

DMX Operation

Channel Mapping

These tables assume a DMX start address of 1. When a different starting address is used, this address becomes channel 1 function and other functions follow in sequence. (There is only one DMX mode for this luminaire, which is Enhanced 16-bit Mode.)



Table 3-1: VL3500 Spot Luminaires Enhanced 16-Bit Mode

DMX Channel	Parameter	Range
1	Intensity	0 - 255
2	Hi Byte Pan	0 - 65535
3	Lo Byte Pan	
4	Hi Byte Tilt	0 - 65535
5	Lo Byte Tilt	
6	Edge	0 - 255
7	Zoom	0 (small) - 255 (big)
8	CTO Mixer	0 (open) - 255 (full saturation)
9	Cyan Mixer	0 (open) - 255 (full saturation)
10	Yellow Mixer	0 (open) - 255 (full saturation)
11	Magenta Mixer	0 (open) - 255 (full saturation)
12	Color Wheel	0 - 216 / 217 - 255 (spins)
13	Rotating Gobo Wheel (Gobo 1)	0 - 108 (index) / 109 - 216 (rotating) / 217 - 255(spins)
14	Hi Byte Gobo 1 Index/Rot	0 - 65535
15	Lo Byte Gobo 1 Index/Rot	
16	Fixed Gobo Wheel (Gobo 2)	0 - 216 (index) / 217 - 255 (spins)
17	Strobe	0 (open) - 255 (max)
18	Shutter 1a	0 (open) - 255 (closed)
19	Shutter 1b	1 (open) - 255 (closed)
20	Shutter 2a	2 (open) - 255 (closed)
21	Shutter 2b	3 (open) - 255 (closed)
22	Shutter 3a	4 (open) - 255 (closed)
23	Shutter 3b	5 (open) - 255 (closed)
24	Shutter 4a	6 (open) - 255 (closed)
25	Shutter 4b	7 (open) - 255 (closed)
26	Rotation	0 - 255 (128 - center)
27	Focus Time	0 - 255
28	Color Time	0 - 255
29	Beam Time	0 - 255
30	Gobo Time	0 - 255
31	Control Channel (<i>see next page</i>)	0 - 255

Control Channel Functions

Control channel functions allow special actions such as reset, lamp on/off and partial recalibration. These must be executed with zero time transition or with timing disabled. Discrete values must be used; not manual controls such as faders or encoders (see chart below for values).

Reset - resets all luminaire mechanisms.

Lamp On or Lamp Off - switches lamp on or off.

Partial Recalibration - resets only the target mechanism (color, gobo, zoom, etc.) without affecting others.

Pan/Tilt Fast Mode- reduces the reaction time to pan and tilt movement commands in the luminaire.

Pan/Tilt Normal Mode - processes luminaire pan and tilt commands at normal rate.

Note: When utilizing the control channel functionality for the Pan/Tilt Fast and Pan/Tilt Normal Mode functions, the mode setting will change immediately following the input of DMX 40-45 (Pan/Tilt Fast Mode) and DMX 50-55 (Pan/Tilt Normal Mode). No other values or actions within the control channel will change the Mode setting. The action of the Mode is based on the last command executed. Mode will not change until another DMX value of 40-45 or 50-55 is entered into the control channel. Resetting the luminaire or cycling the power will not affect the Mode setting. The control channel value will remain visible in all the cues unless another value is inputted. We recommend that the control channel number not be changed to 0, so that the current Mode setting can be viewed in the cue data without having to know the last value entered. This will prevent inconsistencies when changing or substituting other luminaires that may have a different Mode setting.

Table 3-2: Control Channel Functions

Control Channel Function	Control Channel Value		
	% Value	DMX Value	
		For 3 Secs or Greater	After 3 Secs
Pan/Tilt Fast	16-18	40-45	N/A
Pan/Tilt Normal	20-22	50-55	N/A
Luminaire Reset	32-33	81-87	0
Lamp Off	65-67	165-171	0
Lamp On	98-100	249-255	0
Partial Recalibration of:			
- Color	40	100-104	0
- Gobos	45	112-116	0
- Edge/Zoom/Shutter	50	126-130	0
- Dimmer/Strobe	55	138-142	0

To use control channel functions:

- Step 1. Select an action to be sent*.
- Step 2. Set control channel value for desired action (for example, 84 for reset). Hold value for 3 seconds.
- Step 3. Set control channel value to zero. (This must occur without any scaling values. Action will be voided if other values are detected between action value and zero.)

Note: A numerical keypad is required for sending values. An encoder or fader does not allow for a quick value change, which is required to effect the control functions.

* = Only this step is required for Pan/Tilt mode.