

# VARI\***LITE** TECHNICAL BULLETIN

SUBJECT: <b>VLX™ Wash Luminaire Software Release</b>	SERIES: <b>VLX</b>
DISTRIBUTION: <b>Service Centers, End Users</b>	STATUS: <b>Routine</b>

## Introduction

### Embedded Software Release

Vari-Lite has a new software release for VLX™ Wash Luminaires. Software **01/27/10** (file name, **VLX\_012710.bin**) is now available for download and installation. Vari-Lite strongly recommends all owners and users of the VLX™ Wash Luminaire download and install this new version of software from the Support section of the Vari-Lite web site ([www.vari-lite.com](http://www.vari-lite.com)). Please review this bulletin in its entirety.



**Note:** This version of software contains changes where Color, Strobe, and Intensity values may be altered. Programming adjustments may be necessary. Please contact your console manufacturer for any profile updates.

For instructions on downloading and installing VARI\***LITE**® luminaire software, refer to luminaire’s user manual.

For more information on the USB Luminaire Programming Kit (Vari-Lite part number 28.8500.0054), please contact your Authorized VARI\***LITE**® Dealer or Vari-Lite customer service.

If you have any questions regarding this release or your VARI\***LITE**® product, please contact Vari-Lite Customer Service at 1-877-VARILITE (or +1-214-647-7880) or via e-mail at [entertainment.service@philips.com](mailto:entertainment.service@philips.com).

## Release Notes & Channel Map

### New Version

#### Updates to VLX™ Wash software (01/27/10):

##### LED Driver Firmware

LED Driver firmware has been updated to allow for more control at lower end of LED operating range.

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### **Dimmer Curve**

A Square Law dimmer curve has been added. This dimming option is the DEFAULT setting and provides smoother dimming operation, especially on longer fade times. Accessing Square Law curve is done via the menu system as follows:

Config -> Dimming Curve -> Square Law/Linear

Or via the Control Channel, discussed in “[Control Channel Additions](#)” on page 4 of this bulletin.

### **VLX Operational Modes**

In addition to 'Normal' and 'Quiet', 'Constant' and 'Level Light' have been added to the VLX operation mode selection. These four modes are accessed via the menu system as follows:

Config -> Power Level -> Normal/Quiet/Constant/Level

Or via the Control Channel, discussed in “[Control Channel Additions](#)” on page 4 of this bulletin.

- **Normal** = This mode operates the luminaire’s fans according to the LED’s junction temperature. Fans will vary in speed according to thermal readings by MCB.
- **Quiet** = LED output levels are decreased to keep LED junction temperatures lower and fan noise to a minimum. Fans will still vary in speed, but will not exceed the set (lower noise) limit.
- **Constant** = This setting sets fans to maximum speed and will keep them operating at full, regardless of LED junction temperatures.
- **Level Light** = This mode maintains a reduced LED output to keep various fixtures from operating at different levels depending upon thermal situations. The fans will run full speed, regardless of junction temperatures.

### **Delayed Intensity after a Luminaire Reset**

The VLX™ wash will wait 6 seconds after a calibration routine is completed before it applies any set dimmer values.

### **Pan/Tilt Speed Selection**

Pan and Tilt speed control selections have been removed from the Menu.

### **Self Tests**

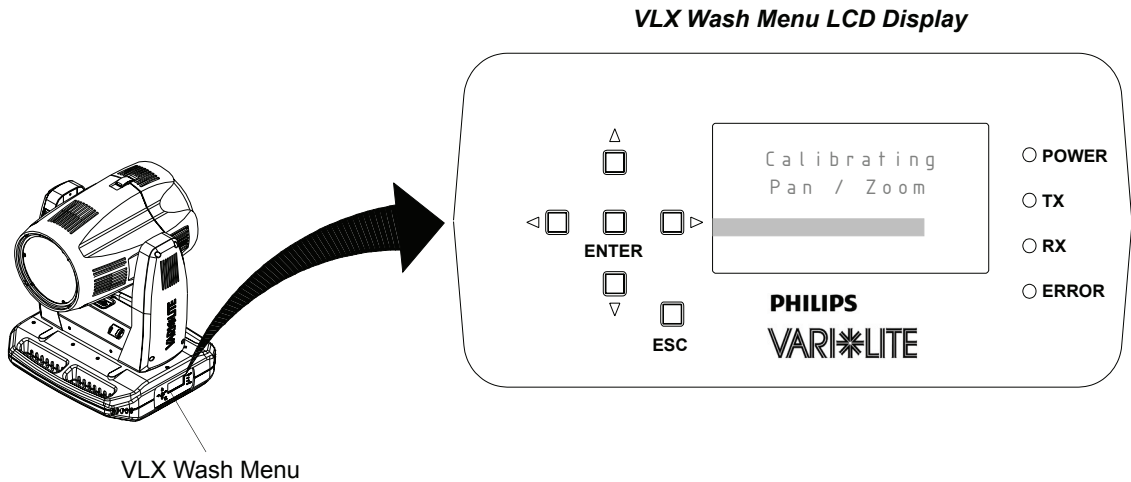
The VLX™ wash self tests have been added in this software version. The tests included are:

- **ALL TEST** - Tests all functions of the VLX including LEDs, Pan/Tilt, Strobe, and Zoom.
- **PAN/TILT** - Tests pan and tilt together.
- **PAN** - Tests pan operation.
- **TILT** - Tests tilt operation.
- **LEDs** - Tests operation of LEDs including timed fades.
- **STROBE** - Tests various strobe settings

- ZOOM - Tests beam spreading mechanism.

### LCD Display - Luminaire Calibration Status

Luminaire Calibration Status information has been added. During luminaire calibration or re-calibration, the progress of the operation is displayed on the luminaire's LCD Display. Information includes description of process and a progress bar.



### Strobe Operation Additions

Strobe functionality added and values updated as described below. New items added in this version appear in *Blue*.

DMX Channel	Parameter	Range DMX	Range%	Description
18	Strobe	0 - 255	0 - 100%	Controls strobe operations as follows: Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) <i>Pulse + Slow Rand = DMX 128 - 129</i> <i>Pulse + Med Rand = DMX 130 - 131</i> <i>Pulse + Fast Rand = DMX 132 - 133</i> <i>Pulse + Range = DMX 134 - 191</i> <i>Pulse - Slow Rand = DMX 192 - 193</i> <i>Pulse - Med Rand = DMX 194 - 195</i> <i>Pulse - Fast Rand = DMX 196 - 197</i> <i>Pulse - Range = DMX 198 - 255</i>

### Command Lock

A "Command Lock" has been added to the VLX™ wash. The Command Lock turned on will "lock-out" access to various settings from the console using the Control Channel. Turning the

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Command Lock off (default) will allow all access to settings from console. The Command Lock is accessed via the menu system as follows:

Config -> Cmd Lock -> On/Off

For Control Channel operation, see “Control Channel Additions” on page 4 of this bulletin.

**Note:** If Command Lock is set to "ON" and a Reset to Defaults is sent from the console to the luminaire, Command Lock will reset to its default state of "OFF".

### Error Messaging

Error messaging has been added to the VLX™ wash. If an error is detected, a RED status indicator LED will turn on, at the luminaire display, until error is resolved. To access an error report in the menu system go to:

Fixture -> Status

### Control Channel Additions

The Control Channel has been updated in this new software version. All additions will appear in **Blue** in the Control Channel Chart. Also, refer to the Notes listed under the Control Channel Chart.

### Control Channel Chart

DMX Channel	Parameter	Range DMX	Range%	Default	Description
23	Control	0 - 255	0 - 100%	0	Used to set different modes, parameters, and functions of the VLX wash. Set control channel value for desired action. Hold value for at least 3 seconds. Set control channel value to 0 without any scaling. See User Manual for more info or examples. Default Setting on Console = DMX 0 <i>Reset All to Defaults*</i> = DMX 5 - 7 <i>Quiet Mode†</i> = DMX 11 - 13 <i>Level Light Mode†</i> = DMX 14 - 16 <i>Constant Fans Mode†</i> = DMX 17 - 19 <i>Normal Mode†</i> = DMX 20 - 22 LED Drive A# = DMX 25 - 26 (for future use) LED Drive B# = DMX 28 - 29 (for future use) <i>Dimmer Curve LINEAR†</i> = DMX 31 - 32 <i>Dimmer Curve SQUARE LAW†</i> = DMX 34 - 35 Full Luminaire Reset = DMX 81 - 87 Color Calibration OFF† = DMX 116 - 117 Color Calibration ON† = DMX 118 - 120 Fixture Sleep = DMX 245 - 249 Fixture Wake Up* = DMX 250 - 255

Notes:

\* When resetting to defaults (DMX 5 - 7), the following will be enabled on the luminaire - Normal Mode, LED Drive A, Dimmer Curve SQUARE LAW, and Color Calibration ON.

\*\*Please note that Fixture Wake Up will completely re-calibrate the fixture.

† These settings require the **Command Lock** in Menu to be set to **OFF** in order to change on Control Channel. Resetting to Defaults (DMX 5 - 7) will turn **Command Lock OFF**.

# LED Drive A and LED Drive B selections will not be available in this version of software (for future use).

### **Intensity Timing Channel**

A timing channel has been added for Intensity at channel 19 of the DMX map. This timing channel will allow for the smoothest fades of intensity on the VLX™ wash. This channel should always default to 255 in console library to allow for the smoothest fades using DMX (console fade) time.

Unlike previous versions of this software, in this new version, Beam Time now controls Zoom operation only.

### **Intensity Limiter**

An Intensity Limiter has been implemented in this version of software. The Intensity Limiter is used to match overall output level of multiple VLX™ wash luminaires if desired. The Intensity Limiter default is 100% and is adjustable by the user. For example, if a fixture's Intensity Limiter is set to '80', a value of 100% from a desk will only output 80% of the fixture power (as determined by the VLX Operation Mode - see "[VLX Operational Modes](#)" on page 2 of this bulletin for additional information). Access the Intensity Limiter feature, through the fixture's menu system, as follows:

Test -> Int Level

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**Note:** If Intensity Limiter is set to a specific level and a Reset to Defaults is sent from the console to the luminaire, Intensity Limiter will reset to its default state of 100% intensity.

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**Note:** Sending a Reset to Defaults to the luminaire, from a console, will reset all values in the luminaire. Only DMX Address will remain as last programmed.

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### Updated Channel Map

Below is the channel map for this new version of software.

DMX Channel	Parameter	Range DMX	Range%	Default ***	Description
1	Intensity - High Byte	0 - 65535	0 - 100%	0	16 bit control for intensity of LED settings
2	Intensity - Low Byte				
3	Pan - High Byte	0 - 65535	0 - 100%	32768	16 bit control for Pan - 540° of movement
4	Pan - Low Byte				
5	Tilt - High Byte	0 - 65535	0 - 100%	32768	16 bit control for Tilt - 270° of movement
6	Tilt - Low Byte				
7	Red - High Byte	0 - 65535	0 - 100%	0	16 bit control of Red LEDs from 0 to full
8	Red - Low Byte				
9	Green - High Byte	0 - 65535	0 - 100%	0	16 bit control of Green LEDs from 0 to full
10	Green - Low Byte				
11	Blue - High Byte	0 - 65535	0 - 100%	0	16 bit control of Blue LEDs from 0 to full
12	Blue - Low Byte				
13	White - High Byte	0 - 65535	0 - 100%	0	16 bit control of White LEDs from 0 to full
14	White - Low Byte				
15	Not used	N/A	N/A	N/A	For Future Use
16	Not used	N/A	N/A	N/A	For Future Use
17	Beam Spreader	0 - 255	0 - 100%	0	Controls beam angle from 23° (DMX 0) to 58° (DMX 255)
18	Strobe	0 - 255	0 - 100%	0	Controls strobe operations as follows: Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 128 - 129 Pulse + Med Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 192 - 193 Pulse - Med Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
19	Intensity Tim	0 - 255	0 - 100%	255	Allows for luminaire timing of intensity. Profile should default to DMX 255 for smoothest console fade times. See user manual for more information.
20	Focus Time	0 - 255	0 - 100%	255	Allows for luminaire timing of pan and tilt. Profile should default to DMX 255 for smoothest console fade times. See user manual for more information.
21	Color Time	0 - 255	0 - 100%	255	Allows for luminaire timing of LEDs. Profile should default to DMX 255 for smoothest console fade times. See user manual for more information.
22	Beam Time	0 - 255	0 - 100%	255	Allows for luminaire timing of zoom and intensity. Profile should default to DMX 255 for smoothest console fade times. See user manual for more information.

*Note, Channel Map continued on next page.*

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23	Control	0 - 255	0 - 100%	0	<p>Used to set different modes, parameters, and functions of the VLX wash. Set control channel value for desired action. Hold value for at least 3 seconds. Set control channel value to 0 without any scaling. See User Manual for more info or examples.</p> <p>Default Setting on Console = DMX 0            Reset All to Defaults* = DMX 5 - 7            Quiet Mode† = DMX 11 - 13            Level Light Mode† = DMX 14 - 16            Constant Fans Mode† = DMX 17 - 19            Normal Mode† = DMX 20 - 22            LED Drive A# = DMX 25 - 26 (for future use)            LED Drive B# = DMX 28 - 29 (for future use)            Dimmer Curve LINEAR† = DMX 31 - 32            Dimmer Curve SQUARE LAW† = DMX 34 - 35            Full Luminaire Reset = DMX 81 - 87            Color Calibration OFF† = DMX 116 - 117            Color Calibration ON† = DMX 118 - 120            Fixture Sleep = DMX 245 - 249            Fixture Wake Up* = DMX 250 - 255</p>
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Notes:

- \* When resetting to defaults (DMX 5 - 7), the following will be enabled on the luminaire - **Normal Mode**, **LED Drive A**, **Dimmer Curve SQUARE LAW**, and **Color Calibration ON**. **Fixture Wake-Up** will completely re-calibrate the fixture.
- \*\*Please note that **Fixture Wake Up** will completely re-calibrate the fixture.
- † These settings require the **Command Lock** in Menu to be set to **OFF** in order to change on Control Channel. Resetting to defaults (DMX 5 - 7) will turn **Command Lock OFF**.
- # LED Drive A and LED Drive B selections will not be available in this version of software (for future use).
- \*\*\* Defaults values are recommended console default values