

300

Digital Effects
System

MIDI
Implementation
Details

lexicon

SysEx Protocol

Received Messages and Responses

Generic System Exclusive Message Format

Value	Description
F0	System Exclusive ID
06	Lexicon ID
03	M300 ID
0ccc nnnn	c = Message Class 0 = Active Bulk Data 1 = Stored Bulk Data 2 = Parameter Data 3 = Event Data 4 = Request Data (Receive Only) 5 = Response Data (Transmit Only) 6 = Display Data (MacIntosh GUI) n = Midi Chnl
0sss dddd	Subclass, Domain
0xxx xxxx...	(Various Data Bytes)
F7	End of System Exclusive

Active Bulk Data Format

I/O format used to transmit and receive bulk data in active use.

Value	Description
F0 06 03	M300 System Exclusive Header
0000 nnnn	Active Bulk Data Class, Midi Chnl
0sss dddd	0x02 - V1.02 Active Setup 0x03 - V1.02 Active Effect 0x10 - V1.02 Active Table 0x20 - V1.02 Active Event List 0x32 - V3.00 Active Setup 0x33 - V3.00 Active Effect A 0x34 - V3.00 Active Effect B 0x40 - V3.00 Active Table
0iii iiii 0x00 - 0x7F: Table Entry 0x00 - 0x31: EList Entry	Index 1 - 128 1 - 50
0ccc cccc	Data Byte Count (# Nibblized Pairs + 4)
0000 xxxx 0000 xxxx	Nibblized Data Byte Pairs, LSB First
0B, 09, 06, 0D 0B, 06, 09, 0D	Bulk Data Flag
0sss ssss	Data Checksum
F7	End of System Exclusive

Stored Bulk Data Format

I/O format used to transmit and receive user register bulk data.

Value	Description
F0 06 03	M300 System Exclusive Header
0001 nnnn	Stored Bulk Data Class, Midi Chnl
0sss dddd	0x00 - V1.02 Stored Setup 0x10 - V1.02 Stored Effect 0x20 - V3.00 Stored Setup 0x30 - V3.00 Stored Effect 0x40 - V3.00 Preset Setup 0x50 - V3.00 Preset Effect
0iii iii 0x00 - 0x63: Presets 0x00 - 0x7F: Registers	Index 1 - 100 1-28
0ccc cccc	Data Byte Count (# Nibblized Pairs + 4)
0000 xxxx 0000 xxxx...	Nibblized Data Byte Pairs, LSB First
0B, 09, 06, 0D 0B, 06, 09, 0D	Bulk data flag
0sss ssss	Data checksum
F7	End of System Exclusive

Parameter Data Format

I/O format used to transmit and receive sysex param automation data.

Value	Description
F0 06 03	M300 System Exclusive Header
0010 nnnn	Parameter Data Class, Midi Chnl
0sss dddd	s = Subclass 0 = Param Value 1 = Param Limit 2 = Param Count d = Domain 0 = Utility 1 = Run 2 = Setup 3 = Effect A 4 = Effect B 5 = Modulation A 6 = Modulation B
0nnn nnnn 0x00 - 0x21: Param 1-34	Parameter Number
NOTE: The param count is domain dependent. Out of range parameter numbers will be ignored.	
0vvv vvvv	Parameter Value, LSB
0vvv vvvv	Parameter Value, MSB
F7	End of System Exclusive

Event Data Format

I/O format used to transmit and receive sysex event automation data.

Value	Description
F0 06 03	M300 System Exclusive Header
0011 nnnn	Event Data Class, Midi Chnl
0sss dddd	s = Subclass 0 = Enqueue Event d = Domain 0 = Utility 1 = Run 2 = Setup 3 = Effect A 4 = Effect B 5 = Modulation A 6 = Modulation B
0nnn nnnn	Event Number 0x00 - 0x7F: Event 1 - 128
0vvv vvvv	Event Data, LSB
0vvv vvvv	Event Data, MSB
F7	End of System Exclusive

Request Data Format

Receive only format.

Value	Description
F0 06 03	M300 System Exclusive Header
0100 nnnn	Request Data Class, Midi Chnl
0sss dddd 0ooo oooo	s = Subclass 0 = Request Data d = Domain 0x00/0x00 - All Preset Setups 0x00/0x01 - All Preset Effects 0x00/0x02 - All Stored Setups 0x00/0x03 - All Stored Effects 0x00/0x04 - Preset Setup 0x00/0x05 - Preset Effect 0x00/0x06 - Stored Setup 0x00/0x07 - Stored Effect 0x02/0x08 - Active Setup 0x03/0x09 - Active Effect A 0x04/0x09 - Active Effect B 0x00/0x0A - Map Table 0x00/0x0B - Map Table Entry 0x00/0x0C - Event List 0x00/0x0D - Event List Entry 0x0n/0x0E - Param Value n = Domain (As Specified Above) 0x0n/0x0F - Param Limit 0x0n/0x10 - Param Count 0x0n/0x11 - Param Name String (S) n = Domain (3 or 4) 0x0n/0x12 - Param Name String (L) 0x0n/0x13 - Param Value String (S) 0x0n/0x14 - Param Value String (L) 0x00/0x15 - Setup ID 0x03/0x16 - Effect A ID 0x04/0x16 - Effect B ID 0x00/0x17 - System Data 0x00/0x18 - Preset Effect Data 0x00/0x19 - Stored Effect Data 0x03/0x1A - Active Effect A Data 0x04/0x1A - Active Effect B Data
0vvv vvvv	Register/Entry/Param#, LSB (Opcodes: 4-7, 11, 13-20, 24-25)
0vvv vvvv	Register/Entry/Param#, MSB
F7	End of System Exclusive

Response Data Format

Transmit only format.

Value	Description
F0 06 03	M300 System Exclusive Header
0101 nnnn	Response Data Class, Midi Chnl
0sss dddd 0ooo oooo	s = subclass Response Data Opcode 0x0n/0x12 - Param Name String (L) 0x0n/0x13 - Param Value String (S) 0x0n/0x14 - Param Value String (L)
	0x00/0x15 - Setup ID 0x03/0x16 - Effect A ID 0x04/0x16 - Effect B ID 0x00/0x17 - System Data 0x00/0x18 - Preset Effect Data 0x00/0x19 - Stored Effect Data 0x03/0x1A - Active Effect A Data 0x04/0x1A - Active Effect B Data 0x30/0x1B - Active Meter DataD
	0x7F - NACK (Unrecognized Request)
0xxx xxxx	Various Data Bytes, Opcode Dependent.
F7	End of System Exclusive

Param String Request - Response

(Opcode 17 - 20) Data Format:

Value	Description
0nnn nnnn	Parameter Number 0x00 - 0x7F: Param 1 - 128
0sss ssss	String Length (Including Null)
0ccc cccc	ASCII Char #1
0ccc cccc	ASCII Char #n

Register ID Request

Response (Opcode 21, 22) Data Format:

Value	Description
0000 000t	Register Type 0 - Preset 1 - Stored
0iii iii	Index 0x00 - 0x7F: Registers 1 - 128

System Data Request

Response (Opcode 23) Data Format:

Byte Number	Description
1	Max Setup Preset Registers
2	Max Setup Stored Registers
3	Max Effect Preset Registers
4	Max Effect Stored Registers
5	Max Config Programs
6	Max Effect Programs
7	Max Effect Parameters
8	Max Effect Patches

Register Param Data Request

Response (Opcode 24 - 26) Data Format:

Value	Description
0iii iii	Register Index 0x00 - 0x7F: Registers 1 - 128
0nnn nnnn	Register Param Count 0x00 - 0x21: Params 1 - 34
0ccc cccc	Data Byte Count (# Nibblized Pairs + 4)
0000 xxxx 0000 xxxx	Nibblized Data Byte Pairs, LSB First
0B, 09, 06, 0D 0B, 06, 09, 0D	Bulk data flag
0sss ssss	Data checksum

Unnibblized Bulk Param Data Format

Byte Number	Description
1	Param Index 0x00 - 0x21: Params 1 - 34
2	Status 0 - Inactive 1 - Alg Param 2 - I/O Param
3	Limit LSB
4	Limit MSB
5-9	Short Name String (4 chars + 1)
10-30	Long Name String (20 chars + 1)
31	Disp Type

Active Meter Data - Response

(Opcode 27) Data Format:

Value	Description
0aaa aaaa	L Meter Value LSB
0bbb bbbb	L Meter Value MSB
0ccc cccc	R Meter Value LSB
0ddd dddd	R Meter Value MSB

Display Data Format

MacIntosh GUI support format.

Value	Description
F0 06 03	M300 System Exclusive Header
0110 nnnn	Display Data Class, Midi Chnl
0sss dddd	s = Subclass 0 - Front Panel d = Domain 0 - Utility
0000 0000	Display Data Opcode 0 = Display String 1 = Display Underline 2 = Display Blink 3 = Clear String 4 = Clear Attributes
0xxx xxxx	Various Data Bytes, Opcode Dependent.
F7	End of System Exclusive

Display String

Display (Opcode 0) Data Format:

Value	Description
0nnn nnnn	Starting Position 0x00 - 0x27: Column 0 - 39
0sss ssss	String Length (Including Null)
0ccc cccc	ASCII Char #1
0ccc cccc	ASCII Char #n (Max = 40 chars)

Display String - Display

(Opcode 1 - 2) Data Format:

Value	Description
0nnn nnnn	Starting Position 0x00 - 0x27: Column 0 - 39
0sss ssss	Character Count

Unnibblized Bulk Data Setup Register Format (V1.02)

Byte Number	Description
1 - 12	Setup Name (ASCII)
13	0
14	Effect A Number 0x00 - 0x4A: Presets 1-75 0x4B - 0x7F: Registers 1-53 0x8B : Available
	Note: Registers 54 - 64 are ignored.
15	Effect B Number 0x00 - Inactive
16	Single Machine Input Config 0 =Analog 1 =Digital 2 =Ana+Dig
17	Misc Setup Params
	Bits 7-6 Param Left Meter Assignment 0 =ANA-IN 1 = DIG-IN 2 = FX-OUT
	Bits 5-4 Param Analog Sample Rate 0 - 48kHz 1 - 44.1kHz
	Bits 3-2 Param Right Meter Assignment 0 - ANA-IN 1 - DIG-IN 2 - FX-OUT
	Bits 1-0 Param Digital Input Connector 0 = XLR 1 = RCA 2 = Optical
18	Misc Setup Params
	Bit 6 Param Digital Copy Protection 0 = No-Copy 1 = One-Copy
	Bit 5 Param Analog Emphasis 0 = Off 1 = On
	Bit 4 Param Digital Emphasis 0 =Off 1 = On
	Bit 0 Param Digital Output Format 0 = SPDIF (EIAJ-340) 1 = AES

Unnibblized Bulk Data Setup Register Format (V3.00)

Byte Number	Description
1-12	Setup Name (ASCII)
13	0
14	Effect A Number 0x00 - 0x63: Presets 1 - 100 0x64 - 0x95: Registers 1 - 50
15	Effect B Number 0x00 - 0x63: Presets 1 - 100 0x64 - 0x95: Registers 1 - 50
16	Setup Machine Config/Routing
	Bits Param
	7-6 Machine Config 0 = Single 1 = Dual Mono 2 = Cascade A->B 3 = Cascade B->A
	5-4 LFO Shape 0 - Sine 1 - Triangle 2 - Square 4 - Random
	3-2 Left Meter Assignment Single 0 =ANA-IN 1 =DIG-IN 2 = FX-OUT Dual Mono 0 =LCH-IN 1 = RCH-IN 2 =LFXOUT Cascade 0 = INPUT 1 = MID-PT 2 = OUTPUT
	1-0 Right Meter Assignment Single 0 = ANA-IN 1 = DIG-IN 2 = FX-OUT Dual Mono 0 = LCH-IN 1 = RCH-IN 2 = RFXOUT Cascade 0 = INPUT 1 = MID-PT 2 = OUTPUT
17	Softknob 0x00 - 0x7F: MIDI Controller Value
18	LFO Rate

	Bits	Param	
	3-0	LFO Rate	
		0-Off; 1-250 value x .02Hz	
19 - 24	Single I/O Signal Levels		
	Byte	Param	
	1	ALVL	(I)
	2	ABAL	(I)
	3	DLVL	(I)
	4	DBAL	(I)
	5	OMIX	(O)
	6	n/a	
	Dual Mono I/O Signal Levels		
	Byte	Param	
	1	AIN	(I)
	2	ABAL	(I)
	3	BIN	(I)
	4	BBAL	(I)
	5	AMIX	(O)
	6	BMIX	(O)
	Cascade I/O Signal Levels		
	Byte	Param	
	1	INPT	(I)
	2	BAL	(I)
	3	FDBK	(I)
	4	AMIX	(O)
	5	BMIX	(O)
	6	OMIX	(O)
25 - 30	Patch 1		
	Byte	Param	
	1	Source	
	2	Destination	
	3	Scale (MSB)	
	4	Threshold	
	5	Scale (LSB)	
	6	0	
31 - 36	Patch 2 (Byte Order As Above)		

Unnibblized Bulk Data Effect Register Format (V1.02)

Byte Number	Description
1 - 12	Effect Name (ASCII)
13	0
14	Algorithm ID 0 =Reverb 1 =Stereo Adjust 2 =Ambience 3 =Stereo Pitch Shift
15 - 74	Params 0-29 (16-bit Values, MSB first)
75 - 80	Patch 1 Byte Param 1 Source 2 Destination 3 Scale (MSB) 4 Threshold 5 Scale (LSB) 6 0
81 - 86	Patch 2 (Byte Order As Above)
87 - 92	Patch 3 (Byte Order As Above)
93 - 98	Patch 4 (Byte Order As Above)
99 - 104	Patch 5 (Byte Order As Above)

Unnibblized Bulk Data Effect Register Format (V3.00)

Byte Number	Description
1 - 12	Effect Name (ASCII)
13	0
14	Algorithm ID 0 = Reverb 1 = Ambience 2 =Plate 3 = Stereo Adjust 4 =Stereo Pitch Shift 5 =Twin Echo 6 =Small Reverb 7 = Mono Pitch Shift 8 =Mono Compressor 9 = PONS 10 = Small Stereo Adjust
15 - 82	Params 0-33 (16-bit Values, MSB first)
83 - 87	Patch 1 Byte Param 1 Source 2 Destination 3 Scale (MSB) 4 Threshold 5 Scale (LSB)
88 - 92	Patch 2 (Byte Order As Above)
93 - 97	Patch 3 (Byte Order As Above)
98 - 102	Patch 4 (Byte Order As Above)

Unnibblized Bulk Data Program Change Map Table Format (V1.02)

Byte Number	Description
1	0
2	Effect A Number 0x00 - 0x4A: Presets 1 - 75 0x4B - 0x8A: Registers 1 - 64 0x8B Available

Unnibblized Bulk Data Program Change Map Table Format (V3.00):

Byte Number	Description
1	0 Machine A Effect 1 Machine B Effect 2 Setup
2	0-99 Presets 1-100 100-149 Registers 1-50

Unnibblized Bulk Data Event List Data Format (V1.02 - Input Only)

Byte Number	Description
1	Event Type 0 =No Event 1 = New Event 2 = Effect Change
2	Not Used
3	Timecode Hours 0x00 - 0x17 (0 - 23)
4	Timecode Minutes 0x00 - 0x3B (0 - 59)
5	Timecode Seconds 0x00 - 0x3B (0 - 59)
6	Timecode Frames 0x00 - 0x1D (0 - 29)
7	Timecode Sub-Frames 0x00 - Not Used
8	Not Used
9	Not Used
10	Not Used
11	Not Used
12	Not Used
13	Not Used
14	Effect Register 0x00 - 0x4A: Presets 1 - 75 0x4B - 0x8A: Registers 1 - 64

Midi Time Code Setup Format

I/O format used to transmit and receive active event list data.

Value	Description
F0	System Exclusive ID
7E	Non-Real-Time ID
0000 nnnn	Midi Chnl
04	Midi Time Code 0000 dddd Setup Message Type 0 = Special 7 = Event Start Point w/Additional Info 9 = Delete Event Start Point
0tth hhhh	t = Frame Rate 0 = 24 Fr/Sec (Film) 1 = 25 Fr/Sec (EBU) 2 = 30 Fr/Sec (SMPTE Drop) 3 = 30 Fr/Sec (SMPTE Non-Drop) h = Hours 0x00 - 0x17 (0 - 23)
00mm mmmm	m = Minutes 0x00 - 0x3B (0 - 59)
00ss ssss	s = Seconds 0x00 - 0x3B (0 - 59)
000f ffff	f = Frames 0x00 - 0x1D (0 - 29)
0ggg gggg	g = Fractional Frames 0x00 - 0x63 (0 - 99)
0iii iii	Event Number Special Message 0 = Time Code Offset 1 = Enable Event List 2 = Disable Event List. 3 = Clear Event List 5 =Event List Request Non-Special Message 0x00 - 0x31: Event List Entry 1 - 50
0iii iii	Data Byte Count (# Nibblized Pairs)
0000 xxxx 0000 xxxx...	Nibblized Data Byte Pairs, LSB First (Optional, varies among message types)
F7	End of System Exclusive

Unnibblized Event List Data Format

Byte Number	Description
1	Lexicon ID
2	M300 ID
3	Event Type 0 = No Event 1 = New Event 2 = Setup Change 3 = Effect A Change 4 = Effect B Change 5 = Param A Change 6 = Param B Change
4	Setup, Effect or Param Number Setup Register 0-99: Presets 1 - 100 100-149: Registers 1 - 50 Effect Register 0-99: Presets 1 - 100 100-149: Registers 1 - 50 Parameter Number 0x00 - 0x21: Param 1 - 34
5	Glide Status Reserved for internal use only.
6	Parameter Glide Time 0x00 - 0xFF: 0 - 255 Frames
7	Parameter Initial Value, LSB
8	Parameter Initial Value, MSB
9	Parameter Final Value, LSB
10	Parameter Final Value, MSB

Other Non-Real-Time SysEx Messages

Inquiry Request Format: Receive only

Value	Description
F0	System Exclusive ID
7E	Non-Real-Time ID
0000 nnnn	Midi Chnl
06	General Info
01	Device Inquiry Message
F7	End of System Exclusive

Inquiry Response Format

Transmit only

Value	Description
F0	System Exclusive ID
7E	Non-Real-Time ID
0000 nnnn	Midi Chnl
06	General Info
02	Device ID Message
06	Lexicon ID
0	Device Family Code, LSB
0	Device Family Code, MSB
0mmm mmmm	Family Member Code, LSB 0 = PCM70 1 = 480L (Not Implemented!) 2 = LXP1 3 = M300 4 = MRC V3.0 5 = LXP5 6 = LXP15 >6 = Future Products
0	Family Member Code, MSB
0sss ssss	Software Rev, Byte 1 (ASCII)
0sss ssss	Software Rev, Byte 2 (")
0sss ssss	Software Rev, Byte 3 (")
0sss ssss	Software Rev, Byte 4 (")
F7	End of System Exclusive

Other Real-Time SysEx Messages

MTC Full Message: Receive only

Value	Description
F0	System Exclusive ID
7F	Real-Time ID
7F	Universal Device ID
01	MIDI Time Code
01	MTC Full Message
0tth hhhh	t = Frame Rate 0 = 24 Fr/Sec (Film) 1 = 25 Fr/Sec (EBU) 2 = 30 Fr/Sec (SMPTE Drop) 3 = 30 Fr/Sec (SMPTE Non-Drop) h = Hours 0x00 - 0x17 (0 - 23)
00mm mmmm	m = Minutes 0x00 - 0x3B (0 - 59)
00ss ssss	s = Seconds 0x00 - 0x3B (0 - 59)
000f ffff	f = Frames 0x00 - 0x1D (0 - 29)
F7	End of System Exclusive

300 Microcode Parameter Maps

Single Setup Parameters (Random Hall/Random Ambience/ Rich Plate/Stereo Adjust/)

Single Setup Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	-	-	-
1	-	-	-
2	-	-	-
3	-	-	-
4	ABAL	Analog Balance	0-127
5	DBAL	Digital Balance	0-127
6	-	-	-
7	OMIX	Wet Dry Mix	0-127
8	-	-	-
9	-	-	-
10	ALVL	Analog Level	0-25
11	DLVL	Digital Level	0-25

Page One: Single Setups

Button #	Param #	Display Name		Range
		Short	Long	
1	10	ALVL	Analog Level	0-25
2	4	ABAL	Analog Balance	0-127
3	11	DLVL	Digital Level	0-25
4	5	DBAL	Digital Balance	0-127
5	7	OMIX	Wet Dry Mix	0-127

Split (Dual Mono and Cascade) Setup Parameters
 (Dual Delays/Split Chamber/ Mono Shift/Compressor/ PONS/Small Stereo Adjust)

Dual Mono Setup Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	-	-	-
1	-	-	-
2	-	-	-
3	-	-	-
4	ABAL	Mach A Balance	0-127
5	BBAL	Mach B Balance	0-127
6	-	-	-
7	-	-	-
8	AMIX	Mach A Mix	0-127
9	BMIX	Mach B Mix	0-127
10	AIN	Mach A Input	0-25
11	BIN	Mach B Input	0-25

Dual Mono Setups

Button #	Param #	Display Name		Range
		Short	Long	
1	10	AIN	Mach A Input	0-25
2	4	ABAL	Mach A Balance	0-127
3	10	BIN	Mach B Input	0-25
4	5	BBAL	Mach B Balance	0-127
5	8	AMIX	Mach A Mix	0-127
6	9	BMIX	Mach B Mix	0-127

Page:
Dual Mono Levels

Cascade Setup Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	-	-	-
1	-	-	-
2	-	-	-
3	-	-	-
4	BAL	Mach A Balance	0-100
5	-	-	-
6	FDBK	Mach A Feedback	0-198
7	OMIX	Master Mix	0-127
8	AMIX	Mach A Mix	0-127
9	BMIX	Mach B Mix	0-127
10	INPT	Mach A Input	0-25

Cascade Setups

Button #	Param #	Display Name		Range
		Short	Long	
1	10	INPT	Mach A Input	0-25
2	4	BAL	Mach A Balance	0-100
4	6	FDBK	Mach A Feedback	0-198
5	8	AMIX	Mach A Mix	0-127
6	9	BMIX	Mach B Mix	0-127
7	7	OMIX	Master Mix	0-127

Page:
Cascade Setups

Effect Parameters

Algorithm: Random Hall

Random Hall Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	SIZE	Room Size	0-63
1	OMIX	See Setup Edit	
2	RTIM	Mid Reverb Time	0-63
3	XOVR	Bass Crossover	0-62
4	BASS	Bass Multiply	0-9
5	ROLL	Hi-Freq Rolloff	0-63
6	TDCY	Treble Decay	0-15
7	DIFF	Diffusion	0-99
8	PDLY	Pre-delay	0-500
9	LINK	Size-Rtim-Sprd Link	0-1
10	SPRD	Early Echo Spread	0-255
11	SHAP	Decay Envelope Shape	0-255
12	DLY1	Echo Delay 1	0-500
13	LVL1	Echo Level 1	0-15
14	DLY2	Echo Delay 2	0-500
15	LVL2	Echo Level 2	0-15
16	DLY3	Echo Delay 3	0-1400
17	LVL3	Echo Level 3	0-15
18	DLY4	Echo Delay 4	0-1400
19	LVL4	Echo Level 4	0-15
20	SPIN	Spin	0-255
21	WAND	Wander	0-255
22	FBK3	Echo Feedback 3	0-30
23	FBK4	Echo Feedback 4	0-30
24	RLVL	Reverb Level	0-25
25	SHLF	Shelf	0-25
26	ALVL	See Setup Edit	
27	DLVL	See Setup Edit	

Page One: Random Hall Coarse Params

Button #	Param #	Display Name		Range
		Short	Long	
1	2	RTIM	Mid Reverb Time	0-63
2	0	SIZE	Room Size	0-63
3	5	ROLL	Hi Freq Rolloff	0-63
4	8	PDLY	Pre-Delay	0-500
5	24	RLVL	Reverb Level	0-25
6	6	TDCY	Treble Decay	0-15
7	4	BASS	Bass Multiply	0-9
8	3	XOVR	Bass Crossover	0-62

Page Two: Random Hall Fine Params

Button #	Param #	Display Name		Range
		Short	Long	
1	20	SPIN	Spin	0-48
2	21	WAND	Wander	0-255
3	11	SHAP	Decay Envelope Shape	0-255
4	10	SPRD	Early Echo Spread	0-255
5	7	DIFF	Diffusion	0-99
6	9	LINK	Size-Rtim-Sprd Link	0-1
7	25	SHLF	Shelf	0-25
8	0	SIZE	Room Size	0-63

**Page Three:
Random Hall Pre-Echoes**

Button #	Param #	Display Name		Range
		Short	Long	
1	12	DLY1	Echo Delay 1	0-500
2	14	DLY2	Echo Delay 2	0-500
3	2	RTIM	Mid Reverb Time	0-63
5	13	LVL1	Echo Level 1	0-15
6	15	LVL2	Echo Level 2	0-15
7	24	RLVL	Reverb Level	0-25

**Page Four:
Feedback Pre-Echoes**

Button #	Param #	Display Name		Range
		Short	Long	
1	16	DLY3	Echo Delay 3	0-1400
2	22	FBK3	Echo Feedback 3	0-30
3	18	DLY4	Echo Delay 4	0-1400
4	23	FBK4	Echo Feedback 4	0-30
5	17	LVL3	Echo Level	0-15
7	19	LVL4	Echo Level 4	0-15

Random Ambience Master Parameter Table

**Algorithm: Random
Ambience**

Param #	Display Name		Range
	Short	Long	
0	SIZE	Room Size	0-63
1	OMIX	See Setup Edit	
2	RTIM	Reverb Time	0-63
3	RLVL	Rear Level	0-25
4	ROLL	Hi Freq Rolloff	0-15
5	SPIN	Spin	0-48
6	WAND	Wander	0-255
7	DIFF	Diffusion	0-99
8	PDLY	Predelay	0-1199
9	DDLY	Dry Delay	0-1199
10	DLVL	See Setup Edit	
11	ALVL	See Setup Edit	

**Page One:
Random Ambience
Coarse Params**

Button #	Param #	Display Name		Range
		Short	Long	
1	2	RTIM	Reverb Time	0-63
2	0	SIZE	Room Size	0-63
3	7	DIFF	Diffusion	0-99
4	4	ROLL	Hi Freq Rolloff	0-15
5	3	RLVL	Reverb Level	0-25
6	9	DDLY	Dry Delay	0-1199
7	8	PDLY	Pre Delay	0-1199

**Page Two:
Random Ambience
Fine Params**

Button #	Param #	Display Name		Range
		Short	Long	
1	5	SPIN	Spin	0-48
2	6	WAND	Wander	0-255

Algorithm: Rich Plate Rich Plate Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	SIZE	Room Size	0-63
1	OMIX	See Setup Edit	
2	RTIM	Mid Reverb Time	0-63
3	XOVR	Bass Crossover	0-62
4	BASS	Bass Multiply	0-9
5	ROLL	Hi-Freq Rolloff	0-63
6	TDCY	Treble Decay	0-15
7	DIFF	Diffusion	0-99
8	PDLY	Predelay	0-500
9	LINK	Size-RTim-Sprd Link	
10	SPRD	Early Echo Spread	0-255
11	SHAP	Decay Envelope Shape	0-255
12	DLY1	Echo Delay 1	0-1000
13	FBK1	Echo Feedback 1	0-30
14	DLY2	Echo Delay 2	0-1000
15	FBK2	Echo Feedback 2	0-30
16	DLY3	Echo Delay 3	0-500
17	LVL3	Echo Level 3	0-15
18	DLY4	Echo Delay 4	0-500
19	LVL4	Echo Level 4	0-15
20	DLY5	Echo Delay 5	0-1400
21	LVL5	Echo Level 5	0-15
22	FBK5	Echo Feedback 5	0-30
23	DLY6	Echo Delay 6	0-1400
24	LVL6	Echo Level 6	0-15
25	FBK6	Echo Feedback 6	0-30
26	SPIN	Spin	0-255
27	WAND	Wander	0-255
28	RLVL	Reverb Level	0-25
29	RAND	Randomization	0-99
30	DLVL	See Setup Edit	
31	ALVL	See Setup Edit	

Page One:
Rich Plate Coarse Params

Button #	Param #	Display Name		Range
		Short	Long	
1	2	RTIM	Reverb Tijme	0-63
2	0	SIZE	Room Size	0-63
3	5	ROLL	Hi Freq Rolloff	0-63
4	8	PDLY	Pre-Delay	0-500
5	28	RLVL	Reverb Level	0-25
6	6	TDCY	Treble Decay	0-15
7	4	BASS	Bass Multiply	0-9
8	3	XOVR	Bass Crossover	0-62

Page Two:
Rich Plate: Fine Params

Button #	Param #	Display Name		Range
		Short	Long	
1	29	RAND	Randomization	0-99
4	10	SPRD	Early Echo Spread	0-255
5	7	DIFF	Diffusion	0-99
6	9	LINK	Size-Rtim-Sprd Link	0-1
8	0	SIZE	Room Size	0-63

Button #	Param #	Display Name		Range
		Short	Long	
1	12	DLY1	Echo Delay 1	0-1000
5	13	FBK1	Echo Feedback	0-30
2	14	DLY2	Echo Delay 2	0-1000
6	15	FBK2	Echo Feedback 2	0-30
3	16	DLY3	Echo Delay 3	0-500
7	17	LVL3	Echo Level 3	0-15
4	18	DLY4	Echo Delay 4	0-500
8	19	LVL4	Echo Level 4	0-15

Page Three:
Rich Plate: Pre-Echoes 1-4

Button #	Param #	Display Name		Range
		Short	Long	
1	20	DLY5	Echo Delay 5	0-1400
2	22	FBK5	Echo Feedback 5	0-30
5	21	LVL5	Echo Level 5	0-15
3	23	DLY6	Echo Delay 6	0-1400
4	25	FBK6	Echo Feedback 6	0-30
7	24	LVL6	Echo Level 6	0-15

Page Four:
Rich Plate: Pre-Echoes 5 & 6

Algorithm: Stereo Adjust **Stereo Adjust Master Parameter Table**

Param #	Display Name		Range
	Short	Long	
0	MSTR	Master Stereo Level	0-220
1	BASS	Stereo Bass	0-49
2	LTRB	Treble Left	0-49
3	RTRB	Treble Right	0-49
4	SPEQ	Spatial Equalization	0-49
5	BXOV	BassCrossover	0-62
6	TXOV	Treble Crossover	0-62
7	TXLR	L&R Treble Crossover	0-62
8	TREB	Stereo Treble	0-49
9	ROT	Rotation	0-127
10	BAL	Balance	0-255
11	D-EM	De-Emphasis	On/Off
12	11µs	Lch 1/2 Sample Dly	On/Off
13	RFnS	Rch Flip'n'Swap	0-3
14	DLAY	Lch 5sec Dly Rch	0-500
15	LDLY	Lch Delay-#Samples	0-500
16	RDLY	Rch Delay-# Samples	0-500
17	LFIN	Lch Delay-# Samples	0-500
18	RFIN	Rch Delay-# Samples	0-500
19	LFBK	Lch Coarse Feedback	0-198
20	Lfbk	Lch Fine Feedback	0-198
21	RFBK	Rch Coarse Feedback	0-198
22	Rfbk	Rch Fine Feedback	0-198
23	L-DC	Lch DC Offset	0-198
24	R-DC	Rch DC Offset	0-198
25	DCSW	DC Offset Nulling	0-2
26	DLVL	See Setup Edit	
27	ALVL	See Setup Edit	

Page One:
Stereo Adjust Master Params

Button #	Param #	Display Name		Range
		Short	Long	
1	0	MSTR	Master Stereo Level	0-220
2	10	BAL	Balance	0-255
3	9	ROT	Rotation	0-127
4	14	DLAY	Lch 5sec Delay Rch	0-500
5	11	D-EM	De-Emphasis	On/Off
6	12	11uS	Lch 1/2 Sample Dly	On/Off
7	13	RFnS	Rch Flip'n'Swap	0-3

Page One:
Stereo Adjust Master Params

Button #	Param #	Display Name		Range
		Short	Long	
1	1	BASS	Stereo Bass	0-49
2	8	TREB	Stereo Treble	0-49
3	2	LTRB	Treble Left	0-49
4	3	RTRB	Treble Right	0-49
5	5	BXOV	Bass Crossover	0-49
6	6	TXOV	Treble Crossover	0-62
7	7	TXLR	L & R Treble Xover	0-62
8	4	SPEQ	Spatial Equalization	0-49

Button #	Param #	Display Name		Range
		Short	Long	
1	15	LDLY	Lch Delay - #Samples	0-500
2	17	LFIN	Lch Delay - #Samples	0-500
3	16	RDLY	Rch Delay - #Samples	0-500
4	18	RFIN	Rch Delay - #Samples	0-500
5	19	LFBK	Lch Coarse Feedback	0-198
6	20	Lfbk	Lch Fine Feedback	0-198
7	21	RFBK	Rch Coarse Feedback	0-198
8	22	Rfbk	Rch Fine Feedback	0-198

Page Three
Stereo Adjust: Delay Params

Button #	Param #	Display Name		Range
		Short	Long	
1	25	DCSW	DC Offset Nulling	0-2
2	23	L-DC	Lch DC Offset	0-198
3	24	R-DC	Rch DC Offset	0-198

Page Four
Stereo Adjust:
Auto Zero Params

Stereo Pitch Shift Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	BNPS	Bandpass On/Off	On/Off
1	OMIX	See Setup Edit	
2	ALVL	See Setup Edit	
3	DLVL	See Setup Edit	
4	-	-	-
5	-	-	-
6	RDLY	Right Predelay	0-255
7	LDLY	Left Predelay	0-255
8	RFBK	R Shifter Feedback	0-127
9	LFBK	L Shifter Feedback	0-127
10	MODE	Mono/Stereo	0-1
11	SYNC	Auto Reset	On/Off
12	GLDL	Pitch Glide L	0-10
13	PCHL	Pitch Shift L&L/R	0-36
14	FINL	Fine Pitch Shift L & L/R	0-64
15	GLDR	Pitch Glide R	0-10
16	PCHR	Pitch Shift R	0-36
17	FINR	Fine Pitch R	0-64

Algorithm:
Stereo Pitch Shift

Button #	Param #	Display Name		Range
		Short	Long	
1	10	MODE	Mono / Stereo	0-1
2	12	GLDL	Pitch Glide L & L/R	0-10
4	15	GLDR	Pitch Glide R	0-10
5	13	PCHL	Pitch Shift L & L/R	0-36
6	14	FINL	Fine Pitch L & L/R	0-64
7	16	PCHR	Pitch Shift R	0-36
8	17	FINR	Fine Pitch R	0-64

Page One
Stereo Pitch Shift: Master
Params

Button #	Param #	Display Name		Range
		Short	Long	
1	7	LDLY	Left Pre-Delay	0-255
2	9	LFBK	L Shifter Feedback	0-127
3	6	RDLY	Right Pre-Delay	0-255
4	8	RFBK	R Shifter Feedback	0-127
5	0	BNPS	Bandpass ON/OFF	On/Off
6	11	SYNC	Auto Reset ON/OFF	On/Off

Page Two
Stereo Pitch Shift: Delay
Params

Algorithm: Dual Delays Dual Delays Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	FDLY	Flange Glide Delay	0-959
1	LFBD	L Flange Bass Delay	0-959
2	RFBD	R Flange Bass Delay	0-959
3	LFLG	L Flange Gain	0-198
4	RFLG	R Flange Gain	0-198
5	APD1	L All-Pass Delay	0-479
6	APG1	L All-Pass Gain	0-191
7	APD2	R All-Pass Delay	0-479
8	APG2	R All-Pass Gain	0-191
9	DLY1	L->L Delay	0-29999
10	FBK1	L->L Feedback	0-198
11	DLY2	R->R Delay	0-29999
12	FBK2	R->R Feedback	0-198
13	DLY3	L->R Delay	0-29999
14	FBK3	L->R Feedback	0-198
15	DLY4	R->L Delay	0-29999
16	FBK4	R->L Feedback	0-198
17	LDLY	Left Out Delay	0-29999
18	RDLY	Right Out Delay	0-29999
19	LPAN	Left Out Pan L-R	0-127
20	RPAN	Right Out Pan R-L	0-127

Page One:
Dual Delay Flanger Params

Button #	Param #	Display Name		Range
		Short	Long	
1	1	LFBD	L Flange Base Delay	0-959
2	2	RFBD	R Flange Base Delay	0-959
3	0	FDLY	Flange Glide Delay	0-959
4				
5	3	LFLG	L Flange Gain	0-198
6	4	RFLG	R Flange Gain	0-198

Page Two:
Dual Delay Main Delay Params

Button #	Param #	Display Name		Range
		Short	Long	
1	9	DLY1	L->L Delay	0-29999
2	5	APD1	L All-Pass Delay	0-479
3	11	DLY2	R->R Delay	0-29999
4	7	APD2	R All-Pass Delay	0-479
5	10	FBK1	L->L Feedback	0-198
6	6	APG1	L All-Pass Gain	0-191
7	12	FBK2	R->R Feedback	0-198
8	8	APG2	R All-Pass Gain	0-191

Page Three: Dual Delay Cross
Delay Params

Button #	Param #	Display Name		Range
		Short	Long	
1	13	DLY3	L->R Delay	0-29999
2	15	DLY4	R->L Delay	0-29999
3	17	LDLY	Left Out Delay	0-29999
4	18	RDLY	Right Out Delay	0-29999
5	14	FBK3	L->R Feedback	0-198
6	16	FBK4	R->L Feedback	0-198
7	19	LPAN	Left Out Pan L-R	0-127
8	20	RPAN	Right Out Pan R-L	0-127

Split Chamber Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	SIZE	Room Size	0-111
1	XOVR	Bass Crossover	0-62
2	BASS	Bass Multiply	0-9
3	TDCY	Treble Decay	0-15
4	PDLY	Predealy	0-500
5	RTIM	Mid Reverb Time	0-63
6	RAND	Randomization	0-99
7	SPRD	Early Echo Spread	0-255
8	SHAP	Decay Envelope Shape	0-255
9	LINK	Size-RTim-Sprd Link	On/Off
10	DIFF	Diffusion	0-99

Algorithm: Split Chamber

Button #	Param #	Display Name		Range
		Short	Long	
1	5	RTIM	Mid Reverb Time	0-63
2	0	SIZE	Room Size"	0-111
4	4	PDLY	Pre-Delay	0-500
5	9	LINK	Size-Rtim-Sprd Link	On/Off
6	3	TDCY	Treble Decay	0-15
7	2	BASS	Bass Multiply	0-9
8	1	XOVR	Bass Crossover	0-62

Page One:
Split Chamber Coarse Params

Button #	Param #	Display Name		Range
		Short	Long	
1	10	DIFF	Diffusion	0-99
2	6	RAND	Randomization	0-99
3	8	SHAP	Decay Envelope Shape	0-255
4	7	SPRD	Early Echo Spread	0-255
8	0	SIZE	Room Size	0-111

Page Two:
Split Chamber Fine Params

Mono Pitch Shift Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	DLY	Predelay	0-255
1	FBK	Shifter Feedback	0-127
2	MODE	Stereo/Mono	Stereo/Mono
3	SYNC	Mono Pitch Sync	On/Off
4	RATE	Pitch Glide	0-447
5	PCH	Coarse Pitch Shift	0-36
6	FIN	Fine Pitch Shift	0-64
7	BNPS	Bandpass	On/Off

Algorithm: Mono
Pitch Shift

Button #	Param #	Display Name		Range
		Short	Long	
1	7	BNPS	Bandpass	On/Off
2	4	Rate	Pitch Glide	0-447
3	0	DLY	Predelay	0-255
4	1	FBK	Shifter Feedback	0-127
5	5	PCH	Coarse Pitch Shift	0-36
6	6	FIN	Fine Pitch Shift	0-64

Page One:
Mono Pitch Shift Fine Params

Algorithm: Compressor Compressor Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	DLY	Front End Delay	0-24
1	SLP	Compressor Slope	0-254
2	GAIN	Compressor Max Gain	0-24
3	THRS	Compressor Threshold	0-40
4	ATC	Attack Time	0-7
5	REL	Release Time	0-22
6	EXS	Expander Slope	0-254
7	EXG	Expander Max Gain	0-24
8	EXT	Expander Threshold	0-70

Page One:
Compressor Params

Button #	Param #	Display Name		Range
		Short	Long	
1	1	SLP	Compressor Slope	0-254
2	3	THRS	Compressor Threshold	0-40
3	2	GAIN	Compressor Max Gain	0-24
5	0	DLY	Front-End Delay	0-24
6	4	ATC	Attack Time	0-7
7	5	REL	Release Time	0-22

Page Two:
Expander Params

Button #	Param #	Display Name		Range
		Short	Long	
1	6	EXS	Expander Slope	0-254
2	8	EXT	Expander Threshold	0-70
3	7	EXG	Expander Max Gain	0-24

Algorithm: PONS PONS Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	PONS	PONS On/Off	0-1
1	DITH	Dither Gain	0-254

Page One:
PONS Params

Button #	Param #	Display Name		Range
		Short	Long	
2	1	DITH	Dither Gain	0-254
3	0	PONS	PONS On/Off	0-1

Small Stereo Adjust Master Parameter Table

Param #	Display Name		Range
	Short	Long	
0	MSTR	MasterStereo Level	0-220
1	BAL	Balance	0-255
2	ROT	Rotation	0-127
3	SPEQ	Spatial EQ	0-49
4	BASL	Bass Left	0-49
5	BASR	Bass Right	0-49
6	LTRB	Treble Left	0-49
7	RTRB	Treble Right	0-49
8	BXOV	Bass Crossover	0-62
9	TXLR	L&R Treble Crossover	0-62
10	RFnS	Rch Flip and Swap	0-3

Algorithm: Small Stereo Adjust

Button #	Param #	Display Name		Range
		Short	Long	
2	0	MSTR	MasterStereo Level	0-220
3	1	BAL	Balance	0-255
4	2	ROT	Rotation	0-127
7	3	SPEQ	Spatial EQ	0-49
8	10	RFnS	Rch Flip and Swap	0-3

Page One: Small Stereo Adjust Params

Button #	Param #	Display Name		Range
		Short	Long	
2	4	BASL	Bass Left	0-49
3	6	LTRB	Treble Left	0-49
4	8	BXOV	Bass Crossover	0-62
6	5	BASR	Bass Right	0-49
7	7	RTRB	Treble Right	0-49
8	9	TXLR	L&R Treble Crossover	0-62

Page Two: EQ Params

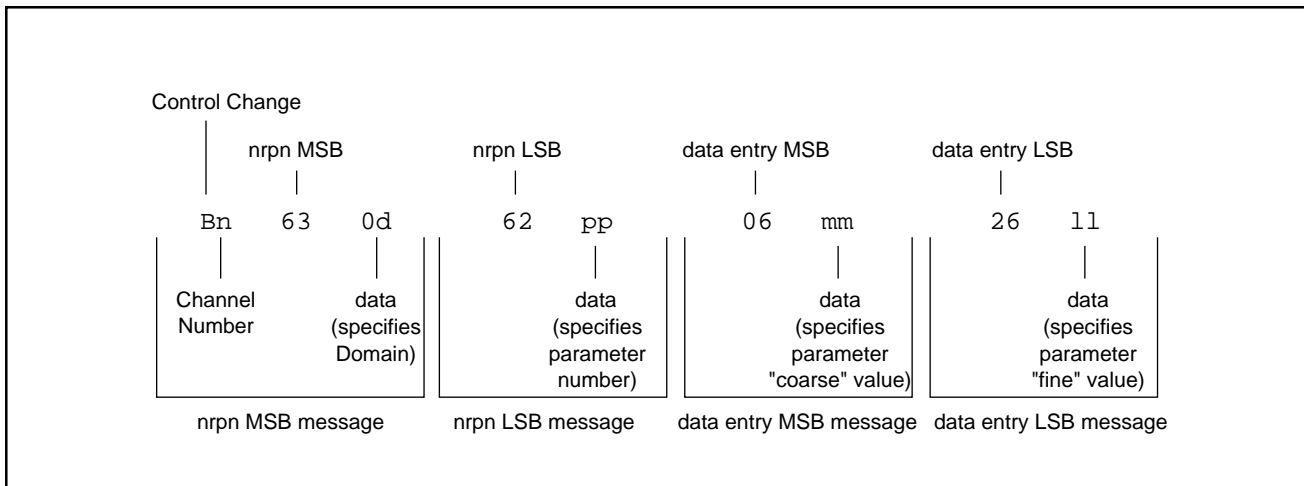
Non-Registered Parameter Numbers

Non-registered parameter implementation in the 300 allows all public system parameters to be controlled. The smaller packet size of these messages, as compared to equivalent SysEx messages, make non-registered parameters a more efficient means of system data transmission.

Transmission Format

When Auto Mode is set to NREG-PARAM (in Control Mode), changing any public system parameter will transmit a running status MIDI controller message formatted as shown below. Note that Lexicon uses:

- nrpn MSB messages (63) to send 300 Domain ID
- nrpn LSM messages (62) to send 300 parameter numbers
- data entry MSB messages (06) to send coarse parameter values
- data entry LSB messages (26) to send fine parameter values



Reception Format

Non-Register parameter data will be recognized in both a running status format and as a burst of individual controller messages.

Domain IDs

Number	Description
0	Utility
1	Run
2	Setup
3	Effect A
4	Effect B
5	Modulation A
6	Modulation B

Number		Description	Value	Display String
Decimal	Hex			
00	0x00	Level Delta	0-200	-10.0dB to +10.0dB in 0.1dB steps
05	0x05	Change Mode	0	BYPASS
			1	MUTE
06	0x06	Bypass Mode	0	BYPASS
			1	INMUTE
07	0x07	Automation Mode	0	OFF
			1	NREG-PARAM
			2	SYSEX
			3	PGM-CHANGE
08	0x08	MIDI System Chnl	0-16	Chnls 1-16, OMNI
09	0x09	MIDI Mach A Chnl	0-16	Chnls 1-16, OMNI
10	0x0A	MIDI Mach B Chnl	0-16	Chnls 1-16, OMNI
11	0x0B	Map Table A Mode	0	OFF (Default)
			1	FIX
			2	FIX
12	0x0C	Map Table B Mode	0	OFF (Default)
			1	FIX
			2	FIX
13	0x0D	Map Table A Pgm #	0	Off (Default)
			1	Fixed
			2-129	Program Change 0-127
14	0x0E	Map Table B Pgm #		Same as Map Table A Pgm
15	0x0F	Map Table A Reg #	0-99	Preset Effect IDs
			100-149	Stored Effect IDs
			150-249	Preset Setup IDs
			250-299	Stored Setup IDs
			300	Available (Default)
6	0x10	Map Table B Reg #		Same as Map Table A Reg
17	0x11	Bulk Data Dump	0	ALL REGISTERS
			1	CURRENT SETUP
			2	MIDI MAP TABLE
			3	MTC EVENT LIST
18	0x12	Event List Mode	0	OFF (Default)
			1	STC
			2	MTC
25	0x19	Copy Protect	0	DISABLE
			1	ENABLE
32	0x20	Delay Units	0	TIME
			1	FRAMES
			2	BEAT/MIN
33	0x21	Pitch Units	0	INTERVAL
			1	%-CPEX
34	0x22	Bulk Dump Delay	0	2ms
			1	50ms
			2	100ms
			3	200ms
35	0x23	Input Routing		
		Single:	0	ANALOG
			1	DIGITAL
			2	ANA+DIG
		Dual Mono:	0	ANALOG
			1	DIGITAL
			2	A>L D>R
			3	D>L A>R
		Cascade:	0	ANALOG
			1	DIGITAL

Utility Domain Control Parameters

36	0x24	Output Routing		
		Single (input 0-2):	0	ana+dig
		Dual Mono:		
		input 0:	0	ANA+DIG
			1	A(D Pre)
			2	A(D Pst)
		input 1:	0	ANA+DIG
			1	D(A Pre)
			2	D(A Pst)
		input 2:	0	a>l d>r
		input 3:	0	d>l a>r
		Cascade:		
		input 0:	0	ANA+DIG
			1	A(D Pre)
			2	A(D Mid)
			3	A(D Pst)
		input 1:	0	ANA+DIG
			1	D(A Pre)
			2	D(A Mid)
			3	D(A Pst)
37	0x25	Digital Input Conn	0	XLR
			1	RCA
			2	OPT
38	0x26	Digital Out Format	0	SPDIF
			1	AES
39	0x27	Sample Rate	0	48kHz
			1	44kHz
40	0x28	Analog Emphasis	0	N
			1	Y
41	0x29	Digital Emphasis	0	N
			1	Y
42	0x2A	SCMS Protection	0	NO-COPY
			1	ONE-COPY
			2	MULT-COPY
			3	aes-pro n/a
43	0x2B	Panel Lock	0	Off (Default)
			1	On
44	0x2C	MDAC L-Input Lvl	0-200	-10.0dB to +10.0dB in 0.1dB steps
45	0x2D	MDAC R-Input Lvl	0-200	-10.0dB to +10.0dB in 0.1dB steps
46	0x2E	MDAC L-Output Lvl	0-200	-10.0dB to +10.0dB in 0.1dB steps
47	0x2F	MDAC R-Output Lvl	0-200	-10.0dB to +10.0dB in 0.1dB steps
48	0x30	Bypass A	0	Off (Default)
			1	On
49	0x31	Bypass B	0	Off (Default)
			1	On
50	0x32	Transmit Meter	0	Off (Default)
			1	On
51	0x33	Transmit Timecode	0	Off (Default)
			1	On

Number		Description	Value	Display String
Decimal	Hex			
00	0x00	Setup Select	0-149	Setup Longname
01	0x01	Setup Delta	0-149	Setup Longname
02	0x02	Softknob	0-127	0 to 127

Run Domain Control Params

Number		Description	Value	Display String
Decimal	Hex			
00	0x00	L Meter Select		
		Single:	0	ANA-IN
			1	DIG-IN
			2	FX-OUT
		Dual Mono/L:	0	LCH-IN
			1	RCH-IN
			2	LFXOUT
		Dual Mono/R:	0	LCH-IN
			1	RCH-IN
			2	RFXOUT
		Cascade:	0	INPUT
			1	MID-PT
			2	OUTPUT
01	0x01	R Meter Select	Same as L Meter Select	
04	0x04	Input Balance 0	0-127	balpct_disp()
05	0x05	Input Balance 1	0-127	balpct_disp()
06	0x06	Cascade Feedback	0-198	bipolar_disp()
07	0x07	Master Mix Out	0-127	wetdry_disp()
08	0x08	Mix Out 0	0-127	wetdry_disp()
09	0x09	Mix Out 1	0-127	wetdry_disp()
10	0x0A	Input Level 0	0-25	levelog_disp()
11	0x0B	Input Level 1	0-25	levelog_disp()
12	0x0C	Machine Config	0	SINGLE
			1	DUAL-MONO
			2	CASCADEa->b (-> single char)
13	0x0D	Effect A Select	0-149	Effect Longname
14	0x0E	Effect B Select	0-149	Effect Longname
15	0x0F	Effect A Delta	0-149	Effect Longname
16	0x1	Effect B Delta	0-149	Effect Longname
17	0x11	Character Delta	20-122	ASCII (20 - 122)
18	0x12	LFO Shape	0	SINE
			1	TRIANGLE
			2	SQUARE
			3	RANDOM
19	0x13	LFO Rate	0-250	.04xvalue
20	0x14	Patch 1 Src	0-72	See MIDI Patch Source
21	0x15	Patch 1 Dest	0-33	Param Shortname
22	0x16	Patch 1 Scale	0-255	
23	0x17	Patch 1 Thres	0-127	0 to 127
24	0x18	Patch 1 Value		Param Display Mech
25	0x19	Patch 2 Src		Same as Patch 1 Group
26	0x20	Patch 2 Dest		
27	0x21	Patch 2 Scale		
28	0x22	Patch 2 Thres		
29	0x23	Patch 2 Value		

Setup Domain Control Params

**Mod Domain
Control Params**

	Number		Description	Value	Display String
	Decimal	Hex			
00	0x00	Patch 1 Src	0-72	See MIDI Patch Source	
01	0x01	Patch 1 Dest	0-33	Param Shortname	
02	0x02	Patch 1 Scale	0-255		
03	0x03	Patch 1 Thres	0-127	0 to 127	
04	0x04	Patch 1 Value		Param Display Mech	
05	0x00	Patch 2 Src		Same as Patch 1 Group	
06	0x06	Patch 2 Dest			
07	0x07	Patch 2 Scale			
08	0x08	Patch 2 Thres			
09	0x09	Patch 2 Value			
10	0x0A	Patch 3 Src		Same as Patch 1 Group	
11	0x0B	Patch 3 Dest			
12	0x0C	Patch 3 Scale			
13	0x0D	Patch 3 Thres			
14	0x0E	Patch 3 Value			
15	0x0F	Patch 4 Src		Same as Patch 1 Group	
16	0x10	Patch 4 Dest			
17	0x11	Patch 4 Scale			
18	0x12	Patch 4 Thres			
19	0x13	Patch 4 Value			

**MIDI Patch Source
Parameters**

	Number		Display String
	Decimal	Hex	
00	0x00	OFF	
01	0x01	Cntrl-0	
02	0x02	ModWheel	
03	0x03	Breath	
04	0x04	Cntrl-3	
05	0x05	FootPedal	
06	0x06	PortaTime	
07	0x07	Volume	
08	0x08	Balance	
09	0x09	Cntrl-9	
10	0x0A	Pan	
11	0x0B	Expression	
12	0x0C	Cntrl-12	
13	0x0D	Cntrl-13	
14	0x0E	Cntrl-14	
15	0x0F	Cntrl-15	
16	0x10	GP Cntrl-1	
17	0x11	GP Cntrl-2	
18	0x12	GP Cntrl-3	
19	0x13	GP Cntrl-4	
20	0x14	Cntrl-20	
21	0x15	Cntrl-21	
22	0x16	Cntrl-22	
23	0x17	Cntrl-23	
24	0x18	Cntrl-24	
25	0x19	Cntrl-25	
26	0x1A	Cntrl-26	
27	0x1B	Cntrl-27	
28	0x1C	Cntrl-28	
29	0x1D	Cntrl-29	
30	0x1E	Cntrl-30	

31	0x1F	Cntrl-31
32	0x20	Sustain
33	0x21	PortaSw
34	0x22	SostenSw
35	0x23	SoftPedal
36	0x24	Switch-68
37	0x25	Switch-69
38	0x26	Switch-70
39	0x27	Switch-71
40	0x28	Switch-72
41	0x29	Switch-73
42	0x2A	Switch-74
43	0x2B	Switch-75
44	0x2C	Switch-76
45	0x2D	Switch-77
46	0x2E	Switch-78
47	0x2F	Switch-79
48	0x30	GP Cntrl-5
49	0x31	GP Cntrl-6
50	0x32	GP Cntrl-7
51	0x33	GP Cntrl-8
52	0x34	Switch-84
53	0x35	Switch-85
54	0x36	Switch-86
55	0x37	Switch-87
56	0x38	Switch-88
57	0x39	Switch-89
58	0x4A	Switch-90
59	0x4B	Switch-91
60	0x4C	Switch-92
61	0x4D	Switch-93
62	0x4E	Switch-94
63	0x4F	Switch-95
64	0x50	PitchWheel
65	0x51	AfterTouch
66	0x52	LastNote
67	0x53	LastVel
68	0x54	MidiClock
69	0x55	SoftKnob
70	0x56	L-Envelope
71	0x57	R-Envelope
72	0x58	LFO_1

MIDI Implementation Chart

Lexicon 300

Digital Effects System

Version: 3.0

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Channel	1 1-16, OMNI	1 1-16, OMNI	Mach A, Mach B, and System on separate channels; Memorized
Mode	Default Messages Altered		Mode 1, 3	
Note Number	True Voice	X	0 - 127	Used as controller
Velocity	Note ON Note OFF	X X	O v=1-127 X	Used as controller
After Touch	Keys Channels	X X	X X	
Pitch Bender		X	O	MSB only
Control Change	0-95	X	OX 0-99	Controllers can be patched to control effects parameters
	96	OX	OX	Data Increment
	97	OX	OX	Data Decrement
	98	OX	O	N-RPN
	99	OX	O	N-RPN
Program Change	True #	O	O 0 - 127 O 0 - 127	
System Exclusive		O	O	
System Common	:Song Pos :Song Sel :Tune	X X X	X X X	
System Real Time	:Clock :Commands	X X	O X	as Controller
Aux Messages	:Local ON/OFF :All Notes OFF :Active Sense :Reset	X X X X	X X X X	
Notes	If Channel is set to OFF, 300 will not recognize any messages			

Mode 1: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO
Mode 4: OMNI OFF, MONO

O : Yes
X : No

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