Bellows+ Keyboard
0049	Distort Gt.	Bellows+ Keyboard
0050	Power Gt.	Bellows+ Keyboard
Bass		
0051	Acoustic Bs1	Keyboard
0052	Fingered Bs1	Keyboard
0053	Fretless Bs1	Keyboard
0054	Picked Bs1	Keyboard
0055	5String Bs	Keyboard
0056	Nu Slap Bs	Keyboard
0057	SH101 Bass	Bellows+ Keyboard
0058	Bassic Needs	Bellows+ Keyboard
0059	XV Ac. Bass	Keyboard
0060	Jazz Bass	Keyboard
0061	MG Bass	Bellows+ Keyboard
0062	LightSynBass	Bellows+ Keyboard
0063	Wood+FlessBs	Keyboard
0064	Acoustic Bs2	Keyboard
0065	Bowed	Bellows
0066	Fingered Bs2	Keyboard
0067	Fretless Bs2	Keyboard
0068	Picked Bs2	Keyboard
0069	Rubber Bass	Keyboard
0070	Tuba	Bellows
0071	Tuba Mix	Keyboard
Strings		
0072	Strings	Bellows
0073	Velo Strings	Bellows+ Keyboard
0074	Sl.Strings	Bellows
0075	StraightStr	Bellows+ Keyboard
0076	Syn.Strings1	Bellows+ Keyboard
0077	Syn.Strings2	Bellows+ Keyboard
0078	Orchestra	Bellows+ Keyboard
0079	Cello	Bellows+ Keyboard
0080	Harp St.	Keyboard
0081	Harp&Strings	Bellows+ Keyboard
0082	Str.+Flute	Bellows+ Keyboard
0083	Violin	Bellows
0084	Pizzicato	Keyboard
0085	HarpsiStr	Bellows+ Keyboard
0086	Str&Choir	Bellows+ Keyboard

No.	Name	Tone Controlled by
Voices		
0087	Warm Voices	Bellows+ Keyboard
0088	Fem Mm Srt	Bellows+ Keyboard
0089	Holy Voices	Bellows+ Keyboard
0090	Tears Voices	Bellows+ Keyboard
0091	SC Heaven	Bellows+ Keyboard
0092	LFO Vox	Bellows+ Keyboard
0093	JazzScat1	Bellows+ Keyboard
0094	JazzScat2	Bellows+ Keyboard
0095	JazzScat3	Bellows+ Keyboard
0096	JazzDoos	Bellows+ Keyboard
0097	Pad Voices	Bellows+ Keyboard
0098	ChorusLuh	Bellows+ Keyboard
0099	ChorusWoh	Bellows+ Keyboard
0100	ChoirAahs	Bellows+ Keyboard
Brass		
0101	2Tps+Tb	Bellows+ Keyboard
0102	2Tps+Tb+Sax	Bellows+ Keyboard
0103	V Twin bones	Bellows+ Keyboard
0104	St. Brass ff	Bellows+ Keyboard
0105	Power Brass	Bellows+ Keyboard
0106	Brass Sforz	Bellows+ Keyboard
0107	JUNO Brass	Bellows+ Keyboard
0108	TrumpetFall1	Bellows+ Keyboard
0109	TrumpetFall2	Bellows+ Keyboard
0110	Brass	Bellows
0111	Horn&Orc	Bellows
Sax - Trumpet		
0112	Twin Trumpet	Bellows
0113	Trumpet	Bellows
0114	Wha Muted Trump	Bellows+ Keyboard
0115	Soft Muted Trump	Bellows+ Keyboard
0116	Muted Trum	Bellows+ Keyboard
0117	Trumpets & Fall	Bellows+ Keyboard
0118	Trp Sfz & Fall	Bellows+ Keyboard
0119	Trombone	Bellows
0120	Alto Sax	Bellows
0121	AltoSax Fall	Bellows+ Keyboard
0122	Soprano Exp.	Bellows+ Keyboard
0123	Soprano Sax	Bellows+ Keyboard
0124	Tenor Sax1	Bellows
0125	Tenor Sax2	Bellows
0126	Tenor Sax Fall	Bellows+ Keyboard
0127	Sax Section1	Bellows+ Keyboard
0128	Sax Section2	Bellows+ Keyboard
0129	FrenchHorn	Bellows
0130	Clarinet	Bellows

No.	Name	Tone Controlled by
0131	Oboe	Bellows
0132	Flute1	Bellows
0133	Flute2	Bellows
0134	PanFlute	Bellows
0135	Bassoon	Bellows+ Keyboard
0136	Piccolo	Bellows+ Keyboard
0137	Whistle	Bellows+ Keyboard
0138	Ocarina	Bellows+ Keyboard
Sax - Synth		
0139	Big Lead	Bellows+ Keyboard
0140	CC Solo	Bellows+ Keyboard
0141	Super Poly	Bellows+ Keyboard
0142	D-50 Fantasy	Bellows+ Keyboard
0143	Euro-Dance	Bellows+ Keyboard
0144	Octave Stack	Bellows+ Keyboard
0145	260HarmPad	Bellows+ Keyboard
0146	Bell Heaven	Bellows+ Keyboard
0147	New Age Pad	Bellows+ Keyboard
0148	Fantasia	Bellows+ Keyboard
0149	LA Brass Ld	Bellows+ Keyboard
0150	LM Blow Lead	Bellows+ Keyboard
Sax - Pad - Ethic		
0151	Nay	Bellows+ Keyboard
0152	Kawala	Bellows+ Keyboard
0153	Shakuhachi	Bellows+ Keyboard
0154	Shaku Bamboo	Bellows+ Keyboard
0155	Pad With	Bellows+ Keyboard
0156	LA Warm Pad	Bellows+ Keyboard
0157	Human Pad	Bellows+ Keyboard
0158	Square Pad	Bellows+ Keyboard
0159	Soft BellPad	Bellows+ Keyboard
0160	D-Mention	Bellows+ Keyboard
0161	Sweep Pad	Bellows+ Keyboard
0162	Warriors	Bellows+ Keyboard
0163	Shwimmer	Bellows+ Keyboard
0164	EP Pad	Bellows+ Keyboard
0165	Soundtrack	Bellows+ Keyboard
0166	Ambient Pad	Bellows+ Keyboard
0167	FallinInsect	Bellows+ Keyboard
0168	Echo Drops	Bellows+ Keyboard
0169	Big Panner	Bellows+ Keyboard
0170	Sitar	Keyboard
0171	Tamboura	Bellows+ Keyboard
0172	Oud	Keyboard
0173	Bazouki Trmv	Keyboard
0174	Oud2Trm VMix	Keyboard
0175	Mizmar Oct	Bellows+ Keyboard
0176	HighLand	Bellows

No.	Name	Tone Controlled by
0177	Zampogna	Bellows
Sax - Percussion - SFX		
0178	Timpani	Keyboard
0179	Timpani+Low	Keyboard
0180	Steel Drums	Keyboard

Interaction between the Tone and the Orchestra Touch Parameter

The FR-8x allows you to change the dynamics of the sound in response to the way that you press the keys of the keyboard. Moreover the FR-8x allows you to do this using the bellows.

In FR-8x, the dynamics of some tones can be controlled by keyboard, some of them by bellows and other by both, keyboard and bellows.

The above table shows the list of FR-8x tones and by what they are controlled.

The following table explains the interaction between the type of Tone (patch) and the Orchestra Touch parameter.

Tone Controlled by	Interaction with the Orchestra Touch
Bellows	<p>The "ORCH TOUCH" parameter does not act when one of these tones is selected.</p> <p>The bellows controls the Expression.</p>
Keyboard	<p>The dynamics of the sound depends on how you press the keys of the keyboard.</p> <p>The "ORCH TOUCH" parameter allows you to specify the velocity sensitivity to play Orchestral sounds:</p> <ul style="list-style-type: none"> ● "Fixed Low", "Fixed Med", "Fixed High" <p>Fixed dynamic value, no matter how hard or softly you press the keys (no dynamic control).</p> <ul style="list-style-type: none"> ● "Low", "Medium", "High", "Heavy" <p>The dynamics of the sound depends on how you press the keys of the keyboard and which type of curve you chose.</p> <ul style="list-style-type: none"> ● "Fixed Low + Bellows", "Fixed Med + Bellows", "Fixed High + Bellows", <p>The dynamics of the sound depends on which fixed curve you chose and how hard you compress or expand the bellows</p> <ul style="list-style-type: none"> ● "Bellows" <p>The dynamics of the sound depends on how hard you compress or expand the bellows.</p>
Bellows + Keyboard	<p>The dynamics of the sound depends on how you press the keys of the keyboard and/or how hard you compress or expand the bellows.</p> <p>The "ORCH TOUCH" parameter allows you to specify the velocity sensitivity to play Orchestral sounds:</p> <ul style="list-style-type: none"> ● "Fixed Low", "Fixed Med", "Fixed High" <p>Fixed dynamic value, no matter how hard or softly you press the keys (no dynamic control).</p> <p>The bellows controls the Expression.</p> <ul style="list-style-type: none"> ● "Low", "Medium", "High", "Heavy" <p>You can choose four types of dynamic curves.</p> <p>The bellows controls the Expression.</p> <ul style="list-style-type: none"> ● "Fixed Low + Bellows", "Fixed Med + Bellows", "Fixed High + Bellows", <p>The dynamics of the sound depends on which fixed curve you chose and how hard you compress or expand the bellows. Moreover the bellows controls the Expression.</p> <ul style="list-style-type: none"> ● "Bellows" <p>The dynamics of the sound depends on how hard you compress or expand the bellows. Moreover the bellows controls the Expression</p>

Drum Set List

No.	Name	CC00	CC32	PC
1	Standard	0	0	1
2	Pop	0	0	2
3	Folk	0	0	3
4	Brush Pop	0	0	4
5	V-Rock	0	0	5
6	Dance	0	0	6
7	House	0	0	7
8	Electronic	0	0	8
9	TR-909	0	0	9
10	SuperOrch	0	0	10

No.	Name	CC00	CC32	PC
11	Orchestra	0	0	11
12	V-VoxDrum	0	0	12
13	Ethnic	0	0	13
14	Oriental	0	0	14
15	Percussion 1	0	0	15
16	Percussion 2	0	0	16
17	SFX	0	0	17
18	Old FR-7x	0	0	18

		Standard	Pop	Folk	Brush Pop	V-Rock	Dance	House	Electronic
0	C-1	Std.1 Kick1	HipHop Kick1	Brasil Tamburin	HipHop Kick1	HipHop BD1	Elec Kick 2	Elec Kick 2	Elec Kick 2
1	C#-1	Std.1 Kick2	Jazz Kick 1	Marches Tamburin	Jazz Kick 1	Jazz Kick 1	Elec Kick 1	Elec Kick 1	Elec Kick 1
2	D-1	Std.2 Kick1	Mex Kick	Tamorra 1	Mex Kick	Mex_Kik36	CR78 BD 1	CR78 BD 1	CR78 BD 1
3	D#-1	Std2 Kick2	Rm Kick 1	Tamorra 2	Rm Kick 1	85Rm BsDrum1	CR78 BD 2	CR78 BD 2	CR78 BD 2
4	E-1	Kick 1	Rm Kick 2	Tamorra 3	Rm Kick 2	85Rm BsDrum2	TR-606 BD1	TR-606 BD1	TR-606 BD1
5	F-1	Kick 2	HipHop Kick2	Tamorra 4	HipHop Kick2	HipHop BD2	TR-707 BD	TR-707 BD	TR-707 BD
6	F#-1	Jazz Kick 1	TechnoKick1	Tamorra 6	TechnoKick1	Techno BD1	808 Kick	808 Kick	808 Kick
7	G-1	Jazz Kick 2	BassDrumSet	Tamorra 7	BassDrumSet	JungleBD Set	TR-808 Kick	TR-808 Kick	TR-808 Kick
8	G#-1	Room Kick 1	HipHop Kick1	Tamorra 8	HipHop Kick1	HipHop BD1	808 BD	808 BD	808 BD
9	A-1	Room Kick 2	909Comp Kick	Tamorra Ending	909Comp Kick	909 Comp BD	TR-909 Kick	TR-909 Kick	TR-909 Kick
10	Bb-1	Power Kick1	St Kick 1	Pandeiro 1	St Kick 1	85St BsDrum1	Dance Kick 2	Dance Kick 2	Dance Kick 2
11	B-1	Power Kick2	JazzKick	Pandeiro 2	JazzKick	NewJzKik	909 Comp BD	909 Comp BD	909 Comp BD
12	C0	Elec Kick 2	NewRockKik	Pandeiro 3	RockKik	NewRockKik	TR-909 BD2	TR-909 BD2	TR-909 BD2
13	C#0	Elec Kick 1	Cymbal Roll	Pandeiro 4	Cymbal Roll	Cymbal Roll	HipHop BD2	HipHop BD2	HipHop BD2
14	D0	TR-808 Kick	Rock Stick 2	Pandeiro 5	Rock Stick 2	NewRkCstk_2	JungleBD Set	JungleBD Set	JungleBD Set
15	D#0	TR-909 Kick	Rm Snare 1	Pandeiro 6	Rm Snare 1	82Rm Snare1	Techno BD1	Techno BD1	Techno BD1
16	E0	Dance Kick 2	Rm Snare 2	BeguineLoop3	Rm Snare 2	82Rm Snare2	Bounce	Bounce	Bounce
17	F0	Voice One	St Snare1	BeguineLoop2	St Snare1	85St Snare1	Voice One	Voice One	Voice One
18	F#0	Voice Two	St Snare2	BeguineLoop1	St Snare2	85St Snare2	Voice Two	Voice Two	Voice Two
19	G0	Voice Three	JazzSnare2	JazzSnare2	JazzSnare2	NewJzSn2	Voice Three	Voice Three	Voice Three
20	G#0	---	JazzSnare1	JazzSnare1	JazzSnare1	NewJzSn1	HipHop BD2	TR-909 BD2	---
21	A0	---	R&B Snare	R&B Snare	R&B Snare	NewR&BSn	TR-909 BD2	Techno BD2	---
22	Bb0	MC-500 Beep	RockSnare2_2	RockSnare2_2	RockSnare2 2	IPopSn40_2	MC-500 Beep	MC-500 Beep	MC-500 Beep
23	B0	MC-500 Beep	RockSnare1_2	RockSnare1_2	RockSnare1 2	IPopSn38_2	MC-500 Beep	MC-500 Beep	MC-500 Beep
24	C1	Concert Snr	PopSnare38 2	PopSnare38 2	PopSnare38 2	IPopSn38_2	Concert Snr	Concert Snr	Concert Snr
25	C#1	Snare Roll	Snare Ghost1	Snare Ghost1	Snare Ghost1	IPopGstS39_2	Snare Roll	Snare Roll	Snare Roll
26	D1	Finger Snap	PopSnare38 2	PopSnare38 2	PopSnare38 2	IPopSn40_2	Finger Snap	FingerSnaps2	Finger Snap
27	D#1	High-Q	FingerSnaps2	FingerSnaps2	FingerSnaps2	FingerSnaps2	High-Q	High-Q	High-Q
28	E1	Slap	909 HandClap	RockSnare2_3	909 HandClap	909 HandClap	Slap	Slap	Slap
29	F1	ScratchPush	808 Clap	Roll Snare	808 Clap	808clap	Scratch Push2	Scratch Push2	Scratch Push2
30	F#1	ScratchPull	Hand clap2	Hand clap2	Hand clap2	Hand clap2	Scratch Pull2	Scratch Pull2	Scratch Pull2
31	G1	Sticks	909 HandClap	909 HandClap	909 HandClap	909 HandClap	Sticks	Sticks	Sticks
32	G#1	SquareClick	Pedal Hi Hat	Pedal Hi Hat	Pedal Hi Hat	NewRkHatPdl	SquareClick	SquareClick	SquareClick
33	A1	Mtrnm.Click	GospelHClp1	FolkSnareTango2	GospelHClp1	GospelHClp1	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
34	Bb1	Mtrnm. Bell	Snare Roll 1	FolkSnareRoll	Snare Roll 1	NewRkSnRll	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
35	B1	Std2 Kick2	Pop Kick 35	Pop Kick 35	Pop Kick 35	NewRockKik	TR-909 BD2	HipHop BD2	Elec Kick 2
36	C2	Std.2 Kick1	Pop Kick 36	Pop Kick 36	Pop Kick 36	NewRockKik	Techno BD2	TR-909 BD2	Elec Kick 1
37	C#2	Side Stick	Pop Stick1	Pop Stick1	Pop Stick1	NewRkCstk_1	Side Stick	Side Stick	Side Stick
38	D2	Std.2 Snare1	PopSnare38 1	PopSnare38 1	PopSnare38 1	NewRockSn1_1	Dance Snare1	House SD	Elec. Snare
39	D#2	808 Clap	Snare Ghost1	Snare Ghost1	Snare Ghost1	NewRkSnGst	909 HandClap	909 HandClap	808clap
40	E2	Std.2 Snare2	PopSnare40 1	PopSnare40 1	PopSnare40 1	NewRockSn2_1	Power Snare1	Elec Snare 2	Elec Snare 2
41	F2	Real Tom 6	Flam Tom 41	Flam Tom 41	Flam Tom 41	NewRkTomL2Fl	Synth Drum 2	909 Tom	Synth Drum 2
42	F#2	JazzClosedHH	Pop Hi Hat1	Pop Hi Hat1	Pop Hi Hat1	NewRkHat1	CR-78 chh	TR-707 HH-c	Jazz Clsd.HH
43	G2	Real Tom 6	Tom 43	Tom 43	Tom 43	NewRkTomL2	Synth Drum 2	909 Tom	Synth Drum 2

Drum Set List

		Standard	Pop	Folk	Brush Pop	V-Rock	Dance	House	Electronic
44	G#2	Pedal HiHat	Pop Hi Hat2	Pop Hi Hat2	Pop Hi Hat2	NewRkHat2	808__chh	CR-78 chh	Pedal HiHat
45	A2	Real Tom 4	Flam Tom 45	Flam Tom 45	Flam Tom 45	NewRkTomL1Fl	Synth Drum 2	909 Tom	Synth Drum 2
46	Bb2	JazzOpenHH	Pop Hi Hat3	Pop Hi Hat3	Pop Hi Hat3	NewRkHat3	CR-78 ohh	909 OH	Jazz Open HH
47	B2	Real Tom 4	Tom 47	Tom 47	Tom 47	NewRkTomL1	Synth Drum 2	909 Tom	Synth Drum 2
48	C3	Real Tom 1	Flam Tom 50	Flam Tom 50	Flam Tom 50	NewRkTomMFl	Synth Drum 2	909 Tom	Synth Drum 2
49	C#3	Crash Cymb1	Pop Cymbal2	Pop Cymbal2	Pop Cymbal2	NewRkCrCym1	808 Crash	909 Crash	Crash Cym.1
50	D3	Real Tom 1	Tom 50	Tom 50	Tom 50	NewRkTomM	Synth Drum 2	909 Tom	Synth Drum 2
51	D#3	Ride Cymbal	Pop Ride1	Pop Ride1	Pop Ride1	NewRkRdCym1	606 Ride Cym	909 Ride Cym	Ride Cymbal
52	E3	ChinaCymbal	Pop Cymbal	Pop Cymbal	Pop Cymbal	NewRkCrCym2	ReverseCymb1	ReverseCymb1	ReverseCymb1
53	F3	Ride Bell	Pop Ride2	Pop Ride2	Pop Ride2	NewRkRdCym2	Ride Bell	Ride Bell	Ride Bell
54	F#3	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Shake Tamb	Shake Tamb	Tambourine
55	G3	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	NewRkCrCym3	Splash Cym.	Splash Cym.	Splash Cym.
56	G#3	Cowbell	ChaChaCowb	ChaChaCowb	ChaChaCowb	ChaChaCBell	808cowbe	808cowbe	Cowbell
57	A3	Crash Cymb2	CrashCymbal2	CrashCymbal2	CrashCymbal2	NewRkCrCym4	Crash Cym.2	909 Crash	Crash Cym.2
58	Bb3	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
59	B3	Ride Cymbal	RockRideCym1	RockRideCym1	RockRideCym1	IPopRd1_51	Ride Cymbal	Ride Cymbal	Ride Cymbal
60	C4	Bongo High	NewHiBongo	HiBongo	HiBongo	NewHiBongo	Bongo High	CR78 HiBongo	Bongo High
61	C#4	Bongo Low	NewLoBongo	LoBongo	LoBongo	NewLoBongo	Bongo Lo	CR78 LoBongo	Bongo Lo
62	D4	Mute H.Conga	NewCongaSlp	CongaSlap	Conga Slap	NewCongaSlp	Mute H.Conga	808 Conga	Mute H.Conga
63	D#4	Conga Hi Opn	NewCongaOp	CongaOp	Conga Op	NewCongaOp	Conga Hi Opn	808 Conga	Conga Hi Opn
64	E4	Conga Lo Opn	LoConga	LoConga	Lo Conga	NewLoConga	Conga Lo Opn	808 Conga	Conga Lo Opn
65	F4	High Timbale	Timbal Hi	Timbal Hi	Timbal Hi	NewTmb1Hi	High Timbale	High Timbale	High Timbale
66	F#4	Low Timbale	Timbal Lo	Timbal Lo	Timbal Lo	NewTmb1Lo	Low Timbale	Low Timbale	Low Timbale
67	G4	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
68	G#4	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
69	A4	Cabasa	NewShaker2	Shaker2	Shaker2	NewShaker2	Cabasa	Cabasa	Cabasa
70	Bb4	Maracas	NewShaker1	Shaker1	Shaker1	NewShaker1	Maracas	808marac	Maracas
71	B4	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
72	C5	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
73	C#5	Short Guiro	Quide1	Quide1	Quide1	NewQuide1	Short Guiro	Short Guiro	Short Guiro
74	D5	Long Guiro	Quide2	Quide2	Quide2	NewQuide2	Long Guiro	CR78 Guiro	Long Guiro
75	D#5	Claves	Claves	Claves	Claves	NewClaves	Claves	808clave	Claves
76	E5	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
77	F5	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
78	F#5	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Hoo	Hoo	Mute Cuica
79	G5	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Hoo	Hoo	Open Cuica
80	G#5	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl	MuteTriangl
81	A5	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl	OpenTriangl
82	Bb5	Shaker	Shaker	Shaker	Shaker	Shaker	626 Shaker	626 Shaker	Shaker
83	B5	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
84	C6	Bar Chimes	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
85	C#6	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
86	D6	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
87	D#6	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
88	E6	Applause 2	Cana	Cana	Cana	Cana	Small Club	Applause 2	Small Club
89	F6	---	Timbal HiFlm	Timbal HiFlm	Timbal HiFlm	NewTmb1HiFlm	66sn260	66sn260	---
90	F#6	---	Timbal LoFlm	Timbal LoFlm	Timbal LoFlm	NewTmb1LoFlm	909 SD 1	Dance Snare1	---
91	G6	---	NewTmb1PHS	Timbal PHS	Timbal PHS	NewTmb1PHS	Elec Snare 2	909 SD 1	---
92	G#6	---	NewShekere1	Shekere1	Shekere1	NewShekere1	House SD	Dance Snare1	---
93	A6	---	NewShekere2	Shekere2	Shekere2	NewShekere2	Rap Snare	Dance Snare1	---
94	Bb6	---	NHBngoMute	Bongo Mute	Bongo Mute	NHBngoMute	House SD	Rap Snare	---
95	B6	---	L BongoMute	L BongoMute	L BongoMute	NewLBngoMute	Dance Snare1	House SD	---
96	C7	---	CajonHi	CajonHi	CajonHi	CajonHi	Rap Snare	House SD	---
97	C#7	Std.1 Snare1	CajonHiFlm	CajonHiFlm	CajonHiFlm	CajonHiFlm	Techno Hit	Techno Hit	Techno Hit
98	D7	Std.1 Snare2	Cajon Low	Cajon Low	Cajon Low	CajonLo	Philly Hit	Philly Hit	Philly Hit
99	D#7	Std.2 Snare1	CajonLoFlm	CajonLoFlm	CajonLoFlm	CajonLoFlm	Shock Wave	Shock Wave	Shock Wave
100	E7	Std.2 Snare2	F1mncoHClap1	F1mnco Clap1	F1mncoHClap1	F1mncoHClap1	Lo Fi Rave	Lo Fi Rave	Lo Fi Rave
101	F7	Tight Snare	F1mncoHClap1	F1mnco Clap1	F1mncoHClap1	F1mncoHClap1	Bam Hit	Bam Hit	Bam Hit
102	F#7	StandrdSnar1	BongoCowBell	BongoCowBell	BongoCowBell	BongoCowBell	Bim Hit	Bim Hit	Bim Hit

Drum Set List

		Standard	Pop	Folk	Brush Pop	V-Rock	Dance	House	Electronic
103	G7	LD Snare M	RockSnareFL_H	PopSnareFL_L	BrushSnare Shot	AfHey	TapeRewind	TapeRewind	TapeRewind
104	G#7	LD Snare C	MamboCowBell	MamboCowBell	MamboCowBell	MamboCowBell	Phono Noise	Phono Noise	Phono Noise
105	A7	Jazz Snare 1	PopSnareDrag	FolkSnrFlam2	Phrase3	MexFVox2	Dance Snare1	Dance Snare1	Dance Snare1
106	Bb7	Jazz Snare 2	HiHatPhrase3	FolkSnrShot1	Phrase1	AfFoods	Power Snare2	Power Snare2	Power Snare2
107	B7	Room Snare 1	CrashPhrase1	FolkSnrShot2	RidePhrase1	MexFVox1	Elec Snare 1	Elec Snare 1	Elec Snare 1
108	C8	Room Snare 2	CrashPhrase2	SmallSnrPhr	RidePhrase2	MexMVox1	Dance Snare2	Dance Snare2	Dance Snare2
109	C#8	Dance Snare1	CrashPhrase3	FolkSnrFlam5	RidePhrase4	YodelFVox1	Elec Snare 2	Elec Snare 2	Elec Snare 2
110	D8	Power Snare1	CrashPhrase4	FolkSnrFlam3	CrashPhrase4	MexMVox2	Elec. Snare	Elec. Snare	Elec. Snare
111	D#8	Rev.Snare	CrashPhrase5	FolkSdSnr1Sh	CrashPhrase5	YodelMVox1	Elec Snare 3	Elec Snare 3	Elec Snare 3
112	E8	Power Snare2	Crash_Stop	FolkSdSnr2Sh	SnareBrushFlam	MexMVox3	66sn260	66sn260	66sn260
113	F8	Elec Snare 1	RidePhrase1	FkSdSnrPhr1	RidePhrase1	FlnmcoFVox1	TR-707 SD	TR-707 SD	TR-707 SD
114	F#8	Dance Snare2	RidePhrase2	FolkRimShtNS	RidePhrase2	YodelFVox2	808 Snare 1	808 Snare 1	808 Snare 1
115	G8	Elec Snare 2	RidePhrase3	FolkSplash1	RidePhrase3	FlnmcoFVox2	808 Snare 2	808 Snare 2	808 Snare 2
116	G#8	Elec. Snare	RidePhrase4	FolkSplash2	RidePhrase4	NewWhistle1	TR-808 SD2	TR-808 SD2	TR-808 SD2
117	A8	Elec Snare 3	RidePhrase5	PopRide_Phr4	RidePhrase5	FlnmcoFVox3	909 Snare 1	909 Snare 1	909 Snare 1
118	Bb8	TR-707 Snare	RidePhrase1	PopRide_Phr5	Cascade_Ending	NewWhistle2	909 Snare 2	909 Snare 2	909 Snare 2
119	B8	808 Snare 1	RidePhrase2	PopBrRidePh2	Chimes&Seeds	FlnmcoMVox1	909 SD 1	909 SD 1	909 SD 1
120	C9	808 Snare 2	RidePhrase4	Cymbal Roll	Chimes	FlnmcoMVox2	TR-909 SD2	TR-909 SD2	TR-909 SD2
121	C#9	909 Snare 1	ChinaRoll	AAhhh	Crotals	BrazilVox1	Rap Snare	Rap Snare	Rap Snare
122	D9	909 Snare 2	ChinaStopped	Uaahh	DoorKeys	FlnmcoMVox3	JungleSD1	JungleSD1	JungleSD1
123	D#9	Rap Snare	Egg S4	Egg S4	Egg S4	BrazilVox2	House SD	House SD	House SD
124	E9	JungleSnare1	Egg S1	Egg S1	Egg S1	BrazilVox3	House Snare	House Snare	House Snare
125	F9	House Snare	Egg AllEndOff	Egg EndOff	Egg EndOff	AfAhhh	House SD	House SD	House SD
126	F#9	House Snare	Tambour Ending	CembaloEnding	CembaloEnding	p33137v	Voice Tah	Voice Tah	Voice Tah
127	G9	House Snare	Tambour Free	CembaloFree	CembaloFree	p33168v	Noise Slap	Noise Slap	Noise Slap

		TR-909	SuperOrch	Orchestra	V-VoxDrum	Ethnic	Oriental	Percussion 1	Percussion 2
0	C-1	Elec Kick 2	---	Std.1 Kick1	HipHop BD1	---	---	CowBellSide	Mambo_SW
1	C#-1	Elec Kick 1	---	Std.1 Kick2	Jazz Kick 1	---	---	SeaShells	SeaShells
2	D-1	CR78 BD 1	---	Std.2 Kick1	p05002v	---	---	Equat-nutshells	Equat-nutshells
3	D#-1	CR78 BD 2	---	Std2 Kick2	85Rm BsDrum1	---	---	Cascade_Ending	Cascade_Ending
4	E-1	TR-606 BD1	---	Kick 1	85Rm BsDrum2	---	---	Chimes-Ending	Chimes-Ending
5	F-1	TR-707 BD	---	Kick 2	HipHop BD2	---	---	Goathooves	Goathooves
6	F#-1	808 Kick	---	Jazz Kick 1	Techno BD1	---	---	GoathoovesShot	GoathoovesShot
7	G-1	TR-808 Kick	---	Jazz Kick 2	JungleBD Set	---	---	Bongo1_SW1	Bongo1_SW1
8	G#-1	808 BD	---	Room Kick 1	HipHop BD1	---	---	Bongo1_SW2	Bongo1_SW2
9	A-1	TR-909 Kick	---	Room Kick 2	909 Comp BD	---	---	Bongo1_SW3	Bongo1_SW3
10	Bb-1	Dance Kick 2	---	Power Kick1	85St BsDrum1	---	---	Bongo2_SW1	Bongo2_SW1
11	B-1	909 Comp BD	---	Power Kick2	NewJzKik	---	---	Bongo2_SW2	Bongo2_SW2
12	C0	TR-909 BD2	---	Elec Kick 2	NewRockKik	---	Wadaiko	Bongo2_3	Bongo2_3
13	C#0	HipHop BD2	---	Elec Kick 1	Cymbal Roll	---	Ohkawa	Congas_SW1	Congas_SW1
14	D0	JungleBD Set	---	TR-808 Kick	NewRkCStk_2	---	Shimedaiko	Congas_SW2	Congas_SW2
15	D#0	Techno BD1	---	TR-909 Kick	82Rm Snare1	---	H kotsuzumi	Congas_SW3	Congas_SW3
16	E0	Bounce	---	Dance Kick 2	82Rm Snare2	---	L kotsuzumi	Congas_SW4	Congas_SW4
17	F0	Voice One	---	Voice One	85St Snare1	---	Tabla_Ge	Tamorra 1	Tamorra 1
18	F#0	Voice Two	---	Voice Two	85St Snare2	---	Tabla_Na	Tamorra 2	Tamorra 2
19	G0	Voice Three	---	Voice Three	NewJzSn2	---	Tabla_Te	Tamorra 3	Tamorra 3
20	G#0	---	---	---	NewJzSn1	---	Tabla_Tun	Tamorra 4	Tamorra 4
21	A0	---	---	---	NewR&BSn	---	Udo_Long	Tamorra 6	Tamorra 6
22	Bb0	MC-500 Beep	---	MC-500 Beep	NewRockSn2_2	---	Djembe_rim	Tamorra 7	Tamorra 7
23	B0	MC-500 Beep	---	MC-500 Beep	NewRockSn1_2	---	909 HandClap	Tamorra 8	Tamorra 8
24	C1	Concert Snr	OrchBD+C.Cym	Concert Snr	IPopSn38_2	---	Tambourine	Tamorra Ending	Tamorra Ending
25	C#1	Snare Roll	Malet Cym1	Snare Roll	IPopGstS39_2	Finger Snap	ChaChaCBell	Pandeiro_SW1	Pandeiro_SW1
26	D1	FingerSnaps2	WindChimeUp1	Finger Snap	IPopSn38_2	Tambourine	Agogo	Pandeiro_SW2	Pandeiro_SW2
27	D#1	High-Q	Cymbal1	Jazz Clsd.HH	FingerSnaps2	Castanets	Agogo	Pandeiro_SW3	Pandeiro_SW3

Drum Set List

		TR-909	SuperOrch	Orchestra	V-VoxDrum	Ethnic	Oriental	Percussion 1	Percussion 2
28	E1	Slap	Concert Cym2	Pedal HiHat	909 HandClap	Crash Cym.1	NewShaker2	Pandeiro 5	Pandeiro 5
29	F1	Scrtch Push2	Orch BD_SW1	Jazz Open HH	808clap	Snare Roll	NewShaker1	Brazilian_Tam-burin	Brazilian_Tam-burin
30	F#1	Scrtch Pull2	Church Bell1	Ride Cymbal	Hand clap2	Concert Snr	IPopSn40_1	Chimes&Seeds_1	Chimes&Seeds_1
31	G1	Sticks	Gong1	Sticks	909 HandClap	Concert Cym	Elec Snare 2	Chimes&Seeds_2	Chimes&Seeds_2
32	G#1	SquareClick	WindChimeDw1	SquareClick	IPopPHat32	Concert BD	909 Snare 2	PopHiHatFoot	PopHiHatFoot
33	A1	Mtrnm.Click	OpenTriangl1	Mtrnm.Click	GospelHClp1	Jingle Bell	909 Snare 1	VibratoneSlow-Fast	VibratoneSlow-Fast
34	Bb1	Mtrnm. Bell	VibraSlap1	Mtrnm. Bell	p35010v	Bell Tree	Elec Kick 2	AfricanCowBell	AfricanCowBell
35	B1	Techno BD2	Wind Whistle	Jazz Kick 1	p05006v	Bar Chimes	TR-909 BD2	Kick_Plastic	Kick_Plastic
36	C2	TR-909 BD2	Big Shot	Concert BD	p33079v	Wadaiko	Std.2 Kick1	Kick_Plastic	Kick_Plastic
37	C#2	TR-909 Rim	SmsHglas	Side Stick	p33146v	Wadaiko Rim	IPopCStk37_1	Snare	Snare
38	D2	909 SD 1	Cymbal2	Concert Snr	p32011v	Shimedaiko	IPopSn38_1	Snare	Snare
39	D#2	909 HandClap	Snare Roll1	Castanets	p43001v	Atarigane	HandClap1st	SnareFlam	SnareFlam
40	E2	TR-909 SD2	Snare1	Concert Snr	p33137v	Hyoushigi	Hand Clap 21	Snare	Snare
41	F2	909 Tom	Cymbal3	Timpani	p33168v	Ohkawa	TR-707 SD	FloorTomFlam	FloorTomFlam
42	F#2	TR-707 HH-c	Concert BD	Timpani	p33012v	H kotsuzumi	Jazz Clsd.HH	Jazz Hat1	Jazz Hat1
43	G2	909 Tom	Chimes1	Timpani	p34001v	L Kotsuzumi	Real Tom 6	FloorTom	FloorTom
44	G#2	TR-707 HH-c	Stick+Triang	Timpani	p33014v	Ban_Gu	Pedal HiHat	Jazz Hat2	Jazz Hat2
45	A2	909 Tom	TimpaniRoll1	Timpani	p33157v	Big Gong	Real Tom 4	Tom2Flam	Tom2Flam
46	Bb2	909 OH	Timpani1	Timpani	p33019v	Small Gong	Jazz Open HH	Jazz Hat3	Jazz Hat3
47	B2	909 Tom	Church Bell2	Timpani	p33164v	Bend Gong	Real Tom 4	Tom2	Tom2
48	C3	909 Tom	Gong2	Timpani	p33159v	RAMA Cymbal	IPopTomL43	Tom1Flam	Tom1Flam
49	C#3	909 Crash	Claps	Timpani	p35029v	RAMA Cymbal	Crash Cym.1	JazzCrCym1	JazzCrCym1
50	D3	909 Tom	WoodBlockUp1	Timpani	p33158v	Gamelan Gong	IPopTomM47	PopBrushTom1	PopBrushTom1
51	D#3	909 Ride Cym	WoodBlockDw1	Timpani	p43002v	Udo_Short	NewRkRdCym1	NewJzRide1	NewJzRide1
52	E3	ChinaCymbal	Tambourine1	Timpani	cym013v	Udo_Long	IPopRd2_55	BrushCrash2	BrushCrash2
53	F3	Ride Bell	Malet Cym2	Timpani	p45002v	Udo_slap	Dholla Dom	Jazz Ride2	Jazz Ride2
54	F#3	344Tambourn	StickSynth	Tambourine	p36017v	Bendir	Dholla Sak 1	CembaloFree	CembaloFree
55	G3	Splash Cym.	Ratchet	Splash Cym.	p34109v	Req_Dum	Dholla Sak 2	BrushCrash1	BrushCrash1
56	G#3	808cowbe	Cymbal4	Cowbell	p36019v	Req_tik	Dholla Sak 3	CowBell	CowBell
57	A3	Crash Cym.2	Orch BD_SW2	Con.Cymbal2	p44001v	Tabla_Te	Dholla Rim	JzCrashCym1	JzCrashCym1
58	Bb3	Vibraslap	Bar Chimes	Vibraslap	p36009v	Tabla_Na	Dholla Raka	vibraslp	vibraslp
59	B3	RideCym Edge	Finger Snap	Concert Cym.	AfAahhh	Tabla_Tun	Dholla Tak 1	RockRide1	RockRide1
60	C4	Bongo High	Timp G	Bongo High	NewHiBongo	Tabla_Ge	Dholla Tak 2	Bongo_SW	Bongo_SW
61	C#4	Bongo Lo	Timp C	Bongo Lo	NewLoBongo	Tabla Ge Hi	DofDom 1	Bongo1_4	Bongo1_4
62	D4	Mute H.Conga	Church Bell3	Mute H.Conga	NewCongaSlp	Talking Drum	DofDom 2	Congas_SW	Congas_SW
63	D#4	Conga Hi Opn	Church Bell4	Conga Hi Opn	NewCongaOp	Bend tlk_drm	DofDom 3	Congas_7	Congas_7
64	E4	Conga Lo Opn	Castanet 1	Conga Lo Opn	NewLoConga	Caxixi	DofTak 1	Congas_8	Congas_8
65	F4	High Timbale	Castanet 2	High Timbale	NewTmbLHi	DJembe	DofTak 2	Timbal Hi	Timbal Hi
66	F#4	Low Timbale	Castnet2Roll	Low Timbale	NewTmbLlo	Djembe_rim	DofSak 1	Timbal Lo	Timbal Lo
67	G4	Agogo	Tambourine2	Agogo	Agogo	Low Timbale	DofRim 1	Agogo 1	Agogo 1
68	G#4	Agogo	OpenTriangl2	Agogo	Agogo	Timbl Paila	DofSak 2	Agogo 2	Agogo 2
69	A4	Cabasa	Mute Triangl	Cabasa	NewShaker2	High Timbale	DofRim 2	Shaker2	Shaker2
70	Bb4	808marac	RollTriangl1	Maracas	NewShaker1	Cowbell	DofSak 3	Shaker1	Shaker1
71	B4	ShrtWhistle	WindChimeUp2	ShrtWhistle	ShrtWhistle	Bongo High	DofFinger 1	ShrtWhistle	ShrtWhistle
72	C5	LongWhistle	WindChimeDw2	LongWhistle	LongWhistle	Bongo Lo	DofFinger 2	LongWhistle	LongWhistle
73	C#5	Short Guiro	VibraSlap2	Short Guiro	NewQuide1	Mute H.Conga	Tabla Raka 1	Quide1	Quide1
74	D5	CR78 Guiro	FingerCymbal	Long Guiro	NewQuide2	Conga Hi Opn	Tabla Tak 1	Quide2	Quide2
75	D#5	808clave	Gong Roll	Claves	NewClaves	Conga MtLow	Tabla Tik 1	Claves	Claves
76	E5	Woodblock	MaletCymRol1	Woodblock	Woodblock	Conga Slap	Tabla Dom	Woodblock1	Woodblock1
77	F5	Woodblock	Cowbell1	Woodblock	Woodblock	Conga Lo Opn	Tabla Sak	Woodblock2	Woodblock2
78	F#5	Hoo	Claves1	Mute Cuica	Mute Cuica	Conga Slide	Tabla Roll	Mute Cuica	Mute Cuica
79	G5	Hoo	Clavs Loop	Open Cuica	Open Cuica	Mut Pandiero	Tabla Tak 2	Open Cuica	Open Cuica
80	G#5	MuteTriangl	Tambourine3	MuteTriangl	MuteTriangl	Opn Pandiero	Tabla Raka 2	MuteTriangl	MuteTriangl
81	A5	OpenTriangl	Tambourine4	OpenTriangl	OpenTriangl	Open Surdo	Tabla Rim 1	OpenTriangl	OpenTriangl
82	Bb5	626 Shaker	Tamb Roll1	Shaker	Shaker	Mute Surdo	Tabla Toks	Shaker	Shaker
83	B5	Jingle Bell	Malet Cym3	Jingle Bell	Jingle Bell	Tamborim	Tabla Rim 2	Jingle Bell	Jingle Bell
84	C6	Bell Tree	Snare Roll2	Bell Tree	Bell Tree	Agogo	Tabla Tik 2	Belltree	Belltree
85	C#6	Castanets	Snare2	Castanets	Castanets	Agogo	Rek Raka	Castanets	Castanets

Drum Set List

		TR-909	SuperOrch	Orchestra	V-VoxDrum	Ethnic	Oriental	Percussion 1	Percussion 2
86	D6	Mute Surdo	Cymbal5	Mute Surdo	Mute Surdo	Shaker	Rek Dom	Surdo_mute	Surdo_mute
87	D#6	Open Surdo	Orch BD_SW3	Open Surdo	Open Surdo	Low Whistle	Rek Trill	Surdo_open	Surdo_open
88	E6	Applause 2	MaletCymRol2	Applause	Cana	Low Whistle	Rek Tak 1	Cana	Cana
89	F6	---	TimpaniRoll2	---	NewTmbHiFlm	Mute Cuica	Rek Rim	TimbalHiFlm	TimbalHiFlm
90	F#6	---	Timp G#	---	NewTmbLoFlm	Open Cuica	Rek Brass 1	TimbalLoFlm	TimbalLoFlm
91	G6	---	Timp C#	---	NewTmbPHS	MuteTriangl	Rek Tok	TimbalPHS	TimbalPHS
92	G#6	---	OpenTriangl3	---	NewShekere1	OpenTriangl	Rek Brass 2	Shekere1	Shekere 1
93	A6	---	Gong3	---	NewShekere2	Short Guiro	Rek Tak 2	Shekere2	Shekere2
94	Bb6	---	RollTriangl2	---	NHBngoMute	Long Guiro	Rek Sak	Bongo Mute	Bongo Mute
95	B6	---	Tambourine5	---	NewLBngoMute	Cabasa Up	Rek Tik	LBongoMute	LBongoMute
96	C7	---	Tamb Roll2	---	CajonHi	Cabasa Down	Mazhar Dom	CajonHi	CajonHi
97	C#7	Techno Hit	WindChimeUp3	Applause 2	CajonHiFlm	Claves	Mazhar Tak	CajonHiFlm	CajonHiFlm
98	D7	Philly Hit	CymRol Dresc	Small Club	CajonLo	Woodblock	Mazhar Sak	CajonLo	CajonLo
99	D#7	Shock Wave	Snare Roll3	Timpani	CajonLoFlm	Woodblock	Mazhar Brass	CajonLoFlm	CajonLoFlm
100	E7	Lo Fi Rave	DynamicSnare	Timpani	FlnmcoHClp1	---	Sagat Mid	FlnmcoHClp1	FlnmcoHClp1
101	F7	Bam Hit	Concert Cym2	Timpani	FlnmcoHClp1	---	Sagat Hi	FlnmcoHClp2	FlnmcoHClp2
102	F#7	Bim Hit	Dynamic BD	Timpani	BongoCowBell	---	Sagat Closed	BongoCowBell	BongoCowBell
103	G7	TapeRewind	Short Cym	Timpani	AfHey	---	Sagat Sak	Crotals	Crotals
104	G#7	Phono Noise	TimpaniRoll3	Timpani	MamboCowBell	---	Dofs Tak	MamboCowBell	MamboCowBell
105	A7	Dance Snare1	DynamicTimpG	Timpani	MexFVox2	---	Dofs Dom	CrashPhrase4	CrashPhrase4
106	Bb7	Power Snare2	DynamicTimpC	Timpani	AfFots	---	Dofs Sak	CrashPhrase5	CrashPhrase5
107	B7	Elec Snare 1	Cowbell2	Timpani	MexFVox1	---	Dofs Rim 1	RidePhrase1	RidePhrase1
108	C8	Dance Snare2	Claves2	Timpani	MexMVox1	---	Dofs Rim 2	RidePhrase2	RidePhrase2
109	C#8	Elec Snare 2	Wind Whistle	Timpani	YodelFVox1	---	Dofs Dom st.	RidePhrase4	RidePhrase4
110	D8	Elec. Snare	WoodblockUp2	Timpani	MexMVox2	---	TablaNurDom	Egg_M3	Egg_M3
111	D#8	Elec Snare 3	WoodblockDw2	Timpani	YodelMVox1	---	Dofs Sak st.	Egg_MEndOff	Egg_MEndOff
112	E8	66sn260	Bell Tree	Timpani	MexMVox3	---	TablaNurRim	Egg_M_SW1	Egg_M_SW1
113	F8	TR-707 SD	---	Timpani	FlnmcoFVox1	---	TablaNurTak	Egg_L4	Egg_L4
114	F#8	808 Snare 1	---	---	YodelFVox2	---	TablaNurSak	Egg_LEndOff	Egg_LEndOff
115	G8	808 Snare 2	---	---	FlnmcoFVox2	---	BassSlideFX	Egg_L_SW1	Egg_L_SW1
116	G#8	TR-808 SD2	---	---	NewWhistle1	---	BassSlapFX	Egg_TuttiEndOff	Egg_TuttiEndOff
117	A8	909 Snare 1	---	---	FlnmcoFVox3	---	ZaghroutaSm2	Egg_S4	Egg_S4
118	Bb8	909 Snare 2	---	---	NewWhistle2	---	Zir 1	Egg_SEndOff	Egg_SEndOff
119	B8	909 SD 1	---	---	FlnmcoMVox1	---	ZaghroutaEd2	Egg_S_SW1	Egg_S_SW1
120	C9	TR-909 SD2	---	---	FlnmcoMVox2	---	NewHiBongo	Chimes	Chimes
121	C#9	Rap Snare	---	---	BrazilVox1	---	NewLoBongo	DoorKeys	DoorKeys
122	D9	JungleSD1	---	---	FlnmcoMVox3	---	NewCongaSlp	Pinchimes	Pinchimes
123	D#9	House SD	---	---	BrazilVox2	---	NewCongaOp	Harness-bell1	Harness-bell1
124	E9	House Snare	---	---	BrazilVox3	---	NewLoConga	Harness-bell2	Harness-bell2
125	F9	House SD	---	---	AfAahhh	---	NewTmbHi	Harness-bell3	Harness-bell3
126	F#9	Voice Tah	---	---	p33137v	---	NewTmbLo	CembaloEnding	CembaloEnding
127	G9	Noise Slap	---	---	p33168v	---	Hager	CembaloFree	CembaloFree

	SFX	Old FR-7x
0	C-1	---
1	C#-1	Pop BD1
2	D-1	Pop BD2
3	D#-1	Folk BD
4	E-1	Jazz BD1
5	F-1	Jazz BD2
6	F#-1	Jazz BD3
7	G-1	Jazz BD4
8	G#-1	Mex BD
9	A-1	TR-909 BD
10	Bb-1	HipHop BD1
11	B-1	HipHop BD2
12	C0	Techno BD1
13	C#0	Techno BD2
14	D0	Jungle BD
15	D#0	Concert BD
16	E0	Folk SD
17	F0	Pop SD1
18	F#0	Pop SD2
19	G0	Jazz SD
20	G#0	Concert SD
21	A0	MC-500 Beep TR-909 SD1
22	Bb0	MC-500 Beep TR-909 SD2
23	B0	ytwn3.xtp Dance SD
24	C1	ytwn2.xtp Power SD
25	C#1	Guitar Slap Ghost SD1
26	D1	Chord Stroke Ghost SD2
27	D#1	Chord Stroke Brush SD
28	E1	Biwa 3 Snare Roll
29	F1	Phono Noise Pop Stick1
30	F#1	TapeRewind Pop Stick2
31	G1	Scratch Push2 Pop Hi Hat1
32	G#1	Scratch Pull2 Pop Hi Hat2
33	A1	Gt.CutNoise2 Pop Hi Hat3
34	Bb1	Gt.CutNoise2 Jazz Hi Hat
35	B1	Dist.CutNoiz 808 Hi Hat
36	C2	Dist.CutNoiz 909 OH
37	C#2	Bass Slide TR-707 HH1
38	D2	Pick Scrape TR-707 HH2
39	D#2	High-Q CR-78 HH1
40	E2	Slap CR-78 HH2
41	F2	ScratchPush Pop Ride1
42	F#2	ScratchPull Pop Ride2
43	G2	Sticks Jazz Cym1
44	G#2	SquareClick Ride Bell
45	A2	Mtrnm.Click Dance Cym
46	Bb2	Mtrnm. Bell 606 Cym
47	B2	Gt.FretNoiz Concrct Cy1
48	C3	Gt.CutNoise Concrct Cy2
49	C#3	Gt.CutNoise Big Gong
50	D3	String Slap Small Gong
51	D#3	Fl.KeyClick Bend Gong
52	E3	Laughing RAMA Cym
53	F3	Screaming Tambourin1
54	F#3	Punch Tambourin2
55	G3	Heart Beat Shake Tam
56	G#3	Footsteps Jingle Bell
57	A3	Footsteps Cowbell
58	Bb3	Applause Claves

	SFX	Old FR-7x
59	B3	Creaking Castanets
60	C4	Door Woodblock1
61	C#4	Scratch Woodblock2
62	D4	Wind Chimes Shaker
63	D#4	Car-Engine Shekere
64	E4	Car-Stop Triangle 1
65	F4	Car-Pass Triangle 2
66	F#4	Car-Crash Hand Clap
67	G4	Siren Finger Snap
68	G#4	Train ShrWhistle
69	A4	Jetplane LongWhistle
70	Bb4	Helicopter Quide
71	B4	Starship Guiro
72	C5	Gun Shot Caxixi
73	C#5	Machine Gun Hoo Lo
74	D5	Lasergun Hoo Mid
75	D#5	Explosion Tom Lo
76	E5	Dog Tom Mid
77	F5	HorseGallop HiBongo
78	F#5	Bird LoBongo
79	G5	Rain CongaSlap
80	G#5	Thunder CongaOp
81	A5	Wind 909 TomL
82	Bb5	Seashore 909 TomM
83	B5	Stream 909 TomH
84	C6	Bubble Synth Dr 1
85	C#6	Kitty Synth Dr 2
86	D6	Bird 2 Tamorra 1
87	D#6	Growl Tamorra 2
88	E6	Applause 2 Tamorra 3
89	F6	Telephone 1 Pandeiro 3
90	F#6	Telephone 2 Pandeiro 4
91	G6	Small Club Pandeiro 5
92	G#6	Small Club 2 Timpni E
93	A6	ApplauseWave Timpni F
94	Bb6	Eruption Timpni F#
95	B6	Big Shot Timpni G
96	C7	Perc. Bang Timpni Ab
97	C#7	---
98	D7	---
99	D#7	---
100	E7	---
101	F7	---
102	F#7	---
103	G7	---
104	G#7	---
105	A7	---
106	Bb7	---
107	B7	---
108	C8	---
109	C#8	---
110	D8	---
111	D#8	---
112	E8	---
113	F8	---
114	F#8	---
115	G8	---
116	G#8	---
117	A8	---

	SFX	Old FR-7x
118	Bb8	---
119	B8	---
120	C9	---
121	C#9	---
122	D9	---
123	D#9	---
124	E9	---
125	F9	---
126	F#9	---
127	G9	---

MFX types and parameters

The multi-effects feature 83 different kinds of effects. Some of the effects consist of two or more different effects connected in series.

MFX Type

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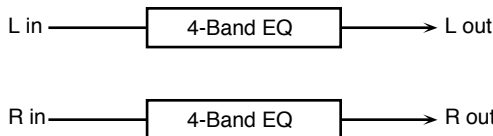
84: Center Canc (Center Canceller) 37

1: Thru

The effects processor is bypassed.

2: Stereo EQ

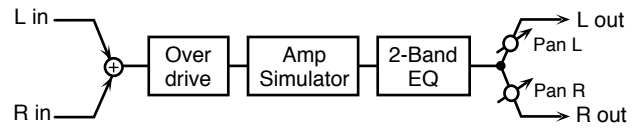
This is a four-band stereo equalizer (low, mid x 2, high).



Parameter	Value	Description
Eq Low Frequency	200, 400Hz	Selects the frequency of the low range.
Eq Low Gain	-15- +15 [dB]	Adjusts the gain of the low frequency.
Eq High Freq	2000, 4000, 8000 [Hz]	Selects the frequency of the high range.
Eq High Gain	-15- +15 [dB]	Adjusts the gain of the high frequency.
Eq Mid 1 Frequency	200-8000 [Hz]	Adjusts the frequency of Middle 1 (mid range).
Eq Mid 1 Q	0.5, 1.0, 2.0, 4.0, 8.0	This parameter adjusts the width of the area around the Middle 1 Frequency that will be affected by the Gain setting. Higher values of Q will result in a narrower area being affected.
Eq Mid 1 Gain	15- +15 [dB]	Adjusts the gain for the area specified by the Middle 1 Frequency and Q settings.
Eq Mid 2 Frequency	200-8000 [Hz]	Adjusts the frequency of Middle 2 (mid range).
Eq Mid 2 Q	0.5, 1.0, 2.0, 4.0, 8.0	This parameter adjusts the width of the area around the Middle 2 Frequency that will be affected by the Gain setting. Higher values of Q will result in a narrower area being affected.
Eq Mid 2 Gain	-15- +15 [dB]	Adjusts the gain for the area specified by the Middle 2 Frequency and Q settings.
Level	0-127	Adjusts the output level.

3: Overdrive

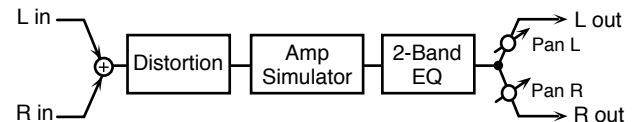
This effect creates a soft distortion similar to that produced by vacuum tube amplifiers.



Parameter	Value	Description
Drive	0-127	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
Panpot	L64-63R	Adjusts the stereo location of the output sound. L64 is far left, 0 is center, and 63R is far right.
Amp Type	Small, Built-In, 2-Stack, 3-Stack	Selects the type of guitar amp. Small: small amp Built-In: single-unit type amp 2-Stack: single-unit type amp 3-Stack: large triple stack amp
Eq Low Gain	-15- +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15- +15 [dB]	Adjusts the gain of the high frequency.
Level	0-127	Adjusts the output level.

4: Distortion

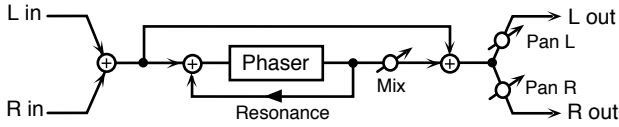
This effect produces a more intense distortion than Overdrive.



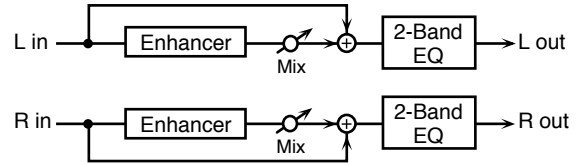
Parameter	Value	Description
Drive	0-127	Adjusts the degree of distortion. The volume will change together with the degree of distortion.
Panpot	L64-63R	Adjusts the stereo location of the output sound. L64 is far left, 0 is center, and 63R is far right.
Amp Type	Small, Built-In, 2-Stack, 3-Stack	Selects the type of guitar amp. Small: small amp Built-In: single-unit type amp 2-Stack: large double stack amp 3-Stack: large triple stack amp
Eq Low Gain	-15- +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15- +15 [dB]	Adjusts the gain of the high frequency.
Level	0-127	Adjusts the output level.

5. Phaser

A phaser adds a phase-shifted sound to the direct sound, producing a twisting modulation that creates spaciousness and depth.



Parameter	Value	Description
Manual	100–8000 [Hz]	Adjusts the basic frequency from which the sound will be modulated.
Rate	0.05–10.00 [Hz]	Adjusts the frequency (period) of modulation.
Depth	0–127	Adjusts the depth of modulation.
Resonance	0–127	Adjusts the amount of feedback for the phaser.
Mix Level	0–127	Adjusts the ratio with which the phase-shifted sound is combined with the direct sound.
Pannpot	L64–63R	Adjusts the stereo location of the output sound. L64 is far left, 0 is center, and 63R is far right.
Level	0–127	Adjusts the output level.

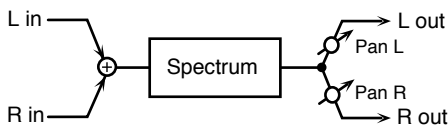


Parameter	Value	Description
Sens	0–127	Adjusts the sensitivity of the enhancer.
Mix	0–127	Adjusts the ratio with which the overtones generated by the enhancer are combined with the direct sound.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Level	0–127	Adjusts the output level.

6: Spectrum

Spectrum is a type of filter which modifies the timbre by boosting or cutting the level at specific frequencies.

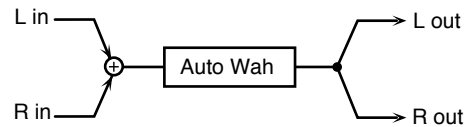
It is similar to an equalizer, but has 8 frequency points fixed at locations most suitable for adding character to the sound.



Parameter	Value	Description
250 Hz Gain	-15– +15 [dB]	Adjusts the 250 Hz level.
500 Hz Gain	-15– +15 [dB]	Adjusts the 500 Hz level.
1000 Hz Gain	-15 – +15 [dB]	Adjusts the 1000 Hz level.
1250 Hz Gain	-15– +15 [dB]	Adjusts the 1250 Hz level.
2000 Hz Gain	-15– +15 [dB]	Adjusts the 2000 Hz level.
3150 Hz Gain	-15– +15 [dB]	Adjusts the 3150 Hz level.
4000 Hz Gain	-15– +15 [dB]	Adjusts the 4000 Hz level.
8000 Hz Gain	-15– +15 [dB]	Adjusts the 8000 Hz level.
Band Width Q	0.5, 1.0, 2.0, 4.0, 8.0	Simultaneously adjusts the width of the adjusted areas for all the frequency bands.
Panpot	L64–63R	Adjusts the stereo location of the output sound. L64 is far left, 0 is center, and 63R is far right.
Level	0–127	Adjusts the output level.

8: Auto Wah

The Auto Wah cyclically controls a filter to create cyclic change in timbre.



Parameter	Value	Description
Filter Type	LPF, BPF	Selects the 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.
Rate	0.05–10.00 [Hz]	Adjusts the frequency of the modulation.
Depth	0–127	Adjusts the depth of the modulation.
Sens	0–127	Adjusts the sensitivity with which the filter is controlled.
Manual	0–127	Adjusts the center frequency from which the effect is applied.
Peak	0–127	Adjusts the amount of the wah effect that will occur in the area of the center frequency. Lower settings will cause the effect to be applied in a broad area around the center frequency. Higher settings will cause the effect to be applied in a more narrow range.
Level	0–127	Adjusts the output level.

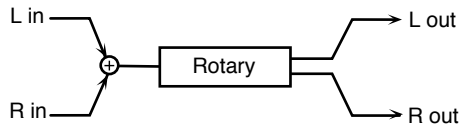
9: Rotary

The Rotary effect simulates the sound of the rotary speakers often used with the electric organs of the past.

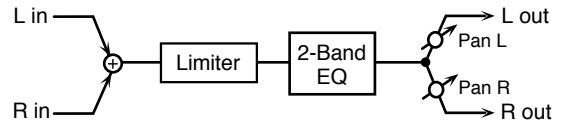
Since the movement of the high range and low range rotors can be set independently, the unique type of modulation characteristic of these speakers can be simulated quite closely. This effect is most suitable for electric organ Patches.

7: Enhancer

The enhancer controls the overtone structure of the high frequencies, adding sparkle and tightness to the sound.



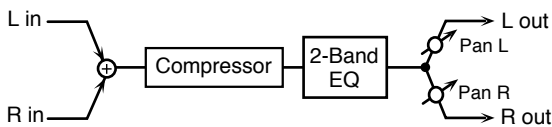
Parameter	Value	Description
TW Slow	0.05-10.0 Hz	Slow speed (SLOW) of the low or high frequency rotor.
WF Slow	0.05-10.0 Hz	
TW Fast	0.05-10.0 Hz	Fast speed (FAST) of the high or low-frequency rotor.
WF Fast	0.05-10.0 Hz	
Speed	Slow, Fast	Simultaneously switches the rotational speed of the low-frequency and high-frequency rotors.
TW Acceler	0-15	Adjusts the time it takes the rotor in question to reach the newly selected speed ("Fast" or "Slow"). Lower values correspond to slower transitions.
WF Acceler	0-15	
TW Level	0-127	Volume of the rotor in question.
WF Level	0-127	
Separation	0-127	Spatial dispersion of the sound.
Level	0-127	Output level.



Parameter	Value	Description
Threshold	0-127	Adjusts the volume at which compression will begin.
Release	0-127	Adjusts the time from when the volume falls below the Threshold Level until compression is no longer applied.
Ratio	1.5:1, 2:1, 4:1, 100:1	Adjusts the compression ratio.
Panpot	L64-63R	Adjusts the stereo location of the output sound. L64 is far left, 0 is center, and 63R is far right.
Post Gain	0, +6, +12, +18 [dB]	Adjusts the output gain.
Eq Low Gain	-15- +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15- +15 [dB]	Adjusts the gain of the high frequency.
Level	0-127	Adjusts the output level.

10: Compressor

The compressor flattens out high levels and boosts low levels, smoothing out unevenness in volume.



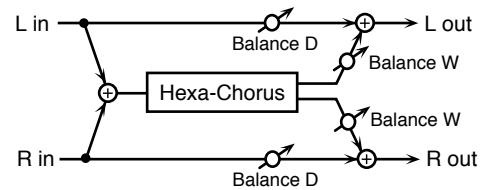
Parameter	Value	Description
Sustain	0-127	Adjusts the time over which low level sounds are boosted until they reach the specified volume.
Attack	0-127	Adjusts the attack time of an input sound.
Panpot	L64-63R	Adjusts the stereo location of the output sound. L64 is far left, 0 is center, and 63R is far right.
Post Gain	0, +6, +12, +18 [dB]	Adjusts the output gain.
Eq Low Gain	-15- +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15- +15 [dB]	Adjusts the gain of the high frequency.
Level	0-127	Adjusts the output level.

11: Limiter

The limiter compresses signals that exceed a specified volume level, preventing distortion from occurring.

12: Hexa-Chorus

Hexa-chorus uses a six-phase chorus (six layers of chorused sound) to give richness and spatial spread to the sound.



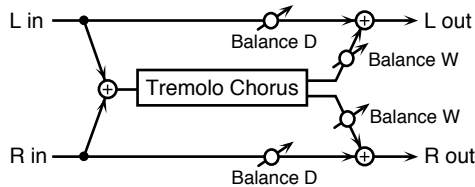
Parameter	Value	Description
Pre Delay	0.0-100 [ms]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
Rate	0.05-10.00 [Hz]	Adjusts the rate of modulation.
Depth	0-127	Adjusts the depth of modulation.
Pre Delay Dev	0-20	Pre Delay Deviation adjusts the differences in Pre Delay between each chorus sound. Pre Delay determines the time from when the direct sound begins until the processed sound is heard.
Depth Dev	-20- +20	Adjusts the difference in modulation depth between each chorus sound.
Pan Dev	0-20	Adjusts the difference in stereo location between each chorus sound. With a setting of 0, all chorus sounds will be in the center. With a setting of 20, each chorus sound will be spaced at 60 degree intervals relative to the center.
Balance	D100:0W- D0:100W	Adjusts the volume balance between the direct sound and the chorus sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the chorus sound will be output.

MFX types and parameters

Parameter	Value	Description
Level	0–127	Adjusts the output level.

13: Trem Chorus (Tremolo Chorus)

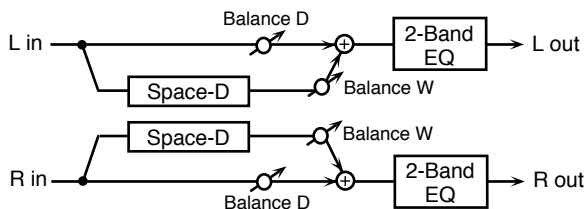
Tremolo chorus is a chorus effect with added tremolo (cyclic modulation of volume).



Parameter	Value	Description
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the chorus effect.
Depth	0–127	Adjusts the modulation depth of the chorus effect.
Tremolo Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the tremolo effect.
Tremolo Separ	0–127	Adjusts the spread of the tremolo effect.
Tremolo Phase	0–180 [deg]	Adjusts the spread of the tremolo effect.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the tremolo chorus sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the tremolo chorus sound will be output.
Level	0–127	Adjusts the output level.

14: Space-D

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

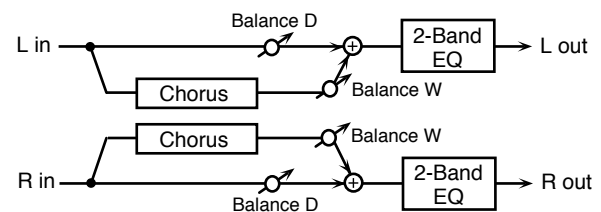


Parameter	Value	Description
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the rate of modulation.
Depth	0–127	Adjusts the depth of modulation.
Phase	0–180 [deg]	Adjusts the spatial spread of the sound.

Parameter	Value	Description
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the chorus sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the chorus sound will be output.
Level	0–127	Adjusts the output level.

15: St. Chorus (Stereo Chorus)

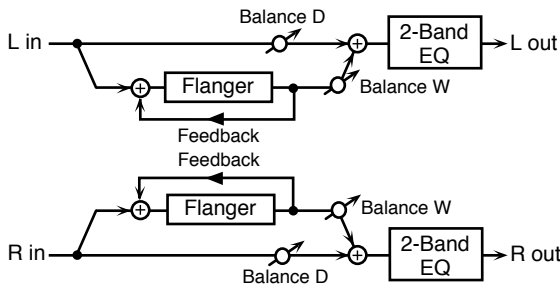
This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorus sound



Parameter	Value	Description
Filter Type	OFF, LPF, HPF	Selects the type of filter. OFF: A filter will not be used. LPF: Cuts the frequency range above the cutoff frequency. HPF: Cuts the frequency range below the cutoff frequency.
Filter Cutoff	200–8000 [Hz]	Adjusts the basic frequency of the filter.
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the processed sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the rate of modulation.
Depth	0–127	Adjusts the depth of modulation.
Phase	0–180 [deg]	Adjusts the spatial spread of the sound.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the chorus sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the chorus sound will be output.
Level	0–127	Adjusts the output level.

16: St. Flanger (Stereo Flanger)

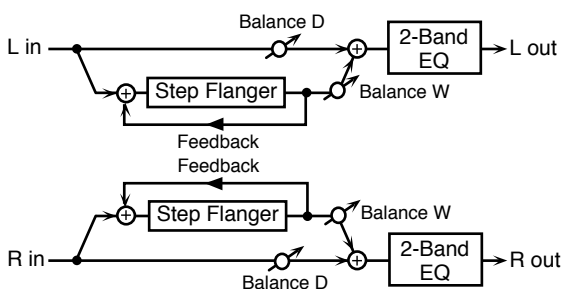
This is a stereo flanger. It produces a metallic resonance that rises and falls like a jet airplane taking off or landing.



Parameter	Value	Description
Filter Type	OFF, LPF, HPF	Selects the type of filter. OFF: A filter will not be used. LPF: Cuts the frequency range above the cutoff frequency. HPF: Cuts the frequency range below the cutoff frequency.
Filter Cutoff	200–8000 [Hz]	Adjusts the basic frequency of the filter.
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the rate of modulation.
Depth	0–127	Adjusts the depth of modulation.
Phase	0–180 [deg]	Adjusts the spatial spread of the sound.
Feedback	-98– +98 [%]	Adjusts the amount (%) of the processed sound that is returned (fed back) into the input. Positive (+) settings will return the sound in phase, and negative (-) settings will return the sound in reverse phase.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the flanger sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the flanger sound will be output.
Level	0–127	Adjusts the output level.

17: Step Flanger

The Step Flanger effect is a flanger in which the flanger pitch changes in steps.



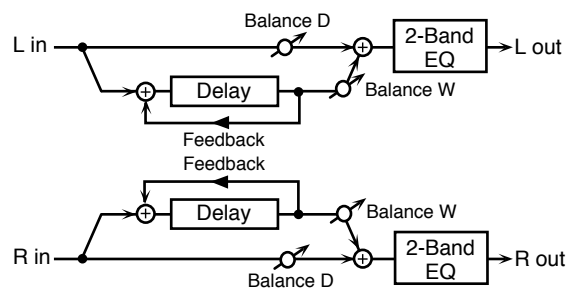
Parameter	Value	Description
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the rate of modulation.

Parameter	Value	Description
Depth	0–127	Adjusts the depth of modulation.
Feedback	-98– +98 [%]	Adjusts the amount (%) of the flanger sound that is returned (fed back) into the input. Negative (-) settings will invert the phase.
Step Rate	0.1–20.0 [Hz], note *1	Adjusts the rate (period) of pitch change.
Phase	0–180 [deg]	Adjusts the spatial spread of the sound.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the flanger sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the chorus sound will be output.
Level	0–127	Adjusts the output level.

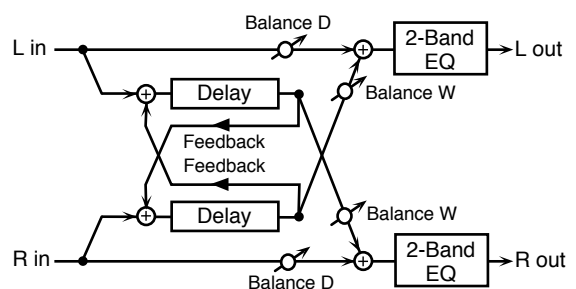
18: St. Delay (Stereo Delay)

This is a stereo delay.

When Feedback Mode is "Normal":



When Feedback Mode is "Cross":



Parameter	Value	Description
Feedback	Normal, Cross	Selects the way in which delay sound is fed back into the effect. Normal: The left delay sound will be fed back into the left delay, and the right delay sound into the right delay. Cross: The left delay sound will be fed back into the right delay, and the right delay sound into the left delay.
Delay L	0–500 [ms]	Adjusts the time from the direct sound until when the left delay sound is heard.

MFX types and parameters

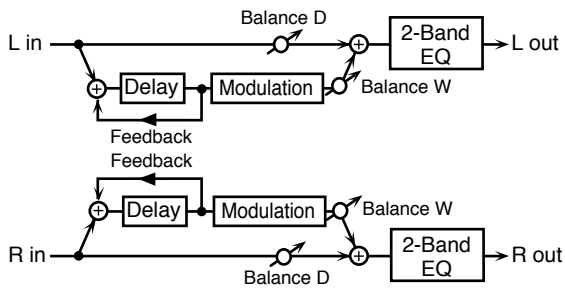
Parameter	Value	Description
Delay R	0–500 [ms]	Adjusts the time from the direct sound until when the right delay sound is heard.
Phase L	Normal, Invert	Selects the phase of the left delay sound. Normal: Phase is not changed. Invert: Phase is inverted.
Phase R	Normal, Invert	Selects the phase of the right delay sound. Normal: Phase is not changed. Invert: Phase is inverted.
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies of the feedback, set this parameter to Bypass.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the delay sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the delay sound will be output.
Level	0–127	Adjusts the output level.

Parameter	Value	Description
Feedback	Normal, Cross	Selects the way in which delay sound is fed back into the effect. Normal: The left delay sound will be fed back into the left delay, and the right delay sound into the right delay. Cross: The left delay sound will be fed back into the right delay, and the right delay sound into the left delay.
Delay L	0–500.0 [ms]	Adjusts the time from the direct sound until when the left delay sound is heard.
Delay R	0–500.0 [ms]	Adjusts the time from the direct sound until when the right delay sound is heard.
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies of the feedback, set this parameter to Bypass.
Modul Rate	0.05–10.00 [Hz]	Adjusts the speed of the modulation.
Modul Depth	0–127	Adjusts the depth of the modulation.
Modul Phase	0–180 [deg]	Adjusts the spatial spread of the sound.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the modulation delay sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the modulation delay sound will be output.
Level	0–127	Adjusts the output level.

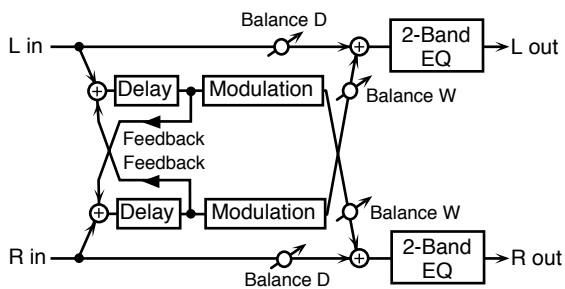
19: Mod. Delay (Modulation Delay)

This effect adds modulation to the delayed sound, producing an effect similar to a flanger.

When Feedback Mode is “Normal”:

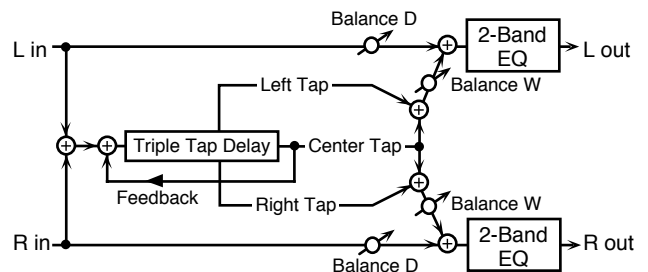


When Feedback Mode is “Cross”:



20: 3 Tap Delay (Triple Tap Delay)

The Triple Tap Delay produces three delay sounds; center, left and right.

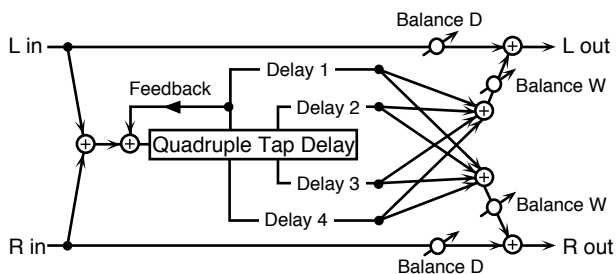


Parameter	Value	Description
Delay L	200–1000 [ms], note *1	Adjusts the time delay from the direct sound until when the left delay sound is heard.
Delay R	200–1000 [ms], note *1	Adjusts the time delay from the direct sound until when the right delay sound is heard.

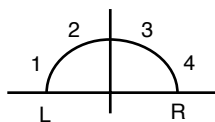
Parameter	Value	Description
Delay C	200–1000 [ms], note *1	Adjusts the time delay from the direct sound until when the center delay sound is heard.
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies of the feed-back, set this parameter to bypass.
Level L	0–127	Adjusts the volume of the left delay sound.
Level R	0–127	Adjusts the volume of the right delay sound.
Level C	0–127	Adjusts the volume of the center delay sound.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W–D0:100W	Adjusts the volume balance between the direct sound and the delay sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the delay sound will be output.
Level	0–127	Adjusts the output level.

21: 4 Tap Delay (Quadruple Tap Delay)

The Quadruple Tap Delay has four delays.



The stereo location of each delay sound is as follows:

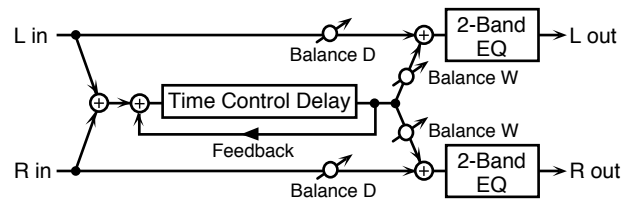


Parameter	Value	Description
Delay 1	200–1000 [ms], note *1	Adjusts the time delay from the direct sound until when delay 1 sound is heard.
Delay 2	200–1000 [ms], note *1	Adjusts the time delay from the direct sound until when delay 2 sound is heard.
Delay 3	200–1000 [ms], note *1	Adjusts the time delay from the direct sound until when delay 3 sound is heard.
Delay 4	200–1000 [ms], note *1	Adjusts the time delay from the direct sound until when delay 4 sound is heard.
Level 1	0–127	Adjusts the volume of delay 1 sound.
Level 2	0–127	Adjusts the volume of delay 2 sound.

Parameter	Value	Description
Level 3	0–127	Adjusts the volume of delay 3 sound.
Level 4	0–127	Adjusts the volume of delay 4 sound.
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies of the feed-back, set this parameter to bypass.
Balance	D100:0W–D0:100W	Adjusts the volume balance between the direct sound and the delay sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the delay sound will be output.
Level	0–127	Adjusts the output level.

22: Time Delay (Time Control Delay)

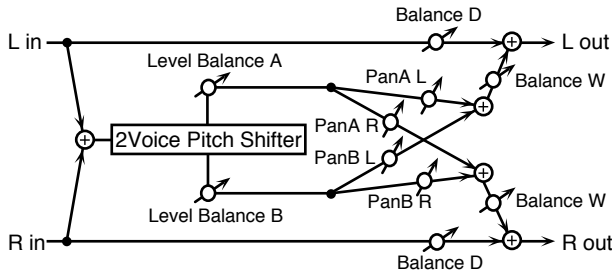
You can change the delay time in real time. Lengthening the delay will lower the pitch, and shortening it will raise the pitch.



Parameter	Value	Description
Time	200–1000 [ms]	Adjusts the time delay from the direct sound until when each delay sound is heard.
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Acceler	0–15	This parameter adjusts the time over which the Delay Time will change from the current setting to a newly specified setting. The rate of change for the Delay Time directly affects the rate of pitch change.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies of the feed-back, set this parameter to bypass.
Panpot	L64–63R	Adjusts the stereo location of the delay sound. L64 is far left, 0 is center, and 63R is far right.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W–D0:100W	Adjusts the volume balance between the direct sound and the delay sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the delay sound will be output.
Level	0–127	Adjusts the output level.

23: 2 Pitch Shift (2 Voice Pitch Shifter)

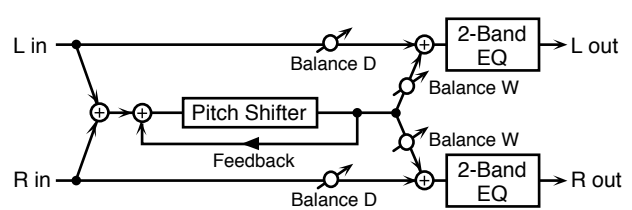
A Pitch Shifter shifts the pitch of the direct sound. This 2-voice pitch shifter has two pitch shifters, and can add two pitch shifted sounds to the direct sound.



Parameter	Value	Description
Shift Mode	1, 2, 3, 4, 5	Higher settings of this parameter will result in slower response, but steadier pitch.
A Coarse	-24- +12 [semi]	Adjusts the pitch of Pitch Shift A in semitone steps (-2- +1 octaves).
B Coarse	-24- +12 [semi]	Adjusts the pitch of Pitch Shift B in semitone steps (-2- +1 octaves).
A Fine	-100- +100 [cent]	Makes fine adjustments to the pitch of Pitch Shift A in 2-cent steps (-100- +100 cents). One cent is 1/100th of a semi-tone.
B Fine	-100- +100 [cent]	Makes fine adjustments to the pitch of Pitch Shift B in 2-cent steps (-100- +100 cents). One cent is 1/100th of a semi-tone.
A Pre Delay	0-500 [ms]	Adjusts the time delay from when the direct sound begins until the Pitch Shift A sound is heard.
B Pre Delay	0-500 [ms]	Adjusts the time delay from when the direct sound begins until the Pitch Shift B sound is heard.
A Panpot	L64-63R	Adjusts the stereo location of the Pitch Shift A sound. L64 is far left, 0 is center, and 63R is far right.
B Panpot	L64-63R	Adjusts the stereo location of the Pitch Shift B sound. L64 is far left, 0 is center, and 63R is far right.
Level AB (Balance)	A100:0B- A0:100B	Adjusts the volume balance between the Pitch Shift A and Pitch Shift B sounds.
Balance	D100:0W- D0:100W	Adjusts the volume balance between the direct sound and the pitch shift sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the pitch shift sound will be output.
Level	0-127	Adjusts the output level.

24: FBK Pitch (Feedback Pitch Shifter)

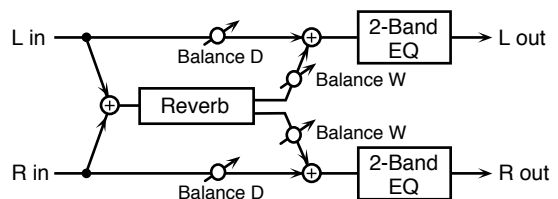
This pitch shifter allows the pitch shifted sound to be fed back into the effect.



Parameter	Value	Description
Shift Mode	1, 2, 3, 4, 5	Higher settings of this parameter will result in slower response, but steadier pitch.
Pitch Coarse	-24- +12 [semi]	Adjusts the pitch of the pitch shifted sound in semitone steps (-2- +1 octaves).
Pitch Fine	-100- +100 [cent]	Makes fine adjustments to the pitch of the pitch shifted sound in 2-cent steps (-100- +100 cents).
Pre Delay	0-500 [ms]	Adjusts the time delay from when the direct sound begins until the pitch shifted sound is heard.
Feedback	-98- +98 [%]	Adjusts the proportion (%) of the processed sound that is fed back into the effect. Negative (-) settings will invert the phase.
Panpot	L64-63R	Adjusts the stereo location of the pitch shifted sound. L64 is far left, 0 is center, and 63R is far right.
Eq Low Gain	-15- +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15- +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W- D0:100W	Adjusts the volume balance between the direct sound and the pitch shift sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the pitch shift sound will be output.
Level	0-127	Adjusts the output level.

25: Reverb

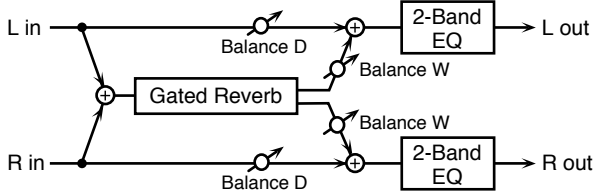
The Reverb effect adds reverberation to the sound, simulating an acoustic space.



Parameter	Value	Description
Type	Room1, Room2, Stage1, Stage2, Hall1, Hall2	Selects the type of Reverb effect. Room1: dense reverb with short decay. Room2: sparse reverb with short decay. Stage1: reverb with greater late reverberation. Stage2: reverb with strong early reflections. Hall1: reverb with clear reverberance. Hall2: reverb with rich reverberance.
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the reverb sound is heard.
Time	0–127	Adjusts the time length of reverberation.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which the reverberant sound will be cut. As the frequency is set lower, more of the high frequencies will be cut, resulting in a softer and more muted reverberance. If you do not want the high frequencies to be cut, set this parameter to bypass.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.
Balance	D100:0W–D0:100W	Adjusts the volume balance between the direct sound and the reverb sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the reverb sound will be output.
Level	0–127	Adjusts the output level.

26: Gate Reverb

Gate Reverb is a special type of reverb in which the reverberant sound is cut off before its natural length.

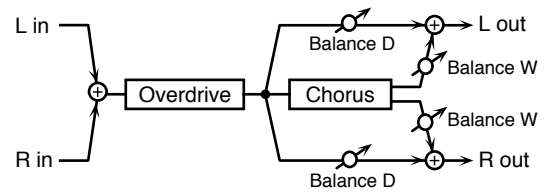


Parameter	Value	Description
Type	Normal, Reverse, Sweep1, Sweep2	Selects the type of reverb. Normal: conventional gate reverb. Reverse: backwards reverb. Sweep1: the reverberant sound moves from right to left. Sweep2: the reverberant sound moves from left to right.
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the reverb sound is heard.
Time	5–500 [ms]	Adjusts the time from when the reverb is heard until when it disappears.
Eq Low Gain	-15– +15 [dB]	Adjusts the gain of the low frequency.
Eq High Gain	-15– +15 [dB]	Adjusts the gain of the high frequency.

Parameter	Value	Description
Balance	D100:0W–D0:100W	Adjusts the volume balance between the direct sound and the reverb sound. With a setting of D100:0W only the direct sound will be output, and with a setting of D0:100W only the reverb sound will be output.
Level	0–127	Adjusts the output level.

27: OD→ Chorus (Overdrive → Chorus)

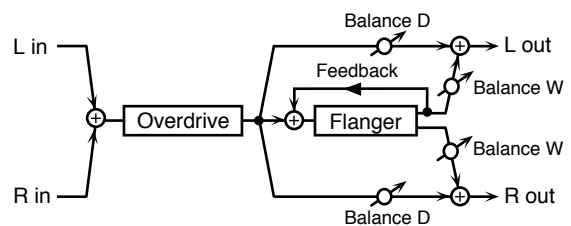
This effect connects an overdrive and a chorus in series.



Parameter	Value	Description
Od Drive	0–127	Adjusts the degree of overdrive distortion. The volume will change together with the degree of distortion.
Od Panpot	L64–63R	Adjusts the stereo location of the overdrive sound. L64 is far left, 0 is center, and 63R is far right.
Cho Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
Cho Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the chorus effect.
Cho Depth	0–127	Adjusts the modulation depth of the chorus effect.
Cho Balance	D100:0W–D0:100W	Adjusts the volume balance between the overdrive sound that is sent through the chorus and the overdrive sound that is not sent through the chorus. With a setting of "D100:0W," only the overdrive sound will be output. With a setting of "D0:100W," only the overdrive sound that is sent through the chorus will be output.
Level	0–127	Adjusts the output level.

28: OD→ Flanger (Overdrive → Flanger)

This effect connects an overdrive and a flanger in series.

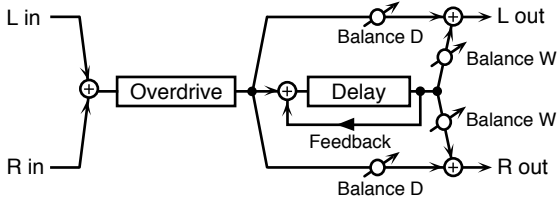


MFX types and parameters

Parameter	Value	Description
OD Drive	0–127	Adjusts the degree of overdrive distortion. The volume will change together with the degree of distortion.
OD Panpot	L64–63R	Adjusts the stereo location of the overdrive sound. L64 is far left, 0 is center, and 63R is far right.
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the flanger effect.
Depth	0–127	Adjusts the modulation depth of the flanger effect.
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Balance	D100:0W– D0:100W	Adjusts the volume balance between the overdrive sound that is sent through the flanger and the overdrive sound that is not sent through the flanger. With a setting of "D100:0W," only the overdrive sound will be output. With a setting of "D0:100W," only the overdrive sound that is sent through the flanger will be output.
Level	0–127	Adjusts the output level.

29: OD→Delay (Overdrive →Delay)

This effect connects an overdrive and a delay in series.



Parameter	Value	Description
Od Drive	0–127	Adjusts the degree of overdrive distortion. The volume will change together with the degree of distortion.
Od Panpot	L64–63R	Adjusts the stereo location of the overdrive sound. L64 is far left, 0 is center, and 63R is far right.
Time	0–500 [ms]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which delayed sound fed back to the effect will be cut. If you do not want to cut the high frequencies of the feedback, set this parameter to bypass.

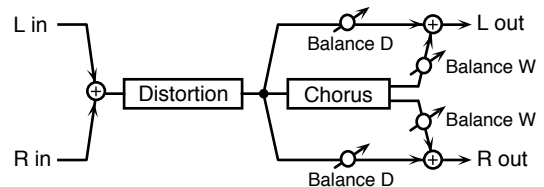
Parameter	Value	Description
Balance	D100:0W– D0:100W	Adjusts the volume balance between the overdrive sound that is sent through the delay and the overdrive sound that is not sent through the delay. With a setting of "D100:0W," only the overdrive sound will be output. With a setting of "D0:100W," only the overdrive sound that is sent through the delay will be output.
Level	0–127	Adjusts the output level.

30: DST→ Cho (Distortion →Chorus)

This effect connects distortion and chorus in series. The parameters are essentially the same as "27: OD→Chorus," with the exception of the following two.

OD Drive→Dist Drive (Specifies the amount of distortion.)

OD Panpot→Dist Panpot (Specifies the stereo location of the distortion sound.)

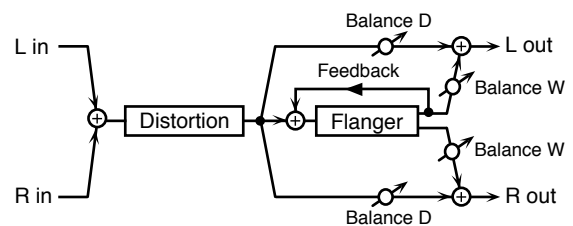


31: DST→ Flanger

This effect connects distortion and flanger in series. The parameters are essentially the same as in "28: OD→Flanger," with the exception of the following two.

OD Drive→Dist Drive (Specifies the amount of distortion.)

OD Panpot→Dist Panpot (Specifies the stereo location of the distortion sound.)

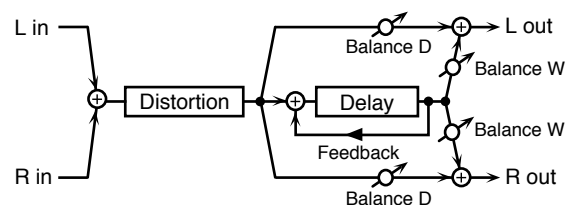


32: DST→ Delay (Distortion→Delay)

The parameters are essentially the same as in "29: OD→Delay" with the exception of the following two.

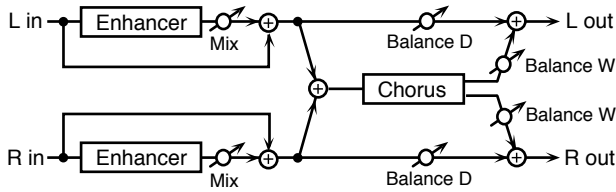
OD Drive→ Dist Drive (Specifies the amount of distortion.)

OD Panpot→Dist Panpot (Specifies the stereo location of the distortion sound.)



33: EH→ Chorus (Enhancer→Chorus)

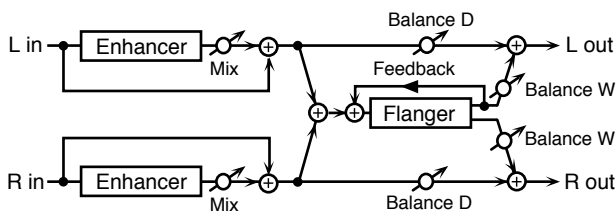
This effect connects an enhancer and a chorus in series.



Parameter	Value	Description
Enh Sens	0–127	Adjusts the sensitivity of the enhancer.
Enh Mix Level	0–127	Adjusts the ratio with which the overtones generated by the enhancer are combined with the direct sound.
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the chorus effect.
Depth	0–127	Adjusts the modulation depth of the chorus effect.
Balance	D100:0W–D0:100W	Adjusts the volume balance between the enhancer sound that is sent through the chorus and the enhancer sound that is not sent through the chorus. With a setting of "D100:0W," only the enhancer sound will be output. With a setting of "D0:100W," only the enhancer sound that is sent through the chorus will be output.
Level	0–127	Adjusts the output level.

34: EH→ Flanger (Enhancer→Flanger)

This effect connects an enhancer and a flanger in series.

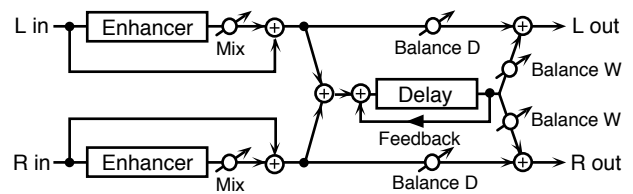


Parameter	Value	Description
Enh Sens	0–127	Adjusts the sensitivity of the enhancer.
Enh Mix Level	0–127	Adjusts the ratio with which the overtones generated by the enhancer are combined with the direct sound.
Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the flanger effect.
Depth	0–127	Adjusts the modulation depth of the flanger effect.

Parameter	Value	Description
Feedback	-98– +98 [%]	Adjusts the proportion (%) of the flanger sound that is feedback into the effect. Negative (-) settings will invert the phase.
Balance	D100:0W–D0:100W	Adjusts the volume balance between the enhancer sound that is sent through the flanger and the enhancer sound that is not sent through the flanger. With a setting of "D100:0W," only the enhancer sound will be output. With a setting of "D0:100W," only the enhancer sound that is sent through the flanger will be output.
Level	0–127	Adjusts the output level.

35: EH→ Delay (Enhancer→Delay)

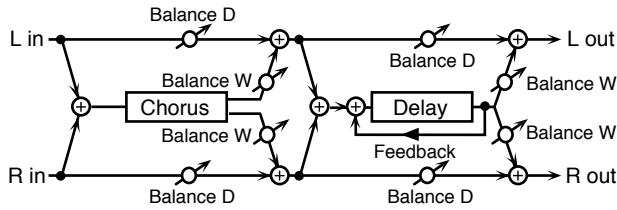
This effect connects an enhancer and a delay in series.



Parameter	Value	Description
Enh Sens	0–127	Adjusts the sensitivity of the enhancer.
Enh Mix Level	0–127	Adjusts the ratio with which the overtones generated by the enhancer are combined with the direct sound.
Time	0–500 [ms]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
Feedback	98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not want to cut the high frequencies of the delay feedback, set this parameter to bypass.
Balance	D100:0W–D0:100W	Adjusts the volume balance between the enhancer sound that is sent through the delay and the enhancer sound that is not sent through the delay. With a setting of "D100:0W," only the enhancer sound will be output. With a setting of "D0:100W," only the enhancer sound that is sent through the delay will be output.
Level	0–127	Adjusts the output level.

36: Cho→ DLY (Chorus→Delay)

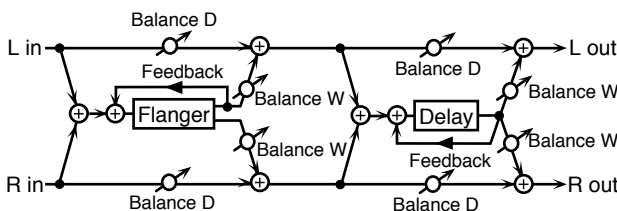
This effect connects a chorus and a delay unit in series.



Parameter	Value	Description
Cho Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
Cho Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the chorus effect.
Cho Depth	0–127	Adjusts the modulation depth of the chorus effect.
Cho Balance	D100:0W–D0:100W	Adjusts the volume balance between the direct sound and the chorus sound. With a setting of "D100:0W," only the direct sound will be output. With a setting of "D0:100W," only the chorus sound will be output.
Dly Time	0–500 [ms]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
Dly Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
Dly HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not want to cut the high frequencies of the feedback, set this parameter to bypass.
Dly Balance	D100:0W–D0:100W	Adjusts the volume balance between the chorus sound that is sent through the delay and the chorus sound that is not sent through the delay. With a setting of "D100:0W," only the chorus sound will be output. With a setting of "D0:100W," only the chorus sound that is sent through the delay will be output.
Level	0–127	Adjusts the output level.

37: Flgr→ DLY (Flanger→Delay)

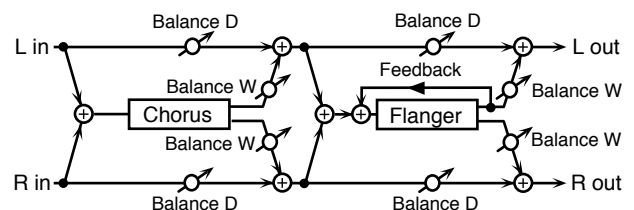
This effect connects a flanger and a delay in series.



Parameter	Value	Description
Flg Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
Flg Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the flanger effect.
Flg Depth	0–127	Adjusts the modulation depth of the flanger effect.
Flg Feedback	-98– +98 [%]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flg Balance	D100:0W–D0:100W	Adjusts the volume balance between the direct sound and the flanger sound. With a setting of "D100:0W," only the direct sound will be output. With a setting of "D0:100W," only the flanger sound will be output.
Dly Time	0–500 [ms]	Adjusts the time delay from when the direct sound begins until the delay sound is heard.
Dly Feedback	-98– +98 [%]	Adjusts the proportion (%) of the delay sound that is fed back into the delay input. Negative (-) settings will invert the phase.
Dly HF Damp	200–8000 [Hz], Bypass	Adjusts the frequency above which delayed sound fed back to the delay input will be cut. If you do not want to cut the high frequencies of the delay feedback, set this parameter to bypass.
Dly Balance	D100:0W–D0:100W	Adjusts the volume balance between the flanger sound that is sent through the delay and the flanger sound that is not sent through the delay. With a setting of "D100:0W," only the flanger sound will be output. With a setting of "D0:100W," only the flanger sound that is sent through the delay will be output.
Level	0–127	Adjusts the output level.

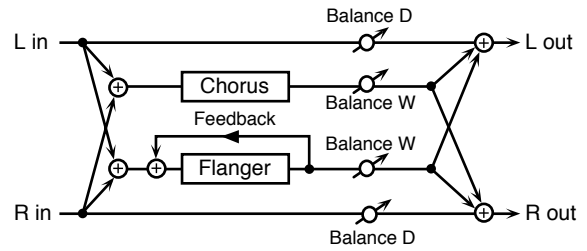
38: CHO→ Flgr (Chorus→Flanger)

This effect connects a chorus and a flanger in series.



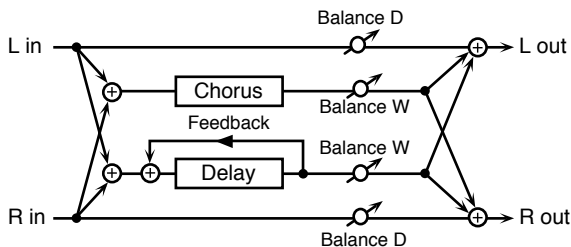
Parameter	Value	Description
Cho Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the chorus sound is heard.
Cho Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the chorus effect.
Cho Depth	0–127	Adjusts the modulation depth of the chorus effect.

Parameter	Value	Description
Cho Balance	D100:0W– D0:100W	Adjusts the volume balance between the direct sound and the chorus sound. With a setting of "D100:0W," only the direct sound will be output. With a setting of "D0:100W," only the chorus sound will be output.
Flg Pre Delay	0.0–100 [ms]	Adjusts the time delay from when the direct sound begins until the flanger sound is heard.
Flg Rate	0.05–10.00 [Hz]	Adjusts the modulation speed of the flanger effect.
Flg Depth	0–127	Adjusts the modulation depth of the flanger effect.
Flg Feedback	-98– +98 [%]	Adjusts the proportion (%) of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flg Balance	D100:0W– D0:100W	Adjusts the volume balance between the chorus sound and the chorus sound that is passed through the flanger. With a setting of "D100:0W," only the chorus sound will be output. With a setting of "D0:100W," only the chorus sound that passes through the flanger will be output.
Level	0–127	Adjusts the output level.



39: CHO/DLY (Chorus/Delay)

This effect connects a chorus and a delay in parallel. The parameters are the same as for "36: Cho→DLY." However, the Dly Balance parameter adjusts the volume balance between the direct sound and the delay sound.



40: Flgr/DLY (Flanger/Delay)

This effect connects a flanger and a delay in parallel. The parameters are the same as for "37: Flgr→DLY." However, the Dly Balance parameter adjusts the volume balance between the direct sound and the delay sound.

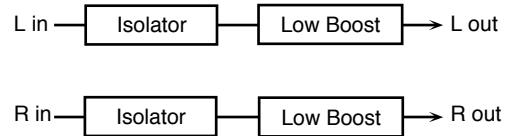
41: CHO/Flgr (Chorus/Flanger)

This effect connects a chorus and a flanger in parallel. The parameters are the same as for "38: CHO→Flgr" However, the Flanger Balance parameter adjusts the volume balance between the direct sound and the flanger sound.

This effect connects a chorus and a flanger in parallel.

42: Isolator

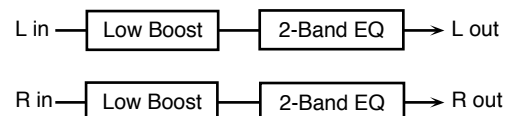
This is an equalizer which cuts the volume greatly, allowing you to add a special effect to the sound by cutting the volume in varying ranges.



Parameter	Value	Description
Low Level	-60– +4 dB	These boost and cut each of the High, Middle, and Low frequency ranges. At -60 dB, the sound becomes inaudible. 0 dB is equivalent to the input level of the sound.
Mid Level		
High Level		
AP Low SW	Off, On	Turns the Anti-Phase function on and off for the Low frequency ranges. When turned on, the counter channel of stereo sound is inverted and added to the signal.
AP Low Level	0–127	Adjusts the level settings for the Low frequency ranges. Adjusting this level for certain frequencies allows you to lend emphasis to specific parts. (This is effective only for stereo source.)
AP Mid SW	Off, On	Settings of the Anti-Phase function for the Middle frequency ranges
AP Mid Level	0–127	The parameters are the same as for the Low frequency ranges.
Low Boost Sw	Off, On	Turns Low Booster on/off. This emphasizes the bottom to create a heavy bass sound.
Low Boost Lev	0–127	Increasing this value gives you a heavier low end. * Depending on the Isolator and filter settings this effect may be hard to distinguish.
Level	0–127	Output Level.

43: Low Boost

Boosts the volume of the lower range, creating powerful lows.



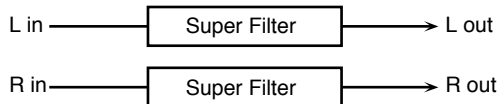
Parameter	Value	Description
Boost Freq	50–125 Hz	Center frequency at which the lower range will be boosted.
Boost Gain	0– +12 dB	Amount by which the lower range will be boosted.

MFX types and parameters

Parameter	Value	Description
Boost Width	Wide, Mid, Narrow	Width of the lower range that will be boosted.
Eq Low Gain	-15– +15 dB	Gain of the low frequency range.
Eq High Gain	-15– +15 dB	Gain of the high frequency range.
Level	0–127	Output level.

44: Super Filter

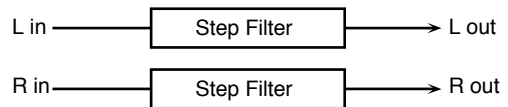
This is a filter with an extremely sharp slope. The cutoff frequency can be varied cyclically.



Parameter	Value	Description
Filter Type	LPF, BPF, HPF, NOTCH	Frequency range that will pass through each filter LPF : frequencies below the cutoff. BPF : frequencies in the region of the cutoff. HPF : frequencies above the cutoff. NOTCH : frequencies other than the region of the cutoff.
Filter Slope	-12, -24, -36 dB	Amount of attenuation per octave -36 dB: extremely steep -24 dB: steep -12 dB: gentle.
Filter Cutoff	0–127	Cutoff frequency of the filter Increasing this value will raise the cut-off frequency.
Filter Reso	0–127	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
Filter Gain	0– +12 dB	Amount of boost for the filter output.
Modul Switch	Off, On	On/off switch for cyclic change.
Modul Wave	TRI, SQR, SIN, SAW1, SAW2	How the cutoff frequency will be modulated TRI : triangle wave. SQR : square wave SIN : sine wave. SAW1 : sawtooth wave (upward). SAW2 : sawtooth wave (downward).
Rate (Sync)	Hz, Note	Rate of modulation.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Depth of modulation.
Attack	0–127	Speed at which the cutoff frequency will change This is effective if Modulation Wave is SQR, SAW1, or SAW2.
Level	0–127	Output level.

45: Step Filter

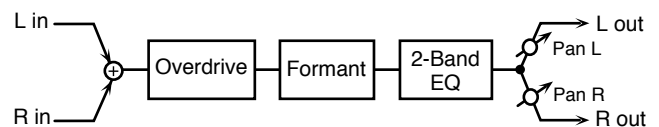
This is a filter whose cutoff frequency can be modulated in steps. You can specify the pattern by which the cutoff frequency will change.



Parameter	Value	Description
Step 1–16	0–127	Cutoff frequency at each step.
Rate (Sync)	Hz, Note	Rate of modulation.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Attack	0–127	Speed at which the cutoff frequency changes between steps.
Filter Type	LPF, BPF, HPF, NOTCH	Filter type Frequency range that will pass through each filter LPF : frequencies below the cutoff. BPF : frequencies in the region of the cutoff. HPF : frequencies above the cutoff. NOTCH : frequencies other than the region of the cutoff.
Filter Slope	-12, -24, -36 dB	Amount of attenuation per octave -12 dB: gentle -24 dB: steep -36 dB: extremely steep.
Filter Reso	0–127	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
Filter Gain	0– +12 dB	Amount of boost for the filter output.
Level	0–127	Output level.

46: Humanizer

Adds a vowel character to the sound, making it similar to a human voice.

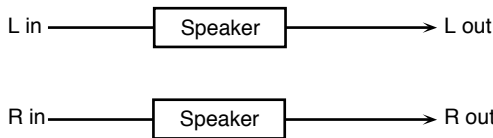


Parameter	Value	Description
Drive Switch	Off, On	Turns Drive on/off.
Drive	0–127	Degree of distortion Also changes the volume.
Vowel1	a, e, i, o, u	Selects the vowel.
Vowel2	a, e, i, o, u	
Rate (Sync)	Hz, Note	Frequency/Note at which the two vowels switch.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Effect depth.
In Sync Sw	Off, On	Determines whether the LFO for switching the vowels is reset by the input signal (On) or not (Off).
In Sync Thrs	0–127	Volume level at which reset is applied.

Parameter	Value	Description
Manual	0–100	Point at which Vowel 1/2 switch 49 or less: Vowel 1 will have a longer duration. 50: Vowel 1 and 2 will be of equal duration. 51 or more: Vowel 2 will have a longer duration.
Eq Low Gain	-15– +15 dB	Gain of the low frequency range.
Eq High Gain	-15– +15 dB	Gain of the high frequency range.
Panpot	L64–63R	Stereo location of the output.
Level	0–127	Output level.

47: Speaker Simulator

Simulates the speaker type and mic settings used to record the speaker sound.



Parameter	Value	Description
Type	(See the table below.)	Type of speaker.
Mic Setting	1, 2, 3	Adjusts the location of the mic that is recording the sound of the speaker. This can be adjusted in three steps, with the mic becoming more distant in the order of 1, 2, and 3.
Mic Level	0–127	Volume of the microphone.
Direct Level	0–127	Volume of the direct sound.
Level	0–127	Output Level.

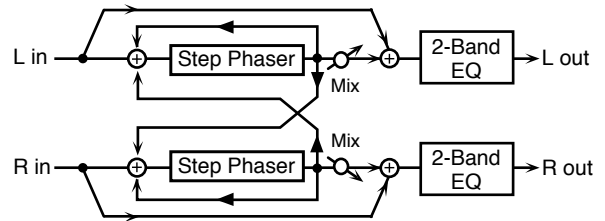
Specifications of each Speaker Type

The speaker column indicates the diameter of each speaker unit (in inches) and the number of units.

Type	Cabinet	Speaker	Microphone
Small 1	small open-back enclosure	10	dynamic
Small 2	small open-back enclosure	10	dynamic
Middle	open back enclosure	12 x 1	dynamic
JC-120	open back enclosure	12 x 2	dynamic
Built-In 1	open back enclosure	12 x 2	dynamic
Built-In 2	open back enclosure	12 x 2	condenser
Built-In 3	open back enclosure	12 x 2	condenser
Built-In 4	open back enclosure	12 x 2	condenser
Built-In 5	open back enclosure	12 x 2	condenser
BG Stack 1	sealed enclosure	12 x 2	condenser
BG Stack 2	large sealed enclosure	12 x 2	condenser
MS Stack 1	large sealed enclosure	12 x 4	condenser
MS Stack 2	large sealed enclosure	12 x 4	condenser
Metal Stk	large double stack	12 x 4	condenser
2-Stack	large double stack	12 x 4	condenser
3-Stack	large triple stack	12 x 4	condenser

48: Step Phaser

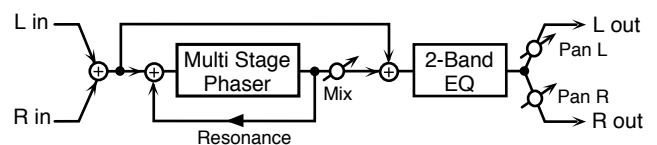
The phaser effect will be varied gradually.



Parameter	Value	Description
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.
Rate (Sync)	Hz, Note	Frequency of modulation.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Depth of modulation.
Polarity	Inverse, Synchro	Selects whether the left and right phase of the modulation will be the same or the opposite. Inverse: The left and right phase will be opposite. When using a mono source, this spreads the sound. Synchro: The left and right phase will be the same. Select this when inputting a stereo source.
Resonance	0–127	Amount of feedback.
Cross FBK	-98– +98 %	Adjusts the proportion of the phaser sound that is fed back into the effect. Negative (-) settings will invert the phase.
SRate (Sync)	Hz, Note	Rate of the step-wise change in the phaser effect.
SRate (Hz)	0.05–20.00 Hz	
SRate (Note)	note *2	
Mix Level	0–127	Level of the phase-shifted sound.
Eq Low Gain	-15– +15 dB	Gain of the low range.
Eq High Gain	-15– +15 dB	Gain of the high range.
Level	0–127	Output Level.

49: MLT Phaser (Multi Stage Phaser)

Extremely high settings of the phase difference produce a deep phaser effect.

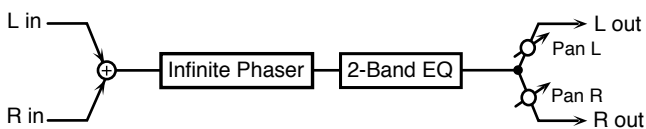


MFX types and parameters

Parameter	Value	Description
Mode	4-Stage, 8-Stage, 12-Stage, 16-Stage, 20-Stage, 24-Stage	Number of phaser stages.
Manual	0–127	Adjusts the basic frequency from which the sound will be modulated.
Rate (Sync)	Hz, Note	Frequency of modulation.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Depth of modulation.
Resonance	0–127	Amount of feedback.
Mix Level	0–127	Level of the phase-shifted sound.
Panpot	L64–63R	Stereo location of the output sound.
Eq Low Gain	-15– +15 dB	Gain of the low range.
Eq High Gain	-15– +15 dB	Gain of the high range.
Level	0–127	Output Level.

50: INF Phaser (Infinite Phaser)

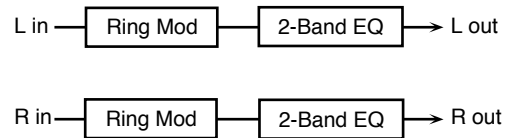
A phaser that continues raising/lowering the frequency at which the sound is modulated.



Parameter	Value	Description
Mode	1, 2, 3, 4	Higher values will produce a deeper phaser effect.
Speed	-100– +100	Speed at which to raise or lower the frequency at which the sound is modulated (+: upward / -: downward).
Resonance	0–127	Amount of feedback.
Mix Level	0–127	Volume of the phase-shifted sound.
Panpot	L64–63R	Panning of the output sound.
Eq Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range.
Eq High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range.
Level	0–127	Output volume.

51: Ring Modul (Ring Modulator)

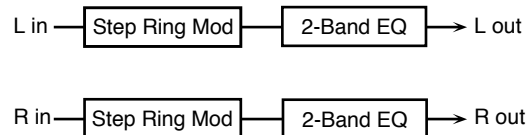
This is an effect that applies amplitude modulation (AM) to the input signal, producing bell-like sounds. You can also change the modulation frequency in response to changes in the volume of the sound sent into the effect.



Parameter	Value	Description
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).
Eq Low Gain	-15– +15 dB	Gain of the low frequency range.
Eq High Gain	-15– +15 dB	Gain of the high frequency range.
Balance	D100:0W– D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0–127	Output level.

52: Step Ring (Step Ring Modulator)

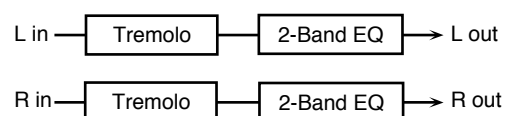
This is a ring modulator that uses a 16-step sequence to vary the frequency at which modulation is applied.




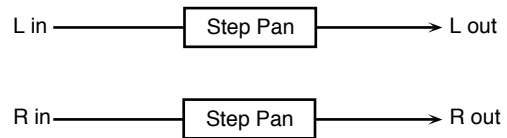
Parameter	Value	Description
Step 1–16	0–127	Frequency of ring modulation at each step.
Rate (Sync)	Hz, Note	Rate at which the 16-step sequence will cycle.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Attack	0–127	Speed at which the modulation frequency changes between steps.
Eq Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range.
Eq High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range.
Balance	D100:0W– D0:100W	Volume balance of the original sound (D) and effect sound (W).
Level	0–127	Output volume.

53: Tremolo

Cyclically modulates the volume to add tremolo effect to the sound.



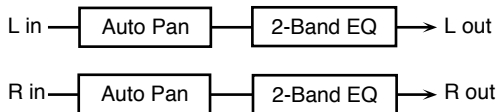
Parameter	Value	Description
Wave	TRI, SQR, SIN, SAW1, SAW2	Modulation Wave TRI: triangle wave. SQR: square wave. SIN: sine wave. SAW1/2: sawtooth wave.
		
Rate (Sync)	Hz, Note	Frequency of the change.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Depth to which the effect is applied.
Eq Low Gain	-15– +15 dB	Gain of the low range.
Eq High Gain	-15– +15 dB	Gain of the high range.
Level	0–127	Output Level.

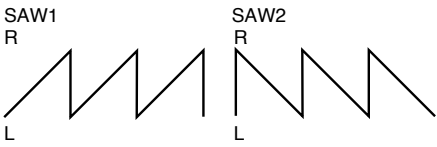


Parameter	Value	Description
Step 1–16	L64–63R	Pan at each step.
Rate (Sync)	Hz, Note	Rate at which the 16-step sequence will cycle.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Attack	0–127	Speed at which the pan changes between steps.
In Sync Sw	Off, On	Specifies whether an input note will cause the sequence to resume from the first step of the sequence (On) or not (Off).
In Sync Thrs	0–127	Volume at which an input note will be detected.
Level	0–127	Output volume.

54: Auto Pan

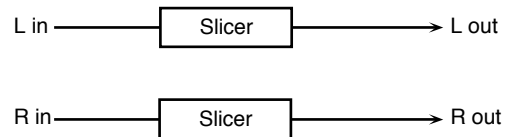
Cyclically modulates the stereo location of the sound.



Parameter	Value	Description
Wave	TRI, SQR, SIN, SAW1, SAW2	Modulation Wave TRI: triangle wave. SQR: square wave. SIN: sine wave. SAW1/2: sawtooth wave.
		
Rate (Sync)	Hz, Note	Frequency of the change.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Depth to which the effect is applied.
Eq Low Gain	-15– +15 dB	Gain of the low range.
Eq High Gain	-15– +15 dB	Gain of the high range.
Level	0–127	Output Level.

56: 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	Description
Step 1–16	0–127	Level at each step
Rate (Sync)	Hz, Note	Rate at which the 16-step sequence will cycle
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Attack	0–127	Speed at which the level changes between steps
In Sync Sw	Off, On	Specifies whether an input note will cause the sequence to resume from the first step of the sequence (On) or not (Off)
In Sync Thrs	0–127	Volume at which an input note will be detected
Mode	Legato, Slash	Sets the manner in which the volume changes as one step progresses to the next. Legato: The change in volume from one step's level to the next remains unaltered. If the level of a following step is the same as the one preceding it, there is no change in volume. Slash: The level is momentarily set to 0 before progressing to the level of the next step. This change in volume occurs even if the level of the following step is the same as the preceding step.
Shuffle	0–127	Timing of volume changes in levels for even-numbered steps (step 2, step 4, step 6...). The higher the value, the later the beat progresses.
Level	0–127	Output level

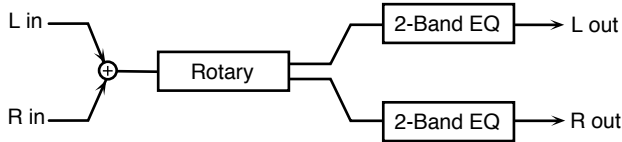
55: Step Pan

This uses a 16-step sequence to vary the panning of the sound.

57: VK Rotary

This type provides modified response for the rotary speaker, with the low end boosted further.

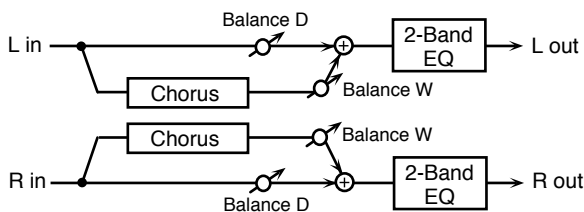
This effect features the same specifications as the VK-7's built-in rotary speaker.



Parameter	Value	Description
Speed	Slow, Fast	Rotational speed of the rotating speaker
Brake	Off, On	Switches the rotation of the rotary speaker. When this is turned on, the rotation will gradually stop. When it is turned off, the rotation will gradually resume.
WF Slow	0.05–10.00 Hz	Low-speed rotation speed of the woofer
WF Fast	0.05–10.00 Hz	High-speed rotation speed of the woofer
WF Trans UP	0–127	Adjusts the rate at which the woofer rotation speeds up when the rotation is switched from Slow to Fast.
WF Trans DW	0–127	Adjusts the rate at which the woofer rotation speeds up when the rotation is switched from Fast to Slow.
WF Level	0–127	Volume of the woofer
TW Slow	0.05–10.00 Hz	Settings of the tweeter The parameters are the same as for the woofer.
TW Fast	0.05–10.00 Hz	
TWTrans UP	0–127	
TWTrans DW	0–127	
TW Level	0–127	
Spread	0–10	Sets the rotary speaker stereo image. The higher the value set, the wider the sound is spread out.
Eq Low Gain	-15– +15 dB	Gain of the low range
Eq High Gain	-15– +15 dB	Gain of the high range
Level	0–127	Output Level

58: 3D Chorus

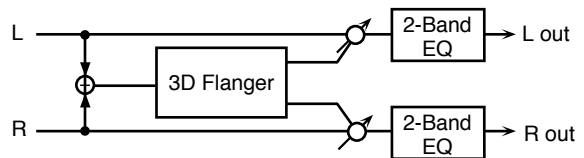
This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorus sound.



Parameter	Value	Description
Filter Type	OFF, LPF, HPF	Type of filter OFF: no filter is used LPF: cuts the frequency range above the Cutoff Freq HPF: cuts the frequency range below the Cutoff Freq
Cutoff Freq	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate (Sync)	Hz, Note	Frequency of modulation
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Depth of modulation
Phase	0–180 deg	Spatial spread of the sound
Out Mode	Speaker, Phones	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select "Speaker" when using speakers, or "Phones" when using headphones.
Eq Low Gain	-15– +15 dB	Gain of the low range
Eq High Gain	-15– +15 dB	Gain of the high range
Balance	D100:0W– D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Level	0–127	Output Level

59: 3D Flanger

This applies a 3D effect to the flanger sound. The flanger sound will be positioned 90 degrees left and 90 degrees right.

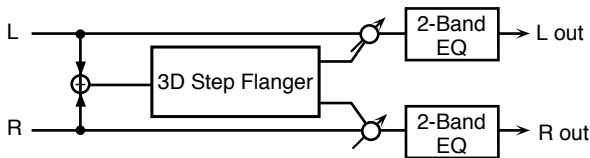


Parameter	Value	Description
Filter Type	OFF, LPF, HPF	Type of filter OFF: no filter is used. LPF: cuts the frequency range above the Cutoff Freq. HPF: cuts the frequency range below the Cutoff Freq.
Cutoff Freq	200–8000 Hz	Basic frequency of the filter.
Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Rate (Sync)	Hz, Note	Frequency of modulation.
Rate (Hz)	0.05–10.00 Hz	
Rate (Note)	note *2	
Depth	0–127	Depth of modulation.
Phase	0–180 deg	Spatial spread of the sound.
Feedback	-98– +98 %	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.

Parameter	Value	Description
Out Mode	Speaker, Phones	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select SPEAKER when using speakers, or PHONES when using head- phones.
Eq Low Gain	-15- +15 dB	Gain of the low range.
Eq High Gain	-15- +15 dB	Gain of the high range.
Balance	D100:0W- D0:100W	Volume balance between the direct sound (D) and the flanger sound (W).
Level	0-127	Output Level.

60: 3D Step Flgr (3D Step Flanger)

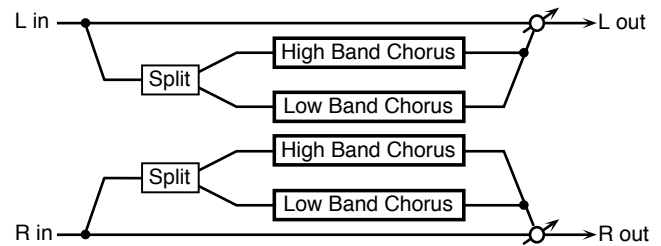
This applies a 3D effect to the step flanger sound. The flanger sound will be positioned 90 degrees left and 90 degrees right.



Parameter	Value	Description
Filter Type	OFF, LPF, HPF	Type of filter OFF: no filter is used. LPF: cuts the frequency range above the Cutoff Freq. HPF: cuts the frequency range below the Cutoff Freq.
Cutoff Freq	200-8000 Hz	Basic frequency of the filter.
Pre Delay	0.0-100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Rate (Sync)	Hz, Note	Frequency of modulation.
Rate (Hz)	0.05-10.00 Hz	
Rate (Note)	note *2	
Depth	0-127	Depth of modulation.
Phase	0-180 deg	Spatial spread of the sound.
Feedback	-98- +98 %	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
SRate (Sync)	Hz, Note	Rate (period) of pitch change
SRate (Hz)	0.05-20.00 Hz	
SRate (Note)	note *2	
Out Mode	Speaker, Phones	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select "Speaker" when using speakers, or "Phones" when using head- phones.
Eq Low Gain	-15- +15 dB	Gain of the low range.
Eq High Gain	-15- +15 dB	Gain of the high range.
Balance	D100:0W- D0:100W	Volume balance between the direct sound (D) and the flanger sound (W).
Level	0-127	Output Level.

61: Band Chorus

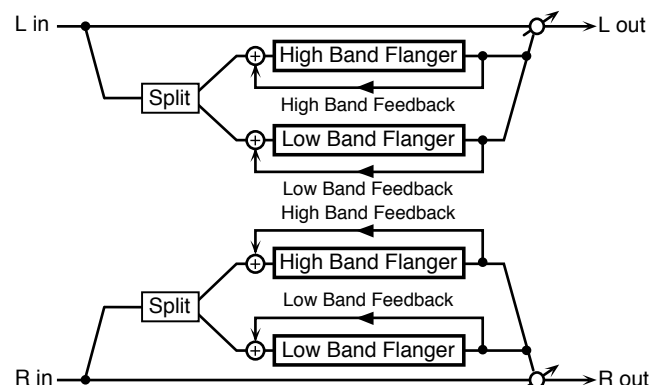
A chorus effect that lets you apply an effect independently to the low-frequency and high-frequency ranges.



Parameter	Value	Description
Split Freq	200-8000 Hz	Frequency at which the low and high ranges will be divided.
Lo Pre Delay	0.0-100.0 ms	Delay time from when the original sound is heard to when the low-range chorus sound is heard.
Lo Rate(Sync)	Hz, Note	Rate at which the low-range chorus sound is modulated.
Lo Rate(Hz)	0.05-10.00 Hz	
Lo Rate(Note)	note *2	
Lo Depth	0-127	Modulation depth for the low-range chorus sound.
Lo Phase	0-180 deg	Spaciousness of the low-range chorus sound.
Hi Pre Delay	0.0-100.0 ms	Delay time from when the original sound is heard to when the high-range chorus sound is heard.
Hi Rate(Sync)	Hz, Note	Rate at which the low-range chorus sound is modulated.
Hi Rate(Hz)	0.05-10.00 Hz	
Hi Rate(Note)	note *2	
Hi Depth	0-127	Modulation depth for the high-range chorus sound.
Hi Phase	0-180 deg	Spaciousness of the high-range chorus sound.
Balance	D100:0W- D0:100W	Volume balance of the original sound (D) and chorus sound (W).
Level	0-127	Output volume.

62: Band Flgr (Band Flanger)

A flanger that lets you apply an effect independently to the low frequency and high-frequency ranges.

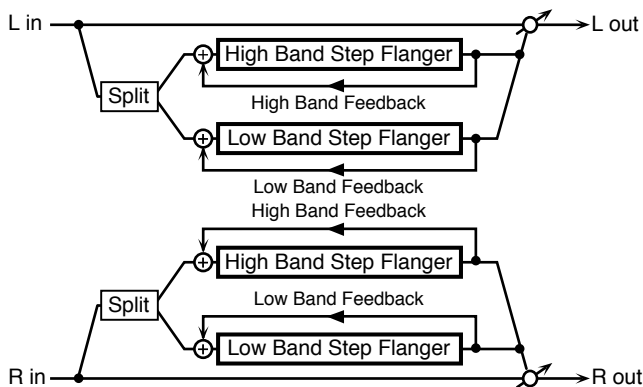


MFX types and parameters

Parameter	Value	Description
Split Freq	200–8000 Hz	Frequency at which the low and high ranges will be divided.
Lo Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the low-range flanger sound is heard.
Lo Rate(Sync)	Hz, Note	Rate at which the low-range flanger sound is modulated.
Lo Rate(Hz)	0.05–10.00 Hz	
Lo Rate(Note)	note *2	
Lo Depth	0–127	Modulation depth for the low-range flanger sound.
Lo Phase	0–180 deg	Spaciousness of the low-range flanger sound.
Lo Feedback	-98– +98%	Proportion of the low-range flanger sound that is to be re- turned to the input (negative values invert the phase).
Hi Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the high-range flanger sound is heard.
Hi Rate(Sync)	Hz, Note	Rate at which the high-range flanger sound is modulated.
Hi Rate(Hz)	0.05–10.00 Hz	
Hi Rate(Note)	note *2	
Hi Depth	0–127	Modulation depth for the high-range flanger sound.
Hi Phase	0–180 deg	Spaciousness of the high-range flanger sound.
Hi Feedback	-98– +98%	Proportion of the high-range flanger sound that is to be re- turned to the input (negative values invert the phase).
Balance	D100:0W– D0:100W	Volume balance of the original sound (D) and flanger sound (W).
Level	0–127	Output volume.

63: B. Step Flgr (2 Band Step Flanger)

A step flanger that lets you apply an effect independently to the low frequency and high-frequency ranges.

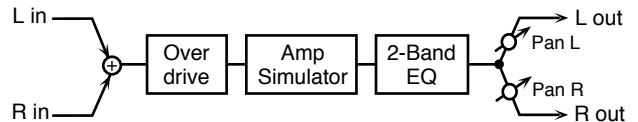


Parameter	Value	Description
Split Freq	200–8000 Hz	Frequency at which the low and high ranges will be divided.
Lo Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the low-range flanger sound is heard.
Lo Rate(Sync)	Hz, Note	Rate at which the low-range flanger sound is modulated.
Lo Rate(Hz)	0.05–10.00 Hz	
Lo Rate(Note)	note *2	
Lo Depth	0–127	Modulation depth for the low-range flanger sound.

Parameter	Value	Description
Lo Phase	0–180 deg	Spaciousness of the low-range flanger sound.
Lo Feedback	-98– +98%	Proportion of the low-range flanger sound that is to be re- turned to the input (negative values invert the phase).
Lo Step(Sync)	Hz, Note	Rate at which the steps will cycle for the low-range flanger sound.
Lo Step(Hz)	0.10–20.00 Hz	
Lo Step (Note)	note *2	
Hi Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the high-range flanger sound is heard.
Hi Rate(Sync)	Hz, Note	Rate at which the high-range flanger sound is modulated.
Hi Rate(Hz)	0.05–10.00 Hz	
Hi Rate(Note)	note *2	
Hi Depth	0–127	Modulation depth for the high-range flanger sound.
Hi Phase	0–180 deg	Spaciousness of the high-range flanger sound.
Hi Feedback	-98– +98%	Proportion of the high-range flanger sound that is to be re- turned to the input (negative values invert the phase).
Hi Step(Sync)	Hz, Note	Rate at which the steps will cycle for the high-range flanger sound.
Hi Step(Hz)	0.10–20.00 Hz	
Hi Step (Note)	note *2	
Balance	D100:0W– D0:100W	Volume balance of the original sound (D) and flanger sound (W).
Level	0–127	Output volume.

64: VS Overdrive

This is an overdrive that provides heavy distortion.



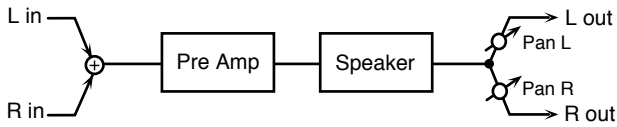
Parameter	Value	Description
Drive	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect.
Amp Switch	Off, On	Turns the Amp Simulator on/off.
Amp Type	Small, Built-In, 2-Stack, 3-Stack	Type of guitar amp Small: small amp. Built-In: single-unit type amp. 2-Stack: large double stack amp. 3-Stack: large triple stack amp.
Eq Low Gain	-15– +15 dB	Gain of the low range.
Eq High Gain	-15– +15 dB	Gain of the high range.
Panpot	L64–63R	Stereo location of the output sound.
Level	0–127	Output Level.

65: VS Distortion

This is a distortion effect that provides heavy distortion. The parameters are the same as for "64: VS Overdrive".

66: GT Amp Simul

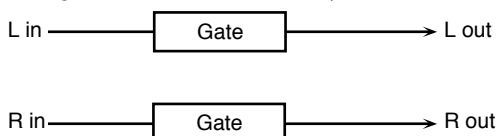
This is an effect that simulates the sound of a guitar amplifier.



Parameter	Value	Description
Amp Switch	Off, On	Turns the amp switch on/off.
Amp Type	JC-120, Clean Twin, Match Drive, BG Lead, MS1959I, MS1959II, MS1959III, Sldn Lead, Metal5150, Metal Lead, OD-1, OD-2 Turbo, Distortion, Fuzz	Type of guitar amp.
Amp Volume	0-127	Volume and amount of distortion of the amp.
Amp Master	0-127	Volume of the entire pre-amp.
Amp Gain	Low, Middle, High	Amount of pre-amp distortion.
Amp Bass	0-127	Tone of the bass/mid/treble frequency range * Middle cannot be set if "Match Drive" is selected as the Pre Amp Type.
Amp Middle		
Amp Treble		
Amp Presence		
Amp Bright	Off, On	Turning this "On" produces a sharper and brighter sound. * This parameter applies to the "JC-120," "Clean Twin," and "BG Lead" Pre Amp Types.
Speaker Sw	Off, On	Determines whether the signal passes through the speaker (ON), or not (OFF).
Speaker Type	(See the table "Specifications of each Speaker Type" p. 25.)	Type of speaker.
Mic Setting	1, 2, 3	Adjusts the location of the mic that's capturing the sound of the speaker. This can be adjusted in three steps, from 1 to 3, with the mic becoming more distant as the value increases.
Mic Level	0-127	Volume of the microphone.
Direct Level	0-127	Volume of the direct sound.
Panpot	L64-63R	Stereo location of the output.
Level	0-127	Output level.

67: Gate

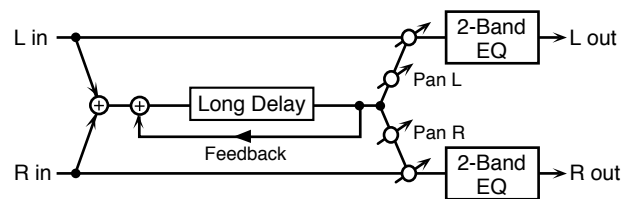
Cuts the reverb's delay according to the volume of the sound sent into the effect. Use this when you want to create an artificial sounding decrease in the reverb's decay.



Parameter	Value	Description
Threshold	0-127	Volume level at which the gate begins to close.
Mode	Gate, Duck	Type of gate: Gate: The gate will close when the volume of the original sound decreases, cutting the original sound. Duck (Ducking): The gate will close when the volume of the original sound increases, cutting the original sound.
Attack	0-127	Adjusts the time it takes for the gate to fully open after being triggered.
Hold	0-127	Adjusts the time it takes for the gate to start closing after the source sound falls beneath the Threshold.
Release	0-127	Adjusts the time it takes the gate to fully close after the hold time.
Balance	D100:0W-D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0-127	Output level.

68: Long Delay

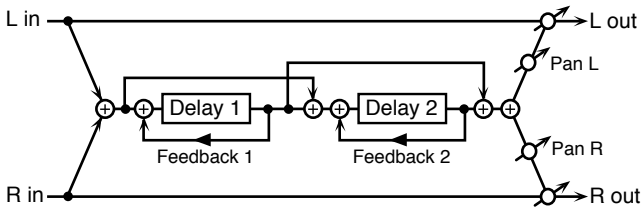
A delay that provides a long delay time.



Parameter	Value	Description
Delay (Sync)	msec, Note	Use this parameter to specify whether ("Note") or not ("msec") the delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time or a note value.
Delay (msec)	0-2600 ms	Adjusts the time until the delay is heard.
Delay (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the "Sync" parameter above to "Note". Specify the value of the desired note.
Phase	Normal, Inverse	Phase of the delay (Normal: non-inverted, Inverse: inverted).
Feedback	-98- +98%	Proportion of the delay sound that is to be returned to the input (negative values invert the phase).
HF Damp	200-8000 Hz, Bypass	Frequency at which the high-frequency content of the delayed sound will be cut (Bypass: no cut).
Panpot	L64-63R	Panning of the delay sound.
Eq Low Gain	-15- +15 dB	Amount of boost/cut for the high-frequency range.
Eq High Gain	-15- +15 dB	Amount of boost/cut for the high-frequency range.
Balance	D100:0W-D0:100W	Volume balance of the original sound (D) and delay sound (W).
Level	0-127	Output volume.

69: Serial Delay

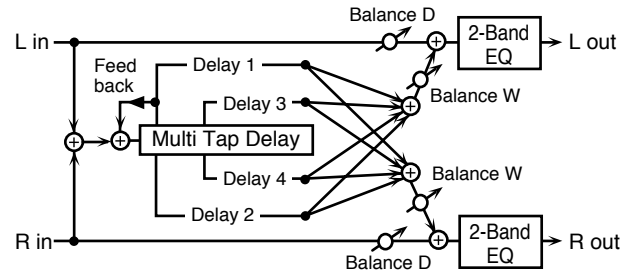
This delay connects two delay units in series. Feedback can be applied independently to each delay unit, allowing you to produce complex delay sounds.



Parameter	Value	Description
Dly1 (Sync)	msec, Note	Use this parameter to specify whether ("Note") or not ("msec") the delay 1 time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time (msec) or a note value.
Dly1 (msec)	0–1300 ms	Delay time from when sound is input to delay 1 until the delay sound is heard.
Dly1 (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the "Sync" parameter above to "Note". Specify the value of the desired note.
Dly1 Fbk	-98– +98%	Proportion of the delay sound that is to be returned to the input of delay 1 (negative values invert the phase).
Dly1 HF Damp	200–8000 Hz, Bypass	Frequency at which the high-frequency content of the delayed sound of delay 1 will be cut (Bypass: no cut).
Dly2 (Sync)	msec, Note	Use this parameter to specify whether ("Note") or not ("msec") the delay 2 time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time (msec) or a note value.
Dly2 (msec)	0–1300 ms	Delay time from when sound is input to delay 2 until the delay sound is heard.
Dly2 (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the "Sync" parameter above to "Note". Specify the value of the desired note.
Dly2 Fbk	-98– +98%	Proportion of the delay sound that is to be returned to the input of delay 2 (negative values invert the phase).
Dy2 HF Damp	200–8000 Hz, Bypass	Frequency at which the high-frequency content of the delayed sound of delay 2 will be cut (Bypass: no cut).
Panpot	L64–63R	Panning of the delay sound.
Eq Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range.
Eq High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range.
Balance	D100:0W– D0:100W	Volume balance of the original sound (D) and delay sound (W).
Level	0–127	Output volume.

70: M. Tap DLY (Multi Tap Delay)

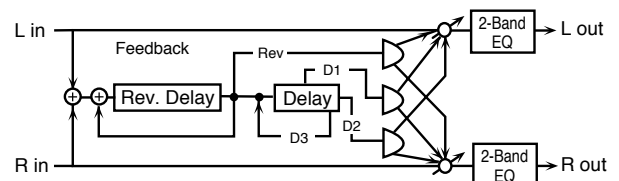
This effect provides four delays. Each of the Delay Time parameters can be set to a note length based on the selected tempo. You can also set the panning and level of each delay sound.



Parameter	Value	Description
Dly1–4 (Sync)	msec, Note	Use this parameter to specify whether ("Note") or not ("msec") the delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time or a note value.
Dly1–4 (msec)	0–2600 ms	Adjusts the time until Delay 1–4 are heard.
Dly1–4 (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the "Sync" parameter above to "Note". Specify the value of the desired note.
Dly1 Fbk	-98– +98 %	Adjusts the amount of the delay sound that's fed back into the effect. Negative (-) settings invert the phase.
HF Damp	200–8000 Hz, Bypass	Adjuststhefrequencyabovewhich-sound fed back to the effect is filtered out. If you don't want to filter out any the high fre- quencies, set this parameter to bypass.
Dly1–4 Panpot	L64–63R	Stereo location of Delays 1–4.
Dly1–4 Level	0–127	Output level of Delays 1–4.
Eq Low Gain	-15– +15 dB	Gain of the low frequency range.
Eq High Gain	-15– +15 dB	Gain of the high frequency range.
Balance	D100:0W– D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0–127	Output level.

71: Reverse DLY

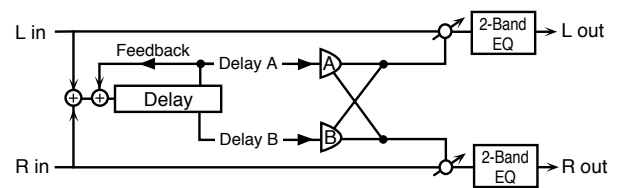
This is a reverse delay that adds a reversed and delayed sound to the input sound. A tap delay is connected immediately after the reverse delay.



Parameter	Value	Description
Threshold	0–127	Volume at which the reverse delay will begin to be applied.
Rev Dly (Sync)	msec, Note	Use this parameter to specify whether (“Note”) or not (“msec”) the reverse delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time (msec) or a note value.
Rev Dly (msec)	0–1300 ms	Delay time from when sound is input into the reverse delay until the delay sound is heard.
Rev Dly (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the “Sync” parameter above to “Note”. Specify the value of the desired note.
Rev Dly Fbk	-98– +98%	Proportion of the delay sound that is to be returned to the input of the reverse delay (negative values invert the phase).
Rev HF Damp	200–8000 Hz, Bypass	Frequency at which the high-frequency content of the reverse-delayed sound will be cut (Bypass: no cut).
Rev Dly Pan	L64–63R	Panning of the reverse delay sound
Rev Dly Level	0–127	Volume of the reverse delay sound
Dly1 – 3 (Sync)	msec, Note	Use this parameter to specify whether (“Note”) or not (“msec”) the delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time or a note value.
Dly1 – 3 (msec)	0–1300 ms	Adjusts the time until the delay is heard.
Dly1 – 3 (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the “Sync” parameter above to “Note”. Specify the value of the desired note.
Dly3 Fbk	-98– +98%	Proportion of the delay sound that is to be returned to the input of the tap delay (negative values invert the phase).
Dly HF Damp	200–8000 Hz, Bypass	Frequency at which the low-frequency content of the tap delay sound will be cut (Bypass: no cut).
Dly1 Panpot, Dly 2 Panpot	L64–63R	Panning of the tap delay sounds.
Dly1 Level, Dly2 Level	0–127	Volume of the tap delay sounds.
Eq Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range.
Eq High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range.
Balance	D100:0W– D0:100W	Volume balance of the original sound (D) and delay sound (W).
Level	0–127	Output volume.

72: Shuffle DLY (Shuffle Delay)

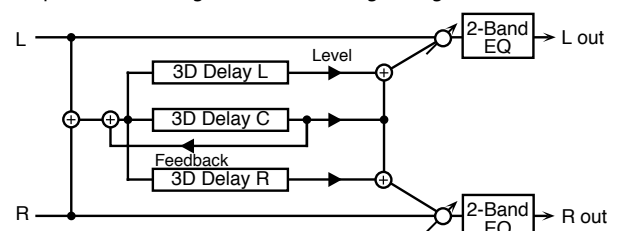
Adds a shuffle to the delay sound, giving the sound a bouncy delay effect with a swing feel.



Parameter	Value	Description
Delay (Sync)	msec, Note	Use this parameter to specify whether (“Note”) or not (“msec”) the delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time or a note value.
Delay (msec)	0–2600 ms	Delay times can be set as a note-value of a tempo, if you set the “Sync” parameter above to “Note”. Specify the value of the desired note.
Delay (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the “Sync” parameter above to “Note”. Specify the value of the desired note.
Shuffle	0–100 %	Adjusts the ratio (as a percentage) of the time that elapses before Delay B sounds relative to the time that elapses before the Delay A sounds. When set to 100%, the delay times are the same.
Acceleration	0–15	Adjusts the time over which the Delay Time changes from the current setting to its specified new setting.
Feedback	-98– +98 %	Adjusts the amount of the delay that’s fed back into the effect. Negative (-) settings invert the phase.
HF Damp	200–8000 Hz, Bypass	Adjusts the frequency above which sound fed back to the effect is filtered out. If you don’t want to filter out any high frequencies, set this parameter to bypass.
Panpot A/B	0–127	Stereo location of Delay A/B.
Level A/B	0–127	Volume of delay A/B.
Eq Low Gain	-15– +15 dB	Gain of the low frequency range.
Eq High Gain	-15– +15 dB	Gain of the high frequency range.
Balance	D100:0W– D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0–127	Output level.

73: 3D Delay

This applies a 3D effect to the delay sound. The delay sound will be positioned 90 degrees left and 90 degrees right.

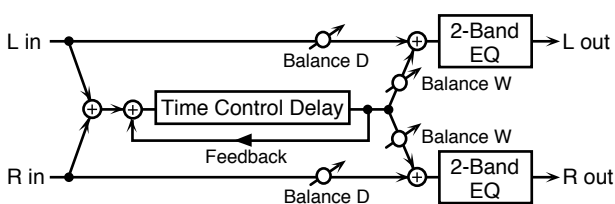


MFx types and parameters

Parameter	Value	Description
Dly L(Sync), Dly R(Sync), Dly C(Sync)	msec, Note	Use this parameter to specify whether ("Note") or not ("msec") the left delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time or a note value.
Dly L(msec), Dly R(msec), Dly C(msec)	0–2600 ms	Adjust the time from the direct sound until when the left/right/center delay sound is heard.
Dly L(Note), Dly R(Note), Dly C(Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the "Sync" parameter above to "Note". Specify the value of the desired note.
Feedback	-98– +98 %	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 Hz, Bypass	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to bypass.
Level L	0–127	Output level of the delay sound.
Level R		
Level C		
Out Mode	Speaker, Phones	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select "Speaker" when using speakers, or "Phones" when using headphones.
Eq Low Gain	-15– +15 dB	Gain of the low range.
Eq High Gain	-15– +15 dB	Gain of the high range.
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0–127	Output Level.

74: Long Delay

A delay in which the delay time can be varied smoothly and allowing an extended delay to be produced.

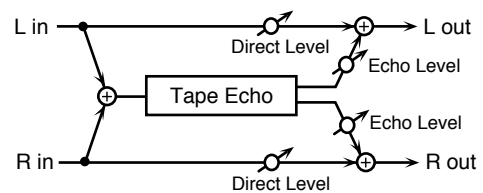


Parameter	Value	Description
Delay (Sync)	msec, Note	Use this parameter to specify whether ("Note") or not ("msec") the delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time or a note value.
Delay (msec)	0–2600 ms	Adjusts the time until the delay is heard.
Delay (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the "Sync" parameter above to "Note". Specify the value of the desired note.

Parameter	Value	Description
Acceleration	0–15	Adjusts the time over which the Delay Time changes from the current setting to a specified new setting. The rate of change for the Delay Time directly affects the rate of pitch change.
Feedback	-98– +98 %	Adjusts the amount of the delay that's fed back into the effect. Negative (-) settings invert the phase.
HF Damp	200–8000 Hz, Bypass	Adjusts the frequency above which sound fed back to the effect is filtered out. If you do not want to filter out any high frequencies, set this parameter to bypass.
Panpot	L64–63R	Stereo location of the delay.
Eq Low Gain	-15– +15 dB	Gain of the low frequency range.
Eq High Gain	-15– +15 dB	Gain of the high frequency range.
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W).
Level	0–127	Output level.

75: Tape Echo

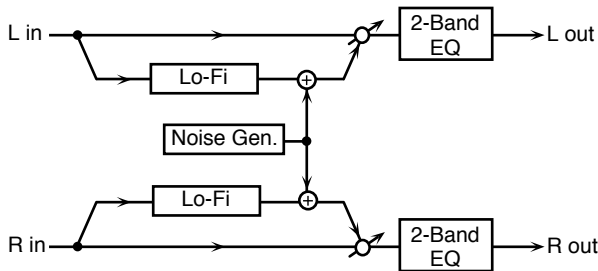
A virtual tape echo that produces a realistic tape delay sound. This simulates the tape echo section of a Roland RE-201 Space Echo.



Parameter	Value	Description
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	L64–63R	Independent panning for the short, middle, and long playback heads.
Head M Pan		
Head 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.
Wow/F Rate	0–127	Speed of wow/flutter (complex variation in pitch caused by tape wear and rotational irregularity).
Wow/F Depth	0–127	Depth of wow/flutter.
Echo Level	0–127	Volume of the echo sound
Direct Level	0–127	Volume of the original sound
Level	0–127	Output level

76: LoFi Noise

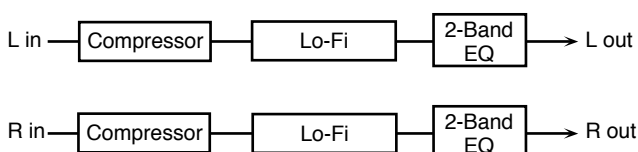
In addition to a lo-fi effect, this adds various types of noise such as white noise and disc noise.



Parameter	Value	Description
LoFi Type	1-9	Degrades the sound quality. The sound quality grows poorer as this value is increased.
Filter Type	OFF, LPF, HPF	Type of filter. OFF : no filter is used LPF : cuts the frequency range above the Cutoff HPF : cuts the frequency range below the Cutoff.
Filter Cutoff	200-8000 Hz	Center frequency of the filter.
W/P Noise TY	White, Pink	Switch between white noise and pink noise.
W/P Noise LP	200-8000 Hz, Bypass	Center frequency of the low pass filter applied to the white/pink noise (Bypass: no cut)
W/P Noise	0-127	Volume of the white/pink noise.
DIS Noise TY	LP, EP, SP, RND	Type of record noise The frequency at which the noise is heard depends on the selected type.
DIS Noise LP	200-8000 Hz, Bypass	Adjusts the cutoff frequency of the low pass filter applied to the record noise. If you don't want to filter out any high frequencies, set this parameter to bypass.
DIS Noise	0-127	Volume of the record noise.
HUM Noise TY	50 Hz, 60 Hz	Frequency of the hum noise.
HUM Noise LP	200-8000 Hz, Bypass	Center frequency of the low pass filter applied to the hum noise (Bypass: no cut).
HUM Noise	0-127	Volume of the hum noise.
Eq Low Gain	-15- +15 dB	Gain of the low range.
Eq High Gain	-15- +15 dB	Gain of the high range.
Balance	D100:0W-D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0-127	Output level.

77: LoFi Comp (Lo-Fi Compressor)

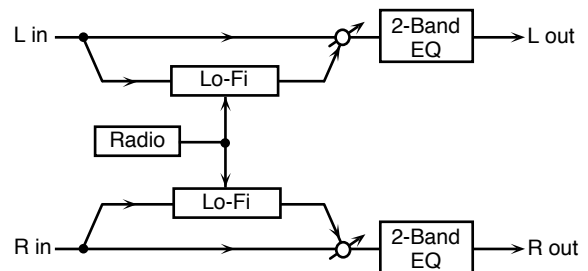
This is an effect that intentionally degrades the sound quality for creative purposes.



Parameter	Value	Description
Pre Filter Type	1-6	Selects the type of filter applied to the sound before it passes through the Lo-Fi effect.
LoFi Type	1-9	Degrades the sound quality. The sound quality grows poorer as this value is increased.
Filter Type	OFF, LPF, HPF	Type of filter OFF : no filter is used. LPF : cuts the frequency range above the Cutoff. HPF : cuts the frequency range below the Cutoff.
Filter Cutoff	200-8000 Hz	Basic frequency of the Post Filter.
Eq Low Gain	-15- +15 dB	Gain of the low range.
Eq High Gain	-15- +15 dB	Gain of the high range.
Balance	D100:0W-D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0-127	Output level.

78: LoFi Radio

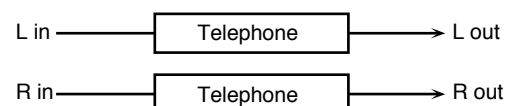
In addition to a Lo-Fi effect, this effect also generates radio noise.



Parameter	Value	Description
LoFi Type	1-9	Degrades the sound quality. The sound quality grows poorer as this value is increased.
Filter Type	OFF, LPF, HPF	Type of filter OFF : no filter is used. LPF : cuts the frequency range above the Cutoff. HPF : cuts the frequency range below the Cutoff.
Filter Cutoff	200-8000 Hz	Basic frequency of the Post Filter
Detune	0-127	Simulates the tuning noise of a radio. As this value is raised, the tuning drifts further.
Noise	0-127	Volume of the radio noise.
Eq Low Gain	-15- +15 dB	Gain of the low range.
Eq High Gain	-15- +15 dB	Gain of the high range.
Balance	D100:0W-D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0-127	Output level.

79: Telephone

This effect simulates the tonal character of a telephone transmission.

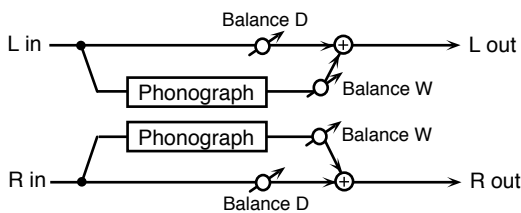


MFX types and parameters

Parameter	Value	Description
Quality	0–15	Audio quality of the telephone voice.
Treble	-15– +15 dB	Bandwidth of the telephone voice.
Balance	D100:0– D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0–127	Output level.

80: Phonograph

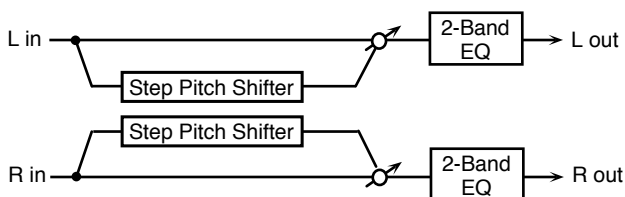
Simulates a sound recorded on an analog record and played back on a record player. This effect also simulates the various types of noise that are typical of a record, and even the rotational irregularities of an old turntable.



Parameter	Value	Description
Distortion	0–127	Depth of distortion.
Freq Range	0–127	Frequency response of the playback system. Decreasing this value will produce the impression of an old system with a poor frequency response.
Disc Type	LP, EP, SP	Rotational speed of the turntable. This will affect the frequency of the scratch noise.
Scratch Noise	0–127	Amount of noise due to scratches on the record.
Dust Noise	0–127	Volume of noise due to dust on the record.
Hiss Noise	0–127	Volume of continuous "hiss".
Total Noise	0–127	Volume of overall noise.
Wow	0–127	Depth of long-cycle rotational irregularity.
Flutter	0–127	Depth of short-cycle rotational irregularity.
Random	0–127	Depth of indefinite-cycle rotational irregularity.
Total Wow/ F	0–127	Depth of overall rotational irregularity.
Balance	D100:0W– D0:100W	Volume balance between the direct sound (D) and the effect sound (W).
Level	0–127	Output level.

81: Step Pitch (Step Pitch Shifter)

A pitch shifter in which the amount of pitch shift is varied by a 16-step sequence.

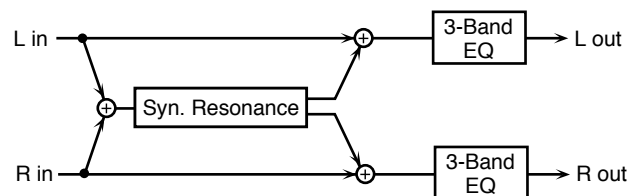


Parameter	Value	Description
Step 1–16	-24–+12 semi	Amount of pitch shift at each step (semitone units).

Parameter	Value	Description
Rate (Sync)	Hz, Note	Use this parameter to specify whether ("Note") or not ("Hz") the rate should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a speed (Hz) or a note value.
Rate (Hz)	0.05–10.00Hz	Rate at which the 16-step sequence will cycle.
Rate (Note)	note *2	Rate parameters can be set as a note-value of a tempo if you set the "Sync" parameter above to "Note". Specify the value of the desired note.
Attack	0–127	Speed at which the amount of pitch shift changes between steps.
Gate Time	0–127	Duration of the pitch shifted sound at each step.
Fine	-100– +100 cent	Pitch shift adjustment for all steps (2-cent units).
Delay (Sync)	msec, note	Use this parameter to specify whether ("Note") or not ("msec") the delay time should be synchronized to the Arranger or Recorder tempo. Depending on your choice, the setting range of the following parameter refers to a time or a note value.
Delay (msec)	0–1300ms	Delay time from the original sound until the pitch-shifted sound is heard.
Delay (Note)	note *2	Delay times can be set as a note-value of a tempo, if you set the "Sync" parameter above to "Note". Specify the value of the desired note.
Feedback	-98– +98%	Proportion of the pitch-shifted sound that is to be returned to the input (negative values invert the phase).
Eq Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range.
Eq High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range.
Balance	D100:0W– D0:100W	Volume balance of the original sound (D) and pitch-shifted sound (W).
Level	0–127	Output volume.

82: Symp Reso (Sympathetic Resonance)

On an acoustic piano, holding down the damper pedal allows other strings to resonate in sympathy with the notes you play, creating rich and spacious resonances. This effect simulates these sympathetic resonances.

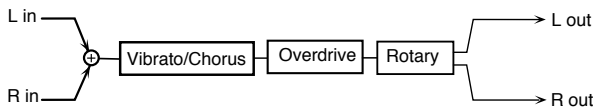


Parameter	Value	Description
Depth	0–127	Depth of the effect.
Damper	0–127	Depth to which the damper pedal is pressed (controls the resonant sound).
Pre LPF	16–15000 Hz, Bypass	Frequency of the filter that cuts the high-frequency content of the input sound (Bypass: no cut).
Pre HPF	Bypass, 16–15000 Hz	Frequency of the filter that cuts the low-frequency content of the input sound (Bypass: no cut).
Peak Freq	200–8000 Hz	Frequency of the filter that boosts/ cuts a specific frequency region of the input sound.

Parameter	Value	Description
Peak Gain	-15- +15 dB	Amount of boost/cut produced by the filter at the specified frequency region of the input sound.
Peak Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the frequency region boosted/cut by the 'Peaking Gain' parameter (larger values make the region narrower).
HF Damp	16-15000 Hz, Bypass	Frequency at which the high-frequency content of the resonant sound will be cut (Bypass: no cut).
LF Damp	Bypass, 16-15000 Hz	Frequency at which the low-frequency content of the resonant sound will be cut (Bypass: no cut).
Lid	0-5	This simulates the actual changes in sound that occur when the lid of a grand piano is set at different heights.
Eq Low Freq	200, 400 Hz	Frequency of the low-range EQ.
Eq Low Gain	-15- +15 dB	Amount of low-range boost/cut.
Eq Mid Freq	200-8000 Hz	Frequency of the midrange EQ.
Eq Mid Gain	-15- +15 dB	Amount of midrange boost/cut.
Eq Mid Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of midrange (larger values make the region narrower).
Eq High Freq	2000, 4000, 8000 Hz	Frequency of the high-range EQ.
Eq High Gain	-15-+15 dB	Amount of high-range boost/cut.
Level	0-127	Output Level.

83: VIB-OD-Rot (Vibrato-Overdrive-Rotary)

This effect combines an overdrive and a rotary with Vibrato/Chorus. The vibrato effect cyclically modulates the pitch of organ sounds (which is not the same as the Rotary effect). The chorus effect mixes the normal sound of the organ with a sound to which vibrato has been applied, adding richness and spaciousness to the sound.

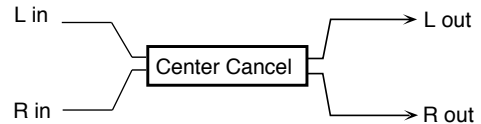


Parameter	Value	Description
VIB Switch	Off, On	Turns the Vibrato Chorus on/ off.
VIB Type	V-1, V-2, V-3, C-1, C-2, C-3	V-1, V-2, V-3: This applies vibrato (pitch modulation). Increasing the value will produce a deeper effect. C-1, C-2, C-3: This applies chorus to add depth and spaciousness to the sound. Increasing the value will produce a deeper effect.
VIB Vintage	'50, '60, '70	Tonewheel sounds of the 1950s, '60s and '70.
VIB Level	0-127	Level of the Vibrato Chorus effect.
OD Switch	Off, On	Turns the Overdrive on/off.
OD Drive	0-127	Degree of distortion.
OD Level	0-127	Sets the Overdrive output level.
Rot Switch	Off, On	Turns the Rotary on/off.
Rot Speed	Slow, Fast	Rotational speed of the rotating speaker.
Rot WF Slow	0.05~10.00Hz	Low-speed rotation speed of the woofer.
Rot WF Fast	0.05~10.00Hz	High-speed rotation speed of the woofer.

Parameter	Value	Description
Rot WF Accel	0~15	Adjusts the time it takes the rotor woofer to reach the newly selected speed ("Fast" or "Slow"). Lower values correspond to slower transitions.
Rot WF Level	0~127	Sets the woofer level.
Rot TW Slow	0.05~10.00Hz	Low-speed rotation speed of the tweeter.
Rot TW Fast	0.05~10.00Hz	High-speed rotation speed of the tweeter.
Rot TW Accel	0~15	Adjusts the time it takes the rotor tweeter to reach the newly selected speed ("Fast" or "Slow"). Lower values correspond to slower transitions.
Rot TW Level	0~127	Sets the tweeter level.
Rot Separation	0~127	Spatial dispersion of the sound.
Rot Level	0~127	Sets the output level of the effect.

84: Center Canc (Center Canceller)

Removes the sounds that are localized at the center of the stereo input. This is a convenient way to eliminate a vocal.



Parameter	Value	Description
Balance L-R	-50~0~50	Volume balance of the L (left) and R (right) channels for removing the sound.
Range Low	16~15000Hz	Lower frequency limit of the band to be removed.
Range High	16~15000Hz	Upper frequency limit of the band to be removed.

note *1

Value	Notation
1/16	
1/8T	
1/16.	
1/8	
1/4T	
1/8.	
1/4	
1/2T	
1/4.	
1/2	

note *2

Value	Notation
1/64T	
1/64	
1/32T	
1/32	
1/16T	
1/32.	
1/16	
1/8T	
1/16.	
1/8	
1/4T	

Value	Notation
1/8.	
1/4	
1/2T	
1/4.	
1/2	
1/1T	
1/2.	
1/1	
2/1T	
1/1.	
2/1	

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