A6 Midi Sysex Specification

5/23/02
Alesis

SYSTEM EXCLUSIVE FORMAT

The A6 MIDI System Exclusive message format is as follows:

F0	System exclusive status
00 00 0E	Alesis manufacturer id#
1D	A6 family id#
cc	Opcode
dd	Data
:	:
:	:
F7	End-Of-Exclusive

OPCODES:

00 - MIDI Program Dump F0 00 00 0E 1D 00 <bank#> <program#> <data> F7

<bank#> = 0..15 selects any bank in the A6, where:
0 = USER
1 = PRESET1
2 = PRESET2
3-15 = CARD BANKS (MAX number depends on size of card)

<program#>= 0..127 selects individual programs from within bank

<data> is in a packed format in order to optimize data transfer. Eight MIDI bytes are used to transmit each block of 7 A6 data bytes. If the 7 data bytes are looked at as one 56-bit word, the format for transmission is eight 7-bit words beginning with the most significant bit of the first byte, as follows:

SEVEN A6 BYTES:
0: A7 A6 A5 A4 A3 A2 A1 A0
1: B7 B6 B5 B4 B3 B2 B1 B0
2: C7 C6 C5 C4 C3 C2 C1 C0
3: D7 D6 D5 D4 D3 D2 D1 D0
4: E7 E6 E5 E4 E3 E2 E1 E0
5: F7 F6 F5 F4 F3 F2 F1 F0
6: G7 G6 G5 G4 G3 G2 G1 G0

TRANSMITTED AS:

0: 0 A6 A5 A4 A3 A2 A1 A0
1: 0 B5 B4 B3 B2 B1 B0 A7
2: 0 C4 C3 C2 C1 C0 B7 B6
3: 0 D3 D2 D1 D0 C7 C6 C5
4: 0 E2 E1 E0 D7 D6 D5 D4
5: 0 F1 F0 E7 E6 E5 E4 E3
6: 0 G0 F7 F6 F5 F4 F3 F2
7: 0 G7 G6 G5 G4 G3 G2 G1

There are 2341 data bytes sent for a single program dump, which corresponds to 2048 bytes of program data. With the header, the total number of bytes transmitted with a program dump is 2350.

For librarian purposes, it is often useful to rename a patch 'offline.' The bytes involved, in a 2048-byte unpacked patch, useful for this purpose are as follows:

Byte 0-1: Patch Version Number: Currently A6h 0Ah
Byte 2-17: 16 Character Name stored in ASCII format

01 - MIDI Program Dump Request F0 00 00 0E 1D 01 <bank#> <program#> F7

<bank#> = 0..15 selects any bank in the A6, where:
0 = USER
1 = PRESET1
2 = PRESET2
3-15 = CARD BANKS (MAX number depends on size of card)
<program#> = 0..127 selects individual user programs

When received, the A6 will respond to this message with a MIDI program dump (00) of the program number selected.

02 - MIDI Program Edit Buffer Dump F0 00 00 0E 1D 02 <editbuf#> <data> F7

<editbuf#> = 0-15; Mix program edit buffers for mix channels 1-16
<editbuf#> = 16; Program edit buffer

<data> is in the same format as described in 00. With this header, the total dump will be 2349 bytes.

03 - MIDI Program Edit Buffer Dump Request F0 00 00 0E 1D 03 <edit#> F7

<editbuf#> = 0-15; Mix program edit buffers for mix channels 1-16
<editbuf#> = 16; Program edit buffer

When received, the A6 will respond to this message with a MIDI edit program dump (02) of the edit program selected.

04 - MIDI Mix Dump F0 00 00 0E 1D 04 <bank#> <mix#> <data> F7

<bank#> = 0..15 selects any bank in the A6, where:
0 = USER
1 = PRESET1
2-15 = CARD BANKS (MAX number depends on size of card)
<mix#> = 0..127 selects individual mixes in bank

<data> is in the same format as described in 00, but with a different number of bytes due to the difference in the mix parameters. The total number of data bytes sent for a single mix dump is 1171, which corresponds to 1024 bytes of mix data. With the header, the total number of bytes transmitted with a program dump is 1180.

For librarian purposes, it is often useful to rename a patch 'offline.' The bytes involved, in a 1024-byte unpacked patch, useful for this purpose are as follows:

Byte 0-1: Patch Version Number: Currently B6h 0Ah
Byte 2-17: 16 Character Name stored in ASCII format

05 - MIDI Mix Dump Request F0 00 00 0E 1D 05 <bank#> <mix#> F7

<bank#> = 0..15 selects any bank in the A6, where:
0 = USER
1 = PRESET1
2-15 = CARD BANKS (MAX number depends on size of card)
<mix#> = 0..127 selects individual mixes in bank

When received, the A6 will respond to this message with a MIDI Mix dump (04) of the mix selected.

06 - MIDI Mix Edit Buffer Dump F0 00 00 0E 1D 06 00 <data> F7

<data> is in the same format as described in 04. With this header, the total dump will be 1179 bytes. In the current OS, there is only one mix edit buffer, hence the command is shown with 00 as the edit buffer.

07 - MIDI Mix Edit Buffer Dump Request F0 00 00 0E 1D 07 00 F7

When received, the A6 will respond to this message with a MIDI mix edit buffer dump (06) of the edited mix. In the current OS, there is only one mix edit buffer, hence the command is shown with 00 as the edit buffer.

08 - MIDI Global Data Dump F0 00 00 0E 1D 08 <data> F7

<data> is in the same format as described in 00, but with a different number of bytes due to the difference in the global parameter size. The total number of data bytes sent for a global data dump is 15904, which corresponds to 18176 bytes of global data. With the header, the total number of bytes transmitted with a program dump is 18183.

09 - MIDI Global Data Dump Request F0 00 00 0E 1D 09 00 F7

When received, the A6 will respond to this message with a MIDI global data dump (08).

0A - MIDI Program Bank Request F0 00 00 0E 1D 0A <bank#> F7

<bank#> = 0..15 selects any bank in the A6, where:
0 = USER
1 = PRESET1
2 = PRESET2
3-15 = CARD BANKS (MAX number depends on size of card)

When received, the A6 will respond to this message with 128 MIDI Program Dumps (00), sent sequentially from the requested bank.

0B - MIDI Mix Bank Request F0 00 00 0E 1D 0B <bank#> F7

<bank#> = 0..15 selects any bank in the A6, where:
0 = USER
1 = PRESET1
2-15 = CARD BANKS (MAX number depends on size of card)

When received, the A6 will respond to this message with 128 MIDI Mix Dumps (04), sent sequentially from the requested bank.

0C - MIDI Dump All Request F0 00 00 0E 1D 0C 00 F7

This command is will dump out MIDI all data stored in the non-volitile RAM within the A6. When received, the A6 will respond to this message with a 128 MIDI Program dumps (00) from the User bank, 128 MIDI Mix dumps (04) from the User bank, and a Global data dump (08), for a total of 470023 MIDI bytes.

0D - MIDI Mode Select F0 00 00 0E 1D 0D <mode> F7

<mode> = 0 = Program mode; 1 = Mix mode

When received, the A6 will change to the mode that was selected. The settings will be retained from the last time that mode was exited.

0E - MIDI Editing

F0 00 00 0E 1D 0E <parent page><child ID><data2><data1><data0>F7

<parent page> = The parent page of the parameter to be edited
<child ID> = child ID of parameter to be edited
<data2> = Mix channel number and most significant bits (bits 14-16) of parameter's data
<data1> = Bits 7-13 of parameter's data
<data0> = Least significant bits (bits 0-6) of parameter's data

All parameters to be edited must be sent in this format (12 MIDI bytes), regardless of the number of bits required to transmit the value of the parameter. When the A6 receives this message, it will change the specified parameter in the specified mix channel to the new data value. The mix channel number is specified in <data2> with the format 0xxx xyyy, where xxxx is the mix channel number (0-15) and yyy are the uppermost bits (bits 14-16) of the parameter data. In program mode, the mix channel number is ignored and the edit will be applied to the program edit buffer and A6's screen will show the result of the edit. In mix mode, the result of the edit will be shown only if the edit occurred in the currently selected mix channel on the A6. If the edit happened to a mix channel not currently selected on the A6, the edit will still occur, but it won't be displayed.

The parameter data is a 17-bit number 2's complement signed number.

If the parent page and child ID selected does not exist in the current configuration, the command will be ignored. The function and page numbers for each parameter are shown in the next section.

Example:

Turn on Osc 2 Mod 3:

F0 00 00 0E 1D 0E 10 1C 00 00 01 F7

Set Filter 2 Offset to –0.02:

F0 00 00 0E 1D 0E 13 08 07 7F 70 F7

A chart of all parameters is at the end of this document.

DEVICE INQUIRY

The A6 responds to the Universal Device Inquiry message < F0 7E 7F 06 01 F7 >
Upon receiving this message the A6 will respond with the following:

F0 7E 7F 06 02	Universal Device Reply
00 00 0E	Alesis Manufacturer ID
1D 00	A6 Family ID, LSB first
00 00	A6 Family Member, LSB first
ww xx yy zz	Software revision, ASCII (ex. 30 31 30 30 = '0100' = 1.00)
F7	End-Of-Exclusive

PROGRAM DATA FORMAT

The following specific parameter information shows the locations in which each Program parameter resides after unpacking the data from its 7 bit MIDI format into the 8 bit format as described in Opcode 00, Program Data Dump.

A6 Program Description 09/13/2001

Byte Offset	Description	Range	
0-1	Key describing program structure. MSB is always 0xA6, LSB is version number of program. 10 = Version 1.0 MSB=0xA6, LSB=0x0A		ushort
2-17	Program Name	ASCII	char
18-105	Actual ASIC Control Values for Initial Condition	Do not Modify	ushort
106-107	Reserved	Do not Modify	char
108-111	Actual ASIC Switch Values for Initial Condition	Do not Modify	uint
112-115	Actual ASIC Switch Values for Initial Condition	Do not Modify	uint
Mod Route 1:			
116-117	Mod 1 Percentage	-32768 to +32767	short
118-119	Mod 1 Offset Amount	-32768 to +32767	short
120-121	Mod 1 Control Percentage	-32768 to +32767	short
122	Mod 1 Source	0-255	byte
123	Mod 1 Destination	0-255	byte
124	Mod 1 Control Source	0-255	byte
125:0	Mod 1 Enable/Disable	0-1	byte
125:1	Mod 1 Polarity	0-1	
125:2-7	Reserved	n/a	
126-131	Reserved	n/a	byte
132-147	Mod Route 2:	See Mod Route 1	
148-163	Mod Route 3:	See Mod Route 1	
164-179	Mod Route 4:	See Mod Route 1	
180-195	Mod Route 5:	See Mod Route 1	
196-211	Mod Route 6:	See Mod Route 1	
212-227	Mod Route 7:	See Mod Route 1	
228-243	Mod Route 8:	See Mod Route 1	
244-259	Mod Route 9:	See Mod Route 1	
260-275	Mod Route 10:	See Mod Route 1	
276-291	Mod Route 11:	See Mod Route 1	
292-307	Mod Route 12:	See Mod Route 1	
308-323	Mod Route 13:	See Mod Route 1	
324-339	Mod Route 14:	See Mod Route 1	
340-355	Mod Route 15:	See Mod Route 1	
356-371	Mod Route 16:	See Mod Route 1	
372-387	Mod Route 17:	See Mod Route 1	
388-403	Mod Route 18:	See Mod Route 1	
404-419	Mod Route 19:	See Mod Route 1	
420-435	Mod Route 20:	See Mod Route 1	
436-451	Mod Route 21:	See Mod Route 1	
452-467	Mod Route 22:	See Mod Route 1	
468-483	Mod Route 23:	See Mod Route 1	
484-499	Mod Route 24:	See Mod Route 1	
500-515	Mod Route 25:	See Mod Route 1	
516-531	Mod Route 26:	See Mod Route 1	
532-547	Mod Route 27:	See Mod Route 1	
548-563	Mod Route 28:	See Mod Route 1	

564-579	Mod Route 29:	See Mod Route 1	
580-595	Mod Route 30:	See Mod Route 1	
596-611	Mod Route 31:	See Mod Route 1	
612-627	Mod Route 32:	See Mod Route 1	
628-643	Mod Route 33:	See Mod Route 1	
644-659	Mod Route 34:	See Mod Route 1	
660-675	Mod Route 35:	See Mod Route 1	
676-691	Mod Route 36:		
692-947	Reserved	n/a	
948-949	Filter 1 Level	-32768 to +32767	short
950-951	Panning for Main Outs	-32768 to +32767	ushort
952-953	Panning for Aux 1 and 2 Outs	-32768 to +32767	
954-955	Reserved	n/a	
956-957	Panning for Digital FX Send	-32768 to +32767	
958-959	Oscillator 1 Semitone	-32768 to +32767	short
960-961	Oscillator 1 Cents	-32768 to +32767	short
962-963	Oscillator 1 Fine	-32768 to +32767	short
964-965	Oscillator 2 Semitone	-32768 to +32767	short
966-967	Oscillator 2 Cents	-32768 to +32767	short
968-969	Oscillator 2 Fine	-32768 to +32767	short
970-971	Reserved	n/a	char
Tracking Gen:			
972-1031	Tracking Generator Slope Values (15 4-byte values)	0-15	uint
1032-1035	Reserved	n/a	
1036-1067	Tracking Generator Y Values (16 2-byte values)	-32768 to +32767	short
1068-1099	Tracking Generator X Values (16 2-byte values)	-32768 to +32767	short
1100-1101	Tracking Generator Percentage	-32768 to +32767	short
1102-1103	Tracking Generator Offset	-32768 to +32767	short
1104	Tracking Generator Source	0-255	byte
1105:0	Tracking Generator Ramp/Step	0-255	byte
1105:1	Tracking Generator Enable	0-255	byte
1105:2-7	Reserved	n/a	
1106	Tracking Generator Size		
1107-1115	Reserved	n/a	byte
LFO 1:			
1116-1119	LFO 1 Multiplier 1	Do not Modify	uint
1120-1123	LFO 1 Multiplier 2	Do not Modify	uint
1124-1127	LFO 1 Sine Multiplier	Do not Modify	uint
1128-1129	LFO 1 Start Phase		ushort
1130-1131	LFO 1 Amplitude		ushort
1132-1133	LFO 1 Period		ushort
1134-1135	LFO 1 Delay		ushort
1136-1137	LFO 1 Offset	-32768 to +32767	short
1138-1139	LFO 1 Trigger Level	-32768 to +32767	short
1140-1141	LFO 1 Modulation Percentage	-32768 to +32767	short
1142-1143	LFO 1 Modulation Offset	-32768 to +32767	short
1144-1145	LFO 1 Ticks per Period		ushort
1146-1147	LFO 1 Duty Cycle		ushort
1148:0-2	LFO 1 Mode		byte
1148:3-4	LFO 1 Polarity		
1148:5	LFO 1 Freerun		
1148:6	LFO 1 Modulation Enable		
1148:7	LFO 1 Trigger Enable		
1149:0	LFO 1 Voice Launch Trigger Enable		byte
1149:1-2	LFO 1 Sync Source		
1149:3-7	Reserved	n/a	
1150	LFO 1 Trigger Source	0-255	byte
1151	LFO 1 Trigger Polarity	0-255	byte
1152	LFO 1 Modulation Source	0-255	byte

1153	LFO 1 Modulation Destination Index	0-255	byte
1154-1167	Reserved	n/a	byte
1168-1219	LFO 2	See LFO1 for byte breakdown	
1220-1271	LFO 3	See LFO1 for byte breakdown	
1272-1273	Envelope 1 Delay		ushort
1274-1275	Envelope 1 Attack Time		ushort
1276-1277	Envelope 1 Decay1 Time		ushort
1278-1279	Envelope 1 Decay2 Time		ushort
1280-1281	Envelope 1 Decay2 Level		ushort
1282-1283	Envelope 1 Sustain Level		ushort
1284-1285	Envelope 1 Release1 Time		ushort
1286-1287	Envelope 1 Release2 Level		ushort
1288-1289	Envelope 1 Release2 Time		ushort
1290-1291	Envelope 1 Smooth Time		ushort
1292-1293	Envelope 1 Amplitude		ushort
1294-1299	Envelope 1 Modulation Percentage	-32768 to +32767	short
1300-1305	Envelope 1 Modulation Offset	-32768 to +32767	short
1306-1307	Envelope 1 Offset	-32768 to +32767	short
1308-1309	Envelope 1 Trigger Level	-32768 to +32767	short
1310-1311	Envelope 1 Retrigger Level	-32768 to +32767	short
1312-1313	Envelope 1 Key Tracking Amount	-32768 to +32767	short
1314-1315	Envelope 1 Level Tracking Amount	-32768 to +32767	short
1316-1317	Envelope 1 Smooth Start		ushort
1318-1319	Envelope 1 Smooth Rise		ushort
1320-1321	Envelope 1 Velocity Modulation	-32768 to +32767	short
1322-1323	Envelope 1 Release Velocity Modulation	-32768 to +32767	short
1324:0	Envelope 1 Mod 1 Enable		
1324:1	Envelope 1 Mod 2 Enable		
1324:2	Envelope 1 Mod 3 Enable		ushort
1324:3	Envelope 1 Polarity		
1324:4-5	Envelope 1 Loop Type		
1324:6	Envelope 1 Sustain Enable		
1324:7	Envelope 1 Trigger Enable		
1325:0-2	Envelope 1 Trigger Polarity		
1325:3	Envelope 1 Retrigger Enable		
1325:4-6	Envelope 1 Retrigger Polarity		
1325:7	Envelope 1 Smooth Polarity		
1326	Envelope 1 Loop Count	0-254,255=infinite	byte
1327	Envelope 1 Attack Shape	0-9	byte
1328	Envelope 1 Decay1 Shape	0-9	byte
1329	Envelope 1 Decay2 Shape	0-9	byte
1330	Envelope 1 Release1 Shape	0-9	byte
1331	Envelepe 1 Release2 Shape	0-9	byte
1332	Envelope 1 Smooth Shape	0-9	byte
1333:0-3	Envelope 1 Mode	0-15	byte
1333:4-5	Envelope 1 Reset Mode	0-3	
1333:6-7	Reserved	n/a	
1334	Envelope 1 Trigger Source		byte
1335	Envelope 1 Retrigger Source		byte
1336	Envelope 1 Retrigger Stage		byte
1337:0-3	Envelope 1 Loop End Stage		byte
1337:4-7	Envelope 1 Loop Start Stage		
1338	Envelope 1 Mod 1 Source Index		
1339	Envelope 1 Mod 2 Source Index		byte
1340	Envelope 1 Mod 3 Source Index		
1341	Envelope 1 Mod 1 Destination Index		byte
1342	Envelope 1 Mod 2 Destination Index		
1343	Envelope 1 Mod 3 Destination Index		
1344	Envelope 1 Key Tracking Base Key		byte
1345-1359	Reserved	n/a	byte

Envelope 2:

1360-1447	Envelope 2	See Envelope 1 for byte breakdown	

Envelope 3:

1448-1535	Envelope 3	See Envelope 1 for byte breakdown	

Sample and Hold:

1536-1537	Sample and Hold Clock frequency		ushort
1538-1539	Sample and Hold Modulation Offset	-32768 to +32767	short
1540-1541	Sample and Hold Modulation Percent	-32768 to +32767	short
1542-1543	Sample and Hold Input Offset	-32768 to +32767	short
1544-1545	Sample and Hold Input Percent		ushort
1546-1547	Sample and Hold Trigger Level	-32768 to +32767	short
1548-1549	Sample and Hold Ticks Per Step		ushort
1550	Sample and Hold Trigger Source		byte
1551	Sample and Hold Modulation Source		byte
1552	Sample and Hold Input Source		byte
1553	Sample and Hold Trigger Polarity		byte
1554:0	Sample and Hold Enable		byte
1554:1	Sample and Hold Modulation Enable		
1554:2	Sample and Hold Trigger Enable		
1554:3-7	Reserved	n/a	
1555:0	Sample and Hold Trigger on Voice Launch Enable		byte
1555:1-2	Sample and Hold Sync Source		
1555:3	Sample and Hold Sample on Trigger Enable		
1555:4-7	Reserved	n/a	
1556-1567	Reserved	n/a	byte

CLOCK:

1568-1569	Master Clock Period		ushort
1570-1571	Master Clock Modulation Percent	-32768 to +32767	short
1572-1573	Master Clock Modulation Offset	-32768 to +32767	short
1574	Master Clock Modulation Source		byte
1575	Master Clock MIDI Sync Channel		byte
1576	Master Clock Ticks per Beat		byte
1577:0	Master Clock Modulation Enable		byte
1577:1-2	Master Clock Modulation Voice		
1577:3-4	Master Clock Source		
1577:5	Master Clock Reset on Key Down Enable		
1577:6-7	Reserved	n/a	
1578-1587	Reserved	n/a	byte

Sequencer:

1588-1589	Sequencer Period		ushort
1590-1591	Sequencer Tempo Modulation Offset	-32768 to +32767	short
1592-1593	Sequencer Trigger Level	-32768 to +32767	short
1594-1595	Sequencer Tempo Modulation Percent	-32768 to +32767	short
1596-1597	Sequencer Ticks per Step	-32768 to +32767	short
1598-1629	Sequencer Row A Values (16 16-bit signed)	-32768 to +32767	short
1630-1661	Sequencer Row B Values (16 16-bit signed)	-32768 to +32767	short
1662-1693	Sequencer Row C Values (16 16-bit signed)	-32768 to +32767	short
1694-1695	Sequencer Hi Bits for Row A	-32768 to +32767	short
1696-1697	Sequencer Hi Bits for Row B	-32768 to +32767	short
1698-1699	Sequencer Hi Bits for Row C	-32768 to +32767	short
1700-1707	Sequencer Note Type (16 4-bit Values)		byte
1708	Sequencer Progressor Value		char
1709	Sequencer Progressor Max Value		char
1710	Sequencer Progressor Min Value		char
1711	Sequencer Length		byte
1712	Sequencer Loop Type		char
1713	Sequencer Loop Count		byte

1714	Sequencer Trigger Source		byte
1715	Sequencer Tempo Modulation Source		byte
1716	Sequencer Trigger Polarity		byte
1717	Sequencer Trigger Voice		byte
1718	Sequencer Trigger Mode		byte
1719	Sequencer Tempo Modulation Voice		byte
1720:0-1	Sequencer Sync Source		byte
1720:2	Sequencer Mono-Legato Enable		
1720:3	Sequencer Sequencer Run Enable		
1720:4	Sequencer Key Event Enable		
1720:5	Sequencer Trigger Enable		
1720:6	Sequencer Retrigger Enable		
1720:7	Sequencer Modulation Enable		
1721-1735	Reserved	n/a	byte

Arpeggiator:

1736-1737	Arpeggiator Period		ushort
1738-1739	Arpeggiator Tempo Modulation Offset	-32768 to +32767	short
1740-1741	Arpeggiator Trigger Level	-32768 to +32767	short
1742-1743	Arpeggiator Tempo Modulation Percent	-32768 to +32767	short
1744-1745	Arpeggiator Ticks per Step	-32768 to +32767	short
1746-1747	Arpeggiator Gate Time		ushort
1748:0-1	Arpeggiator Sync Source		ushort
1748:2	Reserved	n/a	
1748:3	Arpeggiator Latch Enable		
1748:4	Arpeggiator Retrigger Enable		
1748:5	Arpeggiator Chord Mode Enable		
1748:6	Arpeggiator Run Enable		
1748:7	Reserved	n/a	
1749:0	Arpeggiator Tempo Modulation Source Enable		
1749:1	Arpeggiator Trigger Enable		
1749:2-7	Reserved	n/a	
1750	Arpeggiator Tempo Modulation Voice		byte
1751	Arpeggiator Progressor		char
1752	Arpeggiator Progressor Max Value		char
1753	Arpeggiator Progressor Min Value		char
1754	Arpeggiator Loop Type		char
1755	Arpeggiator Octave Range		char
1756	Arpeggiator Trigger Source		byte
1757	Arpeggiator Tempo Modulation Source		byte
1758	Arpeggiator Trigger Polarity		byte
1759	Arpeggiator Trigger Voice		byte
1760	Arpeggiator Trigger Mode		byte
1761-1775	Reserved	n/a	byte

Portamento:

1776-1777	Portamento Time		ushort
1778-1779	Portamento Modulation Percent	-32768 to +32767	short
1780-1781	Portamento Modulation Offset	-32768 to +32767	short
1782	Portamento Modulation Source		byte
1783	Portamento Type		byte
1784	Portamento Start Mode		byte
1785	Portamento Start Offset		char
1786:0	Portamento Enable		byte
1786:1	Portamento Modulation of Oscillator 1 Enable		
1786:2	Portamento Modulation of Oscillator 2 Enable		
1786:3	Portamento Modulation Enable		
1786:4-5	Portamento Mode		
1786:6	Reserved	n/a	
1786:7	Portamento Speed Fixed/Octave Select		

1787	Portamento Filter Enable		byte
1788-1795	Reserved	n/a	byte
Key Tracking:			
1796-1797	Key Tracking Filter1 Amount	-32768 to +32767	short
1798-1799	Key Tracking Filter2 Amount	-32768 to +32767	short
1800	Key Tracking Filter1 Offset		char
1801	Key Tracking Filter2 Offset		char
1802-1807	Reserved	n/a	byte
Pitch Wheel:			
1808-1809	Pitch Wheel Top Range (Cents)		ushort
1810-1811	Pitch Wheel Bottom Range (Cents)		ushort
1812:0-3	Pitch Wheel Bottom Table		
1812:4-7	Pitch Wheel Top Table		
1813	Pitch Wheel Oscillator Enable		ushort
1814-1819	Reserved	n/a	byte
Ribbon Controller:			
1820	Ribbon Controller Mode		byte
1821-1831	Reserved	n/a	byte
Mod Wheel:			
1832-1833	Mod Wheel Range		ushort
1834	Mod Wheel Curve		byte
1835-1843	Reserved	n/a	byte
Chord Mode:			
1844-1859	Chord Mode Notes		byte
1860-1875	Chord Mode Velocities		byte
1876:0	Chord Mode Enable		byte
1876:1	Chord Mode MIDI Out Enable		
1876:2-7	Reserved	n/a	
1877-1883	Reserved	n/a	byte
1884-1895	Reserved	n/a	pacV100_SPARE
1896-1897	Analog Distortion Send Level		ushort
1898-1899	Analog Distortion Output Level		ushort
1900-1901	Digital FX Send Level		ushort
1902-1903	Reserved	n/a	ushort
1904-1905	Reserved	n/a	ushort
1906:0-1	Analog Distortion Type		byte
1906:2-3	Reserved	n/a	byte
1906:4-6	Analog Distortion Output Enables		byte
1906:7	Reserved	n/a	byte
1907:0-3	Oscillator Smoothing Type		byte
1907:4-7	Filter Smoothing Type		byte
1908	Digital FX Configuration		byte
1909-1938	Digital FX Parameters (Configuration specific)		byte
1939:0-3	Keyboard Mono Voice		byte
1939:4	Reserved	n/a	
1939:5-6	Keyboard 1-Pitch		byte
1939:7	Keyboard Mode		byte
1940	Voice Assign Mode		byte
1941	Unison X Mode		byte
1942	Unison X Detune Amount		byte
1943	Front Panel ENV1 Amount Knob Destinations		byte
1944:0-3	Voice Mix Out		byte
1944:4-7	Voice Out		byte
1945	Front Panel Oscillator 2 FM Amount Knob Assignment		byte
1946	Pre Filter Mix Noise/Ext. Assignment		byte
1947	Reserved	n/a	byte

1948	Number of Program Banks on Card		byte
1949	Number of Mix Banks on Card		byte
1950-2047	Reserved	n/a	byte

MIX DATA FORMAT

The following specific parameter information shows the locations in which each Mix parameter resides after unpacking the data from its 7 bit MIDI format into the 8 bit format as described in Opcode 00, Program Data Dump.

Offset	Description	Range	Size (bytes)
0	Mix Structure Version Number		2
2	Mix Name		16
Mix Channel 1 Structure:			
18	Transpose		4
22	Main Volume		2
24	Main Pan		2
26	Reserved		2
28	Reserved		2
30	Controllers	bit 0 = PITCHBEND_MODWHL bit 1 = AFTERTOUCH bit 2 = SUSTAIN_PDL bit 3 = CONTROLLERS bit 4 = MIDI IN bit 5 = MIDI OUT bit 6 = KEYBOARD ON/OFF bit 7 = FX_PROG_CHANGE	2
32	Analog Effects Send Level		2
34	Digital Effects Level		2
36	Digital Effects Pan		2
38	Enable		1
39	Program Bank Number		1
40	Program Number		1
41	Low Key Range		1
42	High Key Range		1
43	Output		1
44	Semitune	-12 to +12	1
45	Cents	-100 to +100	1
46	MIDI Channel		1
47	Mix Mono Vox		1
48	Ticks Per Step		2
50	Sequencer Start/Stop Status		1
51	Reserved		15
66	Mix Channel 2 Structure	See Channel 1	48
114	Mix Channel 3 Structure	See Channel 1	48
162	Mix Channel 4 Structure	See Channel 1	48
210	Mix Channel 5 Structure	See Channel 1	48
258	Mix Channel 6 Structure	See Channel 1	48
306	Mix Channel 7 Structure	See Channel 1	48
354	Mix Channel 8 Structure	See Channel 1	48
402	Mix Channel 9 Structure	See Channel 1	48
450	Mix Channel 10 Structure	See Channel 1	48
498	Mix Channel 11 Structure	See Channel 1	48
546	Mix Channel 12 Structure	See Channel 1	48
594	Mix Channel 13 Structure	See Channel 1	48
642	Mix Channel 14 Structure	See Channel 1	48
690	Mix Channel 15 Structure	See Channel 1	48
738	Mix Channel 16 Structure	See Channel 1	48

786	Clock Structure	See Program	20
806	Analog Effects Output Level		2
808	Reserved	n/a	1
809	Digital Effects Config		1
810	Digital Effects Parameters	Depends on Config	30
840	Current Mix Channel		1
841	Analog Distortion type		1
842	Clock Mod Channel		1
843	Current Mix Number		1
844	Current Mix Bank		1
845	Vox Assign Mode		1
846	Number of Card Program Banks		1
847	Number of Card Mix Banks		1
848	Semitune		1
849	Cents		1
850	Reserved	n/a	174

GLOBAL DATA FORMAT

The Global parameters are comprised of 15902 bytes of data. Note, unused bits must remain at 0. In addition, the signed parameters are kept in 2's complement format, so no offset adjustment is necessary.

Offset	Description	Range
0-3	Pitch Offset (32-bit 2's complement)	-32767 to +32767
4	Transpose amount (8-bit 2's comp.)	-24 to +24 semitones from middle-C
5	Velocity Curve	0=weight, 1=plastic, 2=max
6	Keyboard Velocity Sensitivity	0-100, 50=default
7	Keyboard Transmit Mode	0=local/MIDI, 1=MIDI, 2=local
8	Keyboard MIDI Channel	1-16
9	Aftertouch Scaling	0-100, 50=default
10	Pedal Mode	0=continuous, 1=reverse continuous, 2=switch, 2=reverse switch
11	Pedal MIDI CC Number	0=off, 1-120=cc number
12	Footswitch Mode	0=switch, 1=reverse switch
13	Footswitch MIDI CC Number	0=off, 1-120=cc number, 121=send start/stop, 122=send start stop toggle
14	Mix Select MIDI Channel Number	0=off, 1-16=MIDI channel number
15	Prog Select MIDI Channel Number (Receive)	0=off, 1-16=MIDI channel number
16	MIDI Bank Select Type	0=normal, 1=CC0, 2=CC32
17	MIDI CC Transmit Enable	0=off, 1=on
18	MIDI CC Receive Enable	0=off, 1=on
19	System Exclusive Data Receive Enable	0=off, 1=on
20-27	CC Controller Map	0-127
28	Knob Pass Through Enable	0=none, 1=mod list, 2=all
29	Knob Data Thinning Amount	0-5, 0=thin, 5=dense
30	Reserved	
31	Reserved	
32	Front Panel NRPN Receive Enable	0=off, 1=on
33	Front Panel NRPN Mode	0=local/MIDI, 1=MIDI, 2=local
34-49	Voice Enable (1 byte for each of 16 voices)	0=disabled, 1=enabled
50	Reserved	
51	Voice Assign Mode	0=lowest, 1=rotary
52	Ribbon MIDI CC #	0=off, 1=cc20&cc52, 12=cc31&cc63
53	Left Ribbon MIDI CC #	0=off, 1-120=cc number
54	Right Ribbon MIDI CC #	0=off, 1-120=cc number
55	Sequencer Keyboard Control Enable	0=off, 1=on
56	Sequencer Graph Page Zoom	0=off, 1-47
57	Mix Chan Keyboard Range Keyboard Ctrl Ena	0=off, 1=on
58	Voice Stealing	0=off, 1=on
59	MIDI Send Program Bank Change Enable	0=off, 1=on
60	MIDI Send Clock Enable	0=off, 1=on
61	Clock Sync Source	0=local, 1=MIDI
62	System Exclusive Receive-To Parameter	0=user bank, 1=this location, 2=original, 3-15=card banks
63	System Exclusive Dump All Enable	0=one, 1=all
64-127	Ribbon Calibration Data	
128-135	Control Wheel Calibration Data	
136-14423	Tuning Calibration Data	
14424-14491	Chord Data (32-bit 2's comp.), up to 16 notes + 1 space for termination	0-127 semitones from root (positive direction), -1 signifies end of list.
14492-15835	Tuning Calibration Data	
15836-15837	Background Tuning Enable	0=off, 1=on

15838-15839	Temperature Tuning Enable	0=off, 1=on
15840-15841	Delay between Sending of Sysex Data Bytes.	0-65535, default=7500
15842-15843	Last selected Program Number	0-127
15844-15845	Last selected Program Bank Number	0=user bank, 1=preset 1, 2=preset 2, higher numbers are card
15846-15847	Last selected Mix Number	0-127
15848-15849	Last selected Mix Bank Number	0=user bank, 1=preset, higher numbers are card
15850-15901	Reserved	

SYSEX AND NRPN PARAMETER CHART

These values are to be used with Sysex opcode 0x0E Midi Editing or MIDI NRPNs.

07/12/2001

Index	Parameter Name	Parent (MSB)	Child (LSB)	NRPN	Sysex Only Fields Default	Range
0	CLOCK TEMPO POT	5	0	ON	250	60 to 65335
1	CLOCK SYNCMOD SWITCH	5	1	ON	0	any
2	CLOCK CLOCK_TAB SWITCH	5	2	OFF	0	any
3	CLOCK MOD_VOICE POT	5	3	ON	0	0 to 2
4	CLOCK SYNC_SRC POT	5	4	OFF	0	0 to 1
5	CLOCK MIX_CHAN POT	5	5	OFF	0	0 to 15
6	CLOCK KEYDNRESET POT	5	6	OFF	0	0 to 1
7	CLOCK CLOCK_OUT POT	5	7	OFF	0	0 to 1
8	CLOCK MOD_BTN SWITCH	5	8	ON	0	any
9	CLOCK MODSOURCE POT	5	9	ON	1	1 to 79
10	CLOCK MODOFFSET POT	5	10	ON	0	-65534 to 65534
11	CLOCK MODSCALE POT	5	11	ON	0	0 to 65535
12	CLOCK MODENABLE POT	5	12	ON	0	0 to 1
13	SEQ VIEW_SW SWITCH	6	0	OFF	0	any
14	SEQ GRAPH_TAB SWITCH	6	1	OFF	0	any
15	SEQ STARTSTOP SWITCH	6	2	ON	0	any
16	SEQ CONFIG_TAB SWITCH	6	3	OFF	0	any
17	SEQ PERIOD POT	6	4	ON	250	1 to 65535
18	SEQ KEYMODE POT	6	5	ON	0	0 to 1
19	SEQ LENGTH POT	6	6	ON	3	0 to 15
20	SEQ LOOPTYPE POT	6	7	ON	0	-1 to 1
21	SEQ LOOPCNT POT	6	8	ON	0	1 to 255
22	SEQ MONOLEGATO POT	6	9	ON	0	0 to 1
23	SEQ ZOOM POT	6	10	ON	0	0 to 48
24	SEQ KBDCONTROL POT	6	11	ON	0	0 to 1
25	SEQ SYNC_TAB SWITCH	6	12	OFF	0	0 to 1
26	SEQ SYNC_SRC POT	6	13	ON	0	0 to 2
27	SEQ TIX_STEP POT	6	14	ON	24	2 to 11904
28	SEQ UPPER_LOWER SWITCH	6	15	OFF	0	any
29	SEQ NOTEPOT_1 POT	6	16	ON	0	-65534 to 65534
30	SEQ NOTEPOT_2 POT	6	17	ON	0	-65534 to 65534
31	SEQ NOTEPOT_3 POT	6	18	ON	0	-65534 to 65534
32	SEQ NOTEPOT_4 POT	6	19	ON	0	-65534 to 65534
33	SEQ NOTEPOT_5 POT	6	20	ON	0	-65534 to 65534
34	SEQ NOTEPOT_6 POT	6	21	ON	0	-65534 to 65534
35	SEQ NOTEPOT_7 POT	6	22	ON	0	-65534 to 65534
36	SEQ NOTEPOT_8 POT	6	23	ON	0	-65534 to 65534
37	SEQ VELPOT_1 POT	6	24	ON	0	-65534 to 65534
38	SEQ VELPOT_2 POT	6	25	ON	0	-65534 to 65534
39	SEQ VELPOT_3 POT	6	26	ON	0	-65534 to 65534
40	SEQ VELPOT_4 POT	6	27	ON	0	-65534 to 65534
41	SEQ VELPOT_5 POT	6	28	ON	0	-65534 to 65534
42	SEQ VELPOT_6 POT	6	29	ON	0	-65534 to 65534

43	SEQ VELPOT_7 POT	6	30	ON	0	-65534 to 65534
44	SEQ VELPOT_8 POT	6	31	ON	0	-65534 to 65534
45	SEQ GATEPOT_1 POT	6	32	ON	1	1 to 49995
46	SEQ GATEPOT_2 POT	6	33	ON	1	1 to 49995
47	SEQ GATEPOT_3 POT	6	34	ON	1	1 to 49995
48	SEQ GATEPOT_4 POT	6	35	ON	1	1 to 49995
49	SEQ GATEPOT_5 POT	6	36	ON	1	1 to 49995
50	SEQ GATEPOT_6 POT	6	37	ON	1	1 to 49995
51	SEQ GATEPOT_7 POT	6	38	ON	1	1 to 49995
52	SEQ GATEPOT_8 POT	6	39	ON	1	1 to 49995
53	SEQ NOTE_TYPEPOT_1 POT	6	40	ON	0	0 to 1
54	SEQ NOTE_TYPEPOT_2 POT	6	41	ON	0	0 to 1
55	SEQ NOTE_TYPEPOT_3 POT	6	42	ON	0	0 to 1
56	SEQ NOTE_TYPEPOT_4 POT	6	43	ON	0	0 to 1
57	SEQ NOTE_TYPEPOT_5 POT	6	44	ON	0	0 to 1
58	SEQ NOTE_TYPEPOT_6 POT	6	45	ON	0	0 to 1
59	SEQ NOTE_TYPEPOT_7 POT	6	46	ON	0	0 to 1
60	SEQ NOTE_TYPEPOT_8 POT	6	47	ON	0	0 to 1
61	SEQ TRIG_TAB SWITCH	6	48	OFF	0	any
62	SEQ TRIGENABLE POT	6	49	ON	0	0 to 1
63	SEQ TRIGSOURCE POT	6	50	ON	0	1 to 79
64	SEQ TRIGLEVEL POT	6	51	ON	0	-65534 to 65534
65	SEQ TRIGPOLARITY POT	6	52	ON	0	0 to 5
66	SEQ RETRIG POT	6	53	ON	0	0 to 1
67	SEQ TRIGVOICE POT	6	54	ON	0	0 to 2
68	SEQ TRIGMODE POT	6	55	ON	0	0 to 3
69	SEQ SYNCMOD SWITCH	6	56	ON	0	any
70	SEQ MODSOURCE POT	6	57	ON	1	1 to 79
71	SEQ MODOFFSET POT	6	58	ON	0	-65534 to 65534
72	SEQ MODSCALE POT	6	59	ON	0	-32767 to 32767
73	SEQ MODENABLE POT	6	60	ON	0	0 to 1
74	SEQ MODVOICE POT	6	61	ON	0	0 to 2
75	SEQ PROGRESS_TAB SWITCH	6	62	OFF	0	any
76	SEQ PROG POT	6	63	ON	0	-127 to 127
77	SEQ PROG_MIN POT	6	64	ON	0	-127 to 127
78	SEQ PROG_MAX POT	6	65	ON	0	-127 to 127
79	ARP VIEW_SW SWITCH	7	0	OFF	0	any
80	ARP STARTSTOP SWITCH	7	1	ON	0	any
81	ARP CONFIG_TAB SWITCH	7	2	OFF	0	any
82	ARP CHORD POT	7	3	ON	0	0 to 1
83	ARP RATE POT	7	4	ON	250	0 to 65535
84	ARP LATCH SWITCH	7	5	ON	0	any
85	ARP LENGTH POT	7	6	ON	30	0 to 65535
86	ARP TYPE POT	7	7	ON	0	0 to 3
87	ARP OCTAVE POT	7	8	ON	0	-10 to 10
88	ARP CENTER POT	7	9	ON	0	0 to 1
89	ARP SYNC_TAB SWITCH	7	10	OFF	0	any
90	ARP SYNC_SRC POT	7	11	ON	0	0 to 2
91	ARP TIX_STEP POT	7	12	ON	24	2 to 11904
92	ARP TRIG_TAB SWITCH	7	13	OFF	0	any
93	ARP TRIGENABLE POT	7	14	ON	0	0 to 1

94	ARP TRIGSOURCE POT	7	15	ON	0	1 to 79
95	ARP TRIGLEVEL POT	7	16	ON	0	-65534 to 65534
96	ARP TRIGPOLARITY POT	7	17	ON	0	0 to 5
97	ARP RETRIG POT	7	18	ON	0	0 to 1
98	ARP TRIGVOICE POT	7	19	ON	0	0 to 2
99	ARP TRIGMODE POT	7	20	ON	0	0 to 1
100	ARP SYNCMOD SWITCH	7	21	ON	0	any
101	ARP MODSOURCE POT	7	22	ON	1	1 to 79
102	ARP MODOFFSET POT	7	23	ON	0	-65534 to 65534
103	ARP MODSCALE POT	7	24	ON	0	-32767 to 32767
104	ARP MODENABLE POT	7	25	ON	0	0 to 1
105	ARP MODVOICE POT	7	26	ON	0	0 to 2
106	ARP PROGRESS_TAB SWITCH	7	27	OFF	0	any
107	ARP PROG POT	7	28	ON	0	-127 to 127
108	ARP PROG_MIN POT	7	29	ON	0	-127 to 127
109	ARP PROG_MAX POT	7	30	ON	0	-127 to 127
110	KBD_MODE DETUNE POT	29	0	ON	0	0 to 100
111	KBD_MODE UNISONX SWITCH	29	1	ON	0	0 to 1
112	KBD_MODE POLYMONO SWITCH	29	2	ON	0	0 to 1
113	KBD_MODE UNISONX_POT POT	29	3	ON	0	0 to 16
114	KBD_MODE POLYMONO_POT POT	29	4	ON	0	0 to 1
115	KBD_MODE MONOVOICE POT	29	5	ON	0	0 to 15
116	KBD_MODE VOX_ASSIGNMODE POT	29	6	ON	0	0 to 1
117	KBD_MODE MIX_MONOVOX POT	29	7	ON	0	0 to 15
118	PW_MODE PITCHWHEEL_BUTTON SWITCH	30	0	OFF	0	any
119	PW_MODE TOPRANGE POT	30	1	ON	2	0 to 48
120	PW_MODE TOPCURVE POT	30	2	ON	0	0 to 8
121	PW_MODE BOTRANGE POT	30	3	ON	2	0 to 48
122	PW_MODE BOTCURVE POT	30	4	ON	0	0 to 8
123	PW_MODE OSC1_EN POT	30	5	ON	0	0 to 1
124	PW_MODE OSC2_EN POT	30	6	ON	0	0 to 1
125	MW_MODE MODASSIGN_BUTTON SWITCH	32	0	OFF	0	any
126	MW_MODE MODWHL_TAB SWITCH	32	1	OFF	0	any
127	MW_MODE MODWHL_CURVE POT	32	2	ON	0	0 to 8
128	MW_MODE MODWHL_RANGE POT	32	3	ON	0	0 to 65535
129	CROUTES CTRL_ROUTES_TAB SWITCH	36	0	OFF	0	any
130	CROUTES CTRL_SRC POT	36	1	ON	1	1 to 79
131	CROUTES CTRL_LVL POT	36	2	ON	0	-16384 to 16384
132	CROUTES CTRL_ENA POT	36	3	ON	0	0 to 1
133	CROUTES CTRL_DEST POT	36	4	ON	0	1 to 78
134	CROUTES GRID_TAB SWITCH	36	5	OFF	0	any
135	CROUTES GRID_SRC POT	36	6	ON	1	1 to 79
136	CROUTES GRID_ENA POT	36	7	ON	0	0 to 1
137	CROUTES GRID_LVL POT	36	8	ON	0	-16384 to 16384
138	CROUTES GRID_SCROLL POT	36	9	ON	0	1 to 78
139	(not used)					
140	TRANSP TRANSP_BTN SWITCH	35	0	OFF	0	any
141	TRANSP TRANSPOSE POT	35	1	ON	0	-24 to 24
142	CHORD CHORD_BTN SWITCH	34	0	OFF	0	any
143	PORTA CURVE POT	31	0	ON	0	0 to 8
144	PORTA TIME POT	31	1	ON	50	0 to 15000

145	PORTA PORTA_TAB SWITCH	31	2	OFF	0	any
146	PORTA MODSOURCE POT	31	3	ON	1	1 to 79
147	PORTA MODOFFSET POT	31	4	ON	0	-65534 to 65534
148	PORTA MODSCALE POT	31	5	ON	0	-32767 to 32767
149	PORTA MODENA POT	31	6	ON	0	0 to 1
150	PORTA ONOFF_POT POT	31	7	ON	0	0 to 1
151	PORTA ONOFF_BTN SWITCH	31	8	ON	0	any
152	PORTA MOD_BTN SWITCH	31	9	ON	0	any
153	PORTA OSCENABLE POT	31	10	ON	0	0 to 3
154	PORTA FILTENABLE POT	31	11	ON	0	0 to 3
155	PORTA MODE POT	31	12	ON	0	0 to 2
156	PORTA SPEED POT	31	13	ON	0	0 to 1
157	PORTA MODE_TAB SWITCH	31	14	OFF	0	any
158	PORTA STARTMODE POT	31	15	ON	0	0 to 3
159	PORTA STARTOFS POT	31	16	ON	0	-127 to 127
160	LFO_1 VIEW SWITCH	8	0	OFF	0	any
161	LFO_1 WAVETAB SWITCH	8	1	OFF	0	any
162	LFO_1 TRIGTAB SWITCH	8	2	OFF	0	any
163	LFO_1 TRIGENABLE POT	8	3	ON	0	0 to 1
164	LFO_1 TRIGSOURCE POT	8	4	ON	1	1 to 79
165	LFO_1 TRIGLEVEL POT	8	5	ON	0	-65534 to 65534
166	LFO_1 TRIGPOLARITY POT	8	6	ON	0	0 to 5
167	LFO_1 VOXTRG POT	8	7	ON	0	0 to 1
168	LFO_1 FREERUN POT	8	8	ON	0	0 to 1
169	LFO_1 MOD SWITCH	8	9	ON	0	any
170	LFO_1 RATE POT	8	10	ON	50	20 to 65535
171	LFO_1 MODENABLE POT	8	11	ON	0	0 to 1
172	LFO_1 MODSOURCE POT	8	12	ON	1	1 to 79
173	LFO_1 MODDEST POT	8	13	ON	0	0 to 5
174	LFO_1 MODOFFSET POT	8	14	ON	0	-65534 to 65534
175	LFO_1 MODSCALE POT	8	15	ON	0	-32767 to 32767
176	LFO_1 SHAPE POT	8	16	ON	0	0 to 5
177	LFO_1 DELAY POT	8	17	ON	0	0 to 65535
178	LFO_1 PHASE POT	8	18	ON	0	0 to 65535
179	LFO_1 DUTYCYCLE POT	8	19	ON	32768	0 to 65535
180	LFO_1 OFFSET POT	8	20	ON	0	-65534 to 65534
181	LFO_1 POLARITY POT	8	21	ON	0	-1 to 1
182	LFO_1 LEVEL POT	8	22	ON	32768	0 to 65535
183	LFO_1 SYNCTAB SWITCH	8	23	OFF	0	any
184	LFO_1 SYNCSRC POT	8	24	ON	0	0 to 2
185	LFO_1 TIXPERPERIOD POT	8	25	ON	24	2 to 11904
186	LFO_2 VIEW SWITCH	9	0	OFF	0	any
187	LFO_2 WAVETAB SWITCH	9	1	OFF	0	any
188	LFO_2 TRIGTAB SWITCH	9	2	OFF	0	any
189	LFO_2 TRIGENABLE POT	9	3	ON	0	0 to 1
190	LFO_2 TRIGSOURCE POT	9	4	ON	1	1 to 79
191	LFO_2 TRIGLEVEL POT	9	5	ON	0	-65534 to 65534
192	LFO_2 TRIGPOLARITY POT	9	6	ON	0	0 to 5
193	LFO_2 VOXTRG POT	9	7	ON	0	0 to 1
194	LFO_2 FREERUN POT	9	8	ON	0	0 to 1
195	LFO_2 MOD SWITCH	9	9	ON	0	any

196	LFO_2 RATE POT	9	10	ON	50	20 to 65535
197	LFO_2 MODENABLE POT	9	11	ON	0	0 to 1
198	LFO_2 MODSOURCE POT	9	12	ON	1	1 to 79
199	LFO_2 MODDEST POT	9	13	ON	0	0 to 5
200	LFO_2 MODOFFSET POT	9	14	ON	0	-65534 to 65534
201	LFO_2 MODSCALE POT	9	15	ON	0	-32767 to 32767
202	LFO_2 SHAPE POT	9	16	ON	0	0 to 5
203	LFO_2 DELAY POT	9	17	ON	0	0 to 65535
204	LFO_2 PHASE POT	9	18	ON	0	0 to 65535
205	LFO_2 DUTYCYCLE POT	9	19	ON	32768	0 to 65535
206	LFO_2 OFFSET POT	9	20	ON	0	-65534 to 65534
207	LFO_2 POLARITY POT	9	21	ON	0	-1 to 1
208	LFO_2 LEVEL POT	9	22	ON	32768	0 to 65535
209	LFO_2 SYNCTAB SWITCH	9	23	OFF	0	any
210	LFO_2 SYNCSRC POT	9	24	ON	0	0 to 2
211	LFO_2 TIXPERPERIOD POT	9	25	ON	24	2 to 11904
212	LFO_3 VIEW SWITCH	10	0	OFF	0	any
213	LFO_3 WAVETAB SWITCH	10	1	OFF	0	any
214	LFO_3 TRIGTAB SWITCH	10	2	OFF	0	any
215	LFO_3 TRIGENABLE POT	10	3	ON	0	0 to 1
216	LFO_3 TRIGSOURCE POT	10	4	ON	1	1 to 79
217	LFO_3 TRIGLEVEL POT	10	5	ON	0	-65534 to 65534
218	LFO_3 TRIGPOLARITY POT	10	6	ON	0	0 to 5
219	LFO_3 VOXTRG POT	10	7	ON	0	0 to 1
220	LFO_3 FREERUN POT	10	8	ON	0	0 to 1
221	LFO_3 MOD SWITCH	10	9	ON	0	any
222	LFO_3 RATE POT	10	10	ON	50	20 to 65535
223	LFO_3 MODENABLE POT	10	11	ON	0	0 to 1
224	LFO_3 MODSOURCE POT	10	12	ON	1	1 to 79
225	LFO_3 MODDEST POT	10	13	ON	0	0 to 5
226	LFO_3 MODOFFSET POT	10	14	ON	0	-65534 to 65534
227	LFO_3 MODSCALE POT	10	15	ON	0	-32767 to 32767
228	LFO_3 SHAPE POT	10	16	ON	0	0 to 5
229	LFO_3 DELAY POT	10	17	ON	0	0 to 65535
230	LFO_3 PHASE POT	10	18	ON	0	0 to 65535
231	LFO_3 DUTYCYCLE POT	10	19	ON	32768	0 to 65535
232	LFO_3 OFFSET POT	10	20	ON	0	-65534 to 65534
233	LFO_3 POLARITY POT	10	21	ON	0	-1 to 1
234	LFO_3 LEVEL POT	10	22	ON	32768	0 to 65535
235	LFO_3 SYNCTAB SWITCH	10	23	OFF	0	any
236	LFO_3 SYNCSRC POT	10	24	ON	0	0 to 2
237	LFO_3 TIXPERPERIOD POT	10	25	ON	24	2 to 11904
238	SH VIEW_BTN SWITCH	11	0	OFF	0	any
239	SH INPUT_TAB SWITCH	11	1	OFF	0	any
240	SH INPUTSOURCE POT	11	2	ON	1	1 to 79
241	SH INPUTOFFSET POT	11	3	ON	0	-65534 to 65534
242	SH INPUTSCALE POT	11	4	ON	0	-32767 to 32767
243	SH ENABLE POT	11	5	ON	0	0 to 1
244	SH VOXTRIG POT	11	6	ON	0	0 to 1
245	SH TRIG_TAB SWITCH	11	7	OFF	0	any
246	SH TRIGSOURCE POT	11	8	ON	1	1 to 79

247	SH TRIGLEVEL POT	11	9	ON	0	-65534 to 65534
248	SH TRIGPOLARITY POT	11	10	ON	0	0 to 5
249	SH TRIGENABLE POT	11	11	ON	0	0 to 1
250	SH SAMPLEONTRIG POT	11	12	ON	0	0 to 1
251	SH MOD_BTN SWITCH	11	13	ON	0	any
252	SH MOD_TAB SWITCH	11	14	OFF	0	any
253	SH CLOCKFREQ POT	11	15	ON	1	5 to 32768
254	SH MODSOURCE POT	11	16	ON	1	1 to 79
255	SH MODOFFSET POT	11	17	ON	0	-65534 to 65534
256	SH MODSCALE POT	11	18	ON	0	-32767 to 32767
257	SH MODENABLE POT	11	19	ON	0	0 to 1
258	SH SYNC_TAB SWITCH	11	20	OFF	0	any
259	SH SYNCSRC POT	11	21	ON	0	0 to 2
260	SH TIXPERSTEP POT	11	22	ON	24	2 to 11904
261	PROCESS PROCSW SWITCH	12	0	OFF	0	any
262	PROCESS PROC_SEL POT	12	1	ON	0	0 to 1
263	TRACK_GEN INPUT_TAB SWITCH	13	0	OFF	0	any
264	TRACK_GEN OUTPUT_TAB SWITCH	13	1	OFF	0	any
265	TRACK_GEN INSRC POT	13	2	ON	1	1 to 79
266	TRACK_GEN INLVL POT	13	3	ON	0	-32767 to 32767
267	TRACK_GEN INOFS POT	13	4	ON	0	-65534 to 65534
268	TRACK_GEN TYPE POT	13	5	ON	0	0 to 1
269	TRACK_GEN ENABLE POT	13	6	ON	0	0 to 1
270	TRACK_GEN SIZE POT	13	7	ON	0	0 to 15
271	TRACK_GEN POINT_SEL POT	13	8	ON	0	0 to 15
272	TRACK_GEN CURVESET POT	13	9	ON	0	0 to 8
273	TRACK_GEN OUTVAL_Y_POT POT	13	10	ON	0	-65534 to 65534
274	TRACK_GEN INVAL_X_POT POT	13	11	ON	0	-65534 to 65534
275	SMOOTHSET SMOOTHTAB SWITCH	14	0	OFF	0	any
276	SMOOTHSET OSC POT	14	1	ON	0	0 to 3
277	SMOOTHSET FILT POT	14	2	ON	0	0 to 3
278	(not used)					
279	(not used)					
280	OSC_1 TUNESEMITONE POT	15	0	ON	0	-60 to 60
281	OSC_1 TUNECENTS POT	15	1	ON	0	-100 to 100
282	OSC_1 TUNEFINE POT	15	2	ON	0	-100 to 100
283	OSC_1 1PITCH POT	15	3	ON	0	0 to 1
284	OSC_1 NZEXT_TAB SWITCH	15	4	OFF	0	any
285	OSC_1 NZ_SOURCE POT	15	5	ON	0	0 to 3
286	OSC_1 NZ_LINFM POT	15	6	ON	0	0 to 65535
287	OSC_1 NZ_EXPFM POT	15	7	ON	0	0 to 65535
288	OSC_1 NZ_PWM POT	15	8	ON	0	0 to 65535
289	OSC_1 NZ_EXPFM2 POT	15	9	ON	0	0 to 65535
290	OSC_1 NZ_PWM2 POT	15	10	ON	0	0 to 65535
291	OSC_1 FM_TAB SWITCH	15	11	OFF	0	any
292	OSC_1 OSC2FMLEVEL POT	15	12	ON	0	0 to 65535
293	OSC_1 OSC2LINFM POT	15	13	ON	0	0 to 65535
294	OSC_1 OSC2EXPFM POT	15	14	ON	0	0 to 65535
295	OSC_1 OSC2PWM POT	15	15	ON	0	0 to 65535
296	OSC_1 FM_FPASSIGN POT	15	16	ON	0	0 to 7
297	OSC_1 BUTTON_SIN SWITCH	15	17	ON	0	any

298	OSC_1 BUTTON_TRI SWITCH	15	18	ON	0	any
299	OSC_1 BUTTON_SAW SWITCH	15	19	ON	0	any
300	OSC_1 BUTTON_SQR SWITCH	15	20	ON	0	any
301	OSC_1 POT_SIN POT	15	21	ON	0	0 to 1
302	OSC_1 POT_TRI POT	15	22	ON	0	0 to 1
303	OSC_1 POT_SAW POT	15	23	ON	0	0 to 2
304	OSC_1 POT_SQR POT	15	24	ON	0	0 to 1
305	OSC_1 POT_SQR_LVL POT	15	25	ON	7208	0 to 32767
306	OSC_1 POT_CVOUT POT	15	26	ON	0	0 to 1
307	OSC_1 PULSEWIDTH POT	15	27	ON	32768	0 to 65535
308	OSC_1 VIEWBUTTON SWITCH	15	28	OFF	0	any
309	OSC_1 TUNE_TAB SWITCH	15	29	OFF	0	any
310	OSC_1 WAVE_TAB SWITCH	15	30	OFF	0	any
311	OSC_1 ENV1_TAB SWITCH	15	31	OFF	0	any
312	OSC_1 ENV1MODENABLE POT	15	32	ON	0	0 to 1
313	OSC_1 ENV1MODLEVEL POT	15	33	ON	0	-32767 to 32767
314	OSC_1 ENV1MODOFFSET POT	15	34	ON	0	-65534 to 65534
315	OSC_1 MODMASTER_TAB SWITCH	15	35	OFF	0	any
316	OSC_1 OSC2FMMODBUTTON SWITCH	15	36	ON	0	any
317	OSC_1 PWMMODBUTTON SWITCH	15	37	ON	0	any
318	OSC_1 MOD1BUTTON SWITCH	15	38	ON	0	any
319	OSC_1 MOD2BUTTON SWITCH	15	39	ON	0	any
320	OSC_1 MOD3BUTTON SWITCH	15	40	ON	0	any
321	OSC_1 OSC2FMMODENABLE POT	15	41	ON	0	0 to 1
322	OSC_1 PWMMODENABLE POT	15	42	ON	0	0 to 1
323	OSC_1 MOD1ENABLE POT	15	43	ON	0	0 to 1
324	OSC_1 MOD2ENABLE POT	15	44	ON	0	0 to 1
325	OSC_1 MOD3ENABLE POT	15	45	ON	0	0 to 1
326	OSC_1 OSC2FMMODSOURCE POT	15	46	ON	1	1 to 79
327	OSC_1 PWMMODSOURCE POT	15	47	ON	1	1 to 79
328	OSC_1 MOD1SOURCE POT	15	48	ON	1	1 to 79
329	OSC_1 MOD2SOURCE POT	15	49	ON	1	1 to 79
330	OSC_1 MOD3SOURCE POT	15	50	ON	1	1 to 79
331	OSC_1 OSC2FMMODDEST POT	15	51	ON	0	0 to 2
332	OSC_1 PWMMODDEST POT	15	52	ON	0	
333	OSC_1 MOD1DEST POT	15	53	ON	0	0 to 8
334	OSC_1 MOD2DEST POT	15	54	ON	0	0 to 8
335	OSC_1 MOD3DEST POT	15	55	ON	0	0 to 8
336	OSC_1 OSC2FMMODOFFSET POT	15	56	ON	0	-65534 to 65534
337	OSC_1 PWMMODOFFSET POT	15	57	ON	0	-65534 to 65534
338	OSC_1 MOD1OFFSET POT	15	58	ON	0	-65534 to 65534
339	OSC_1 MOD2OFFSET POT	15	59	ON	0	-65534 to 65534
340	OSC_1 MOD3OFFSET POT	15	60	ON	0	-65534 to 65534
341	OSC_1 OSC2FMMODSCALE POT	15	61	ON	0	-32767 to 32767
342	OSC_1 PWMMODSCALE POT	15	62	ON	0	-16384 to 16384
343	OSC_1 MOD1SCALE POT	15	63	ON	0	-32767 to 32767
344	OSC_1 MOD2SCALE POT	15	64	ON	0	-32767 to 32767
345	OSC_1 MOD3SCALE POT	15	65	ON	0	-32767 to 32767
346	OSC_1 FPLINK POT	15	66	ON	0	any
347	OSC_2 TUNESEMITONE POT	16	0	ON	0	-60 to 60
348	OSC_2 TUNECENTS POT	16	1	ON	0	-100 to 100

349	OSC_2 TUNEFINE POT	16	2	ON	0	-100 to 100
350	OSC_2 1PITCH POT	16	3	ON	0	0 to 1
351	OSC_2 BUTTON_SIN SWITCH	16	4	ON	0	any
352	OSC_2 BUTTON_TRI SWITCH	16	5	ON	0	any
353	OSC_2 BUTTON_SAW SWITCH	16	6	ON	0	any
354	OSC_2 BUTTON_SQR SWITCH	16	7	ON	0	any
355	OSC_2 POT_SIN POT	16	8	ON	0	0 to 1
356	OSC_2 POT_TRI POT	16	9	ON	0	0 to 1
357	OSC_2 POT_SAW POT	16	10	ON	0	0 to 2
358	OSC_2 POT_SQR POT	16	11	ON	0	0 to 1
359	OSC_2 POT_SQR_LVL POT	16	12	ON	7208	0 to 32767
360	OSC_2 POT_CVOUT POT	16	13	ON	0	0 to 1
361	OSC_2 PULSEWIDTH POT	16	14	ON	32768	0 to 65535
362	OSC_2 VIEWBUTTON SWITCH	16	15	OFF	0	any
363	OSC_2 TUNE_TAB SWITCH	16	16	OFF	0	any
364	OSC_2 WAVE_TAB SWITCH	16	17	OFF	0	any
365	OSC_2 ENV1_TAB SWITCH	16	18	OFF	0	any
366	OSC_2 ENV1MODENABLE POT	16	19	ON	0	0 to 1
367	OSC_2 ENV1MODLEVEL POT	16	20	ON	0	-32767 to 32767
368	OSC_2 ENV1MODOFFSET POT	16	21	ON	0	-65534 to 65534
369	OSC_2 SYNCBUTTON SWITCH	16	22	ON	0	any
370	OSC_2 POT_SYNC POT	16	23	ON	0	0 to 2
371	OSC_2 MODMASTER_TAB SWITCH	16	24	OFF	0	any
372	OSC_2 PWMMODBUTTON SWITCH	16	25	ON	0	any
373	OSC_2 MOD1BUTTON SWITCH	16	26	ON	0	any
374	OSC_2 MOD2BUTTON SWITCH	16	27	ON	0	any
375	OSC_2 MOD3BUTTON SWITCH	16	28	ON	0	any
376	OSC_2 PWMMODENABLE POT	16	29	ON	0	0 to 1
377	OSC_2 MOD1ENABLE POT	16	30	ON	0	0 to 1
378	OSC_2 MOD2ENABLE POT	16	31	ON	0	0 to 1
379	OSC_2 MOD3ENABLE POT	16	32	ON	0	0 to 1
380	OSC_2 PWMMODSOURCE POT	16	33	ON	1	1 to 79
381	OSC_2 MOD1SOURCE POT	16	34	ON	1	1 to 79
382	OSC_2 MOD2SOURCE POT	16	35	ON	1	1 to 79
383	OSC_2 MOD3SOURCE POT	16	36	ON	1	1 to 79
384	OSC_2 PWMMODDEST POT	16	37	ON	0	
385	OSC_2 MOD1DEST POT	16	38	ON	0	0 to 4
386	OSC_2 MOD2DEST POT	16	39	ON	0	0 to 4
387	OSC_2 MOD3DEST POT	16	40	ON	0	0 to 4
388	OSC_2 PWMMODOFFSET POT	16	41	ON	0	-65534 to 65534
389	OSC_2 MOD1OFFSET POT	16	42	ON	0	-65534 to 65534
390	OSC_2 MOD2OFFSET POT	16	43	ON	0	-65534 to 65534
391	OSC_2 MOD3OFFSET POT	16	44	ON	0	-65534 to 65534
392	OSC_2 PWMMODSCALE POT	16	45	ON	0	-16384 to 16384
393	OSC_2 MOD1SCALE POT	16	46	ON	0	-32767 to 32767
394	OSC_2 MOD2SCALE POT	16	47	ON	0	-32767 to 32767
395	OSC_2 MOD3SCALE POT	16	48	ON	0	-32767 to 32767
396	OSC_2 ENV_OSC12BUTTON SWITCH	16	49	ON	0	any
397	OSC_2 ENV12AMOUNT POT	16	50	ON	0	any
398	OSC_2 FPLINK POT	16	51	ON	0	any
399	PRE_FILT OSC1LEVEL POT	17	0	ON	16384	0 to 32768

400	PRE_FILT OSC2LEVEL POT	17	1	ON	16384	0 to 32768
401	PRE_FILT SUBOSC1LEVEL POT	17	2	ON	16384	0 to 32768
402	PRE_FILT SUBOSC2LEVEL POT	17	3	ON	16384	0 to 32768
403	PRE_FILT RINGMODLEVEL POT	17	4	ON	16384	0 to 32768
404	PRE_FILT NOISEEXTLEVEL POT	17	5	ON	16384	0 to 32768
405	PRE_FILT NZEXT_POT POT	17	6	ON	0	0 to 4
406	PRE_FILT NOISE_POT POT	17	7	ON	16384	0 to 32768
407	PRE_FILT OSC1_POT POT	17	8	ON	16384	0 to 32768
408	PRE_FILT OSC1SUB_POT POT	17	9	ON	16384	0 to 32768
409	PRE_FILT OSC2_POT POT	17	10	ON	16384	0 to 32768
410	PRE_FILT OSC2SUB_POT POT	17	11	ON	16384	0 to 32768
411	PRE_FILT RINGMOD_POT POT	17	12	ON	16384	0 to 32768
412	PRE_FILT EXTAUDIN_POT POT	17	13	ON	16384	0 to 1
413	PRE_FILT MIXTAB SWITCH	17	14	OFF	0	any
414	PRE_FILT NOISEMOD_TAB SWITCH	17	15	ON	0	any
415	PRE_FILT OSC1MOD_TAB SWITCH	17	16	ON	0	any
416	PRE_FILT OSC1SUBMOD_TAB SWITCH	17	17	ON	0	any
417	PRE_FILT OSC2MOD_TAB SWITCH	17	18	ON	0	any
418	PRE_FILT OSC2SUBMOD_TAB SWITCH	17	19	ON	0	any
419	PRE_FILT RINGMOD_TAB SWITCH	17	20	ON	0	any
420	PRE_FILT OSC1MODBUTTON SWITCH	17	21	ON	0	any
421	PRE_FILT OSC2MODBUTTON SWITCH	17	22	ON	0	any
422	PRE_FILT SUBOSC1MODBUTTON SWITCH	17	23	ON	0	any
423	PRE_FILT SUBOSC2MODBUTTON SWITCH	17	24	ON	0	any
424	PRE_FILT RINGMODMODBUTTON SWITCH	17	25	ON	0	any
425	PRE_FILT NOISEEXTMODBUTTON SWITCH	17	26	ON	0	any
426	PRE_FILT OSC1MOD_SRC POT	17	27	ON	1	1 to 79
427	PRE_FILT OSC2MOD_SRC POT	17	28	ON	1	1 to 79
428	PRE_FILT SUBOSC1MOD_SRC POT	17	29	ON	1	1 to 79
429	PRE_FILT SUBOSC2MOD_SRC POT	17	30	ON	1	1 to 79
430	PRE_FILT RINGMODMOD_SRC POT	17	31	ON	1	1 to 79
431	PRE_FILT NOISEEXTMOD_SRC POT	17	32	ON	1	1 to 79
432	PRE_FILT OSC1MOD_SCL POT	17	33	ON	0	-32767 to 32767
433	PRE_FILT OSC2MOD_SCL POT	17	34	ON	0	-32767 to 32767
434	PRE_FILT SUBOSC1MOD_SCL POT	17	35	ON	0	-32767 to 32767
435	PRE_FILT SUBOSC2MOD_SCL POT	17	36	ON	0	-32767 to 32767
436	PRE_FILT RINGMODMOD_SCL POT	17	37	ON	0	-32767 to 32767
437	PRE_FILT NOISEEXTMOD_SCL POT	17	38	ON	0	-32767 to 32767
438	PRE_FILT OSC1MOD_OFS POT	17	39	ON	0	-65534 to 65534
439	PRE_FILT OSC2MOD_OFS POT	17	40	ON	0	-65534 to 65534
440	PRE_FILT SUBOSC1MOD_OFS POT	17	41	ON	0	-65534 to 65534
441	PRE_FILT SUBOSC2MOD_OFS POT	17	42	ON	0	-65534 to 65534
442	PRE_FILT RINGMODMOD_OFS POT	17	43	ON	0	-65534 to 65534
443	PRE_FILT NOISEEXTMOD_OFS POT	17	44	ON	0	-65534 to 65534
444	PRE_FILT OSC1MOD_ENA POT	17	45	ON	0	0 to 1
445	PRE_FILT OSC2MOD_ENA POT	17	46	ON	0	0 to 1
446	PRE_FILT SUBOSC1MOD_ENA POT	17	47	ON	0	0 to 1
447	PRE_FILT SUBOSC2MOD_ENA POT	17	48	ON	0	0 to 1
448	PRE_FILT RINGMODMOD_ENA POT	17	49	ON	0	0 to 1
449	PRE_FILT NOISEEXTMOD_ENA POT	17	50	ON	0	0 to 1
450	PRE_FILT EXTINSELECT SWITCH	17	51	ON	0	any

451	PRE_FILT FILTERFEEDBACK SWITCH	17	52	ON	0	0 to 1
452	PRE_FILT VIEWSW SWITCH	17	53	OFF	0	any
453	FILT_1 FREQUENCY POT	18	0	ON	0	0 to 65535
454	FILT_1 RESONANCE POT	18	1	ON	16384	0 to 32768
455	FILT_1 KEYTRACK POT	18	2	ON	16384	0 to 32768
456	FILT_1 ENV2AMOUNT POT	18	3	ON	0	0 to 32768
457	FILT_1 KEYTRK_LVL_POT POT	18	4	ON	16384	-32767 to 32767
458	FILT_1 KEYTRK_OFS_POT POT	18	5	ON	0	-127 to 127
459	FILT_1 ENV2_LVL_POT POT	18	6	ON	0	0 to 32767
460	FILT_1 ENV2_OFS_POT POT	18	7	ON	0	-65534 to 65534
461	FILT_1 CVIN_POT POT	18	8	ON	0	0 to 32768
462	FILT_1 CV_ROUTE POT	18	9	ON	0	0 to 3
463	FILT_1 VIEWBUTTON SWITCH	18	10	OFF	0	any
464	FILT_1 MOD1BUTTON SWITCH	18	11	ON	0	any
465	FILT_1 MOD2BUTTON SWITCH	18	12	ON	0	any
466	FILT_1 MOD3BUTTON SWITCH	18	13	ON	0	any
467	FILT_1 FILT1TAB SWITCH	18	14	OFF	0	any
468	FILT_1 MOD1TAB SWITCH	18	15	ON	0	any
469	FILT_1 MOD2TAB SWITCH	18	16	ON	0	any
470	FILT_1 MOD3TAB SWITCH	18	17	ON	0	any
471	FILT_1 MOD1SRC POT	18	18	ON	1	1 to 79
472	FILT_1 MOD2SRC POT	18	19	ON	1	1 to 79
473	FILT_1 MOD3SRC POT	18	20	ON	1	1 to 79
474	FILT_1 MOD1DST POT	18	21	ON	0	0 to 1
475	FILT_1 MOD2DST POT	18	22	ON	0	0 to 1
476	FILT_1 MOD3DST POT	18	23	ON	0	0 to 1
477	FILT_1 MOD1OFS POT	18	24	ON	0	-65534 to 65534
478	FILT_1 MOD2OFS POT	18	25	ON	0	-65534 to 65534
479	FILT_1 MOD3OFS POT	18	26	ON	0	-65534 to 65534
480	FILT_1 MOD1SCL POT	18	27	ON	0	-32767 to 32767
481	FILT_1 MOD2SCL POT	18	28	ON	0	-32767 to 32767
482	FILT_1 MOD3SCL POT	18	29	ON	0	-32767 to 32767
483	FILT_1 MOD1ENA POT	18	30	ON	0	0 to 1
484	FILT_1 MOD2ENA POT	18	31	ON	0	0 to 1
485	FILT_1 MOD3ENA POT	18	32	ON	0	0 to 1
486	FILT_1 FILTERBYPASS SWITCH	18	33	ON	0	any
487	FILT_2 FREQUENCY POT	19	0	ON	0	0 to 65535
488	FILT_2 RESONANCE POT	19	1	ON	0	0 to 32768
489	FILT_2 KEYTRACK POT	19	2	ON	16384	0 to 32767
490	FILT_2 ENV2AMOUNT POT	19	3	ON	0	0 to 32768
491	FILT_2 INPUT_POT POT	19	4	ON	0	0 to 3
492	FILT_2 KEYTRK_LVL_POT POT	19	5	ON	16384	-32767 to 32767
493	FILT_2 KEYTRK_OFS_POT POT	19	6	ON	0	-127 to 127
494	FILT_2 ENV2_LVL_POT POT	19	7	ON	0	0 to 32767
495	FILT_2 ENV2_OFS_POT POT	19	8	ON	0	-65534 to 65534
496	FILT_2 CV_ROUTE POT	19	9	ON	0	0 to 3
497	FILT_2 VIEWBUTTON SWITCH	19	10	OFF	0	any
498	FILT_2 MOD1BUTTON SWITCH	19	11	ON	0	any
499	FILT_2 MOD2BUTTON SWITCH	19	12	ON	0	any
500	FILT_2 MOD3BUTTON SWITCH	19	13	ON	0	any
501	FILT_2 FILT2TAB SWITCH	19	14	OFF	0	any

502	FILT_2 MOD1TAB SWITCH	19	15	ON	0	any
503	FILT_2 MOD2TAB SWITCH	19	16	ON	0	any
504	FILT_2 MOD3TAB SWITCH	19	17	ON	0	any
505	FILT_2 MOD1SRC POT	19	18	ON	1	1 to 79
506	FILT_2 MOD2SRC POT	19	19	ON	1	1 to 79
507	FILT_2 MOD3SRC POT	19	20	ON	1	1 to 79
508	FILT_2 MOD1DST POT	19	21	ON	0	0 to 1
509	FILT_2 MOD2DST POT	19	22	ON	0	0 to 1
510	FILT_2 MOD3DST POT	19	23	ON	0	0 to 1
511	FILT_2 MOD1OFS POT	19	24	ON	0	-65534 to 65534
512	FILT_2 MOD2OFS POT	19	25	ON	0	-65534 to 65534
513	FILT_2 MOD3OFS POT	19	26	ON	0	-65534 to 65534
514	FILT_2 MOD1SCL POT	19	27	ON	0	-32767 to 32767
515	FILT_2 MOD2SCL POT	19	28	ON	0	-32767 to 32767
516	FILT_2 MOD3SCL POT	19	29	ON	0	-32767 to 32767
517	FILT_2 MOD1ENA POT	19	30	ON	0	0 to 1
518	FILT_2 MOD2ENA POT	19	31	ON	0	0 to 1
519	FILT_2 MOD3ENA POT	19	32	ON	0	0 to 1
520	FILT_2 LOPASSINPUT SWITCH	19	33	ON	0	any
521	POST_FILT FILT1LPLEVEL POT	20	0	ON	16384	0 to 32768
522	POST_FILT FILT1HPLEVEL POT	20	1	ON	16384	0 to 32768
523	POST_FILT FILT1BPLEVEL POT	20	2	ON	16384	0 to 32768
524	POST_FILT FILT2LPLEVEL POT	20	3	ON	16384	0 to 32768
525	POST_FILT PREFILTERLEVEL POT	20	4	ON	16384	0 to 32768
526	POST_FILT F1_MIX_POT POT	20	5	ON	0	-65534 to 65534
527	POST_FILT F1_LP_POT POT	20	6	ON	16384	0 to 32768
528	POST_FILT F1_HP_POT POT	20	7	ON	16384	0 to 32768
529	POST_FILT F1_BP_POT POT	20	8	ON	16384	0 to 32768
530	POST_FILT F1_BPINV_POT POT	20	9	ON	0	0 to 1
531	POST_FILT F2_LP_POT POT	20	10	ON	16384	0 to 32768
532	POST_FILT PREFILT_POT POT	20	11	ON	16384	0 to 32768
533	POST_FILT SRMSRC_POT POT	20	12	ON	16384	0 to 7
534	POST_FILT FILT1LPMODBUTTON SWITCH	20	13	ON	0	any
535	POST_FILT FILT1HPMODBUTTON SWITCH	20	14	ON	0	any
536	POST_FILT FILT1BPMODBUTTON SWITCH	20	15	ON	0	any
537	POST_FILT FILT2LPMODBUTTON SWITCH	20	16	ON	0	any
538	POST_FILT PREFILTMODBUTTON SWITCH	20	17	ON	0	any
539	POST_FILT MIXTAB SWITCH	20	18	OFF	0	any
540	POST_FILT F1LP_MOD_TAB SWITCH	20	19	ON	0	any
541	POST_FILT F1HP_MOD_TAB SWITCH	20	20	ON	0	any
542	POST_FILT F1BP_MOD_TAB SWITCH	20	21	ON	0	any
543	POST_FILT F1MIX_MOD_TAB SWITCH	20	22	ON	0	any
544	POST_FILT F2LP_MOD_TAB SWITCH	20	23	ON	0	any
545	POST_FILT SRM_MOD_TAB SWITCH	20	24	ON	0	any
546	POST_FILT F1_LPMODSRC POT	20	25	ON	1	1 to 79
547	POST_FILT F1_HPMODSRC POT	20	26	ON	1	1 to 79
548	POST_FILT F1_BPMODSRC POT	20	27	ON	1	1 to 79
549	POST_FILT F1_MIXMODSRC POT	20	28	ON	1	1 to 79
550	POST_FILT F2_LPMODSRC POT	20	29	ON	1	1 to 79
551	POST_FILT F1_SRMMODSRC POT	20	30	ON	1	1 to 79
552	POST_FILT F1_LPMODSCL POT	20	31	ON	0	-32767 to 32767

553	POST_FILT F1_HPMODSCL POT	20	32	ON	0	-32767 to 32767
554	POST_FILT F1_BPMODSCL POT	20	33	ON	0	-32767 to 32767
555	POST_FILT F1_MIXMODSCL POT	20	34	ON	0	-32767 to 32767
556	POST_FILT F2_LPMODSCL POT	20	35	ON	0	-32767 to 32767
557	POST_FILT F1_SRMMODSCL POT	20	36	ON	0	-32767 to 32767
558	POST_FILT F1_LPMODOFS POT	20	37	ON	0	-65534 to 65534
559	POST_FILT F1_HPMODOFS POT	20	38	ON	0	-65534 to 65534
560	POST_FILT F1_BPMODOFS POT	20	39	ON	0	-65534 to 65534
561	POST_FILT F1_MIXMODOFS POT	20	40	ON	0	-65534 to 65534
562	POST_FILT F2_LPMODOFS POT	20	41	ON	0	-65534 to 65534
563	POST_FILT F1_SRMMODOFS POT	20	42	ON	0	-65534 to 65534
564	POST_FILT F1_LPMODENA POT	20	43	ON	0	0 to 1
565	POST_FILT F1_HPMODENA POT	20	44	ON	0	0 to 1
566	POST_FILT F1_BPMODENA POT	20	45	ON	0	0 to 1
567	POST_FILT F1_MIXMODENA POT	20	46	ON	0	0 to 1
568	POST_FILT F2_LPMODENA POT	20	47	ON	0	0 to 1
569	POST_FILT F1_SRMMODENA POT	20	48	ON	0	0 to 1
570	POST_FILT FILT1BPINVERT SWITCH	20	49	ON	0	0 to 1
571	POST_FILT OSC1SIN_BUTTON SWITCH	20	50	ON	0	0 to 1
572	POST_FILT OSC2SIN_BUTTON SWITCH	20	51	ON	0	0 to 1
573	POST_FILT RINGMOD_BUTTON SWITCH	20	52	ON	0	0 to 1
574	POST_FILT VIEWSW SWITCH	20	53	OFF	0	any
575	ENV_1 DELAYTIME POT	21	0	ON	0	0 to 65535
576	ENV_1 ATTACKTIME POT	21	1	ON	1	1 to 65535
577	ENV_1 DECAY1TIME POT	21	2	ON	0	0 to 65535
578	ENV_1 DECAY2TIME POT	21	3	ON	0	0 to 65535
579	ENV_1 RELEASE1TIME POT	21	4	ON	0	0 to 65535
580	ENV_1 RELEASE2TIME POT	21	5	ON	1	1 to 65535
581	ENV_1 SHAPE POT	21	6	ON	0	0 to 8
582	ENV_1 D2LEVEL POT	21	7	ON	32768	0 to 65535
583	ENV_1 SUSTAINLEVEL POT	21	8	ON	32768	0 to 65535
584	ENV_1 R2LEVEL POT	21	9	ON	32768	0 to 65535
585	ENV_1 ENVOFFSET POT	21	10	ON	0	-65534 to 65534
586	ENV_1 ENVLEVEL POT	21	11	ON	0	0 to 65535
587	ENV_1 ENVPOL POT	21	12	ON	0	-1 to 1
588	ENV_1 VIEWBUTTON SWITCH	21	13	OFF	0	any
589	ENV_1 VIEWENVTIMETAB SWITCH	21	14	OFF	0	any
590	ENV_1 VIEWENVLEVELTAB SWITCH	21	15	OFF	0	any
591	ENV_1 VIEWENVLOOPTAB SWITCH	21	16	OFF	0	any
592	ENV_1 DELAYBUTTON SWITCH	21	17	OFF	0	any
593	ENV_1 TRIGGERBUTTON SWITCH	21	18	ON	0	any
594	ENV_1 MOD1BUTTON SWITCH	21	19	ON	0	any
595	ENV_1 MOD2BUTTON SWITCH	21	20	ON	0	any
596	ENV_1 MOD3BUTTON SWITCH	21	21	ON	0	any
597	ENV_1 DYNAMICSBUTTON SWITCH	21	22	OFF	0	any
598	ENV_1 LOOPBUTTON SWITCH	21	23	ON	0	any
599	ENV_1 ENVMODE POT	21	24	ON	0	0 to 6
600	ENV_1 TRIG_SRC POT	21	25	ON	1	1 to 79
601	ENV_1 TRIG_INLVL POT	21	26	ON	0	-65534 to 65534
602	ENV_1 TRIG_POL POT	21	27	ON	0	0 to 5
603	ENV_1 TRIG_ENA POT	21	28	ON	0	0 to 1

604	ENV_1 RETRIG_SRC POT	21	29	ON	1	1 to 79
605	ENV_1 RETRIG_STAGE POT	21	30	ON	0	1 to 6
606	ENV_1 RETRIG_LVL POT	21	31	ON	0	-65534 to 65534
607	ENV_1 RETRIG_POL POT	21	32	ON	0	0 to 5
608	ENV_1 RETRIG_ENA POT	21	33	ON	0	0 to 1
609	ENV_1 TRIGPAGE_SEL POT	21	34	ON	0	any
610	ENV_1 LOOP_START POT	21	35	ON	0	1 to 5
611	ENV_1 LOOP_END POT	21	36	ON	0	2 to 6
612	ENV_1 LOOP_COUNT POT	21	37	ON	0	1 to 255
613	ENV_1 LOOP_TYPE POT	21	38	ON	0	-1 to 1
614	ENV_1 LOOP_SMTIME POT	21	39	ON	0	1 to 65535
615	ENV_1 LOOP_SMSHAPE POT	21	40	ON	0	0 to 8
616	ENV_1 LOOP_MIDISYNC POT	21	41	ON	0	any
617	ENV_1 DYN_RESET POT	21	42	ON	0	0 to 3
618	ENV_1 DYN_SUSPDL POT	21	43	ON	0	0 to 1
619	ENV_1 DYN_KEYTRK POT	21	44	ON	0	-65534 to 65534
620	ENV_1 DYN_KTRK_BASEKEY POT	21	45	ON	0	0 to 127
621	ENV_1 DYN_LVLTRK POT	21	46	ON	0	-65534 to 65534
622	ENV_1 DYN_VELMOD POT	21	47	ON	0	-65534 to 65534
623	ENV_1 DYN_RELMOD POT	21	48	ON	0	-65534 to 65534
624	ENV_1 MOD1ENABLE POT	21	49	ON	0	0 to 1
625	ENV_1 MOD2ENABLE POT	21	50	ON	0	0 to 1
626	ENV_1 MOD3ENABLE POT	21	51	ON	0	0 to 1
627	ENV_1 MOD1SOURCE POT	21	52	ON	1	1 to 79
628	ENV_1 MOD2SOURCE POT	21	53	ON	1	1 to 79
629	ENV_1 MOD3SOURCE POT	21	54	ON	1	1 to 79
630	ENV_1 MOD1DEST POT	21	55	ON	0	0 to 7
631	ENV_1 MOD2DEST POT	21	56	ON	0	0 to 7
632	ENV_1 MOD3DEST POT	21	57	ON	0	0 to 7
633	ENV_1 MOD1OFFSET POT	21	58	ON	0	-65534 to 65534
634	ENV_1 MOD2OFFSET POT	21	59	ON	0	-65534 to 65534
635	ENV_1 MOD3OFFSET POT	21	60	ON	0	-65534 to 65534
636	ENV_1 MOD1SCALE POT	21	61	ON	0	-32767 to 32767
637	ENV_1 MOD2SCALE POT	21	62	ON	0	-32767 to 32767
638	ENV_1 MOD3SCALE POT	21	63	ON	0	-32767 to 32767
639	ENV_2 DELAYTIME POT	22	0	ON	0	0 to 65535
640	ENV_2 ATTACKTIME POT	22	1	ON	1	1 to 65535
641	ENV_2 DECAY1TIME POT	22	2	ON	0	0 to 65535
642	ENV_2 DECAY2TIME POT	22	3	ON	0	0 to 65535
643	ENV_2 RELEASE1TIME POT	22	4	ON	0	0 to 65535
644	ENV_2 RELEASE2TIME POT	22	5	ON	1	1 to 65535
645	ENV_2 SHAPE POT	22	6	ON	0	0 to 8
646	ENV_2 D2LEVEL POT	22	7	ON	32768	0 to 65535
647	ENV_2 SUSTAINLEVEL POT	22	8	ON	32768	0 to 65535
648	ENV_2 R2LEVEL POT	22	9	ON	32768	0 to 65535
649	ENV_2 ENVOFFSET POT	22	10	ON	0	-65534 to 65534
650	ENV_2 ENVLEVEL POT	22	11	ON	0	0 to 65535
651	ENV_2 ENVPOL POT	22	12	ON	0	-1 to 1
652	ENV_2 VIEWBUTTON SWITCH	22	13	OFF	0	any
653	ENV_2 VIEWENVTIMETAB SWITCH	22	14	OFF	0	any
654	ENV_2 VIEWENVLEVELTAB SWITCH	22	15	OFF	0	any

655	ENV_2 VIEWENVLOOPTAB SWITCH	22	16	OFF	0	any
656	ENV_2 DELAYBUTTON SWITCH	22	17	OFF	0	any
657	ENV_2 TRIGGERBUTTON SWITCH	22	18	ON	0	any
658	ENV_2 MOD1BUTTON SWITCH	22	19	ON	0	any
659	ENV_2 MOD2BUTTON SWITCH	22	20	ON	0	any
660	ENV_2 MOD3BUTTON SWITCH	22	21	ON	0	any
661	ENV_2 DYNAMICSBUTTON SWITCH	22	22	OFF	0	any
662	ENV_2 LOOPBUTTON SWITCH	22	23	ON	0	any
663	ENV_2 ENVMODE POT	22	24	ON	0	0 to 6
664	ENV_2 TRIG_SRC POT	22	25	ON	1	1 to 79
665	ENV_2 TRIG_INLVL POT	22	26	ON	0	-65534 to 65534
666	ENV_2 TRIG_POL POT	22	27	ON	0	0 to 5
667	ENV_2 TRIG_ENA POT	22	28	ON	0	0 to 1
668	ENV_2 RETRIG_SRC POT	22	29	ON	1	1 to 79
669	ENV_2 RETRIG_STAGE POT	22	30	ON	0	1 to 6
670	ENV_2 RETRIG_LVL POT	22	31	ON	0	-65534 to 65534
671	ENV_2 RETRIG_POL POT	22	32	ON	0	0 to 5
672	ENV_2 RETRIG_ENA POT	22	33	ON	0	0 to 1
673	ENV_2 TRIGPAGE_SEL POT	22	34	ON	0	any
674	ENV_2 LOOP_START POT	22	35	ON	0	1 to 5
675	ENV_2 LOOP_END POT	22	36	ON	0	2 to 6
676	ENV_2 LOOP_COUNT POT	22	37	ON	0	1 to 255
677	ENV_2 LOOP_TYPE POT	22	38	ON	0	-1 to 1
678	ENV_2 LOOP_SMTIME POT	22	39	ON	0	1 to 65535
679	ENV_2 LOOP_SMSHAPE POT	22	40	ON	0	0 to 8
680	ENV_2 LOOP_MIDISYNC POT	22	41	ON	0	any
681	ENV_2 DYN_RESET POT	22	42	ON	0	0 to 3
682	ENV_2 DYN_SUSPDL POT	22	43	ON	0	0 to 1
683	ENV_2 DYN_KEYTRK POT	22	44	ON	0	-65534 to 65534
684	ENV_2 DYN_KTRK_BASEKEY POT	22	45	ON	0	0 to 127
685	ENV_2 DYN_LVLTRK POT	22	46	ON	0	-65534 to 65534
686	ENV_2 DYN_VELMOD POT	22	47	ON	0	-65534 to 65534
687	ENV_2 DYN_RELMOD POT	22	48	ON	0	-65534 to 65534
688	ENV_2 MOD1ENABLE POT	22	49	ON	0	0 to 1
689	ENV_2 MOD2ENABLE POT	22	50	ON	0	0 to 1
690	ENV_2 MOD3ENABLE POT	22	51	ON	0	0 to 1
691	ENV_2 MOD1SOURCE POT	22	52	ON	1	1 to 79
692	ENV_2 MOD2SOURCE POT	22	53	ON	1	1 to 79
693	ENV_2 MOD3SOURCE POT	22	54	ON	1	1 to 79
694	ENV_2 MOD1DEST POT	22	55	ON	0	0 to 7
695	ENV_2 MOD2DEST POT	22	56	ON	0	0 to 7
696	ENV_2 MOD3DEST POT	22	57	ON	0	0 to 7
697	ENV_2 MOD1OFFSET POT	22	58	ON	0	-65534 to 65534
698	ENV_2 MOD2OFFSET POT	22	59	ON	0	-65534 to 65534
699	ENV_2 MOD3OFFSET POT	22	60	ON	0	-65534 to 65534
700	ENV_2 MOD1SCALE POT	22	61	ON	0	-32767 to 32767
701	ENV_2 MOD2SCALE POT	22	62	ON	0	-32767 to 32767
702	ENV_2 MOD3SCALE POT	22	63	ON	0	-32767 to 32767
703	ENV_3 DELAYTIME POT	23	0	ON	0	0 to 65535
704	ENV_3 ATTACKTIME POT	23	1	ON	1	1 to 65535
705	ENV_3 DECAY1TIME POT	23	2	ON	0	0 to 65535

706	ENV_3 DECAY2TIME POT	23	3	ON	0	0 to 65535
707	ENV_3 RELEASE1TIME POT	23	4	ON	0	0 to 65535
708	ENV_3 RELEASE2TIME POT	23	5	ON	1	1 to 65535
709	ENV_3 SHAPE POT	23	6	ON	0	0 to 8
710	ENV_3 D2LEVEL POT	23	7	ON	32768	0 to 65535
711	ENV_3 SUSTAINLEVEL POT	23	8	ON	32768	0 to 65535
712	ENV_3 R2LEVEL POT	23	9	ON	32768	0 to 65535
713	ENV_3 ENVOFFSET POT	23	10	ON	0	-65534 to 65534
714	ENV_3 ENVLEVEL POT	23	11	ON	0	0 to 65535
715	ENV_3 ENVPOL POT	23	12	ON	0	any
716	ENV_3 VIEWBUTTON SWITCH	23	13	OFF	0	any
717	ENV_3 VIEWENVTIMETAB SWITCH	23	14	OFF	0	any
718	ENV_3 VIEWENVLEVELTAB SWITCH	23	15	OFF	0	any
719	ENV_3 VIEWENVLOOPTAB SWITCH	23	16	OFF	0	any
720	ENV_3 DELAYBUTTON SWITCH	23	17	OFF	0	any
721	ENV_3 TRIGGERBUTTON SWITCH	23	18	ON	0	any
722	ENV_3 MOD1BUTTON SWITCH	23	19	ON	0	any
723	ENV_3 MOD2BUTTON SWITCH	23	20	ON	0	any
724	ENV_3 MOD3BUTTON SWITCH	23	21	ON	0	any
725	ENV_3 DYNAMICSBUTTON SWITCH	23	22	OFF	0	any
726	ENV_3 LOOPBUTTON SWITCH	23	23	ON	0	any
727	ENV_3 ENVMODE POT	23	24	ON	0	0 to 6
728	ENV_3 TRIG_SRC POT	23	25	ON	1	1 to 79
729	ENV_3 TRIG_INLVL POT	23	26	ON	0	-65534 to 65534
730	ENV_3 TRIG_POL POT	23	27	ON	0	0 to 5
731	ENV_3 TRIG_ENA POT	23	28	ON	0	0 to 1
732	ENV_3 RETRIG_SRC POT	23	29	ON	1	1 to 79
733	ENV_3 RETRIG_STAGE POT	23	30	ON	0	1 to 6
734	ENV_3 RETRIG_LVL POT	23	31	ON	0	-65534 to 65534
735	ENV_3 RETRIG_POL POT	23	32	ON	0	0 to 5
736	ENV_3 RETRIG_ENA POT	23	33	ON	0	0 to 1
737	ENV_3 TRIGPAGE_SEL POT	23	34	ON	0	any
738	ENV_3 LOOP_START POT	23	35	ON	0	1 to 5
739	ENV_3 LOOP_END POT	23	36	ON	0	2 to 6
740	ENV_3 LOOP_COUNT POT	23	37	ON	0	1 to 255
741	ENV_3 LOOP_TYPE POT	23	38	ON	0	-1 to 1
742	ENV_3 LOOP_SMTIME POT	23	39	ON	0	1 to 65535
743	ENV_3 LOOP_SMSHAPE POT	23	40	ON	0	0 to 8
744	ENV_3 LOOP_MIDISYNC POT	23	41	ON	0	any
745	ENV_3 DYN_RESET POT	23	42	ON	0	0 to 3
746	ENV_3 DYN_SUSPDL POT	23	43	ON	0	0 to 1
747	ENV_3 DYN_KEYTRK POT	23	44	ON	0	-65534 to 65534
748	ENV_3 DYN_KTRK_BASEKEY POT	23	45	ON	0	0 to 127
749	ENV_3 DYN_LVLTRK POT	23	46	ON	0	-65534 to 65534
750	ENV_3 DYN_VELMOD POT	23	47	ON	0	-65534 to 65534
751	ENV_3 DYN_RELMOD POT	23	48	ON	0	-65534 to 65534
752	ENV_3 MOD1ENABLE POT	23	49	ON	0	0 to 1
753	ENV_3 MOD2ENABLE POT	23	50	ON	0	0 to 1
754	ENV_3 MOD3ENABLE POT	23	51	ON	0	0 to 1
755	ENV_3 MOD1SOURCE POT	23	52	ON	1	1 to 79
756	ENV_3 MOD2SOURCE POT	23	53	ON	1	1 to 79

757	ENV_3 MOD3SOURCE POT	23	54	ON	1	1 to 79
758	ENV_3 MOD1DEST POT	23	55	ON	0	0 to 7
759	ENV_3 MOD2DEST POT	23	56	ON	0	0 to 7
760	ENV_3 MOD3DEST POT	23	57	ON	0	0 to 7
761	ENV_3 MOD1OFFSET POT	23	58	ON	0	-65534 to 65534
762	ENV_3 MOD2OFFSET POT	23	59	ON	0	-65534 to 65534
763	ENV_3 MOD3OFFSET POT	23	60	ON	0	-65534 to 65534
764	ENV_3 MOD1SCALE POT	23	61	ON	0	-32767 to 32767
765	ENV_3 MOD2SCALE POT	23	62	ON	0	-32767 to 32767
766	ENV_3 MOD3SCALE POT	23	63	ON	0	-32767 to 32767
767	VMIX VOICELEVEL POT	24	0	ON	16384	0 to 32768
768	VMIX VOICEPAN POT	24	1	ON	32768	0 to 65535
769	VMIX VMIX_TAB SWITCH	24	2	OFF	0	any
770	VMIX OUTPUTSELECT SWITCH	24	3	ON	0	any
771	VMIX MODBUTTON SWITCH	24	4	ON	0	any
772	VMIX VOICEOUTONOFF SWITCH	24	5	ON	0	any
773	VMIX OUTSEL_POT POT	24	6	ON	1	0 to 2
774	VMIX VOXOUT_POT POT	24	7	ON	0	0 to 1
775	VMIX MODSOURCE POT	24	8	ON	1	1 to 79
776	VMIX MODDEST POT	24	9	ON	0	0 to 1
777	VMIX MODOFFSET POT	24	10	ON	0	-65534 to 65534
778	VMIX MODSCALE POT	24	11	ON	0	-32767 to 32767
779	VMIX MODENABLE POT	24	12	ON	0	0 to 1
780	PROG_MODE PROGBUTTON SWITCH	2	0	OFF	0	any
781	PROG_MODE TAB_PROG SWITCH	2	1	OFF	0	any
782	PROG_MODE TAB_DIR SWITCH	2	2	OFF	0	any
783	PROG_MODE TAB_PERF SWITCH	2	3	OFF	0	any
784	PROG_MODE TAB_SPERF SWITCH	2	4	OFF	0	any
785	PROG_MODE BANKSELECT POT	2	5	OFF	0	0 to 14
786	PROG_MODE PROGSELECT POT	2	6	OFF	0	0 to 127
787	PROG_MODE DEFAULT POT	2	7	OFF	0	any
788	STORE_MODE STOREBUTTON SWITCH	3	0	OFF	0	any
789	STORE_MODE TAB_PROG SWITCH	3	1	OFF	0	any
790	STORE_MODE TAB_DIR SWITCH	3	2	OFF	0	any
791	STORE_MODE DIRCOPY POT	3	3	OFF	0	any
792	STORE_MODE DIRCOPY_TO POT	3	4	OFF	0	any
793	STORE_MODE TAB_COPY SWITCH	3	5	OFF	0	any
794	STORE_MODE COPY_TYPE POT	3	6	OFF	0	0 to 6
795	STORE_MODE COPY_SRCBANK POT	3	7	OFF	0	0 to 14
796	STORE_MODE COPY_SRCNUM POT	3	8	OFF	0	0 to 127
797	STORE_MODE COPY_SRCMIXCH POT	3	9	OFF	0	0 to 15
798	STORE_MODE COPY_DSTBANK POT	3	10	OFF	0	0 to 14
799	STORE_MODE COPY_DSTMIXCH POT	3	11	OFF	0	0 to 15
800	STORE_MODE COPY_DSTBUF POT	3	12	OFF	0	0 to 1
801	STORE_MODE COPY_BLANK2 POT	3	13	OFF	0	any
802	STORE_MODE TAB_INIT SWITCH	3	14	OFF	0	any
803	STORE_MODE TAB_CARD SWITCH	3	15	OFF	0	any
804	STORE_MODE CARD_INIT POT	3	16	OFF	0	any
805	STORE_MODE TAB_SYSEX SWITCH	3	17	OFF	0	any
806	STORE_MODE TAB_BLANK SWITCH	3	18	OFF	0	any
807	STORE_MODE TAB_NAME SWITCH	3	19	OFF	0	any

808	STORE_MODE BANKSELECT POT	3	20	OFF	0	0 to 2
809	STORE_MODE PROGSELECT POT	3	21	OFF	0	0 to 127
810	STORE_MODE RECIEVE_TO POT	3	22	OFF	2	0 to 2
811	STORE_MODE DUMPALL POT	3	23	OFF	1	0 to 1
812	STORE_MODE POT_INIT_PROG POT	3	24	OFF	0	any
813	STORE_MODE POT_INIT_MIX POT	3	25	OFF	0	any
814	STORE_MODE NAME_NUMBER POT	3	26	OFF	0	0 to 9
815	STORE_MODE NAME_UPPER POT	3	27	OFF	0	0 to 25
816	STORE_MODE NAME_LOWER POT	3	28	OFF	0	0 to 25
817	STORE_MODE NAME_SPECIAL POT	3	29	OFF	0	0 to 90
818	STORE_MODE NAME_CHARSEL POT	3	30	OFF	0	0 to 15
819	STORE_MODE NAME_NAMESEL POT	3	31	OFF	0	0 to 89
820	MIX_MODE MIX_MIX_TAB SWITCH	1	0	OFF	0	any
821	MIX_MODE BANKSELECT POT	1	1	OFF	0	0 to 13
822	MIX_MODE PROGSELECT POT	1	2	OFF	0	0 to 127
823	MIX_MODE MIX_DIR_TAB SWITCH	1	3	OFF	0	any
824	MIX_MODE MIX_PERF_TAB SWITCH	1	4	OFF	0	any
825	MIX_MODE MIX_SPERF_TAB SWITCH	1	5	OFF	0	any
826	MIX_MODE MIX_KBD_TAB SWITCH	1	6	OFF	0	any
827	MIX_MODE KBD_KBDHI POT	1	7	OFF	127	0 to 127
828	MIX_MODE KBD_KBDLO POT	1	8	OFF	0	0 to 127
829	MIX_MODE KBD_KBDCTL POT	1	9	OFF	0	0 to 1
830	MIX_MODE KBD_ENABLE POT	1	10	OFF	0	0 to 1
831	MIX_MODE MIX_PROGXX_TAB SWITCH	1	11	OFF	0	any
832	MIX_MODE PROGXX_LVL POT	1	12	ON	16384	0 to 32767
833	MIX_MODE PROGXX_PAN POT	1	13	ON	32768	0 to 65535
834	MIX_MODE PROGXX_OUT POT	1	14	ON	0	0 to 2
835	MIX_MODE PROGXX_SEMI POT	1	15	ON	0	-60 to 60
836	MIX_MODE PROGXX_CENTS POT	1	16	ON	0	-100 to 100
837	(not used)					
838	MIX_MODE PROGXX_MIDICH POT	1	18	OFF	0	0 to 15
839	(not used)					
840	(not used)					
841	MIX_MODE MIX_CNTLXX_TAB SWITCH	1	21	OFF	0	any
842	MIX_MODE CNTLXX_POT1 POT	1	22	OFF	0	0 to 1
843	MIX_MODE CNTLXX_POT2 POT	1	23	OFF	0	0 to 1
844	MIX_MODE CNTLXX_POT3 POT	1	24	OFF	0	0 to 1
845	MIX_MODE CNTLXX_POT4 POT	1	25	OFF	0	0 to 1
846	MIX_MODE CNTLXX_POT5 POT	1	26	OFF	0	0 to 1
847	MIX_MODE CNTLXX_POT6 POT	1	27	OFF	0	0 to 1
848	MIX_MODE CNTLXX_POT7 POT	1	28	OFF	0	0 to 1
849	MIX_MODE CNTLXX_POT8 POT	1	29	OFF	0	0 to 1
850	MIX_MODE MIX_CHN_EN_POT POT	1	30	OFF	0	any
851	MIX_MODE SOLO_TAB SWITCH	1	31	OFF	0	any
852	GLOBPG GLOBAL_BUTTON SWITCH	4	0	OFF	0	any
853	GLOBPG KBD_TAB SWITCH	4	1	OFF	0	0 to 1
854	GLOBPG KBD_TRANSP POT	4	2	OFF	0	-24 to 24
855	GLOBPG KBD_VELCRV POT	4	3	OFF	1	0 to 2
856	GLOBPG KBD_SENS POT	4	4	OFF	50	0 to 100
857	GLOBPG KBD_MODE POT	4	5	OFF	0	0 to 2
858	GLOBPG KBD_MIDICH POT	4	6	OFF	0	0 to 15

859	GLOBPG KBD_AFTCH POT	4	7	OFF	50	0 to 100
860	GLOBPG KBD_VOICESTEAL POT	4	8	OFF	1	0 to 1
861	GLOBPG PEDAL_TAB SWITCH	4	9	OFF	0	0 to 1
862	GLOBPG PEDMODE POT	4	10	OFF	0	0 to 3
863	GLOBPG FSWMODE POT	4	11	OFF	0	0 to 1
864	GLOBPG MIDI_TAB SWITCH	4	12	OFF	0	0 to 16
865	GLOBPG MIDI_MIXSEL POT	4	13	OFF	0	0 to 16
866	GLOBPG MIDI_PRGSEL POT	4	14	OFF	0	0 to 1
867	GLOBPG MIDI_PRGTX POT	4	15	OFF	1	0 to 1
868	GLOBPG MIDI_BNKSEL POT	4	16	OFF	0	0 to 2
869	GLOBPG MIDI_CCTX POT	4	17	OFF	0	0 to 1
870	GLOBPG MIDI_CCRX POT	4	18	OFF	0	0 to 1
871	GLOBPG MIDI_SYXRCV POT	4	19	OFF	0	0 to 1
872	GLOBPG CCMAP_TAB SWITCH	4	20	OFF	0	any
873	GLOBPG FSWCC POT	4	21	OFF	0	0 to 127
874	GLOBPG RIBVAL_CC POT	4	22	OFF	0	20 to 31
875	GLOBPG RIBLEFT_CC POT	4	23	OFF	0	0 to 120
876	GLOBPG RIBRIGHT_CC POT	4	24	OFF	0	0 to 120
877	GLOBPG PEDCC POT	4	25	OFF	7	0 to 120
878	GLOBPG MIDI_CTLNUM POT	4	26	OFF	0	0 to 7
879	GLOBPG MIDI_CTLCC POT	4	27	OFF	0	0 to 127
880	GLOBPG PANEL_TAB SWITCH	4	28	OFF	0	0 to 1
881	GLOBPG PANEL_PASSTHRU POT	4	29	OFF	0	0 to 2
882	GLOBPG PANEL_THIN POT	4	30	OFF	2	0 to 5
883	(not used)					
884	GLOBPG PANEL_NNRPRX POT	4	32	OFF	0	0 to 1
885	GLOBPG PANEL_MODE POT	4	33	OFF	0	0 to 2
886	GLOBPG SYSTEM_TAB SWITCH	4	34	OFF	0	0 to 1
887	GLOBPG VOXMON_TAB SWITCH	4	35	OFF	0	0 to 1
888	(not used)					
889	(not used)					
890	(not used)					
891	GLOBAL PITCHWHEEL_POT POT	4	39	OFF	0	any
892	GLOBAL MODWHEEL_POT POT	4	40	OFF	0	any
893	GLOBAL RIBBON_RIGHT_POT POT	4	41	OFF	0	any
894	GLOBAL RIBBON_LEFT_POT POT	4	42	OFF	0	any
895	(not used)					
896	(not used)					
897	(not used)					
898	GLOBAL MIX_BUTTON SWITCH	4	46	OFF	0	any
899	GLOBAL MANUAL_BUTTON SWITCH	4	47	OFF	0	any
900	GLOBAL COMPARE_BUTTON SWITCH	4	48	OFF	0	any
901	GLOBAL HOLDLEFT_BUTTON SWITCH	4	49	OFF	0	any
902	GLOBAL HOLDRIGHT_BUTTON SWITCH	4	50	OFF	0	any
903	GLOBAL RIBBON_BUTTON SWITCH	4	51	OFF	0	any
904	GLOBAL AFTERTOUCH POT	4	255	OFF	0	any
905	GLOBAL CONTROLPEDAL POT	4	255	OFF	0	any
906	BANK_SEL DECREMENT SWITCH	40	0	OFF	0	any
907	BANK_SEL INCREMENT SWITCH	40	1	OFF	0	any
908	PROG_SEL SW00 SWITCH	40	2	OFF	0	any
909	PROG_SEL SW10 SWITCH	40	3	OFF	0	any

910	PROG_SEL SW20 SWITCH	40	4	OFF	0	any
911	PROG_SEL SW30 SWITCH	40	5	OFF	0	any
912	PROG_SEL SW40 SWITCH	40	6	OFF	0	any
913	PROG_SEL SW50 SWITCH	40	7	OFF	0	any
914	PROG_SEL SW60 SWITCH	40	8	OFF	0	any
915	PROG_SEL SW70 SWITCH	40	9	OFF	0	any
916	PROG_SEL SW80 SWITCH	40	10	OFF	0	any
917	PROG_SEL SW90 SWITCH	40	11	OFF	0	any
918	PROG_SEL SW100 SWITCH	40	12	OFF	0	any
919	PROG_SEL SW110 SWITCH	40	13	OFF	0	any
920	PROG_SEL SW120 SWITCH	40	14	OFF	0	any
921	PROG_SEL SW0 SWITCH	40	15	OFF	0	any
922	PROG_SEL SW1 SWITCH	40	16	OFF	0	any
923	PROG_SEL SW2 SWITCH	40	17	OFF	0	any
924	PROG_SEL SW3 SWITCH	40	18	OFF	0	any
925	PROG_SEL SW4 SWITCH	40	19	OFF	0	any
926	PROG_SEL SW5 SWITCH	40	20	OFF	0	any
927	PROG_SEL SW6 SWITCH	40	21	OFF	0	any
928	PROG_SEL SW7 SWITCH	40	22	OFF	0	any
929	PROG_SEL SW8 SWITCH	40	23	OFF	0	any
930	PROG_SEL SW9 SWITCH	40	24	OFF	0	any
931	MIX_SEL MULTISEL SWITCH	40	25	OFF	0	any
932	MIX_SEL SW109 SWITCH	40	26	OFF	0	any
933	MIX_SEL SW210 SWITCH	40	27	OFF	0	any
934	MIX_SEL SW311 SWITCH	40	28	OFF	0	any
935	MIX_SEL SW412 SWITCH	40	29	OFF	0	any
936	MIX_SEL SW513 SWITCH	40	30	OFF	0	any
937	MIX_SEL SW614 SWITCH	40	31	OFF	0	any
938	MIX_SEL SW715 SWITCH	40	32	OFF	0	any
939	MIX_SEL SW816 SWITCH	40	33	OFF	0	any
940	EFFECTS ONOFFBUTTON SWITCH	26	0	ON	0	any
941	ANAFX CONFIG_BTN SWITCH	26	1	OFF	0	any
942	ANAFX MOD_BTN SWITCH	26	2	ON	0	any
943	ANAFX SEND_LVL POT	26	3	ON	0	0 to 65535
944	ANAFX DIST_LVL POT	26	4	ON	0	0 to 65535
945	ANAFX DIST_TYPE POT	26	5	ON	0	0 to 3
946	ANAFX TODFX1BUS POT	26	6	ON	0	0 to 1
947	ANAFX TODFX2BUS POT	26	7	ON	0	0 to 1
948	ANAFX TOMAINBUS POT	26	8	ON	0	0 to 1
949	ANAFX MODENABLE POT	26	9	ON	0	0 to 1
950	ANAFX MODSOURCE POT	26	10	ON	1	1 to 79
951	ANAFX MODOFFSET POT	26	11	ON	0	-65534 to 65534
952	ANAFX MODSCALE POT	26	12	ON	0	-32767 to 32767
953	DIGFX CONFIG_TAB SWITCH	28	0	OFF	0	any
954	DIGFX MOD_BTN SWITCH	28	1	ON	0	any
955	DIGFX PARM1_TAB SWITCH	28	2	OFF	0	any
956	DIGFX PARM2_TAB SWITCH	28	3	OFF	0	any
957	DIGFX PARM3_TAB SWITCH	28	4	OFF	0	any
958	DIGFX PARM4_TAB SWITCH	28	5	OFF	0	any
959	DIGFX PARM5_TAB SWITCH	28	6	OFF	0	any
960	DIGFX MOD1_TAB SWITCH	28	7	ON	0	any

961	DIGFX MOD2_TAB SWITCH	28	8	ON	0	any
962	DIGFX MOD1SOURCE POT	28	9	ON	1	1 to 79
963	DIGFX MOD2SOURCE POT	28	10	ON	1	1 to 79
964	DIGFX MOD1DEST POT	28	11	ON	0	0 to 3
965	DIGFX MOD2DEST POT	28	12	ON	0	0 to 3
966	DIGFX MOD1OFFSET POT	28	13	ON	0	-65534 to 65534
967	DIGFX MOD2OFFSET POT	28	14	ON	0	-65534 to 65534
968	DIGFX MOD1SCALE POT	28	15	ON	0	-32767 to 32767
969	DIGFX MOD2SCALE POT	28	16	ON	0	-32767 to 32767
970	DIGFX MOD1ENABLE POT	28	17	ON	0	0 to 1
971	DIGFX MOD2ENABLE POT	28	18	ON	0	0 to 1
972	DIGFX CONFIGSELECT POT	28	19	ON	0	0 to 28
973	DIGFX INPUT_LVL POT	28	20	ON	0	0 to 65535
974	DIGFX INPUT_PAN POT	28	21	ON	32768	0 to 65535
975	DIGFX OUTPUT_ONE POT	28	22	ON	0	Depends on effect config
976	DIGFX OUTPUT_TWO POT	28	23	ON	0	Depends on effect config
977	DIGFX OUTPUT_THREE POT	28	24	ON	0	Depends on effect config
978	DIGFX PARAM_0 POT	28	25	ON	0	Depends on effect config
979	DIGFX PARAM_1 POT	28	26	ON	0	Depends on effect config
980	DIGFX PARAM_2 POT	28	27	ON	0	Depends on effect config
981	DIGFX PARAM_3 POT	28	28	ON	0	Depends on effect config
982	DIGFX PARAM_4 POT	28	29	ON	0	Depends on effect config
983	DIGFX PARAM_5 POT	28	30	ON	0	Depends on effect config
984	DIGFX PARAM_6 POT	28	31	ON	0	Depends on effect config
985	DIGFX PARAM_7 POT	28	32	ON	0	Depends on effect config
986	DIGFX PARAM_8 POT	28	33	ON	0	Depends on effect config
987	DIGFX PARAM_9 POT	28	34	ON	0	Depends on effect config
988	DIGFX PARAM_10 POT	28	35	ON	0	Depends on effect config
989	DIGFX PARAM_11 POT	28	36	ON	0	Depends on effect config
990	DIGFX PARAM_12 POT	28	37	ON	0	Depends on effect config
991	DIGFX PARAM_13 POT	28	38	ON	0	Depends on effect config
992	DIGFX PARAM_14 POT	28	39	ON	0	Depends on effect config
993	DIGFX PARAM_15 POT	28	40	ON	0	Depends on effect config
994	DIGFX PARAM_16 POT	28	41	ON	0	Depends on effect config
995	DIGFX PARAM_17 POT	28	42	ON	0	Depends on effect config
996	DIGFX PARAM_18 POT	28	43	ON	0	Depends on effect config
997	DIGFX PARAM_19 POT	28	44	ON	0	Depends on effect config
998	DIGFX PARAM_20 POT	28	45	ON	0	Depends on effect config
999	DIGFX PARAM_21 POT	28	46	ON	0	Depends on effect config
1000	DIGFX PARAM_22 POT	28	47	ON	0	Depends on effect config
1001	DIGFX PARAM_23 POT	28	48	ON	0	Depends on effect config
1002	DIGFX PARAM_24 POT	28	49	ON	0	Depends on effect config
1003	DIGFX PARAM_25 POT	28	50	ON	0	Depends on effect config
1004	DIGFX PARAM_26 POT	28	51	ON	0	Depends on effect config
1005	DIGFX PARAM_27 POT	28	52	ON	0	Depends on effect config
1006	DIGFX PARAM_28 POT	28	53	ON	0	Depends on effect config
1007	DIGFX PARAM_29 POT	28	54	ON	0	Depends on effect config
1008	EXT_FLT_IN INPUT15 SWITCH	27	0	ON	0	any
1009	EXT_FLT_IN INPUT16 SWITCH	27	1	ON	0	any
1010	EXT_FLT_IN PREMIX SWITCH	27	2	ON	0	any
1011	CV_INPUTS OSCIN SWITCH	38	0	ON	0	any

1012	CV_INPUTS FILTERIN SWITCH	38	1	ON	0	any
1013	(not used)					
1014	(not used)					
1015	(not used)					
1016	(not used)					
1017	(not used)					
1018	(not used)					
1019	(not used)					
1020	(not used)					
1021	(not used)					
1022	(not used)					
1023	(not used)					
1024	(not used)					
1025	(not used)					
1026	(not used)					
1027	(not used)					
1028	(not used)					
1029	(not used)					
1030	(not used)					
1031	TUNEPAGE AUTOTUNE_BUTTON SWITCH	37	0	OFF	0	any
1032	TUNEPAGE MASTERTUNE_POT POT	37	1	ON	0	-2048 to 2048
1033	TUNEPAGE BKGTUNE POT	37	2	OFF	0	0 to 1
1034	TUNEPAGE TEMPTUNE POT	37	3	OFF	0	0 to 1
1035	TUNEPAGE TUNETAB SWITCH	37	4	OFF	0	any
1036	TUNEPAGE VCACAL SWITCH	37	5	OFF	0	any
1037	TUNEPAGE OSCFREQ SWITCH	37	6	OFF	0	any
1038	TUNEPAGE OSCPW SWITCH	37	7	OFF	0	any
1039	TUNEPAGE FILTFREQ SWITCH	37	8	OFF	0	any
1040	TUNEPAGE VOXNUM POT	37	9	OFF	0	0 to 15
1041	TUNEPAGE BAND POT	37	10	OFF	0	0 to 15