



**Reason**  
ESSENTIALS

**MIDI IMPLEMENTATION CHART**

# Reason Essentials 8 MIDI Controller Chart

MIDI Contr. #	MIDI Controller Name	Mixer Master Section	Mixer Channel Strip	Combinator	Mixer 14:2	Line Mixer 6:2
0	ControlBankSelect					
1	ControlModulationWheel			Mod Wheel		
2	ControlBreathController					
3	ControlUndefined3					
4	ControlFootController					
5	ControlPortamentoTime					
6	ControlDataEntryMSB					
7	ControlChannelVolume	Master Level	Level (Fader)		Master Level	Master Level
8	ControlBalance		Width		Channel 1 Level	Channel 1 Level
9	ControlUndefined9	Bypass (Insert FX)		Enabled	Channel 2 Level	Channel 2 Level
10	ControlPan		Pan (Fader)		Channel 3 Level	Channel 3 Level
11	ControlExpressionController					
12	ControlEffectControl1	Threshold (Compressor)	Mute		Channel 4 Level	Channel 4 Level
13	ControlEffectControl2	Attack (Compressor)	Solo		Channel 5 Level	Channel 5 Level
14	ControlUndefined14	Release (Compressor)	FX1 Send On (Send FX)		Channel 6 Level	Channel 6 Level
15	ControlUndefined15	Key (Compressor)	FX1 Send Level (Send FX)		Channel 7 Level	
16	ControlGeneralPurpose1	Ratio (Compressor)	FX1 Pre Fader (Send FX)		Channel 8 Level	
17	ControlGeneralPurpose2	On (Compressor)	FX2 Send On (Send FX)		Channel 9 Level	
18	ControlGeneralPurpose3	Make-Up Gain (Compressor)	FX2 Send Level (Send FX)		Channel 10 Level	
19	ControlGeneralPurpose4		FX2 Pre Fader (Send FX)		Channel 11 Level	
20	ControlUndefined20		FX3 Send On (Send FX)		Channel 12 Level	
21	ControlUndefined21		FX3 Send Level (Send FX)		Channel 13 Level	
22	ControlUndefined22		FX3 Pre Fader (Send FX)		Channel 14 Level	
23	ControlUndefined23	FX1 Pan (Send FX)	FX4 Send On (Send FX)		Channel 1 Pan	Channel 1 Pan
24	ControlUndefined24	FX2 Pan (Send FX)	FX4 Send Level (Send FX)		Channel 2 Pan	Channel 2 Pan
25	ControlUndefined25	FX3 Pan (Send FX)	FX4 Pre Fader (Send FX)		Channel 3 Pan	Channel 3 Pan
26	ControlUndefined26	FX4 Pan (Send FX)			Channel 4 Pan	Channel 4 Pan
27	ControlUndefined27				Channel 5 Pan	Channel 5 Pan
28	ControlUndefined28				Channel 6 Pan	Channel 6 Pan
29	ControlUndefined29				Channel 7 Pan	
30	ControlUndefined30				Channel 8 Pan	
31	ControlUndefined31				Channel 9 Pan	
32	ControlSB0 (Bank select)					
33	ControlSB1 (ModWheel)				Channel 10 Pan	
34	ControlSB2 (Breath)				Channel 11 Pan	
35	ControlSB3 (Undefined)				Channel 12 Pan	
36	ControlSB4 (Foot controller)				Channel 13 Pan	
37	ControlSB5 (Portamento time)				Channel 14 Pan	
38	ControlSB6 (DataEntry LSB)					
39	ControlSB7 (Channel Volume)				Channel 1 Aux 1 Send	Channel 1 Aux Send
40	ControlSB8 (Balance)				Channel 2 Aux 1 Send	Channel 2 Aux Send
41	ControlSB9 (Undefined)				Channel 3 Aux 1 Send	Channel 3 Aux Send
42	ControlSB10 (Pan)				Channel 4 Aux 1 Send	Channel 4 Aux Send
43	ControlSB11 (Expression)				Channel 5 Aux 1 Send	Channel 5 Aux Send
44	ControlSB12 (Effect control 1)				Channel 6 Aux 1 Send	Channel 6 Aux Send
45	ControlSB13 (Effect control 2)				Channel 7 Aux 1 Send	
46	ControlSB14 (Undefined)				Channel 8 Aux 1 Send	
47	ControlSB15 (Undefined)	FX1 Return Level (Send FX)			Channel 9 Aux 1 Send	
48	ControlSB16 (General purpose 1)	FX2 Return Level (Send FX)			Channel 10 Aux 1 Send	
49	ControlSB17 (General purpose 2)	FX3 Return Level (Send FX)			Channel 11 Aux 1 Send	
50	ControlSB18 (General purpose 3)	FX4 Return Level (Send FX)			Channel 12 Aux 1 Send	
51	ControlSB19 (General purpose 4)				Channel 13 Aux 1 Send	
52	ControlSB20 (Undefined)				Channel 14 Aux 1 Send	
53	ControlSB21 (Undefined)				Channel 1 Aux 2 Send	
54	ControlSB22 (Undefined)				Channel 2 Aux 2 Send	
55	ControlSB23 (Undefined)				Channel 3 Aux 2 Send	
56	ControlSB24 (Undefined)				Channel 4 Aux 2 Send	
57	ControlSB25 (Undefined)				Channel 5 Aux 2 Send	
58	ControlSB26 (Undefined)				Channel 6 Aux 2 Send	
59	ControlSB27 (Undefined)				Channel 7 Aux 2 Send	
60	ControlSB28 (Undefined)				Channel 8 Aux 2 Send	
61	ControlSB29 (Undefined)				Channel 9 Aux 2 Send	
62	ControlSB30 (Undefined)				Channel 10 Aux 2 Send	
63	ControlSB31 (Undefined)				Channel 11 Aux 2 Send	
64	ControlDamperPedal (Sustain)					
65	ControlPortamentoOnOff		HF Bell (EQ)		Channel 12 Aux 2 Send	
66	ControlSustain				Channel 13 Aux 2 Send	
67	ControlSoftPedal				Channel 14 Aux 2 Send	
68	ControlLegatoFootSwitch		Bypass Insert FX (Insert FX)		Channel 1 Bass Amount	
69	ControlHold2				Channel 2 Bass Amount	
70	ControlSoundController1 (Sound Variation)				Channel 3 Bass Amount	
71	ControlSoundController2 (Harmonic Intensity)	Rotary 1 (Insert FX)	Rotary 1 (Insert FX)	Rotary 1	Channel 4 Bass Amount	
72	ControlSoundController3 (Release time)	Rotary 2 (Insert FX)	Rotary 2 (Insert FX)	Rotary 2	Channel 5 Bass Amount	
73	ControlSoundController4 (Attack time)	Rotary 3 (Insert FX)	Rotary 3 (Insert FX)	Rotary 3	Channel 6 Bass Amount	
74	ControlSoundController5 (Brightness)	Rotary 4 (Insert FX)	Rotary 4 (Insert FX)	Rotary 4	Channel 7 Bass Amount	
75	ControlSoundController6	Button 1 (Insert FX)	Button 1 (Insert FX)	Button 1	Channel 8 Bass Amount	
76	ControlSoundController7	Button 2 (Insert FX)	Button 2 (Insert FX)	Button 2	Channel 9 Bass Amount	
77	ControlSoundController8	Button 3 (Insert FX)	Button 3 (Insert FX)	Button 3	Channel 10 Bass Amount	
78	ControlSoundController9	Button 4 (Insert FX)	Button 4 (Insert FX)	Button 4	Channel 11 Bass Amount	
79	ControlSoundController10				Channel 12 Bass Amount	
80	ControlGeneralPurposeController5		EQ On (EQ)		Channel 13 Bass Amount	
81	ControlGeneralPurposeController6		HF Gain (EQ)		Channel 14 Bass Amount	
82	ControlGeneralPurposeController7		HF Frequency (EQ)		Channel 1 Treble Amount	
83	ControlGeneralPurposeController8				Channel 2 Treble Amount	
84	ControlPortamentoControl				Channel 3 Treble Amount	
85	ControlUndefined85				Channel 4 Treble Amount	
86	ControlUndefined86				Channel 5 Treble Amount	
87	ControlUndefined87				Channel 6 Treble Amount	
88	ControlUndefined88				Channel 7 Treble Amount	
89	ControlUndefined89				Channel 8 Treble Amount	
90	ControlUndefined90				Channel 9 Treble Amount	
91	ControlEffects1Depth		LF Gain (EQ)		Channel 10 Treble Amount	
92	ControlEffects2Depth		LF Frequency (EQ)		Channel 11 Treble Amount	
93	ControlEffects3Depth		LF Bell (EQ)		Channel 12 Treble Amount	
94	ControlEffects4Depth				Channel 13 Treble Amount	
95	ControlEffects5Depth				Channel 14 Treble Amount	
96	ControlDataIncrement					
97	ControlDataDecrement					
98	ControlNonRegisteredParameterNumberLSB					
99	ControlNonRegisteredParameterNumberMSB					
100	ControlRegisteredParameterNumberLSB					
101	ControlRegisteredParameterNumberMSB					
102	ControlUndefined102	FX1 Mute (Send FX)			Channel 1 Aux 3 Send	
103	ControlUndefined103	FX2 Mute (Send FX)			Channel 2 Aux 3 Send	
104	ControlUndefined104	FX3 Mute (Send FX)			Channel 3 Aux 3 Send	
105	ControlUndefined105	FX4 Mute (Send FX)			Channel 4 Aux 3 Send	
106	ControlUndefined106				Channel 5 Aux 3 Send	
107	ControlUndefined107		Gain (Input)		Channel 6 Aux 3 Send	
108	ControlUndefined108		Invert Phase (Input)		Channel 7 Aux 3 Send	
109	ControlUndefined109				Channel 8 Aux 3 Send	
110	ControlUndefined110				Channel 9 Aux 3 Send	
111	ControlUndefined111				Channel 10 Aux 3 Send	
112	ControlUndefined112				Channel 11 Aux 3 Send	
113	ControlUndefined113				Channel 12 Aux 3 Send	
114	ControlUndefined114				Channel 13 Aux 3 Send	
115	ControlUndefined115				Channel 14 Aux 3 Send	
116	ControlUndefined116				Aux 1 Return Level	Aux Return Level
117	ControlUndefined117				Aux 2 Return Level	
118	ControlUndefined118				Aux 3 Return Level	
119	ControlUndefined119				Aux 4 Return Level	
120	ControlReservedForChannelModeMessages120					
121	ControlReservedForChannelModeMessages121					
122	ControlReservedForChannelModeMessages122					
123	ControlReservedForChannelModeMessages123					
124	ControlReservedForChannelModeMessages124					
125	ControlReservedForChannelModeMessages125					
126	ControlReservedForChannelModeMessages126					
127	ControlReservedForChannelModeMessages127					

# Reason Essentials 8 MIDI Controller Chart

MIDI Contr. #	MIDI Controller Name	ID# Instrument	MClass Equalizer	MClass Stereo Imager	MClass Compressor	MClass Maximizer
0	ControlBankSelect					
1	ControlModulationWheel	Mod Wheel				
2	ControlBreathController					
3	ControlUndefined3					
4	ControlFootController					
5	ControlPortamentoTime					
6	ControlDataEntryMSB					
7	ControlChannelVolume	Volume			Output Gain	Output Gain
8	ControlBalance			Solo Mode	Sidechain Solo	
9	ControlUndefined9		Enabled	Enabled	Enabled	Enabled
10	ControlPan					
11	ControlExpressionController					
12	ControlEffectControl1		Parametric 1 Gain	Low Width	Threshold	Soft Clip Amount
13	ControlEffectControl2		Parametric 2 Gain	High Width	Attack	Attack Speed
14	ControlUndefined14		Low Shelf Gain		Release	Release Speed
15	ControlUndefined15		Hi Shelf Gain		Adapt	Look Ahead Enable
16	ControlGeneralPurpose1		Low Cut Enable		Ratio	Limiter Enable
17	ControlGeneralPurpose2		Low Shelf Enable		Soft Knee	Soft Clip Enable
18	ControlGeneralPurpose3		Parametric 1 Enable			Output Level Meter Mode
19	ControlGeneralPurpose4		Parametric 2 Enable		Input Gain	Input Gain
20	ControlUndefined20		Hi Shelf Enable			
21	ControlUndefined21					
22	ControlUndefined22					
23	ControlUndefined23					
24	ControlUndefined24					
25	ControlUndefined25					
26	ControlUndefined26					
27	ControlUndefined27					
28	ControlUndefined28					
29	ControlUndefined29					
30	ControlUndefined30					
31	ControlUndefined31					
32	ControlSB0 (Bank select)					
33	ControlSB1 (ModWheel)					
34	ControlSB2 (Breath)					
35	ControlSB3 (Undefined)					
36	ControlSB4 (Foot controller)					
37	ControlSB5 (Portamento time)					
38	ControlSB6 (DataEntry LSB)					
39	ControlSB7 (Channel Volume)					
40	ControlSB8 (Balance)					
41	ControlSB9 (Undefined)					
42	ControlSB10 (Pan)					
43	ControlSB11 (Expression)					
44	ControlSB12 (Effect control 1)					
45	ControlSB13 (Effect control 2)					
46	ControlSB14 (Undefined)					
47	ControlSB15 (Undefined)					
48	ControlSB16 (General purpose 1)					
49	ControlSB17 (General purpose 2)					
50	ControlSB18 (General purpose 3)					
51	ControlSB19 (General purpose 4)					
52	ControlSB20 (Undefined)					
53	ControlSB21 (Undefined)					
54	ControlSB22 (Undefined)					
55	ControlSB23 (Undefined)					
56	ControlSB24 (Undefined)					
57	ControlSB25 (Undefined)					
58	ControlSB26 (Undefined)					
59	ControlSB27 (Undefined)					
60	ControlSB28 (Undefined)					
61	ControlSB29 (Undefined)					
62	ControlSB30 (Undefined)					
63	ControlSB31 (Undefined)					
64	ControlDamperPedal (Sustain)					
65	ControlPortamentoOnOff					
66	ControlSostenuto					
67	ControlSoftPedal					
68	ControlLegatoFootSwitch					
69	ControlHold2					
70	ControlSoundController1 (Sound Variation)					
71	ControlSoundController2 (Harmonic Intensity)	Parameter 1 Level	Parametric 1 Q			
72	ControlSoundController3 (Release time)	Parameter 2 Level				
73	ControlSoundController4 (Attack time)					
74	ControlSoundController5 (Brightness)		Parametric 1 Frequency	X-Over Frequency		
75	ControlSoundController6					
76	ControlSoundController7					
77	ControlSoundController8					
78	ControlSoundController9		Parametric 2 Q			
79	ControlSoundController10		Parametric 2 Frequency			
80	ControlGeneralPurposeController5		Low Shelf Q			
81	ControlGeneralPurposeController6		Low Shelf Frequency			
82	ControlGeneralPurposeController7		Hi Shelf Q			
83	ControlGeneralPurposeController8		Hi Shelf Frequency			
84	ControlPortamentoControl					
85	ControlUndefined85					
86	ControlUndefined86					
87	ControlUndefined87					
88	ControlUndefined88					
89	ControlUndefined89					
90	ControlUndefined90					
91	ControlEffects1Depth					
92	ControlEffects2Depth					
93	ControlEffects3Depth					
94	ControlEffects4Depth					
95	ControlEffects5Depth					
96	ControlDataIncrement					
97	ControlDataDecrement					
98	ControlNonRegisteredParameterNumberLSB					
99	ControlNonRegisteredParameterNumberMSB					
100	ControlRegisteredParameterNumberLSB					
101	ControlRegisteredParameterNumberMSB					
102	ControlUndefined102					
103	ControlUndefined103					
104	ControlUndefined104					
105	ControlUndefined105					
106	ControlUndefined106					
107	ControlUndefined107					
108	ControlUndefined108					
109	ControlUndefined109					
110	ControlUndefined110					
111	ControlUndefined111					
112	ControlUndefined112					
113	ControlUndefined113					
114	ControlUndefined114					
115	ControlUndefined115					
116	ControlUndefined116					
117	ControlUndefined117					
118	ControlUndefined118					
119	ControlUndefined119					
120	ControlReservedForChannelModeMessages120					
121	ControlReservedForChannelModeMessages121					
122	ControlReservedForChannelModeMessages122					
123	ControlReservedForChannelModeMessages123					
124	ControlReservedForChannelModeMessages124					
125	ControlReservedForChannelModeMessages125					
126	ControlReservedForChannelModeMessages126					
127	ControlReservedForChannelModeMessages127					

# Reason Essentials 8 MIDI Controller Chart

MIDI Contr. #	MIDI Controller Name	Line6 Guitar Amp	Line6 Bass Amp	RV7000 Reverb	Scream 4	DDL-1 Delay	CF-101 Chorus
0	ControlBankSelect						
1	ControlModulationWheel						
2	ControlBreathController						
3	ControlUndefined3						
4	ControlFootController						
5	ControlPortamentoTime						
6	ControlDataEntryMSB						
7	ControlChannelVolume				Master Level		
8	ControlBalance						
9	ControlUndefined9	Enabled	Enabled	Enabled	Enabled	Enabled	Enabled
10	ControlPan						
11	ControlExpressionController						
12	ControlEffectControl1			Hi EQ	Damage Type	DelayTime (steps)	Delay
13	ControlEffectControl2	Drive	Drive	HF Damp	Damage Control	Feedback	Feedback
14	ControlUndefined14	Bass	Bass	Decay	Parameter 1	Dry/Wet Balance	Rate
15	ControlUndefined15	Middle	Low Mid	Dry/Wet	Parameter 2	Unit	Modulation Amount
16	ControlGeneralPurpose1	Treble	Hi Mid	SmallSpace Size	Damage On/Off	Step Length	
17	ControlGeneralPurpose2	Volume	Volume	SmallSpace Mod Rate	Cut On/Off		
18	ControlGeneralPurpose3			SmallSpace Room Shape	Cut Lo		
19	ControlGeneralPurpose4			SmallSpace LF Damp	Cut Mid		
20	ControlUndefined20			SmallSpace Wall Freq	Cut Hi		
21	ControlUndefined21	Presence	Treble	SmallSpace Predelay			
22	ControlUndefined22	Volume Pedal		SmallSpace Mod Amount			
23	ControlUndefined23	Wah Pedal amount	Comp Threshold	Room Size			
24	ControlUndefined24			Room Diffusion			
25	ControlUndefined25			Room Shape			
26	ControlUndefined26			Room ER -> Late Delay			
27	ControlUndefined27			Room ER Level			
28	ControlUndefined28			Room Predelay			
29	ControlUndefined29			Room Mod Amount			
30	ControlUndefined30			Hall Size			LFO Sync Enable
31	ControlUndefined31			Hall Diffusion			
32	ControlLSB0 (Bank select)						
33	ControlLSB1 (ModWheel)			Hall Room Shape			
34	ControlLSB2 (Breath)			Hall ER -> Late Delay			
35	ControlLSB3 (Undefined)			Hall ER Level			
36	ControlLSB4 (Foot controller)			Hall Predelay			
37	ControlLSB5 (Portamento time)			Hall Mod Amount			
38	ControlLSB6 (DataEntry LSB)						
39	ControlLSB7 (Channel Volume)			Arena Size			
40	ControlLSB8 (Balance)			Arena Diffusion			
41	ControlLSB9 (Undefined)			Arena Mono Delay			
42	ControlLSB10 (Pan)			Arena Mono Level			
43	ControlLSB11 (Expression)			Arena Left Delay			
44	ControlLSB12 (Effect control 1)			Arena Right Delay			
45	ControlLSB13 (Effect control 2)			Arena Stereo Level			
46	ControlLSB14 (Undefined)						
47	ControlLSB15 (Undefined)			Plate LF Damp			
48	ControlLSB16 (General purpose 1)			Plate Predelay			
49	ControlLSB17 (General purpose 2)			Spring Length			
50	ControlLSB18 (General purpose 3)			Spring Diffusion			
51	ControlLSB19 (General purpose 4)			Spring Dispersion Freq			
52	ControlLSB20 (Undefined)			Spring LF Damp			
53	ControlLSB21 (Undefined)			Spring Stereo Enable			
54	ControlLSB22 (Undefined)			Spring Predelay			
55	ControlLSB23 (Undefined)			Spring Dispersion Amount			
56	ControlLSB24 (Undefined)						
57	ControlLSB25 (Undefined)			Echo Tempo Sync			
58	ControlLSB26 (Undefined)			Echo Time			
59	ControlLSB27 (Undefined)			Echo Time Steps			
60	ControlLSB28 (Undefined)			Echo Diffusion			
61	ControlLSB29 (Undefined)			Echo LF Damp			
62	ControlLSB30 (Undefined)			Echo Spread			
63	ControlLSB31 (Undefined)			Echo Predelay			
64	ControlDamperPedal (Sustain)						
65	ControlPortamentoOnOff			MultiTap Tempo Sync			
66	ControlSustainPedal			MultiTap Repeat Time			
67	ControlSoftPedal			MultiTap Repeat Time Steps			
68	ControlLegatoFootSwitch			MultiTap Diffusion			
69	ControlHold2			MultiTap LF Damp			
70	ControlSoundController1 (Sound Variation)	Wah Pedal On	Compressor On	MultiTap 1 Delay	Body On/Off		
71	ControlSoundController2 (Harmonic Intensity)			MultiTap 1 Delay Steps	Body Resonance		
72	ControlSoundController3 (Release time)			MultiTap 2 Delay			
73	ControlSoundController4 (Attack time)			MultiTap 2 Delay Steps			
74	ControlSoundController5 (Brightness)			MultiTap 3 Delay	Body Scale		
75	ControlSoundController6			MultiTap 3 Delay Steps			
76	ControlSoundController7			MultiTap 4 Delay			
77	ControlSoundController8			MultiTap 4 Delay Steps			
78	ControlSoundController9			MultiTap 1 Level	Body Auto		
79	ControlSoundController10			MultiTap 2 Level	Body Type		
80	ControlGeneralPurposeController5			MultiTap 3 Level			
81	ControlGeneralPurposeController6			MultiTap 4 Level			
82	ControlGeneralPurposeController7			MultiTap 1 Pan			
83	ControlGeneralPurposeController8			MultiTap 2 Pan			
84	ControlPortamentoControl			MultiTap 3 Pan			
85	ControlUndefined85			MultiTap 4 Pan			
86	ControlUndefined86			Reverse Tempo Sync			
87	ControlUndefined87			Reverse Length			
88	ControlUndefined88			Reverse Length Steps			
89	ControlUndefined89			Reverse Rev Dry/Wet			
90	ControlUndefined90			Reverse Density			
91	ControlEffects1Depth			Algorithm Select			
92	ControlEffects2Depth						
93	ControlEffects3Depth						
94	ControlEffects4Depth			Gate On/Off			
95	ControlEffects5Depth			EQ On/Off			
96	ControlDataIncrement						
97	ControlDataDecrement						
98	ControlNonRegisteredParameterNumberLSB						
99	ControlNonRegisteredParameterNumberMSB						
100	ControlRegisteredParameterNumberLSB						
101	ControlRegisteredParameterNumberMSB						
102	ControlUndefined102			Gate Threshold			
103	ControlUndefined103			Gate Decay Mod			
104	ControlUndefined104			Gate Trig Source			
105	ControlUndefined105			Gate High Pass			
106	ControlUndefined106			Gate Attack			
107	ControlUndefined107			Gate Hold			
108	ControlUndefined108			Gate Release			
109	ControlUndefined109			EQ Low Gain			
110	ControlUndefined110			EQ Low Freq			
111	ControlUndefined111			EQ Param Gain			
112	ControlUndefined112			EQ Param Freq			
113	ControlUndefined113			EQ Param Q			
114	ControlUndefined114						
115	ControlUndefined115						
116	ControlUndefined116						
117	ControlUndefined117						
118	ControlUndefined118						
119	ControlUndefined119						
120	ControlReservedForChannelModeMessages120						
121	ControlReservedForChannelModeMessages121						
122	ControlReservedForChannelModeMessages122						
123	ControlReservedForChannelModeMessages123						
124	ControlReservedForChannelModeMessages124						
125	ControlReservedForChannelModeMessages125						
126	ControlReservedForChannelModeMessages126						
127	ControlReservedForChannelModeMessages127						

# Reason Essentials 8 MIDI Controller Chart

MIDI Contr. #	MIDI Controller Name	Subtractor	NN-XT	Dr. Octo Rex	Redrum	Matrix
0	ControlBankSelect					
1	ControlModulationWheel	Mod Wheel	Mod Wheel	Mod Wheel		
2	ControlBreathController		Mod Wheel 2*			
3	ControlUndefined3				Pattern Select	Pattern Select
4	ControlFootController					
5	ControlPortamentoTime	Portamento			Flam Amount	
6	ControlDataEntryMSB					
7	ControlChannelVolume	Master Level	Master Volume	Master Level	Master Level	
8	ControlBalance				Drum 1 Level	
9	ControlUndefined9	Amp Env Decay	Amp Env Decay	Amp Env Decay	Drum 2 Level	Pattern Enable
10	ControlPan				Drum 3 Level	
11	ControlExpressionController		Mod Wheel 2**			
12	ControlEffectControl1	Amp Env Sustain		Amp Env Sustain	Drum 4 Level	
13	ControlEffectControl2				Drum 5 Level	
14	ControlUndefined14	Filter Env Attack		Filter Env Attack	Drum 6 Level	
15	ControlUndefined15	Filter Env Decay	Mod Env Decay	Filter Env Decay	Drum 7 Level	
16	ControlGeneralPurpose1	Filter Env Sustain		Filter Env Sustain	Drum 8 Level	
17	ControlGeneralPurpose2	Filter Env Release		Filter Env Release	Drum 9 Level	
18	ControlGeneralPurpose3	Filter Env Amount		Filter Env Amount	Drum 10 Level	
19	ControlGeneralPurpose4	Filter Env Invert			Drum 1 Pan	
20	ControlUndefined20	Osc1 Wave			Drum 2 Pan	
21	ControlUndefined21	Osc1 Octave		Osc Octave	Drum 3 Pan	
22	ControlUndefined22	Osc1 Semitone		Transpose	Drum 4 Pan	
23	ControlUndefined23	Osc1 Fine Tune		Osc Fine Tune	Drum 5 Pan	
24	ControlUndefined24			Osc Env Amount	Drum 6 Pan	
25	ControlUndefined25	Osc1 Kbd Track			Drum 7 Pan	
26	ControlUndefined26	LFO1 Rate		LFO1 Rate	Drum 8 Pan	
27	ControlUndefined27	LFO1 Amount		LFO1 Amount	Drum 9 Pan	
28	ControlUndefined28	LFO1 Wave		LFO1 Wave	Drum 10 Pan	
29	ControlUndefined29	LFO1 Dest		LFO1 Dest	Drum 1 Send 1 Amount	
30	ControlUndefined30	LFO Sync Enable		LFO Sync Enable	Drum 2 Send 1 Amount	
31	ControlUndefined31				Drum 3 Send 1 Amount	
32	ControlLSB0 (Bank select)					
33	ControlLSB1 (ModWheel)	Filter Freq Mod Wheel Amount		Filter Freq Mod Wheel Amount	Drum 4 Send 1 Amount	
34	ControlLSB2 (Wheel)	Filter Res Mod Wheel Amount		Filter Res Mod Wheel Amount	Drum 5 Send 1 Amount	
35	ControlLSB3 (Undefined)	LFO1 Mod Wheel Amount		Filter Decay Mod Wheel Amount	Drum 6 Send 1 Amount	
36	ControlLSB4 (Foot controller)	FM Mod Wheel Amount		Amp Vel Amount	Drum 7 Send 1 Amount	
37	ControlLSB5 (Portamento time)	Phase Diff Mod Wheel Amount			Drum 8 Send 1 Amount	
38	ControlLSB6 (DataEntry LSB)					
39	ControlLSB7 (Channel Volume)	Pitch Bend Range		Pitch Bend Range	Drum 9 Send 1 Amount	
40	ControlLSB8 (Balance)	Filter Freq Ext Mod			Drum 10 Send 1 Amount	
41	ControlLSB9 (Undefined)	LFO1 Ext Mod.		Loop Level 1	Drum 1 Send 2 Amount	
42	ControlLSB10 (Pan)	Amp Ext Mod		Loop Level 2	Drum 2 Send 2 Amount	
43	ControlLSB11 (Expression)	Ext Mod Select		Loop Level 3	Drum 3 Send 2 Amount	
44	ControlLSB12 (Effect control 1)	FM Ext Mod		Loop Level 4	Drum 4 Send 2 Amount	
45	ControlLSB13 (Effect control 2)	Amp Vel Amount		Loop Level 5	Drum 5 Send 2 Amount	
46	ControlLSB14 (Undefined)	Filter Env Vel Amount		Filter Env Vel Amount	Drum 6 Send 2 Amount	
47	ControlLSB15 (Undefined)	Filter Decay Vel Amount		Filter Decay Vel Amount	Drum 7 Send 2 Amount	
48	ControlLSB16 (General purpose 1)	Amp Attack Vel Attack		Loop Level 6	Drum 8 Send 2 Amount	
49	ControlLSB17 (General purpose 2)	FM Vel Amount		Loop Level 7	Drum 9 Send 2 Amount	
50	ControlLSB18 (General purpose 3)	Mod Env Vel Amount		Loop Level 8	Drum 10 Send 2 Amount	
51	ControlLSB19 (General purpose 4)	Phase Vel Amount		Loop 1 Transpose	Drum 1 Pitch	
52	ControlLSB20 (Undefined)	Filter2 Freq Vel Amount		Loop 2 Transpose	Drum 2 Pitch	
53	ControlLSB21 (Undefined)	Mix Vel Amount		Loop 3 Transpose	Drum 3 Pitch	
54	ControlLSB22 (Undefined)			Loop 4 Transpose	Drum 4 Pitch	
55	ControlLSB23 (Undefined)			Loop 5 Transpose	Drum 5 Pitch	
56	ControlLSB24 (Undefined)			Loop 6 Transpose	Drum 6 Pitch	
57	ControlLSB25 (Undefined)			Loop 7 Transpose	Drum 7 Pitch	
58	ControlLSB26 (Undefined)			Loop 8 Transpose	Drum 8 Pitch	
59	ControlLSB27 (Undefined)				Drum 9 Pitch	
60	ControlLSB28 (Undefined)				Drum 10 Pitch	
61	ControlLSB29 (Undefined)				Drum 1 Tone	
62	ControlLSB30 (Undefined)				Drum 2 Tone	
63	ControlLSB31 (Undefined)				Drum 10 Tone	
64	ControlDamperPedal (Sustain)					
65	ControlPortamentoOnOff				Drum 6 Pitch Bend Amount	
66	ControlSostenuto				Drum 7 Pitch Bend Amount	
67	ControlSoftPedal				Drum 1 Vel to Level	
68	ControlLegalFootSwitch	Key Mode			Drum 2 Vel to Level	
69	ControlHold2				Drum 3 Vel to Level	
70	ControlSoundController1 (Sound Variation)				Drum 4 Vel to Level	
71	ControlSoundController2 (Harmonic Intensity)	Filter Res	Filter Res	Filter Res	Drum 5 Vel to Level	
72	ControlSoundController3 (Release time)	Amp Env Release	Amp Env Release	Amp Env Release	Drum 6 Vel to Level	
73	ControlSoundController4 (Attack time)	Amp Env Attack	Amp Env Attack	Amp Env Attack	Drum 7 Vel to Level	
74	ControlSoundController5 (Brightness)	Filter Freq	Filter Freq	Filter Freq	Drum 8 Vel to Level	
75	ControlSoundController6	Filter2 On/Off		Filter On/Off	Drum 9 Vel to Level	
76	ControlSoundController7	Filter Type		Filter Mode	Drum 10 Vel to Level	
77	ControlSoundController8	Filter Kbd Track			Drum 1 Length	
78	ControlSoundController9	Filter2 Res			Drum 2 Length	
79	ControlSoundController10	Filter2 Freq			Drum 3 Length	
80	ControlGeneralPurposeController5	Filter Link Freq On/Off			Drum 4 Length	
81	ControlGeneralPurposeController6	Noise On/Off			Drum 5 Length	
82	ControlGeneralPurposeController7	Noise Level			Drum 6 Length	
83	ControlGeneralPurposeController8	Noise Decay			Drum 7 Length	
84	ControlPortamentoControl	Noise Color			Drum 8 Length	
85	ControlUndefined85	Mod Env Gain			Drum 9 Length	
86	ControlUndefined86	Mod Env Invert			Drum 10 Length	
87	ControlUndefined87	Mod Env Attack			Drum 3 Sample Start	
88	ControlUndefined88	Mod Env Decay			Drum 4 Sample Start	
89	ControlUndefined89	Mod Env Sustain			Drum 5 Sample Start	
90	ControlUndefined90	Mod Env Release			Drum 6 Sample Start	
91	ControlEffects1Depth	Mod Env Dest			Drum 9 Sample Start	
92	ControlEffects2Depth	Osc1 Phase Mode			Pattern Enable	Enable
93	ControlEffects3Depth	Osc1 Phase Diff				
94	ControlEffects4Depth	Osc2 On/Off			Drum 6 Vel to Pitch Bend	
95	ControlEffects5Depth	Osc2 Wave			Drum 7 Vel to Pitch Bend	
96	ControlDataIncrement					
97	ControlDataDecrement					
98	ControlNonRegisteredParameterNumberLSB					
99	ControlNonRegisteredParameterNumberMSB					
100	ControlRegisteredParameterNumberLSB					
101	ControlRegisteredParameterNumberMSB					
102	ControlUndefined102	Osc2 Octave			Drum 6 Pitch Bend Rate	
103	ControlUndefined103	Osc2 Semitone			Drum 7 Pitch Bend Rate	
104	ControlUndefined104	Osc2 Fine Tune			Drum 1 Vel to Tone	
105	ControlUndefined105	Osc2 Phase Mode			Drum 2 Vel to Tone	
106	ControlUndefined106	Osc2 Phase Diff			Drum 10 Vel to Tone	
107	ControlUndefined107	Osc Mix			Drum 3 Vel to Sample Start	
108	ControlUndefined108	FM Amount			Drum 4 Vel to Sample Start	
109	ControlUndefined109	Ring Mod			Drum 5 Vel to Sample Start	
110	ControlUndefined110	LFO2 Rate			Drum 8 Vel to Sample Start	
111	ControlUndefined111	LFO2 Amount			Drum 9 Vel to Sample Start	
112	ControlUndefined112	LFO2 Delay				
113	ControlUndefined113	LFO2 Dest				
114	ControlUndefined114	LFO2 Kbd Track				
115	ControlUndefined115	Osc2 Kbd Track				
116	ControlUndefined116					
117	ControlUndefined117					
118	ControlUndefined118					
119	ControlUndefined119					
120	ControlReservedForChannelModeMessages120					
121	ControlReservedForChannelModeMessages121					
122	ControlReservedForChannelModeMessages122					
123	ControlReservedForChannelModeMessages123					
124	ControlReservedForChannelModeMessages124					
125	ControlReservedForChannelModeMessages125					
126	ControlReservedForChannelModeMessages126					
127	ControlReservedForChannelModeMessages127					

\* Assuming source is set to Breath  
 \*\* Assuming source is set to Expression

