

Automated Lights

Ordinary dimmers **map** DMX values from a single channel to a 0-100% scale.

0 → 255

0% → 100%

Automated lights and other special effects systems generally map multiple bytes of channel data to multiple different functions. For example, the *High End Studio Spot 575* maps the following functions to a sequential 24 channel block:

1	Pan Coarse	13	Gobo 2 Function
2	Pan Fine	14	Gobo 2 Position
3	Tilt Coarse	15	Gobo 2 Rotation
4	Tilt Fine	16	Gobo 2 Fine Rotation
5	Color Wheel 1 Function	17	Frost
6	Color Wheel 1 Position	18	Focus
7	Color Wheel 2 Function	19	Iris
8	Color Wheel 2 Position	20	Shutter / Strobe
9	Gobo 1 Function	21	Dimmer
10	Gobo 1 Position	22	Motor Speed
11	Gobo 1 Rotation	23	Macro Channel
12	Gobo 1 Fine Rotation	24	Control

A Studio spot set to Starting Channel 100 would use channels 100 through 123 for its various parameters. For example, changing the value of channel 118 would open and close the iris of the instrument.

? How would you patch an automated light in order to make it easy to remember the function of the various channels?

Not all channels are simple 0-255 scales. For example, the strobe channel uses DMX values 32-63 to vary the rate of the strobe. Values from 64-95 instruct the instrument to strobe its shutter in a random pattern. Other values are mapped to other functions.

The Hog and Other Automated Lighting Consoles assign plaintext names to the DMX output channels. Instead of panning the instrument by typing “Channel 1 @ 50%”, you pan the instrument by instruction “Studio Spot 1, pan at 50%”

Consoles designed specifically for automated lighting contain **profiles** for numerous different brands and models of lights. These profiles contain the map data for that instrument and, once the instrument is patched, are used to assign the plaintext labels. This allows a board op/programmer to refer to the functions easily, instead of having to remember a numeric map.

Also, this map contains the plaintext description of the function to which each channel value is mapped. Remember the strobe example above? On the Hog, you don't have to remember which values control the rate of the strobe and which values send it into random mode. The screen of the Hog will read “Random” if you are operating within that range of values.