HANDLEIDING DISPLAY (Stichting Logos)

Midi-channel: 0

The utmost left 7-segment display responds to midi note 1. Thus, for the four characters, we use notes 1,2,3 and 4.

A Note-off command blanks the corresponding display character.

The note velocity byte with note-on commands is used to control what the displays will show. This is only the case in NUM and ASCI modes. In event counter mode, this can be used to set a preset counter value.

Program change:

0= plain numeric with hexadecimal extensions [NUM]
1= simplified ASCII character set [ASCI], both uppercase and lowercase ascii codes can be sent.
2= event counter mode. Counter is incremented with controller 27, reset with controller 26. The controller value has no meaning. If you want to start from a preset value, you should send four note-on commands with the velocity byte set to the required preset value for that digit.
3= seconds counter. The counter starts on reception of this program change command. The value will increment every second. The count is decimal. In this mode, controller 28 is implemented (with any value) to temporary halt the seconds-counter. To restart it from the reading is was at on being halted, controller 29 (with any value) should be send. The controllers are one-shots.
4= stopwatch mode. The stopwatch starts on reception of this program change command. It counts in minutes and seconds MM.SS. In this mode, controller 28 is implemented (with any value) to temporary halt the stopwatch. To restart it from the reading is was at on being halted, controller 29 (with any value) should be send. The controllers are one-shots.
5= analog 5-bit display mode. Any note-on command for notes 1,2,3,4 can be sent with the required velo value. Velo range is 0-33.

In NUM mode, the displays will respond to velocity values as follows:

            value 0 displays "0"
            value 1 displays "1"
            value 2 displays "2"
            value 3 displays "3"
            etc.
            value 10 displays "A"
            value 11 displays "b"
            value 12 displays "C"
            value 13 displays "d"
            value 14 displays "E"
            value 15 displays "F"

value 16: blanks the display

If bit 5 in the velocity byte is set, the dot will be on, otherwise
always off.

In ASCII mode, the displays will translate ascii codes as follows:

            value 7 beeps the buzzer (for note 4 only)
            other values < 48: blank the display
            value 49-57: "0" to "9"
            value 59-93: "A" to "F" (for hexadecimal uses)
            value 65 to 90: "a to z"
            value 91 to 96: switch dot ON
            value 97-122: "a to z"
            value > 122: blank display

To allow users to freely program the segments of the display, we also
implemented the note-pressure command, both in the NUM and ASCI modes
of operation.

The individual bits of the pressure value byte control each individual
segment of any display:

            bit 6: segment a
            bit 5: segment b
            bit 4: segment c
            bit 3: segment d
            bit 2: segment e
            bit 1: segment f
            bit 0: segment g