

## 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. 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 and output ON

**aa** = 02: Send out All-Notes-Off and Sustain-Off whenever turning and 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**

HEXADECIMAL CONVERSION TABLE														
Dec/Hex	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		