

MIDI Solutions Programmable Output Selector Operating Instructions

The MIDI Solutions Programmable Output Selector (hereafter referred to as POS) has a single MIDI input, two MIDI outputs, and a footswitch input. The outputs that incoming MIDI data is routed to are programmable and can be controlled by sending the POS Program Change messages or tapping a footswitch. There are nine options for the LED to indicate which outputs are selected. The POS can be programmed to send the All-Notes-Off and Sustain off messages when an output is turned on or off. All programmed settings are retained by the unit even after power is removed.

After receiving the following programming commands, the POS's LED will flash rapidly for about a second to indicate that it has been programmed. Please allow a few seconds for the setting to be stored in the POS's memory before sending the next command. Refer to the table below for conversions to hexadecimal values.

- ▶ The POS can store up to 128 programs which specify the outputs the MIDI data is routed to. To store these programs in memory, send the POS the following System Exclusive message (all values in Hexadecimal):

F0 00 00 50 1B 01 ab ab ab ... F7 where **ab ab ab ...** are the program settings starting with Program #0

a and **b** are set as follows: **a** = 0: Nothing sent to OutA

a = 1: All MIDI messages except notes sent to OutA

a = 2: All MIDI messages sent to OutA

b = 0: Nothing sent to OutB

b = 1: All MIDI messages except notes sent to OutB

b = 2: All MIDI messages sent to OutB

Example: To program the POS to route all messages to OutA in response to Program Change #0, and all messages to OutB in response to Program Change #1, send it the following programming command:

F0 00 00 50 1B 01 20 02 F7

- ▶ The POS can be programmed to change programs in response to incoming Program Change messages, or by holding down or tapping a footswitch. The POS can also send All-Notes-Off and Sustain-Off whenever an output is turned on or off. To program these parameters, send the POS the following System Exclusive message (all values in Hexadecimal):

F0 00 00 50 1B 00 aa tt (cc) F7 (**cc** is optional) **aa**, **tt**, and **cc** are set as follows:

aa = 00: Don't send All-Notes-Off and Sustain-Off

aa = 01: Send out All-Notes-Off and Sustain-Off whenever turning an output ON

aa = 02: Send out All-Notes-Off and Sustain-Off whenever turning an output OFF

tt = 00: Tap OFF - footswitch open selects Program #0, footswitch closed selects Program #1

tt = 01: Tap ON - tapping the footswitch increments through Programs

cc = MIDI channel to respond to Program Change messages on (see channel table below for values)

- if **cc** is omitted then incoming Program Changes are ignored and POS responds to footswitch only

- ▶ The POS's LED can be programmed to flash in a variety of ways to indicate the output status. With **ab** defined as above, the LED indication **ii** corresponding to the state of **ab** is programmed as follows:

F0 00 00 50 1B 02 ab ii F7 where **ii** is set as follows:

ii = 00: LED OFF **ii** = 01: LED flashes once/second **ii** = 02: LED flashes twice/second

ii = 03: LED flashes three times/second **ii** = 04: LED constant flash **ii** = 05: LED rapid flash

ii = 06: LED ON **ii** = 07: LED ON flashing OFF briefly when data is passed through POS

ii = 08: LED OFF flashing ON briefly when data is passed through POS

Example: To program the POS's LED to flash rapidly when all MIDI messages are being routed to OutA and OutB, send it the following command: **F0 00 00 50 1B 02 22 05 F7**

Dec/Hex	HEXADECIMAL CONVERSION TABLE															
0 00	16 10	32 20	48 30	64 40	80 50	96 60	112 70									
1 01	17 11	33 21	49 31	65 41	81 51	97 61	113 71									
2 02	18 12	34 22	50 32	66 42	82 52	98 62	114 72									
3 03	19 13	35 23	51 33	67 43	83 53	99 63	115 73									
4 04	20 14	36 24	52 34	68 44	84 54	100 64	116 74									
5 05	21 15	37 25	53 35	69 45	85 55	101 65	117 75									
6 06	22 16	38 26	54 36	70 46	86 56	102 66	118 76									
7 07	23 17	39 27	55 37	71 47	87 57	103 67	119 77									
8 08	24 18	40 28	56 38	72 48	88 58	104 68	120 78									
9 09	25 19	41 29	57 39	73 49	89 59	105 69	121 79									
10 0A	26 1A	42 2A	58 3A	74 4A	90 5A	106 6A	122 7A									
11 0B	27 1B	43 2B	59 3B	75 4B	91 5B	107 6B	123 7B									
12 0C	28 1C	44 2C	60 3C	76 4C	92 5C	108 6C	124 7C									
13 0D	29 1D	45 2D	61 3D	77 4D	93 5D	109 6D	125 7D									
14 0E	30 1E	46 2E	62 3E	78 4E	94 5E	110 6E	126 7E									
15 0F	31 1F	47 2F	63 3F	79 4F	95 5F	111 6F	127 7F									

MIDI CHANNEL TABLE					
cc must be set according to the following table:					
Chan.	cc	Chan.	cc	Chan.	cc
1 -	00	7 -	06	13 -	0C
2 -	01	8 -	07	14 -	0D
3 -	02	9 -	08	15 -	0E
4 -	03	10 -	09	16 -	0F
5 -	04	11 -	0A	ALL -	7F
6 -	05	12 -	0B		