# Showline

## SL WASH 180 RGBW LED Luminaire

## Showline Offices

**Dallas**
10911 Petal Street
Dallas, TX 75238
Tel: +1 214-647-7880
Fax: +1 214-647-8030

**Auckland**
19-21 Kawana Street
Northcote, Auckland 0627
New Zealand
Tel: +64 9 481 0100
Fax: +64 9 481 0101

**Asia**
Unit C, 14/F, Roxy Industrial Centre
No. 41-49 Kwai Cheong Road
Kwai Chung, N.T., Hong Kong
Tel: +852 2796 9786
Fax: +852 2798 6545

**Europe**
Rondweg zuid 85
Winterswijk 7102 JD
The Netherlands
Tel: +31 (0) 543-542516

www.philips.com/showline

The material in this manual is for information purposes only and is subject to change without notice. Showline assumes no responsibility for any errors or omissions which may appear in this manual. For comments and suggestions regarding corrections and/or updates to this manual, please contact your nearest Showline office.

El contenido de este manual es solamente para información y está sujeto a cambios sin previo aviso. Showline no asume responsabilidad por errores o omisiones que puedan aparecer. Cualquier comentario, sugerencia o corrección con respecto a este manual, favor de dirijirlo a la oficina de Showline más cercana.

Der Inhalt dieses Handbuches ist nur für Informationszwecke gedacht, Aenderungen sind vorbehalten. Showline uebernimmt keine Verantwortung für Fehler oder Irrtuemer, die in diesem Handbuch auftreten. Für Bemerkungen und Verbesserungsvorschlaege oder Vorschlaege in Bezug auf Korrekturen und/oder Aktualisierungen in diesem Handbuch, moechten wir Sie bitten, Kontakt mit der naechsten Showline-Niederlassung aufzunehmen.

Le matériel décrit dans ce manuel est pour information seulement et est sujet à changements sans préavis. La compagnie Showline n'assume aucune responsabilité sur toute erreur ou ommission inscrite dans ce manuel. Pour tous commentaires ou suggestions concernant des corrections et/ou les mises à jour de ce manuel, veuillez s'il vous plait contacter le bureau de Showline le plus proche.

**Note:** Information contained in this document may not be duplicated in full or in part by any person without prior written approval of Showline. Its sole purpose is to provide the user with conceptual information on the equipment mentioned. The use of this document for all other purposes is specifically prohibited.

Document Number: **SL WASH 180 RGBW LED Luminaire Users**
Version as of: **11 December 2013**

# IMPORTANT INFORMATION

## Warnings and Notices

When using electrical equipment, basic safety precautions should always be followed including the following:

a. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**.

b. Do not use outdoors.

c. Do not mount near gas or electric heaters.

d. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

e. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

f. Do not use this equipment for other than intended use.

g. Refer service to qualified personnel.

**SAVE THESE INSTRUCTIONS**.

**WARNING**: You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. A qualified electrician must perform this installation.

**WARNING**: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

**WARNING**: This equipment is intended for installation in accordance with the National Electric Code® and local regulations. It is also intended for installation in indoor applications only. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

## Additional Resources for DMX512

For more information on installing DMX512 control systems, the following publication is available for purchase from the United States Institute for Theatre Technology (USITT), "Recommended Practice for DMX512: A Guide for Users and Installers, 2nd edition" (ISBN: 9780955703522). USITT Contact Information:

> **USITT**
> **315 South Crouse Avenue, Suite 200**
> **Syracuse, NY 13210-1844**
> **Phone: 1.800.938.7488 or 1.315.463.6463**
> **www.usitt.org**

## Showline Limited Two-Year Warranty

Showline offers a two-year limited warranty of its luminaires against defects in materials or workmanship from the date of delivery. A copy of Showline two-year limited warranty containing specific terms and conditions can be obtained by contacting your local Showline office.

# TABLE OF CONTENTS

**Showline**

# PREFACE

## 1. About this Manual

The document provides installation and operation instructions for the following products:

• SL WASH 180 RGBW LED Luminaire

Please read all instructions before installing or using this product. *Retain this manual for future reference.* Additional product information and descriptions may be found on the product specification sheet.

**Note:** The SL WASH 180 RGBW LED Luminaires are universal voltage 100 to 240 VAC (auto-ranging).

## 2. Included Items

Each SL WASH 180 RGBW LED Luminaire includes the following items:
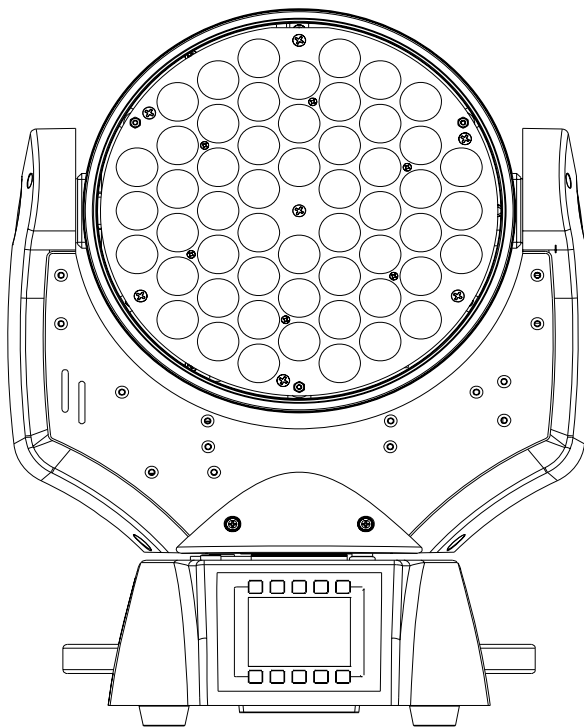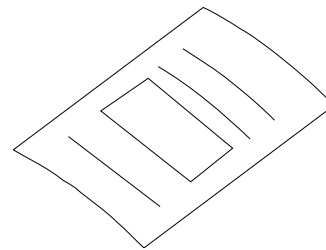
Unpack & Quick
Start Guide
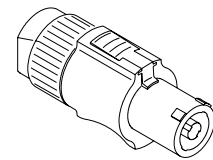
Neutrik PowerCon®
AC Input Connector

SL WASH 180 RGBW LED Luminaire

## 3. Accessories

Contact your Authorized Showline Dealer for price and availability of all accessories for SL WASH 180 RGBW LED Luminaires.

Showline

# SL WASH 180 RGBW LED LUMINAIRE OVERVIEW

## 1.   SL WASH 180 RGBW LED Luminaire Components

### Common Luminaire Components
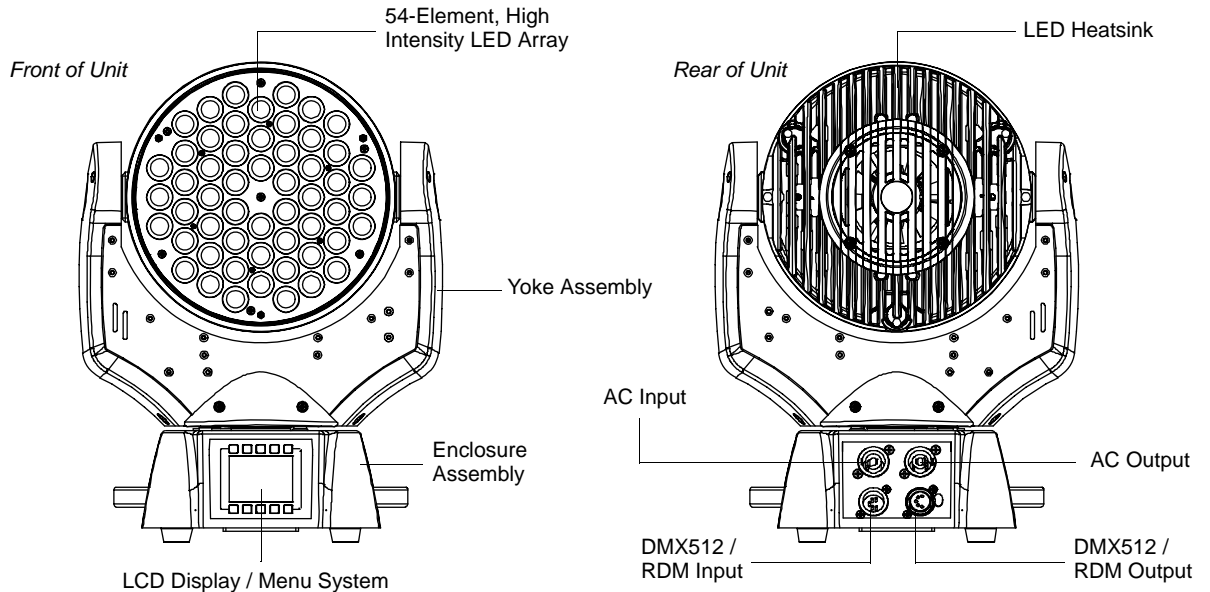


**Figure 1:  SL WASH 180 RGBW LED Luminaire Common Components**

### LCD Display / Menu System
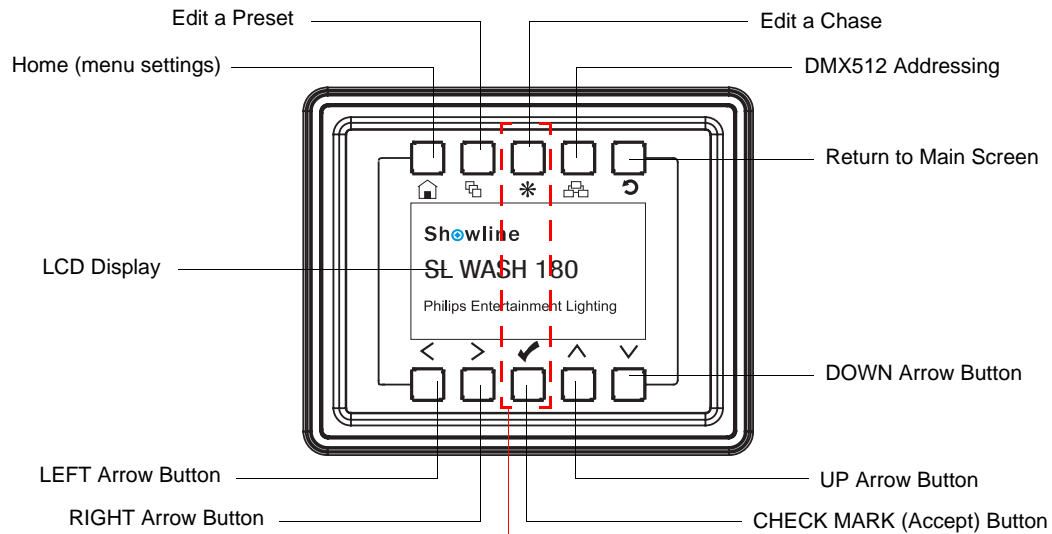


*NOTE: Menu rotates with orientation of luminaire and menu buttons are always in the same position (with rotation of menu)*

*To rotate menu 180 degrees from current orientation, press and hold the two center buttons for 2 seconds.*

**Figure 2:  LCD Display & Menu System**

**Note:**  For Menu operation and programming details, refer to "LCD Display and Menu System" on page 10.

# INSTALLATION AND SET UP

## 1.  Power Requirements

The SL WASH 180 RGBW LED Luminaires operate on AC input voltages from 100 to 240 VAC.

**WARNING!**  SL WASH 180 RGBW LED Luminaires do not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from the luminaire when not in use.

### AC Power Operation

When connected to an AC source, the unit operates on 100 to 240 volts AC (+/- 10%, auto-ranging). The luminaire contains an auto-ranging power supply. Each luminaire can draw up to 180 Watts.

**WARNING!**  Maximum amount of fixtures that may be daisy-chained is (A) 10 units 100 ~ 120VAC or (B) 20 units 230 ~ 240VAC (10 Amps).

**Table 1: SL WASH 180 RGBW LED Luminaire Voltage (VAC) vs. Current\***

| Voltage (AC) | Total Current (A) | Voltage (AC) | Total Current (A) |
|:---:|:---:|:---:|:---:|
| 100 | 1.80 | 180 | 1.00 |
| 110 | 1.63 | 190 | 0.95 |
| 120 | 1.50 | 200 | 0.90 |
| 130 | 1.38 | 210 | 0.86 |
| 140 | 1.28 | 220 | 0.82 |
| 150 | 1.20 | 230 | 0.78 |
| 160 | 1.12 | 240 | 0.75 |
| 170 | 1.06 | | |

**Note:**  For wiring of AC input connector, refer to "Connecting SL WASH 180 RGBW LED Luminaires to AC Power" on page 7.

## 2.  Connecting Power

Units can be powered in one of two ways:

- Direct connection to a AC power source using an AC input cable. For wiring of AC input connector, refer to "Connecting SL WASH 180 RGBW LED Luminaires to AC Power" on page 7.

- Connection from the AC output of another SL WASH 180 RGBW LED Luminaire. When using this method, it is very important not to connect any other type of equipment device.

**WARNING!**  Only connect other SL WASH 180 RGBW LED Luminaires to the AC Output (Thru) connector of a SL WASH 180 RGBW LED Luminaire.

Showline

## Connecting SL WASH 180 RGBW LED Luminaires to AC Power

If the unit is supplied with an AC input cable but you did not order an AC input connector, Table 2 describes how to connect power to your SL WASH 180 RGBW LED Luminaire. Field wiring of the SL WASH 180 RGBW LED Luminaire is straight forward. A total of 3 wires/conductors need to be brought to the unit. The following wiring scheme is required:

**Table 2:** SL WASH 180 RGBW LED Luminaire AC Input Connections

| Wire Color | Purpose |
|---|---|
| Brown | Main / Line (100 to 240VAC) |
| Blue | Neutral |
| Green/Yellow | Ground (Earth) |
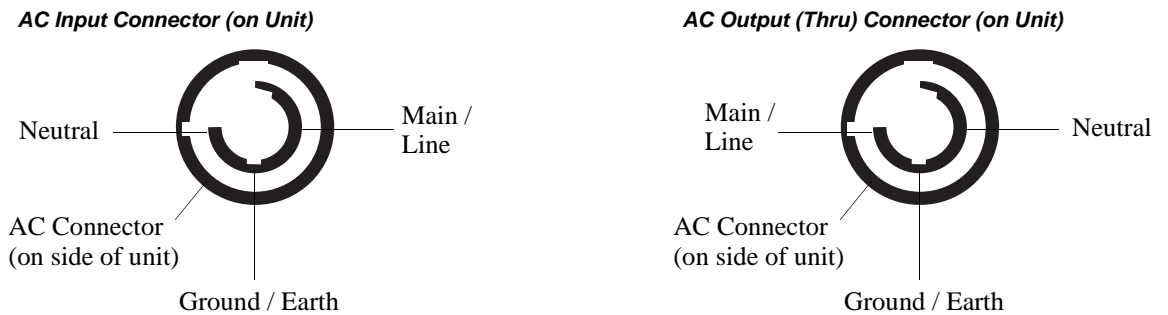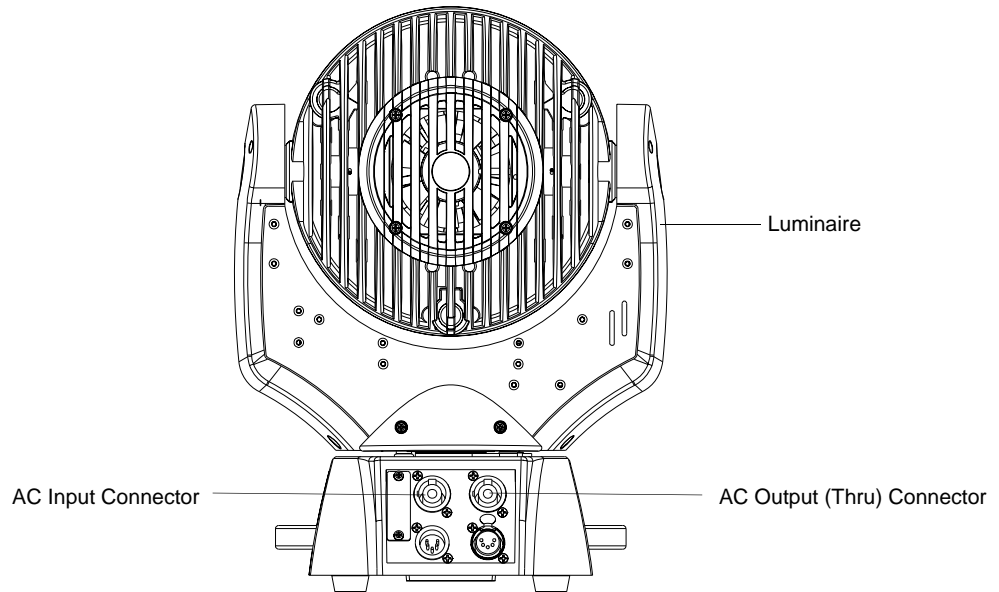


**Figure 3:  SL WASH 180 RGBW LED Luminaire AC Input & Output Connections**

**CAUTION:**  In the event the AC input cable of this luminaire is damaged, it must be replaced, by the user, with an approved cable through an Authorized Showline Dealer or Service Center.

## 3.　Connecting to the DMX512 Network

Basic DMX512 installation consists of connecting multiple SL WASH 180 RGBW LED Luminaires together (up to 32 luminaires) in "daisy-chain" fashion. A cable runs from the control console (or DMX512 control source) to the DMX connector on the first SL WASH 180 RGBW LED Luminaire. Another cable runs from the other DMX connector on the first unit to a DMX connector on the next SL WASH 180 RGBW LED Luminaire (or DMX512 device to be controlled).
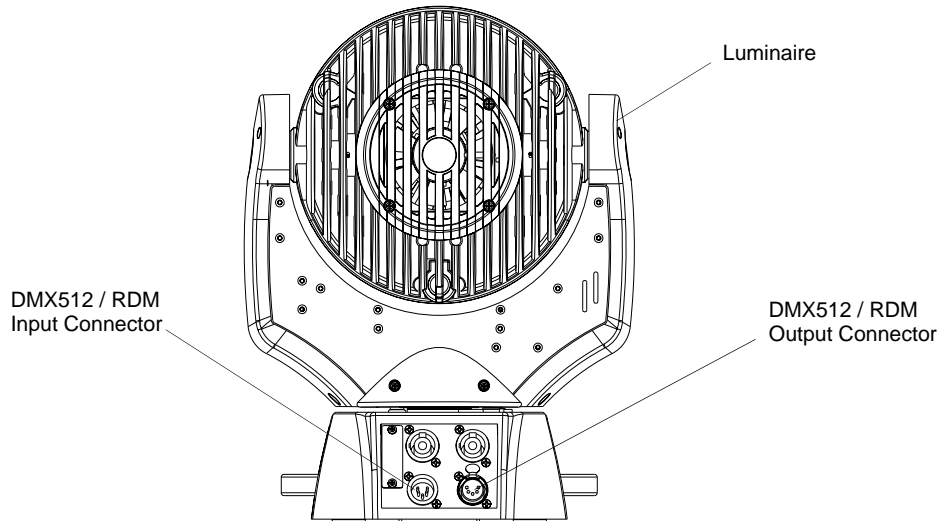


**Figure 4:　SL WASH 180 RGBW LED Luminaire DMX512 Input / Output Connections**

**Note:**　For more information on DMX512 networking and systems, refer to "Additional Resources for DMX512" on page 1. For SL WASH 180 RGBW LED Luminaire DMX Mapping, refer to "DMX CONTROL" on page 19.
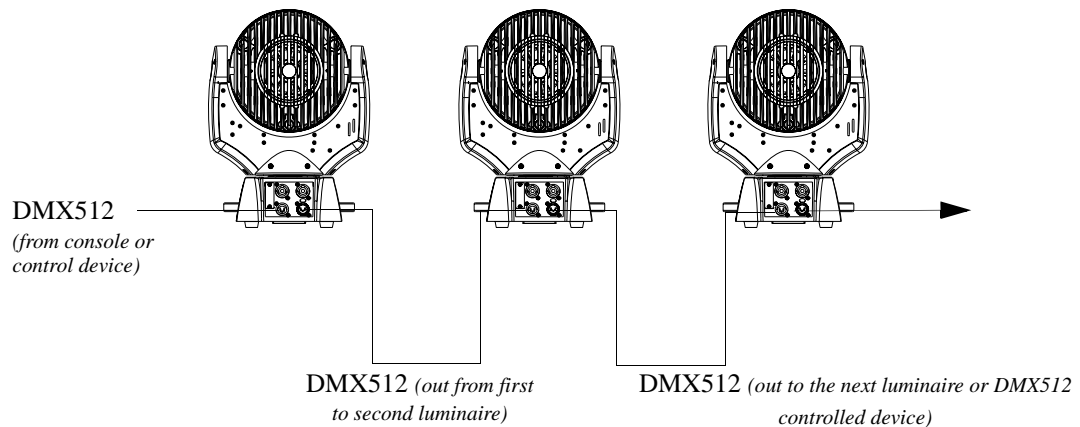


| DMX512 Connections | |
|---|---|
| **DMX512 Signal** | **XLR Pin** |
| Common (Drain) | 1 |
| DMX512 - | 2 |
| DMX512 + | 3 |
| Note: Remaining pins on each connector are not used. | |

**Figure 5:　SL WASH 180 RGBW LED Luminaire - DMX512 Connections**

Showline

## 4.  Mounting Luminaire

### Truss / Hanging Applications

The SL WASH 180 RGBW LED Luminaire is provided with the ability to hang via truss hooks, clamps, etc. (sold separately). Simply attach hook, clamp, etc. to the SL WASH 180 RGBW LED Luminaire enclosure assembly in the provided M10 holes. It is recommended (and may be required by local and national safety codes) to use and install a safety cable (sold separately) as illustrated in Figure 6. When hanging the fixture, be sure to leave enough space around the luminaire to allow proper, uninterrupted airflow for cooling and movement. refer to "Luminaire Dimensions" on page 37 for spacing (dimensional) requirements.

**Note:**  Mounting hooks, clamps, safety cables, etc. are sold separately or by others. For mounting accessories available for this product, contact your local Authorized Showline Dealer.
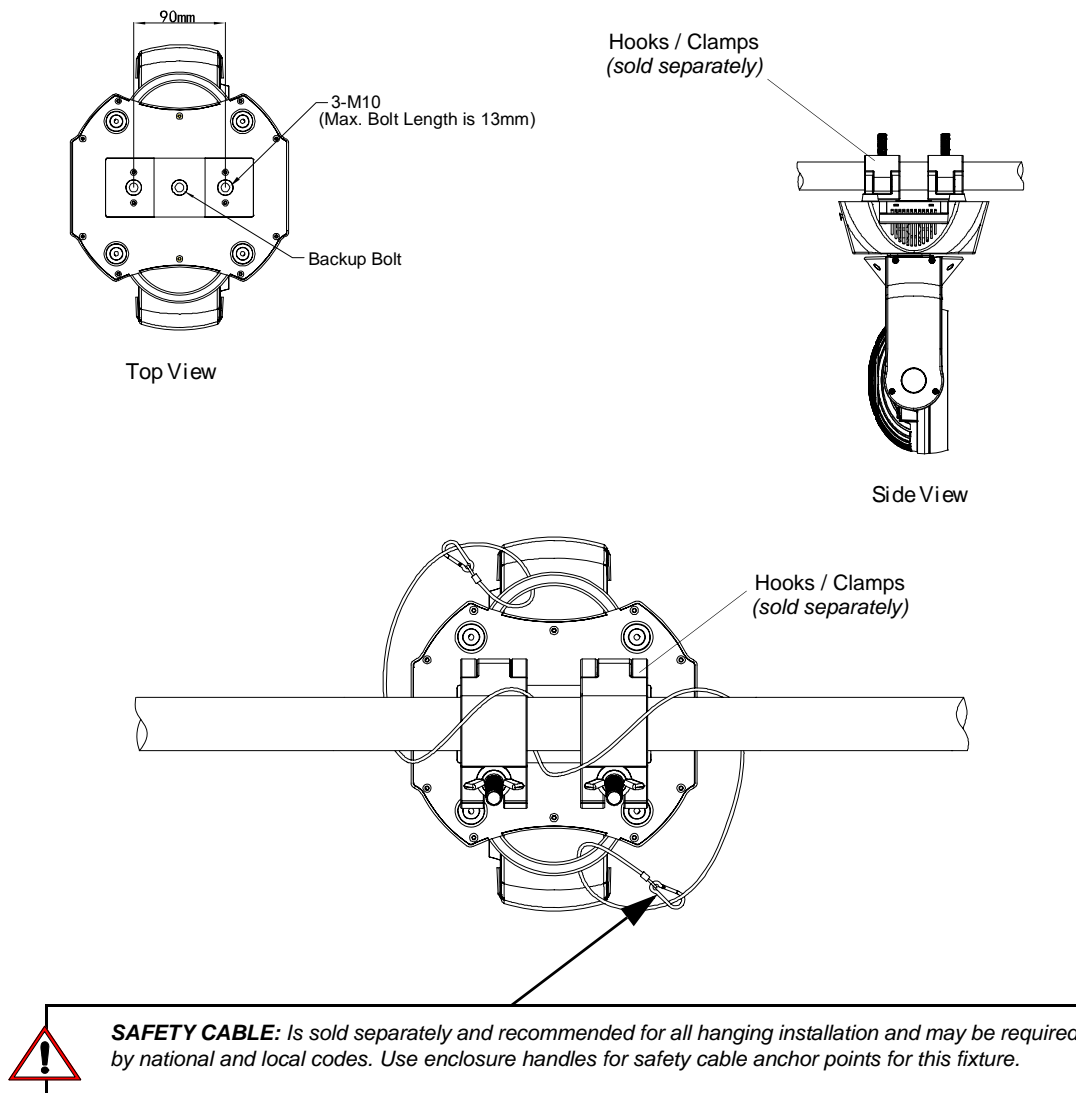


**Figure 6:  Mounting the Fixture - Hanging Applications**

### Floor Mounting

The SL WASH 180 RGBW LED Luminaires are designed to sit directly on its enclosure assembly (base) in a floor installation application. When used in this type of application, be sure to leave enough space around the luminaire to allow proper, uninterrupted airflow for cooling and movement.

# OPERATION AND PROGRAMMING

## 1. LCD Display and Menu System

The SL WASH 180 RGBW LED Luminaire's LCD Display and Menu System provides local control for accessing the following fixture's settings:

- Presets (Standard and User Defined)
- Color Filters
- Chases (preloaded and user defined)
- Strobe / Timing
- Fixture Settings
- Fixture Lockout (to prevent changes)
- Password Setting
- Current Fixture Operational Status
- Setting the DMX512 Address

**Note:** If there are multiple luminaires in a system, changes would need to be made at each LCD Menu as desired. For SL WASH 180 RGBW LED Luminaire menu structure, see .

Upon power up, the LCD will display the main screen showing the product type/name. If DMX is enabled, the programmed address will appear after power up.

## 2. LCD Display and Menu System Operation

The LCD Display Menu system consists of several categories. Use the Menu Buttons to access and make changes to the menu items. When the desired menu item is reached, press the desired Menu Button to display the menu options and to navigate and configure the menu options as required.

**To navigate and access menu settings/selections:**

Step 1. Make sure unit is powered and turned on.

Step 2. Press the desired button (as shown in ) to access menu categories.

Step 3. Use UP | DOWN | LEFT | RIGHT arrow buttons to navigate through the various options and settings.

Step 4. Make changes as desired.

Step 5. Press CHECK MARK (OK) button to accept changes.
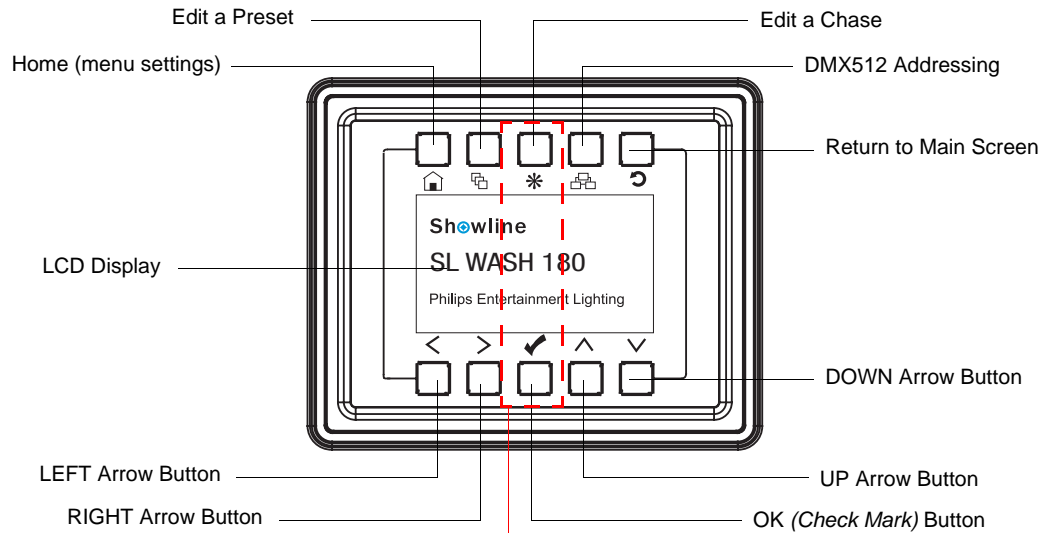
Sh⬦wline

.



Edit a Preset

Home (menu settings)

Edit a Chase

DMX512 Addressing

Return to Main Screen

LCD Display

DOWN Arrow Button

LEFT Arrow Button

UP Arrow Button

RIGHT Arrow Button

OK *(Check Mark)* Button

*NOTE: Menu rotates with orientation of Luminaire and menu buttons are always in the same position (with rotation of menu)*

*To rotate menu 180 degrees manually from current orientation, press and hold the two center buttons for 2 seconds.*

**Figure 7: LCD Display and Menu System**

## 3. SL WASH 180 RGBW LED Luminaire Main Menu Options

### Presets

Presets are stored values of the luminaire's LED settings that can be recalled via the menu system or DMX. You can customize up to 31 presets via the menu system.

### Recalling or Editing Presets

**To recall or edit a preset:**

Step 1. Select Preset from the main menu or from the Preset shortcut key.

Step 2. The top left field indicates the current preset or Off, when this field is selected (highlighted in blue), use the left and right buttons to scroll through all presets

Step 3. If you wish to edit the preset, use the Up and Down keys to scroll through the parameters. Once a parameter is selected, use the left and right arrow buttons to make adjustments.

Edit a Preset
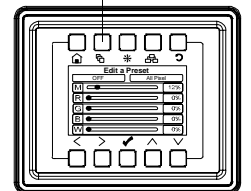


### Notes:

• If security features are enabled, the Up and Down arrows will have no effect. See "Settings/Security" on page 13.

• Depending on the DMX map set assigned the DMX menu, different either RGBW or HSIC parameters will be available.

Step 4. Once all values are adjusted as desired, press the Check Mark button to save the preset.

Step 5. The Save Preset Menu option will appear. Use the left and right arrow buttons to select the preset number to save to.

**Note:** This function allows you to save your current edits to a different preset number than you began editing. This is helpful to create copies of existing presets.

Step 6.  Press the Check Mark button to save the preset. You will be asked to confirm your saving operation.

Step 7.  The preset is now saved and can be recalled via the menu or DMX.

## Color Filter

Color filters are 43 factory made colors that utilize the Harmonize Color Calibration system (refer to "Harmonize Color Calibration" on page 17 for more information). They can be recalled via the menu system or DMX.

**To recall a color filter from the menu:**

Step 1.  Select Color Filter from the main menu

Step 2.  The top indicates the current color filter or Off, when this field is selected (highlighted in blue), use the left and right buttons to scroll through all color filters.

Step 3.  Use the Up and Down arrow keys to toggle to the Master Intensity field. Use the Left and Right arrow keys to adjust the Master Intensity.

Step 4.  The menu will display a graphical indication of the color along with the color name.

**Note:**  The color filter will remain ON until you select a preset, chase, other color filter or send the unit DMX.

## Chases

Chases are stored values of the luminaire's LED settings that can be recalled via the menu system or DMX. There are 10 factory defined chases and eight user adjustable chases. You can adjust the master intensity, speed, and fade values for any of the 18 chases.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different general fixture settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 3.

**Table 3: Effects Parameters**

| Parameter | Description |
|---|---|
| User Chase / Built-in Chase | Select from the 18 different chases. |
| Master Intensity | Adjust the master intensity for ALL chases. |
| Total Steps | Displays the total steps used by the chase. This field is not editable. |
| Speed | The total time each step of the chase will be recalled. |
| Fade | The percentage of the time assigned by the speed that is crossfaded between steps. |

**Showline**

## Editing User Chases

Eight User chases can be further customized to create different effects on the fixture. To edit a User Chase, first use the up and down arrows to scroll to the Edit User Chase field and then press the Check Mark button. The Edit User Chase window will be displayed:
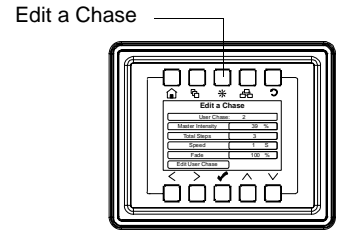
Edit a Chase



Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different general fixture settings. When finished, press the Check button to exit the menu level.

**To edit and save a Step:**

Step 1. Select Edit Step or New Step from the Edit User Chase menu.

Step 2. The top left field indicates the preset or color filter to be used for the step. When set to OFF no preset or color filter is to be used. Use the left and right buttons to scroll through all presets and color filters.

Step 3. Use the Up and Down keys to scroll through the output parameters. Once a parameter is selected, use the left and right arrow buttons to make adjustments.

### Notes:

• If security features are enabled, the Up and Down arrows will have no effect. See "Settings/Security" on page 13.

• Depending on the DMX map set assigned the DMX menu, different either RGBW or HSIC parameters will be available.

Step 4. Once all values are adjusted as desired, press the Check Mark button to return to the Edit User Chase screen.

Step 5. Continue editing steps as needed. When complete, press the Return to Main Menu button or up one level *(as shown to the right)*. to exit the Edit User Chase window.



*Return to Main Menu button*

Step 6. The user chase is now saved and can be recalled via the menu or DMX.

## Strobe/Timing

The Strobe/Timing menu allows you to assign strobe and timing values from the menu system. These settings are instantly applied to any active Preset, Color filter, or chase.

Use the Up and Down buttons to select parameters and the Left and Right buttons to adjust the currently selected parameter. The adjustable parameters are described in Table 3.

**Table 4: Strobe / Timing Parameters**

| Parameter | Description |
|---|---|
| Master Intensity | Overall fixture output intensity level. |
| Strobe: X | Strobe mode and rate value settings following DMX map (see SL WASH 180 RGBW LED Luminaire DMX Mapping for details). |
| Duration | The time each strobe flash remains ON. |
| Intensity Timing | The time used to change intensity values when running a chase. |
| Color Timing | The time used to change color values when running a chase. |

## Settings/Security

All Showline fixtures have a multiple level locking feature. This allows you to configure the fixture and allow different menu access to multiple users. The menu system can be locked instantly or assigned to power on to a particular lock level. You can assign three different 4-digit PIN (personal identification number) codes to each unlock specific levels of functionality within the menu system.

Anytime the fixture is locked, each PIN code will unlock all functions except the pertaining features assigned via the security level.

**Note:** The Level 3 PIN will always unlock all functions.

**Table 5: Security Lock Levels**

| Lock Level | Menu Functions Affected |
|---|---|
| Level 1 | Edit Presets, Edit Chases, and Settings Menu |
| Level 2 | Settings Menu |
| Level 3 | All |

Use the Up and Down buttons to select security PIN codes. Press the Check button and then use Left and Right and Up Down buttons to assign the pin code. Press the Check button to save the new PIN code.

The Power-Up Level parameter assigns a lock level to the fixture when power is applied. Use the Up and Down buttons to select the Power-Up Level, and then use the Left and Right buttons to select the Power-up Level option.

**Table 6: PIN Level Parameters**

| Parameter | Description |
|---|---|
| Enter Pass PIN | Enter a PIN code matching the level codes assigned in the Settings/Security menu to toggle the current security level. |
| Level 1 PIN | Edit the PIN code used to toggle the Level 1 security. |
| Level 2 PIN | Edit the PIN code used to toggle the Level 2 security. |
| Level 3 PIN | Edit the PIN code used to toggle the Level 3 security. |
| Power-up Level | Select the security level to default to when the fixture is powered ON.<br>• Disable PIN will disable all security functions.<br>• Locked will lock all functions. |

## Settings/General

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different general fixture settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 7.

**Table 7: General Level Parameters**

| Parameter | Description |
|---|---|
| Power-Up | Select the action of the fixture when the unit is powered ON. You can select from Off, Last Set, Color filters, presets, and chases. |
| Mode | Select either Master/Slave (see Master / Slave Operational Mode for more information). |
| Dim Response | Select Normal, Incandescent, or Reduced dimming response.<br>• Normal: Fixture LEDs dim with a normal response.<br>• Incandescent: Fixture LED's dim with an incandescent emulation response. The response to dimming commands will be slightly delayed at lower intensities.<br>• Reduced: The response to dimming commands will be calculated with a smaller algorithm to provide emulation with other manufacturer's products. |
| Dimming Curve | Select one of four dimming curve choices (see Dimming Curve Selection for more information). |
| Calibration | Toggle Harmonize Color Calibration on or off (see Harmonize Color Calibration for more information). |
| Fan Control | Select Auto of Off fan operation (see SL WASH 180 RGBW LED Luminaire DMX Mapping for more information). |

## Settings/Factory Default

Factory default menu settings can be recalled through this menu option. You can select if you wish to overwrite the user edited preset and chases.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 8.

**Table 8: Factory Default Parameters**

| Parameter | Description |
|---|---|
| Protected | • No - all menu items are able to be restored to factory defaults.<br>• Preset & Chase - user edited Presets and Chases are not able to be restored to factory defaults. |
| Load Factory | • No - no action.<br>• Yes - restore to factory default menu settings. |

## Settings/DMX

DMX configuration options are available in the DMX menu.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the fixture's DMX settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 9.

**Table 9: DMX Setting Parameters**

| Parameter | Description |
|---|---|
| DMX Enable | • Enable - Fixture will respond to DMX commands/signals.<br>• Disable - Fixture will ignore DMX commands/signals. |
| Address | Assigns the fixture's DMX start address. |
| Map | Selects the DMX map for the fixture to use (see DMX CONTROL section for more information). |
| When no DMX | Selects the action of the fixture when the unit is powered ON and not receiving DMX.<br>• Off - Turn off all LED output.<br>• Last Action - restore the last menu action.<br>• Power-up - follow the power-up value in the settings menu.<br>• Hold - continue with the last DMX values received. |

## Settings/Display

Options of the fixture's LCD display can be adjusted in the Display menu.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the fixture's DMX settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 10.

**Table 10: LCD Display Parameters**

| Parameter | Description |
|---|---|
| Flip Display | • Yes - The display will be inverted.<br>• No - The display will not be inverted.<br>• Auto - The display will automatically invert depending upon fixture orientation. |
| Off Time | Assign a time for the display to automatically turn off after the last button press. A value of ON will leave the display on indifferently. |
| Language Select | English is the only language currently supported. |

## Lock Fixture

You can lock all fixture functions, requiring a PIN code to access the menu functions. When you select this menu item, you are asked to confirm that you wish to lock the fixture. Once locked, all menu items can only be accessed by entering one of the three PIN codes assigned in the Settings/Security menu. (see "Settings/Security" on page 13 for more information). The PIN code used to unlock the fixture will only unlock the functionality assigned to that particular PIN code.

**Note:** When the fixture is powered off, the Lock Fixture function will be disabled. To assign fixture power-up security refer to (see "Settings/Security" on page 13 for more information).

### Password (PassPIN)

The Password menu item will display an Enter PassPIN dialog box. Use the Up Down Left Right buttons to enter a PIN code matching the codes assigned in the Settings/Security menu to toggle the current security level.

### Status

The Status screen displays the current value of the master intensity and LED intensities for each pixel control of a fixture. The number of pixels will vary depending upon fixture type. Use the Up Down Left Right arrows to scroll through the different pixels and view their levels.

- The last Status item displayed shows the RDM UID and current Firmware Version.

- Press the Check Mark button to exit the Status screen.

### Quick Selection Buttons

The Showline menu system includes four quick selection buttons on the top of the menu. These keys provide direct access to common functions and act as shortcuts to main menu items as described in Table 10.

**Table 11: Quick Select Buttons**

| Quick Select Button | Description |
|:---:|---|
| 🏠 | Main Menu<br>Refer to Settings/General for more information. |
| ⧉ | Edit a Preset<br>Refer to Recalling or Editing Presets for more information. |
| ✳ | Chase / Edit a Chase<br>Refer to Chases and Editing User Chases for more information. |
| ⛁ | DMX Start Address<br>Refer to DMX Address for more information. |
| ↺ | Return to Main Menu / Return Up a Menu Item |

### DMX Address

You can display and edit the current DMX start address for the fixture by pressing the Quick Select button on the top of the menu system (as shown right). The current DMX start address will be display in large digits.
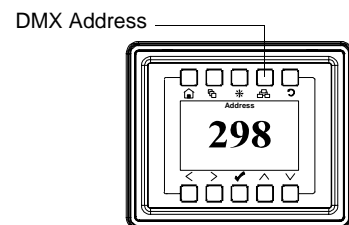
**To edit the DMX start address:**

Step 1. Press the Check Mark button to begin the DMX start address editing. The last digit will change to a blue color.

Step 2. Use the UP and Down arrows to change the value of the currently selected digit.

Step 3. Use the Left and Right arrows to select another digit to adjust.

Step 4. Press the Check Mark button to save the new DMX Start Address.

DMX Address ———

Address
**298**

**Sh⊙wline**

## 4.  Harmonize Color Calibration

Harmonize is a proprietary, advanced LED color matching system, consisting of 3 correction modules: RGB, RGBW and Cool White/Warm White. Every Showline fixture undergoes rigorous testing to provide you with consistent control of color and intensity as well as output of the highest quality.

When enabled either via DMX or the fixture's menu, the Harmonize technology will ensure that colors match from fixture-to-fixture and pixel-to-pixel. As the Harmonize system matches Showline products, they will all operate in the same color space. Use the Harmonize system when perfect color matching is an essential requirement.

**Note:**  When attempting to achieve the most saturated colors possible, disable the Harmonize color calibration.
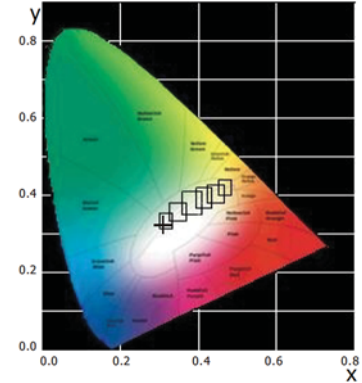
## 5.  Dimming Curve Selection

Through the menu, you are able to select one of four dimming curves:

• Linear Curve

• PL_Curve

• S_Curve

• Square Curve
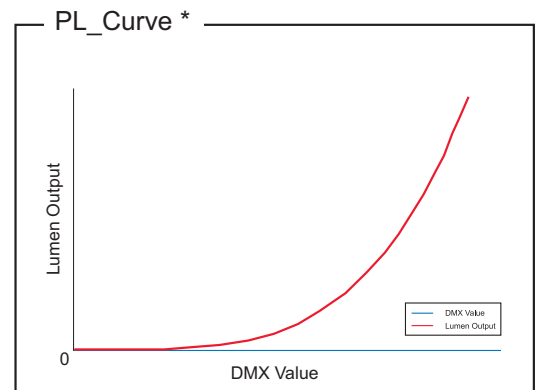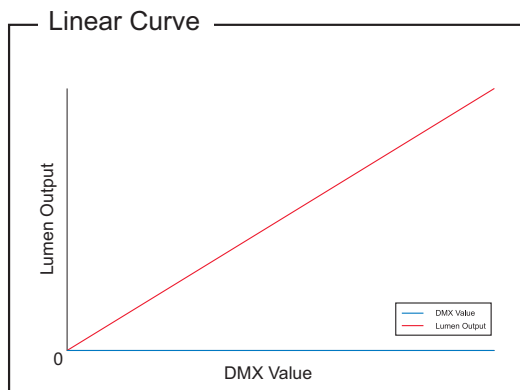


*PL Curve follows the dimming curve of Philips Selecon PL series LED luminaries.
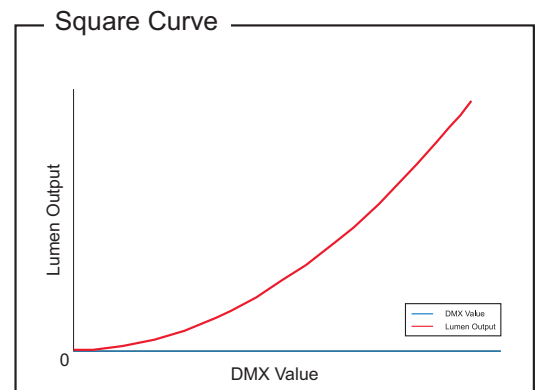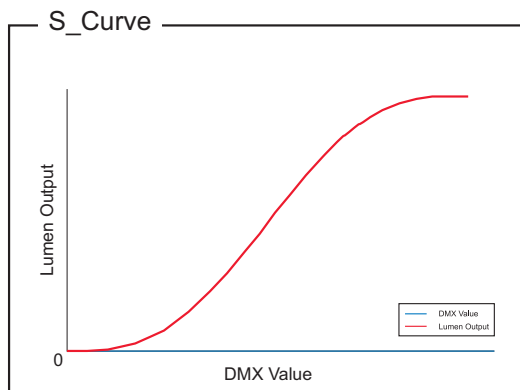
**Figure 8:  SL WASH 180 RGBW LED Luminaire Dimmer Curves**

# 6.   Master / Slave Operational Mode

The Master / Slave Operational Mode allows one SL WASH 180 RGBW LED Luminaire to act as the "Master" unit and all other connected units are controlled by this unit. When a unit is set to "Slave" mode, it will only listen to and follow any commands sent from a "Master" unit. Only one "Master" unit is allowed in this type of operation.

**To setup a master / slave network:**

Step  1.   Set the first device in the DMX512 chain to Master Mode through the unit's menu system.

Step  2.   Set all other connected units to Slave Mode.

Step  3.   The master unit can be controlled via DMX512, RDM or through standalone operation (self-contained network utilizing on-board effects). The slave units will mimic the master unit's operation in all cases.

**Note:** For more information on DMX512 networking and systems, refer to "Additional Resources for DMX512" on page 1. For SL WASH 180 RGBW LED Luminaire DMX Mapping, refer to "DMX CONTROL" on page 19.
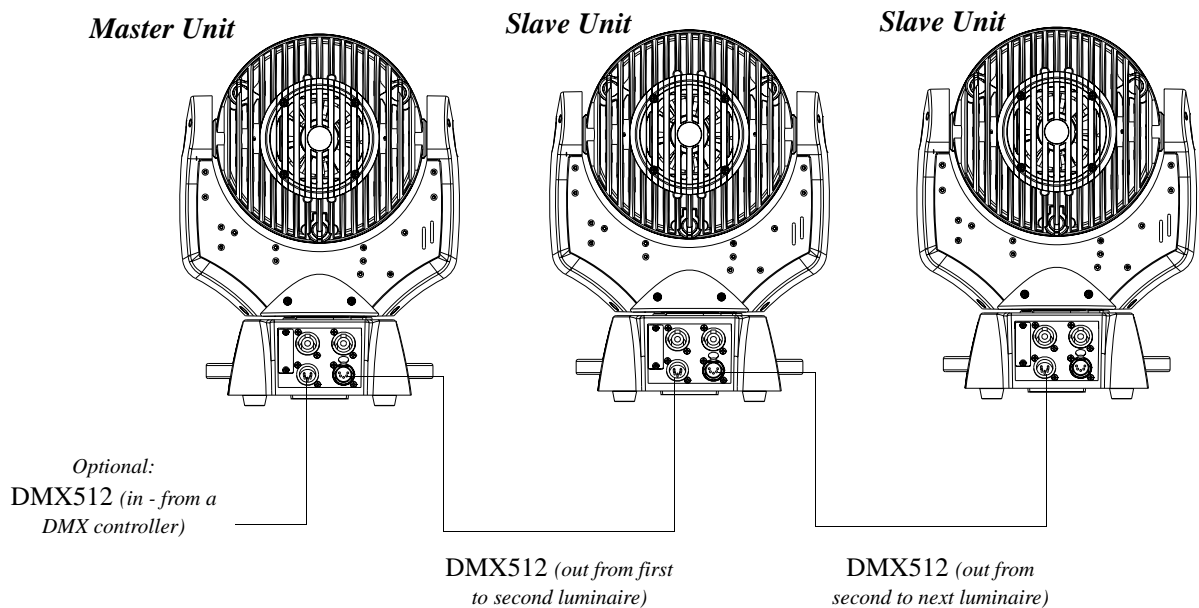


**Figure 9:  SL WASH 180 RGBW LED Luminaire - Master / Slave Configuration**

# DMX CONTROL

This section contains information for operating the luminaire using DMX control in 16-bit, 8-Bit, or HSIC (Hue, Saturation, Intensity and Color Correction) modes. For Menu options and detailed information, see "LCD Display and Menu System" on page 10.

**Note:** 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.

## 1.  SL WASH 180 RGBW LED Luminaire DMX Mapping

### 16-Bit Mode

Table 12 provides DMX channel mapping of all DMX512 control values when the SL WASH 180 RGBW LED Luminaire is in 16-bit DMX512 mode (as set by the luminaire's menu system).

**Table 12: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)**

| DMX Channel | Parameter | Range DMX | Range% | Default - recommended console default values | Description |
|---|---|---|---|---|---|
| 1 | Pan - High Byte | 0 - 65535 | 0 - 100% | 32768 | 16-bit control for Pan Operation |
| 2 | Pan - Low Byte | | | | |
| 3 | Tilt - High Byte | 0 - 65535 | 0 - 100% | 32768 | 16-bit control for Tilt Operation |
| 4 | Tilt - Low Byte | | | | |
| 5 | Master Intensity | 0 - 65535 | 0 - 100% | 0 | 16-bit control for Intensity of LED settings |
| 6 | | | | | |
| 7 | Color Presets | 0 - 255 | 0 - 100% | 0 | *Select presets, variable color filters or chases as follows:*<br><br>Channel OFF (disabled) DMX 0 - 4<br>Preset 0 (OFF) DMX 5 - 6<br>Preset 1 DMX 7 - 8<br>Preset 2 DMX 9 - 10<br>Preset 3 DMX 11 - 12<br>Preset 4 DMX 13 - 14<br>Preset 5 DMX 15 - 16<br>Preset 6 DMX 17 - 18<br>Preset 7 DMX 19 - 20<br>Preset 8 DMX 21 - 22<br>Preset 9 DMX 23 - 24<br>Preset 10 DMX 25 - 26<br>Preset 11 DMX 27 - 28<br>Preset 12 DMX 29 - 30<br>Preset 13 DMX 31 - 32<br>Preset 14 DMX 33 - 34<br>Preset 15 DMX 35 - 36<br>Preset 16 DMX 37 - 38<br>Preset 17 DMX 39 - 40<br>Preset 18 DMX 41 - 42<br>Preset 19 DMX 43 - 44<br>Preset 20 DMX 45 - 46<br>Preset 21 DMX 47 - 48<br>Preset 22 DMX 49 - 50<br>Preset 23 DMX 51 - 52<br>Preset 24 DMX 53 - 54<br>Preset 25 DMX 55 - 56<br>Preset 26 DMX 57 - 58<br>Preset 27 DMX 59 - 60<br>Preset 28 DMX 61 - 62<br>Preset 29 DMX 63 - 64<br>Preset 30 DMX 65 - 66<br>Preset 31 DMX 67 - 68 |

**Table 12: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)**

| | | | | | *Select presets, variable color filters or chases as follows:*<br><br>CF_0_Color OFF DMX 69 - 70<br>CF_1_White 10000K DMX 71 - 72<br>CF_2_White 8000K DMX 73 - 74<br>CF_3_White 6500K DMX 75 - 76<br>CF_4_White 5600K DMX 77 - 78<br>CF_5_White 5000K DMX 79 - 80<br>CF_6_White 4500K DMX 81 - 82<br>CF_7_White 4000K DMX 83 - 84<br>CF_8_White 3200K DMX 85 - 86<br>CF_9_White 3000K DMX 87 - 88<br>CF_10_White 2700K DMX 89 - 90<br>CF_11_Moroccan Pink DMX 91 - 92<br>CF_12_Pink DMX 93 - 94<br>CF_13_Flesh Pink DMX 95 - 96<br>CF_14_Bright Rose DMX 97 - 98<br>CF_15_Follies Pink DMX 99 - 100<br>CF_16_Fuchsia Pink DMX 101 - 102<br>CF_17_Surprise Pink DMX 103 - 104<br>CF_18_Congo Blue DMX 105 - 106<br>CF_19_Blue DMX 107 - 108<br>CF_20_Virgin Blue DMX 109 - 110<br>CF_21_Midnight Maya DMX 111 - 112<br>CF_22_Double C.T Blue DMX 113 - 114<br>CF_23_Slate Blue DMX 115 - 116<br>CF_24_Regal Blue DMX 117 - 118<br>CF_25_Full C.T Blue DMX 119 - 120<br>CF_26_Steel Blue DMX 121 - 122<br>CF_27_Lighter Blue DMX 123 - 124<br>CF_28_Cyan DMX 125 - 126<br>CF_29_Marine Blue DMX 127 - 128<br>CF_30_Soft Green DMX 129 - 130<br>CF_31_Moss Green DMX 131 - 132<br>CF_32_Green DMX 133 - 134<br>CF_33_Fem Green DMX 135 - 136<br>CF_34_JAS Green DMX 137 - 138<br>CF_35_Pale Green DMX 139 - 140<br>CF_36_Spring Yellow DMX 141 - 142<br>CF_37_Yellow DMX 143 - 144<br>CF_38_Deep Amber DMX 145 - 146<br>CF_39_Chrome Orange DMX 147 - 148<br>CF_40_Orange DMX 149 - 150<br>CF_41_Magenta DMX 151 - 152<br>CF_42_Flame Red DMX 153 - 154<br>CF_43_Purple DMX 155 - 156<br>Rotate CW Fast -> Slow DMX 157 - 171<br>Rotate ACW Slow -> Fast DMX 172 - 186<br>Random Color Fast -> Slow DMX 187 - 201<br>Chase1 DMX 202 - 204<br>Chase2 DMX 205 - 207<br>Chase3 DMX 208 - 210<br>Chase4 DMX 211 - 213<br>Chase5 DMX 214 - 216<br>Chase6 DMX 217 - 219<br>Chase7 DMX 220 - 222<br>Chase8 DMX 223 - 225<br>Chase9 DMX 226 - 228<br>Chase10 DMX 229 - 231<br>User Chase1 DMX 232 - 234<br>User Chase2 DMX 235 - 237<br>User Chase3 DMX 238 - 240<br>User Chase4 DMX 241 - 243<br>User Chase5 DMX 244 - 246<br>User Chase6 DMX 247 - 249<br>User Chase7 DMX 250 - 252<br>User Chase8 DMX 253 - 255 |
|---|---|---|---|---|---|
| 7 | Color Presets | 0 - 255 | 0 - 100% | 0 | |

Showline

**Table 12: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)**

| | | | | |
|---|---|---|---|---|
| 8 | 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 |
| 9 | Duration | 0 - 255 | 0 - 100% | 0 | Strobe's duration, Range is DMX 0 - 85 as follows: 0 = DMX 0 1 = DMX 1 - 3 x = (DMX Value-1)/3+1 85 = DMX 253-255 |
| 10 | Zoom | 0 - 255 | 0 - 100% | 0 | Control of variable zoom (beam spread) operation from 12 to 45 degrees |
| 11 | Focus Timing | 0 - 255 | 0 - 100% | 255 | Timing control of Pan and Tilt |
| 12 | Intensity Timing | 0 - 255 | 0 - 100% | 255 | Allows for timing control of Intensity. Channel should default to 255 for smoothest actions using console and/or manual fades. Refer to **"DMX Timing Channel Detail" on page 26**. |
| 13 | Color Timing | 0 - 255 | 0 - 100% | 255 | Allows for timing control of Color. Channel should default to 255 for smoothest actions using console and/or manual fades.Refer to **"DMX Timing Channel Detail" on page 26**. |
| 14 | Zoom Timing | 0 - 255 | 0 - 100% | 255 | Allows for timing control of Zoom. Channel should default to 255 for smoothest actions using console and/or manual fades.Refer to **"DMX Timing Channel Detail" on page 26**. |
| 15 | Control | 0 - 255 | 0 - 100% | 0 | *Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds. Then restore control channel value to 0 without any scaling.* Default Setting on Console = DMX 0-4 DIM Response_Normal = DMX 5 - 9 DIM Response_Incandescent = DMX 10 - 14 Dimming Curve_Linear = DMX 30 - 34 Dimming Curve_Square = DMX 35- 39 Dimming Curve_S-Curve = DMX 40 - 44 Dimming Curve_PL-Curve = DMX 45 - 49 Calibration_OFF = DMX 70 - 74 Calibration_ON = DMX 75 - 79 Fan_Auto = DMX 80 - 84 Fan_Off = DMX 85 - 89 Reserved ( Future use) = DMX 90 - 250 |
| 16 | Red - High Byte | 0 - 65535 | 0 - 100% | 0 | 16-bit control for of Red LEDs 0 to full. |
| 17 | Red - Low Byte | | | | |
| 18 | Green - High Byte | 0 - 65535 | 0 - 100% | 0 | 16-bit control for of Green LEDs 0 to full. |
| 19 | Green - Low Byte | | | | |
| 20 | Blue - High Byte | 0 - 65535 | 0 - 100% | 0 | 16-bit control for of Blue LEDs 0 to full. |
| 21 | Blue - Low Byte | | | | |
| 22 | White - High Byte | 0 - 65535 | 0 - 100% | 0 | 16-bit control for of White LEDs 0 to full. |
| 23 | White - Low Byte | | | | |

## 8-Bit Mode

Table 13 provides DMX channel mapping of all DMX512 control values when the SL WASH 180 RGBW LED Luminaire is in 8-bit DMX512 mode (as set by the luminaire's menu system).

**Table 13: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (8-Bit Mode)**

| DMX Channel | Parameter | Range DMX | Range% | Default - *recommended console default values* | Description |
|---|---|---|---|---|---|
| 1 | Pan - High Byte | 0 - 65535 | 0 - 100% | 32768 | 16-bit control for Pan Operation |
| 2 | Pan - Low Byte | | | | |
| 3 | Tilt - High Byte | 0 - 65535 | 0 - 100% | 32768 | 16-bit control for Tilt Operation |
| 4 | Tilt - Low Byte | | | | |
| 5 | Master Intensity | 0 - 255 | 0 - 100% | 0 | 8-bit control for Intensity of LED settings. |
| 6 | Color Presets | 0 - 255 | 0 - 100% | 0 | *Select presets, variable color filters or chases as follows:*<br><br>Channel OFF (disabled) DMX 0 - 4<br>Preset 0 (OFF) DMX 5 - 6<br>Preset 1 DMX 7 - 8<br>Preset 2 DMX 9 - 10<br>Preset 3 DMX 11 - 12<br>Preset 4 DMX 13 - 14<br>Preset 5 DMX 15 - 16<br>Preset 6 DMX 17 - 18<br>Preset 7 DMX 19 - 20<br>Preset 8 DMX 21 - 22<br>Preset 9 DMX 23 - 24<br>Preset 10 DMX 25 - 26<br>Preset 11 DMX 27 - 28<br>Preset 12 DMX 29 - 30<br>Preset 13 DMX 31 - 32<br>Preset 14 DMX 33 - 34<br>Preset 15 DMX 35 - 36<br>Preset 16 DMX 37 - 38<br>Preset 17 DMX 39 - 40<br>Preset 18 DMX 41 - 42<br>Preset 19 DMX 43 - 44<br>Preset 20 DMX 45 - 46<br>Preset 21 DMX 47 - 48<br>Preset 22 DMX 49 - 50<br>Preset 23 DMX 51 - 52<br>Preset 24 DMX 53 - 54<br>Preset 25 DMX 55 - 56<br>Preset 26 DMX 57 - 58<br>Preset 27 DMX 59 - 60<br>Preset 28 DMX 61 - 62<br>Preset 29 DMX 63 - 64<br>Preset 30 DMX 65 - 66<br>Preset 31 DMX 67 - 68 |

Showline

**Table 13: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (8-Bit Mode)**

| 6 | Color Presets | 0 - 255 | 0 - 100% | 0 | *Select presets, variable color filters or chases as follows:* |
|---|---|---|---|---|---|
| | | | | | CF_0_Color OFF DMX 69 - 70 |
| | | | | | CF_1_White 10000K DMX 71 - 72 |
| | | | | | CF_2_White 8000K DMX 73 - 74 |
| | | | | | CF_3_White 6500K DMX 75 - 76 |
| | | | | | CF_4_White 5600K DMX 77 - 78 |
| | | | | | CF_5_White 5000K DMX 79 - 80 |
| | | | | | CF_6_White 4500K DMX 81 - 82 |
| | | | | | CF_7_White 4000K DMX 83 - 84 |
| | | | | | CF_8_White 3200K DMX 85 - 86 |
| | | | | | CF_9_White 3000K DMX 87 - 88 |
| | | | | | CF_10_White 2700K DMX 89 - 90 |
| | | | | | CF_11_Moroccan Pink DMX 91 - 92 |
| | | | | | CF_12_Pink DMX 93 - 94 |
| | | | | | CF_13_Flesh Pink DMX 95 - 96 |
| | | | | | CF_14_Bright Rose DMX 97 - 98 |
| | | | | | CF_15_Follies Pink DMX 99 - 100 |
| | | | | | CF_16_Fuchsia Pink DMX 101 - 102 |
| | | | | | CF_17_Surprise Pink DMX 103 - 104 |
| | | | | | CF_18_Congo Blue DMX 105 - 106 |
| | | | | | CF_19_Blue DMX 107 - 108 |
| | | | | | CF_20_Virgin Blue DMX 109 - 110 |
| | | | | | CF_21_Midnight Maya DMX 111 - 112 |
| | | | | | CF_22_Double C.T Blue DMX 113 - 114 |
| | | | | | CF_23_Slate Blue DMX 115 - 116 |
| | | | | | CF_24_Regal Blue DMX 117 - 118 |
| | | | | | CF_25_Full C.T Blue DMX 119 - 120 |
| | | | | | CF_26_Steel Blue DMX 121 - 122 |
| | | | | | CF_27_Lighter Blue DMX 123 - 124 |
| | | | | | CF_28_Cyan DMX 125 - 126 |
| | | | | | CF_29_Marine Blue DMX 127 - 128 |
| | | | | | CF_30_Soft Green DMX 129 - 130 |
| | | | | | CF_31_Moss Green DMX 131 - 132 |
| | | | | | CF_32_Green DMX 133 - 134 |
| | | | | | CF_33_Fem Green DMX 135 - 136 |
| | | | | | CF_34_JAS Green DMX 137 - 138 |
| | | | | | CF_35_Pale Green DMX 139 - 140 |
| | | | | | CF_36_Spring Yellow DMX 141 - 142 |
| | | | | | CF_37_Yellow DMX 143 - 144 |
| | | | | | CF_38_Deep Amber DMX 145 - 146 |
| | | | | | CF_39_Chrome Orange DMX 147 - 148 |
| | | | | | CF_40_Orange DMX 149 - 150 |
| | | | | | CF_41_Magenta DMX 151 - 152 |
| | | | | | CF_42_Flame Red DMX 153 - 154 |
| | | | | | CF_43_Purple DMX 155 - 156 |
| | | | | | Rotate CW Fast -> Slow DMX 157 - 171 |
| | | | | | Rotate ACW Slow -> Fast DMX 172 - 186 |
| | | | | | Random Color Fast -> Slow DMX 187 - 201 |
| | | | | | Chase1 DMX 202 - 204 |
| | | | | | Chase2 DMX 205 - 207 |
| | | | | | Chase3 DMX 208 - 210 |
| | | | | | Chase4 DMX 211 - 213 |
| | | | | | Chase5 DMX 214 - 216 |
| | | | | | Chase6 DMX 217 - 219 |
| | | | | | Chase7 DMX 220 - 222 |
| | | | | | Chase8 DMX 223 - 225 |
| | | | | | Chase9 DMX 226 - 228 |
| | | | | | Chase10 DMX 229 - 231 |
| | | | | | User Chase1 DMX 232 - 234 |
| | | | | | User Chase2 DMX 235 - 237 |
| | | | | | User Chase3 DMX 238 - 240 |
| | | | | | User Chase4 DMX 241 - 243 |
| | | | | | User Chase5 DMX 244 - 246 |
| | | | | | User Chase6 DMX 247 - 249 |
| | | | | | User Chase7 DMX 250 - 252 |
| | | | | | User Chase8 DMX 253 - 255 |

**Table 13: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (8-Bit Mode)**

| | | | | | |
|---|---|---|---|---|---|
| 7 | Strobe | 0 - 255 | 0 - 100% | 0 | *Controls strobe operations as follows:*<br><br>Open = DMX 0 - 2<br>Closed = DMX 3 - 5<br>Slow Rand = DMX 6 - 7<br>Med Rand = DMX 8 - 10<br>Fast Rand = DMX 11 - 12<br>Strobe Range = DMX 13 - 127 (fastest)<br>Pulse + Slow Rand = DMX 128 - 129<br>Pulse + Med Rand = DMX 130 - 131<br>Pulse + Fast Rand = DMX 132 - 133<br>Pulse + Range = DMX 134 - 191<br>Pulse - Slow Rand = DMX 192 - 193<br>Pulse - Med Rand = DMX 194 - 195<br>Pulse - Fast Rand = DMX 196 - 197<br>Pulse - Range = DMX 198 - 255 |
| 8 | Duration | 0 - 255 | 0 - 100% | 0 | Strobe's duration, Range is DMX 0 - 85 as follows:<br><br>0 = DMX 0<br>1 = DMX 1 - 3<br>x = (DMX Value-1)/3+1<br>85 = DMX 253-255 |
| 9 | Zoom | 0 - 255 | 0 - 100% | 0 | Control of variable zoom (beam spread) operation from 12 to 45 degrees |
| 10 | Focus Timing | 0 - 255 | 0 - 100% | 255 | Timing control of Pan and Tilt |
| 11 | Timing | 0 - 255 | 0 - 100% | 255 | Allows for timing control of Intensity, Color and Zoom parameters. Channel should default to 255 for smoothest actions using console and/or manual fades. Refer to **"DMX Timing Channel Detail" on page 26**. |
| 12 | Control | 0 - 255 | 0 - 100% | 255 | *Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds. Set control channel value to 0 without any scaling.*<br><br>Default Setting on Console = DMX 0-4<br>DIM Response_Normal = DMX 5 - 9<br>DIM Response_Incandescent = DMX 10 - 14<br>Dimming Curve_Linear = DMX 30 - 34<br>Dimming Curve_Square = DMX 35- 39<br>Dimming Curve_S-Curve = DMX 40 - 44<br>Dimming Curve_PL-Curve = DMX 45 - 49<br>Calibration_OFF = DMX 70 - 74<br>Calibration_ON = DMX 75 - 79<br>Map_RGBW 16-bit Mode = DMX 100 - 104<br>Map_RGBW 8-bit Mode = DMX 105 - 109<br>Map_HSIC Mode = DMX 110 - 114<br>Reserved ( Future use) = DMX 115 - 250 |
| 13 | Red | 0 - 255 | 0 - 100% | 0 | 8-bit control of Red LEDs from 0 to Full |
| 14 | Green | 0 - 255 | 0 - 100% | 0 | 8-bit control of Green LEDs from 0 to Full |
| 15 | Blue | 0 - 255 | 0 - 100% | 0 | 8-bit control of Blue LEDs from 0 to Full |
| 16 | White | 0 - 255 | 0 - 100% | 0 | 8-bit control of White LEDs from 0 to Full |

**Showline**

## HSIC Mode

Table 14 provides DMX channel mapping of all DMX512 control values when the SL WASH 180 RGBW LED Luminaire is in HSIC (Hue, Saturation, Intensity, and Color Correction) DMX512 mode (as set by the luminaire's menu system).

**Table 14: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (HSIC Mode)**

| DMX Channel | Parameter | Range DMX | Range% | Default - *recommended console default values* | Description |
|---|---|---|---|---|---|
| 1 | Pan - High Byte | 0 - 65535 | 0 - 100% | 0 | 16-bit control for Pan Operation |
| 2 | Pan - Low Byte | | | | |
| 3 | Tilt - High Byte | 0 - 65535 | 0 - 100% | 0 | 16-bit control for Tilt Operation |
| 4 | Tilt - Low Byte | | | | |
| 5 | Master Intensity | 0 - 255 | 0 - 100% | 0 | 8-bit control for Intensity of LED settings. |
| 6 | Strobe | 0 - 255 | 0 - 100% | 0 | *Controls strobe operations as follows:*<br><br>Open = DMX 0 - 2<br>Closed = DMX 3 - 5<br>Slow Rand = DMX 6 - 7<br>Med Rand = DMX 8 - 10<br>Fast Rand = DMX 11 - 12<br>Strobe Range = DMX 13 - 127 (fastest)<br>Pulse + Slow Rand = DMX 128 - 129<br>Pulse + Med Rand = DMX 130 - 131<br>Pulse + Fast Rand = DMX 132 - 133<br>Pulse + Range = DMX 134 - 191<br>Pulse - Slow Rand = DMX 192 - 193<br>Pulse - Med Rand = DMX 194 - 195<br>Pulse - Fast Rand = DMX 196 - 197<br>Pulse - Range = DMX 198 - 255 |
| 7 | Duration | 0 - 255 | 0 - 100% | 0 | Strobe's duration, Range is DMX 0 - 85 as follows:<br><br>0 = DMX 0<br>1 = DMX 1 - 3<br>x = (DMX Value-1)/3+1<br>85 = DMX 253-255 |
| 8 | Zoom | 0 - 255 | 0 - 100% | 0 | Control of variable zoom (beam spread) operation from 12 to 45 degrees |
| 9 | Focus Timing | 0 - 255 | 0 - 100% | 255 | Timing control of Pan and Tilt |
| 10 | Timing | 0 - 255 | 0 - 100% | 255 | Allows for timing control of Intensity, Color and Zoom parameters. Channel should default to 255 for smoothest actions using console and/or manual fades. Refer to **"DMX Timing Channel Detail" on page 26**. |
| 11 | Control | 0 - 255 | 0 - 100% | 255 | *Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds. Set control channel value to 0 without any scaling.*<br><br>Default Setting on Console = DMX 0-4<br>DIM Response_Normal = DMX 5 - 9<br>DIM Response_Incandescent = DMX 10 - 14<br>Dimming Curve_Linear = DMX 30 - 34<br>Dimming Curve_Square = DMX 35- 39<br>Dimming Curve_S-Curve = DMX 40 - 44<br>Dimming Curve_PL-Curve = DMX 45 - 49<br>Calibration_OFF = DMX 70 - 74<br>Calibration_ON = DMX 75 - 79<br>Map_RGBW 16-bit Mode = DMX 100 - 104<br>Map_RGBW 8-bit Mode = DMX 105 - 109<br>Map_HSIC Mode = DMX 110 - 114<br>Reserved ( Future use) = DMX 115 - 250 |
| 12 | Hue - High Byte | 0 - 65535 | 0 - 100% | 0 | 16-Bit control of Hue 0 - 359 Degrees |
| 13 | Hue - Low Byte | | | | |
| 14 | Saturation | 0 - 255 | 0 - 100% | 0 | 8-bit control for Saturation. |
| 15 | Intensity | 0 - 255 | 0 - 100% | 0 | 8-bit control for Intensity. |

**Table 14: SL WASH 180 RGBW LED Luminaire DMX Channel Mapping (HSIC Mode)**

| 16 | CCT | 0 - 255 | 0 - 100% | 0 | *Variable control of correlated color temperature as follows:*<br><br>Channel OFF (disabled) DMX 0 - 5<br>2700K - 6500K. DMX 6 - 255 |
|----|-----|---------|----------|---|-----|

## 2.   DMX Timing Channel Detail

Timing channel control improves the timed moves of certain groups of parameters. The SL WASH 180 RGBW LED Luminaire provides timing channels in 16-bit mode (one for intensity time and one for color time) and one timing channel in 8-bit (color and intensity timing combined). The luminaire uses its timing channel value to calculate a smooth continuous operation for a given time and transition.

**Guidelines:**

• Timing channels support time values from zero to 60 minutes.

• To use a timing channel instead of console timing, it is recommended to set the timing channel to the desired value and set cue and/or console cue fade time to zero. A combination of time controls can produce unexpected results.

• The default value setting in the profile should be 255 (proportional control) to allow smooth operation when using console timing.

• The timing channel data should change as a snap. A zero value will give the fastest operation, however, without any smoothing this can appear "steppy" in console timed moves.

Refer to "DMX Timing Channel Detail" for more information.

**Table 15: SL WASH 180 RGBW LED Luminaire Timing Channel Detail**

| % Value | DMX | = Seconds<br>*(unless noted)* |
|---------|-----|-------------------------------|
| 0 | 0 | 0 (Full Speed) |
|   | 1 | 0.2 |
|   | 2 | 0.4 |
| 1 | 3 | 0.6 |
|   | 4 | 0.8 |
| 2 | 5 | 1 |
|   | 6 | 1.2 |
|   | 7 | 1.4 |
| 3 | 8 | 1.6 |
|   | 9 | 1.8 |
| 4 | 10 | 2 |
|   | 11 | 2.2 |
|   | 12 | 2.4 |
| 5 | 13 | 2.6 |
|   | 14 | 2.8 |
| 6 | 15 | 3 |
|   | 16 | 3.2 |
|   | 17 | 3.4 |
| 7 | 18 | 3.6 |
|   | 19 | 3.8 |
| 8 | 20 | 4 |
|   | 21 | 4.2 |
|   | 22 | 4.4 |
| 9 | 23 | 4.6 |
|   | 24 | 4.8 |
| 10 | 25 | 5 |

Sh⦿wline

**Table 15: SL WASH 180 RGBW LED Luminaire Timing Channel Detail**

| % Value | DMX | = Seconds (unless noted) |
|---|---|---|
|  | 26 | 5.2 |
|  | 27 | 5.4 |
| 11 | 28 | 5.6 |
|  | 29 | 5.8 |
|  | 30 | 6 |
| 12 | 31 | 6.2 |
|  | 32 | 6.4 |
| 13 | 33 | 6.6 |
|  | 34 | 6.8 |
|  | 35 | 7.0 |
| 14 | 36 | 7.2 |
|  | 37 | 7.4 |
| 15 | 38 | 7.6 |
|  | 39 | 7.8 |
|  | 40 | 8 |
| 16 | 41 | 8.2 |
|  | 42 | 8.4 |
| 17 | 43 | 8.6 |
|  | 44 | 8.8 |
|  | 45 | 9 |
| 18 | 46 | 9.2 |
|  | 47 | 9.4 |
| 19 | 48 | 9.6 |
|  | 49 | 9.8 |
|  | 50 | 10 |
| 20 | 51 | 10.2 |
|  | 52 | 10.4 |
|  | 53 | 10.6 |
| 21 | 54 | 10.8 |
|  | 55 | 11 |
| 22 | 56 | 11.2 |
|  | 57 | 11.4 |
|  | 58 | 11.6 |
| 23 | 59 | 11.8 |
|  | 60 | 12 |
| 24 | 61 | 12.2 |
|  | 62 | 12.4 |
|  | 63 | 12.6 |
| 25 | 64 | 12.8 |
|  | 65 | 13 |
| 26 | 66 | 13.2 |
|  | 67 | 13.4 |
|  | 68 | 13.6 |
| 27 | 69 | 13.8 |
|  | 70 | 14 |
| 28 | 71 | 14.2 |
|  | 72 | 14.4 |
|  | 73 | 14.6 |
| 29 | 74 | 14.8 |
|  | 75 | 15 |
| 30 | 76 | 15.2 |

**Table 15: SL WASH 180 RGBW LED Luminaire Timing Channel Detail**

| % Value | DMX | = Seconds *(unless noted)* |
|---|---|---|
|  | 77 | 15.4 |
|  | 78 | 15.6 |
| 31 | 79 | 15.8 |
|  | 80 | 16 |
|  | 81 | 16.2 |
| 32 | 82 | 16.4 |
|  | 83 | 16.6 |
| 33 | 84 | 16.8 |
|  | 85 | 17 |
|  | 86 | 17.2 |
| 34 | 87 | 17.4 |
|  | 88 | 17.6 |
| 35 | 89 | 17.8 |
|  | 90 | 18 |
|  | 91 | 18.2 |
| 36 | 92 | 18.4 |
|  | 93 | 18.6 |
| 37 | 94 | 18.8 |
|  | 95 | 19 |
|  | 96 | 19.2 |
| 38 | 97 | 19.4 |
|  | 98 | 19.6 |
| 39 | 99 | 19.8 |
|  | 100 | 20 |
|  | 101 | 21 |
| 40 | 102 | 22 |
|  | 103 | 23 |
|  | 104 | 24 |
| 41 | 105 | 25 |
|  | 106 | 26 |
| 42 | 107 | 27 |
|  | 108 | 28 |
|  | 109 | 29 |
| 43 | 110 | 30 |
|  | 111 | 31 |
| 44 | 112 | 32 |
|  | 113 | 33 |
|  | 114 | 34 |
| 45 | 115 | 35 |
|  | 116 | 36 |
| 46 | 117 | 37 |
|  | 118 | 38 |
|  | 119 | 39 |
| 47 | 100 | 40 |
|  | 121 | 41 |
| 48 | 122 | 42 |
|  | 123 | 43 |
|  | 124 | 44 |
| 49 | 125 | 45 |
|  | 126 | 46 |
|  | 127 | 47 |

**Showline**

**Table 15: SL WASH 180 RGBW LED Luminaire Timing Channel Detail**

| % Value | DMX | = Seconds *(unless noted)* |
|---|---|---|
| 50 | 128 | 48 |
|  | 129 | 49 |
| 51 | 130 | 50 |
|  | 131 | 51 |
|  | 132 | 52 |
| 52 | 133 | 53 |
|  | 134 | 54 |
| 53 | 135 | 55 |
|  | 136 | 56 |
|  | 137 | 57 |
| 54 | 138 | 58 |
|  | 139 | 59 |
| 55 | 140 | 60 |
|  | 141 | 61 |
|  | 142 | 62 |
| 56 | 143 | 63 |
|  | 144 | 64 |
| 57 | 145 | 65 |
|  | 146 | 66 |
|  | 147 | 67 |
| 58 | 148 | 68 |
|  | 149 | 69 |
| 59 | 150 | 70 |
|  | 151 | 71 |
|  | 152 | 72 |
| 60 | 153 | 73 |
|  | 154 | 74 |
|  | 155 | 75 |
| 61 | 156 | 76 |
|  | 157 | 77 |
| 62 | 158 | 78 |
|  | 159 | 79 |
|  | 160 | 80 |
| 63 | 161 | 81 |
|  | 162 | 82 |
| 64 | 163 | 83 |
|  | 164 | 84 |
|  | 165 | 85 |
| 65 | 166 | 86 |
|  | 167 | 87 |
| 66 | 168 | 88 |
|  | 169 | 89 |
|  | 170 | 90 |
| 67 | 171 | 91 |
|  | 172 | 92 |
| 68 | 173 | 93 |
|  | 174 | 94 |
|  | 175 | 95 |
| 69 | 176 | 96 |
|  | 177 | 97 |
|  | 178 | 98 |

**Table 15: SL WASH 180 RGBW LED Luminaire Timing Channel Detail**

| % Value | DMX | = Seconds *(unless noted)* |
|---|---|---|
| 70 | 179 | 99 |
| | 180 | 100 |
| 71 | 181 | 101 |
| | 182 | 102 |
| | 183 | 103 |
| 72 | 184 | 104 |
| | 185 | 105 |
| 73 | 186 | 106 |
| | 187 | 107 |
| | 188 | 108 |
| 74 | 189 | 109 |
| | 190 | 110 |
| 75 | 191 | 111 |
| | 192 | 112 |
| | 193 | 113 |
| 76 | 194 | 114 |
| | 195 | 115 |
| 77 | 196 | 116 |
| | 197 | 117 |
| | 198 | 118 |
| 78 | 199 | 119 |
| | 200 | 100 |
| 79 | 201 | 121 |
| | 202 | 122 |
| | 203 | 123 |
| 80 | 204 | 124 |
| | 205 | 125 |
| 81 | 206 | 126 |
| | 207 | 127 |
| | 208 | 128 |
| 82 | 209 | 129 |
| | 210 | 130 |
| | 211 | 131 |
| 83 | 212 | 132 |
| | 213 | 133 |
| 84 | 214 | 134 |
| | 215 | 135 |
| | 216 | 136 |
| 85 | 217 | 137 |
| | 218 | 138 |
| 86 | 219 | 139 |
| | 220 | 140 |
| | 221 | 141 |
| 87 | 222 | 142 |
| | 223 | 143 |
| 88 | 224 | 144 |
| | 225 | 145 |
| | 226 | 146 |
| 89 | 227 | 147 |
| | 228 | 148 |
| | 229 | 149 |

Showline

**Table 15: SL WASH 180 RGBW LED Luminaire Timing Channel Detail**

| % Value | DMX | = Seconds *(unless noted)* |
|---------|-----|------------------|
| 90 | 230 | 150 |
|  | 231 | 151 |
| 91 | 232 | 152 |
|  | 233 | 153 |
|  | 234 | 154 |
| 92 | 235 | 155 |
|  | 236 | 156 |
| 93 | 237 | 157 |
|  | 238 | 158 |
|  | 239 | 159 |
| 94 | 240 | 160 |
|  | 241 | 161 |
| 95 | 242 | 162 |
|  | 243 | 163 |
|  | 244 | 164 |
| 96 | 245 | 165 |
|  | 246 | 5 Minutes |
| 97 | 247 | 15 Minutes |
|  | 248 | 30 Minutes |
|  | 249 | 60 Minutes |
| 98 | 250* | 60mS |
|  | 251* | 80mS |
| 99 | 252* | 100mS |
|  | 253* | 100mS |
|  | 254* | 140mS |
| 100 | 255* (default) | 160mS |

**Note:** * DMX values 250 to 255 provide smoothing when using console fade timing. DMX value 255 (recommended default) will provide the smoothest timing.

# RDM PARAMETER IDS

## 1. SL WASH 180 RGBW LED Luminaire RDM Parameter IDs

The following tables outline and describe all the RDM parameters IDs associated with SL WASH 180 RGBW LED Luminaires.

**Table 16: SL WASH 180 RGBW LED Luminaire RDM Product Parameters IDs**

| Model ID | Manufacturer | Model Description | Product Category |
|---|---|---|---|
| 0x1140 | Philips Entertain. Lighting Asia | SL WASH 180 (RGBW) | 0x0509 |

**Table 17: SL WASH 180 RGBW LED Luminaire RDM UID**

| UID | | | | | |
|---|---|---|---|---|---|
| MSB of ESTA 50H | LSB of ESTA 41H | 1st of Unique Seq. | 2nd of Unique Seq. | 3rd of Unique Seq. | 4th of Unique Seq. |

**Table 18: SL WASH 180 RGBW LED Luminaire RDM Parameters IDs**

| Get Allowed | Set Allowed | RDM Parameter IDs | Value | Comment | Implemented |
|---|---|---|---|---|---|
| | | *Category - Network Management* | | | |
| | | DISC_UNIQUE_BRANCH | 0x0001 | | ■ |
| | | DISC_MUTE | 0x0002 | | ■ |
| | | DISC_UN_MUTE | 0x0003 | | ■ |
| ■ | | PROXIED_DEVICES | 0x0010 | | |
| ■ | | PROXIED_DEVICES_COUNT | 0x0011 | | |
| ■ | ■ | COMMS_STATUS | 0x0015 | | |
| | | *Category - Status Collection* | | | |
| ■ | | QUEUED_MESSAGE | 0x0020 | | ■ |
| ■ | | STATUS_MESSAGES | 0x0030 | | ■ |
| ■ | | STATUS_ID_DESCRIPTION | 0x0031 | | ■ |
| | ■ | CLEAR_STATUS_ID | 0x0032 | | ■ |
| ■ | ■ | SUB_DEVICE_STATUS_REPORT_THRESHOLD | 0x0033 | | |
| | | *Category - RDM Information* | | | |
| ■ | | SUPPORTED_PARAMETERS | 0x0050 | *Support required only if supporting Parameters beyond the minimum required set.* | ■ |
| ■ | | PARAMETER_DESCRIPTION | 0x0051 | *Support required for Manufacturer-Specific PIDs exposed in SUPPORTED_ PARAMETERS message.* | ■ |

**Showline**

**Table 18: SL WASH 180 RGBW LED Luminaire RDM Parameters IDs**

| Get Allowed | Set Allowed | RDM Parameter IDs | Value | Comment | Implemented |
|:---:|:---:|:---:|:---:|:---|:---:|
| | | *Category - Product Information* | | | |
| ■ | | DEVICE_INFO | 0x0060 | | ■ |
| ■ | | PRODUCT_DETAIL_ID_LIST | 0x0070 | | |
| ■ | | DEVICE_MODEL_DESCRIPTION | 0x0080 | | ■ |
| ■ | | MANUFACTURER_LABEL | 0x0081 | | ■ |
| ■ | ■ | DEVICE_LABEL | 0x0082 | | ■ |
| ■ | ■ | FACTORY_DEFAULTS | 0x0090 | | ■ |
| ■ | | LANGUAGE_CAPABILITIES | 0x00A0 | | |
| ■ | ■ | LANGUAGE | 0x00B0 | | |
| ■ | | SOFTWARE_VERSION_LABEL | 0x00C0 | | ■ |
| ■ | | BOOT_SOFTWARE_VERSION_ID | 0x00C1 | | |
| ■ | | BOOT_SOFTWARE_VERSION_LABEL | 0x00C2 | | |
| | | *Category - DMX512 Setup* | | | |
| ■ | ■ | DMX_PERSONALITY | 0x00E0 | | ■ |
| ■ | | DMX_PERSONALITY_DESCRIPTION | 0x00E1 | | ■ |
| ■ | ■ | DMX_START_ADDRESS | 0x00F0 | *Required if device uses a DMX Slot* | ■ |
| ■ | | SLOT_INFO | 0x0120 | | ■ |
| ■ | | SLOT_DESCRIPTION | 0x0121 | | ■ |
| ■ | | DEFAULT_SLOT_VALUE | 0x0122 | | |
| | | *Category - Sensors 0x02xx* | | | |
| ■ | | SENSOR_DEFINITION | 0x0200 | | ■ |
| ■ | ■ | SENSOR_VALUE | 0x0201 | | ■ |
| | ■ | RECORD_SENSORS | 0x0202 | | |
| | | *Category - Dimmer Settings 0x03xx - FUTURE USE* | | | |
| | | *Category - Power / Lamp Settings 0x04xx* | | | |
| ■ | ■ | DEVICE_HOURS | 0x0400 | | |
| ■ | ■ | LAMP_HOURS | 0x0401 | | |
| ■ | ■ | LAMP_STRIKES | 0x0402 | | |
| ■ | ■ | LAMP_STATE | 0x0403 | | |
| ■ | ■ | LAMP_ON_MODE | 0x0404 | | |
| ■ | ■ | DEVICE_POWER_CYCLES | 0x0405 | | |
| | | *Category - Display Settings 0x05xx* | | | |
| ■ | ■ | DISPLAY_INVERT | 0x0500 | | ■ |
| ■ | ■ | DISPLAY_LEVEL | 0x0501 | | |
| | | *Category - Configuration 0x06xx* | | | |
| ■ | ■ | PAN_INVERT | 0x0600 | | |
| ■ | ■ | TILT_INVERT | 0x0601 | | |
| ■ | ■ | PAN_TILT_SWAP | 0x0602 | | |
| ■ | ■ | REAL_TIME_CLOCK | 0x0603 | | |
| | | *Category - Control 0x10xx* | | | |
| ■ | ■ | IDENTIFY_DEVICE | 0x1000 | | ■ |
| | ■ | RESET_DEVICE | 0x1001 | | |

**Table 18: SL WASH 180 RGBW LED Luminaire RDM Parameters IDs**

| Get Allowed | Set Allowed | RDM Parameter IDs | Value | Comment | Implemented |
|:---:|:---:|:---:|:---:|:---:|:---:|
| ■ | ■ | POWER_STATE | 0x1010 | | |
| ■ | ■ | PERFORM_SELFTEST | 0x1020 | | |
| ■ | | SELF_TEST_DESCRIPTION | 0x1021 | | |
| | ■ | CAPTURE_PRESET | 0x1030 | | |
| ■ | ■ | PRESET_PLAYBACK | 0x1031 | | |

**Table 19: SL WASH 180 RGBW LED Luminaire RDM Manufacturer Status IDs**

| Manufacturer Specific messages are in the range of 0x8000 - 0xFFDF. Each Manufacturer-specific Status ID shall have a unique meaning, which shall be consistent across all products having a given Manufacturer ID. See Table B-2, ANSI E1.20-2010. | | | | |
|:---:|:---:|:---:|:---:|:---:|
| **Status ID Message** | **Value** | **Data Value 1** | **Data Value 2** | **Status ID Description** |
| 8100H | | 00H | 00H | ALL OK |

**Table 20: SL WASH 180 RGBW LED Luminaire RDM Manufacturer Specific PIDs**

| Get Allowed | Set Allowed | RDM Parameter IDs | Type | Length | Unit | Prefix | Min | Max | Default | Description |
|:---:|:---:|:---:|:---:|:---:|:---:|:---:|:---:|:---:|:---:|:---:|
| *Category - Manufacturer Defined PIDs - Range is 0x8000-0xffdf (See ANSI E1.20-2010 Standard, Table A-3)* | | | | | | | | | | |
| ■ | ■ | 8A00H | U8 | 1 | None | None | 0 | 100 | 100 | DIMMER |
| ■ | ■ | 8A04H | U8 | 1 | None | None | 0 | 100 | 100 | Dimmer RED |
| ■ | ■ | 8A05H | U8 | 1 | None | None | 0 | 100 | 100 | Dimmer GREEN |
| ■ | ■ | 8A06H | U8 | 1 | None | None | 0 | 100 | 100 | Dimmer BLUE |
| ■ | ■ | 8A07H | U8 | 1 | None | None | 0 | 100 | 100 | Dimmer WHITE |
| ■ | ■ | 8AB2H | U8 | 1 | None | None | 1 | 18 | 1 | Chase |
| ■ | ■ | 8AB0H | U8 | 1 | None | None | 0 | 43 | 0 | Color Filter |
| ■ | ■ | 8AB1H | U8 | 1 | None | None | 0 | 31 | 0 | Preset |
| ■ | ■ | 8A92H | U8 | 1 | None | None | 0 | 255 | 0 | Strobe |
| ■ | ■ | 8A94H | U8 | 1 | None | None | 0 | 255 | 0 | Duration |
| ■ | ■ | 8A95H | U16 | 1 | None | None | 0 | 65535 | 0 | Pan |
| ■ | ■ | 8A96H | U16 | 1 | None | None | 0 | 65535 | 0 | Tilt |
| ■ | ■ | 8AC3H | U16 | 1 | None | None | 0 | 65535 | 0 | Pan/Tilt Timing |
| ■ | ■ | 8AC0H | U8 | 1 | None | None | 0 | 255 | 255 | Intensity Timing |
| ■ | ■ | 8AC2H | U8 | 1 | None | None | 0 | 255 | 255 | Color Timing |
| ■ | ■ | 8A40H | U8 | 1 | None | None | 0 | 1 | 0 | Link Mode |
| ■ | ■ | 8A42H | U8 | 1 | None | None | 0 | 1 | 0 | Incandescent Effect |
| ■ | ■ | 8AA1H | U8 | 1 | None | None | 0 | 3 | 0 | Dimming Curve |
| ■ | ■ | 8A0CH | U8 | 1 | None | None | 0 | 3 | 0 | DMX Fail Mode |
| ■ | ■ | 8AA0H | U8 | 1 | None | None | 0 | 4 | 0 | Backlight Off Time |
| ■ | ■ | 8AA2H | U8 | 1 | None | None | 0 | 94 | 0 | Power Up Setup |
| ■ | ■ | 8A44H | U8 | 1 | None | None | 0 | 1 | 0 | Calibration ON/OFF Setup |
| ■ | ■ | 8A41H | U8 | 1 | None | None | 0 | 1 | 0 | Lock Fixture |

Showline

# CLEANING AND CARE

> ⚡ **WARNING!** All cleaning should be performed with power completely removed from the luminaire. Never remove protective covers when luminaire is powered. Wear appropriate protective eye wear and gloves when cleaning the fixture. All service and maintenance, other than described herein, should be performed by a qualified technician or Authorized Service Center.

## 1.  Special Cleaning and Care Instructions

Being a solid-state fixture, and unlike most fixtures, the SL WASH 180 RGBW LED Luminaire requires very little routine maintenance by the user. This section covers portions of the luminaire that can be removed for cleaning.

The SL WASH 180 RGBW LED Luminaire special care when it comes to cleaning front lens assembly. Additional care needs to be taken with the plastic components because they are much easier to scratch or damage than glass.

The following is a list of cleaning materials required to care for your SL WASH 180 RGBW LED Luminaire:

- Lint free lens tissue
- Lint or powder free gloves
- Reagent grade isopropyl alcohol*
- A mild soap solution.

**Note:** *Reagent grade isopropyl alcohol is good to use on the SL WASH 180 RGBW LED Luminaire plastic optics with anti-reflection coatings.

If the lens is still dirty after using  isopropyl alcohol, for instance if fingerprints or oil is just redistributed and not cleaned off the optic,  then a mild soap and water solution can be used to gently wash the lens.  Repeat the cleaning with isopropyl alcohol to eliminate streaks and soap residue.

> ⚠ **WARNING!** Under no circumstances should ammonia-based cleaners, acetone, or other harsh solvents be used on or near the SL WASH 180 RGBW LED Luminaire. These types of cleaners or solvents can permanently damage the optics or housings of the fixture.

If you have any questions regarding the use or care of your SL WASH 180 RGBW LED Luminaire, please contact Showline technical support or your local Authorized Dealer.

## 2.  Front Lens Cleaning

**To clean the front lens:**

Step  1.  Turn off luminaire and allow to cool completely.

Step  2.  Apply a small amount of reagent grade isopropyl alcohol to lint-free lens tissue.

Step  3.  Wipe all debris, dirt, fingerprints, etc. from lens.

Step  4.  Using a second lint-free lens tissue, wipe off any alcohol residue.

## 3.  Service and Maintenance

For all other service and maintenance issues, please contact your local Showline office or an Authorized Service Center.

> ⚡ **WARNING!** Disassembly (other than as described herein), alterations, unauthorized service, etc. will void the product warranty. Contact your local Showline office or an Authorized Service Center for technical support and service.

**Show◈line**

# TECHNICAL SPECIFICATIONS

### 1.   Operational Specifications

| | |
|---|---|
| Source: | Color RGBW LED Array (x54 - 16 RED/12 GREEN/14 BLUE/12 WHITE all 600mA) |
| Beam Angle: | 12 to 45 Degrees Zoom |
| Light Output: | 3,475 Lumens, CRI/CQS: >90 (RGBW) |
| Color Temperature: | 2700 - 10000K (user adjustable) |
| Input Voltage (AC): | 100V to 240V (+/- 10%, auto-ranging) |
| Power Consumption: | 180 Watts (max.) |
| Pan & Tilt: | Pan 660 degrees / Tilt 300 degrees |
| Frequency: | 50/60Hz |
| Control Protocols: | DMX512 (1990) / DMX512A (RDM) / On-Board Menu |
| Ambient Temperature: | -20 to 40 Degrees C (-4 to 104 Degrees F) |
| Humidity: | 5%-95% Non condensing |
| Cooling: | Forced Air |
| Weight: | 17.6 lbs (8.0 kg) - Luminaire only (no mount, AC input cable or accessories) |
| Housing: | Die Cast Aluminium with Powder Coating |
| Compliance: | CE Marked |
| IP Rating: | IP20 |

**Note:**  Common model specifications shown. For specific model specifications, features, and accessories, refer to the product specification sheet for more details.
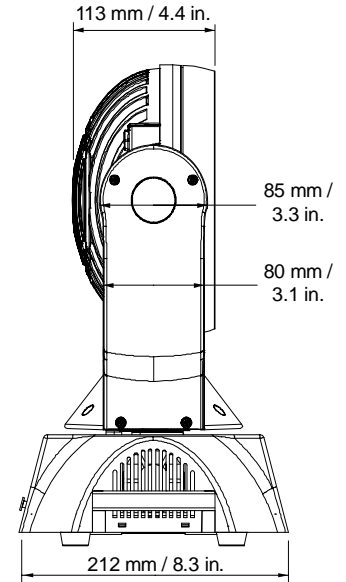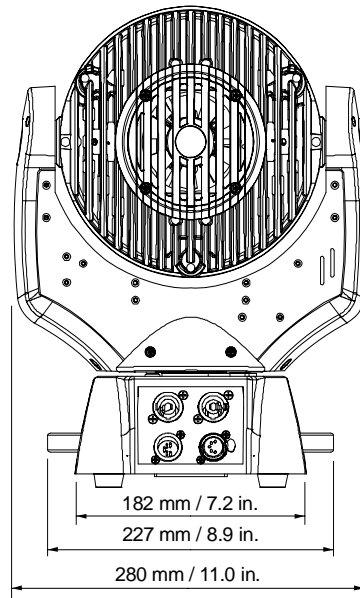
$$C\,\epsilon$$

Sh●wline

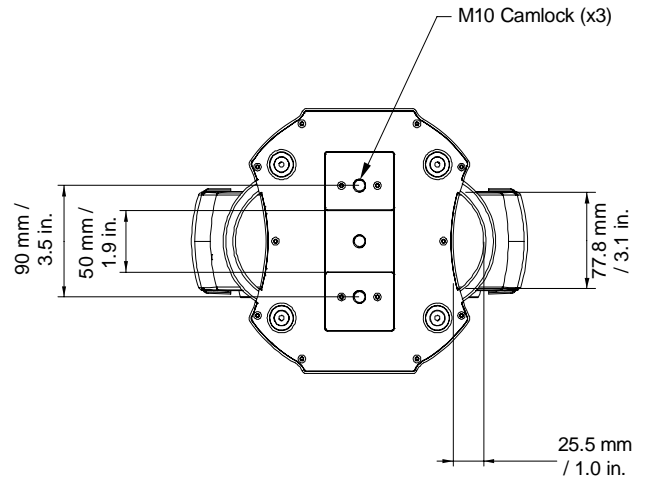## 2.  Luminaire Dimensions
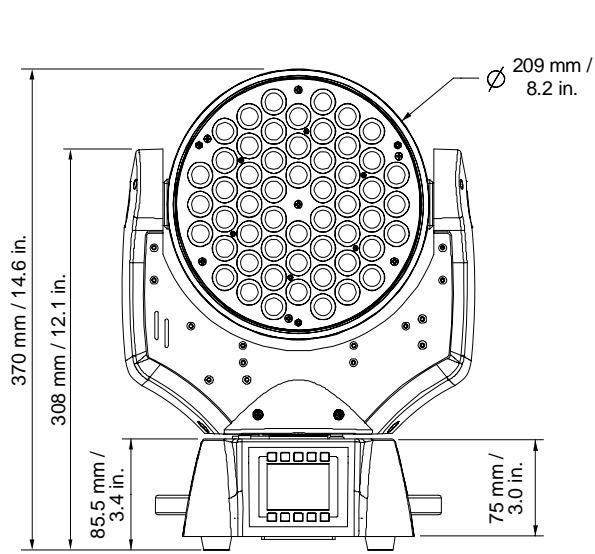


*Front View*



*Side View*



*Rear View*



*Enclosure View*

# Showline

Dallas
10911 Petal Street
Dallas, TX 75238
Tel: +1 214-647-7880
Fax: +1214-647-8031

Asia
Unit C, 14/F, Roxy Industrial Centre
No. 41-49 Kwai Cheong Road
Kwai Chung, N.T., Hong Kong
Tel: +852 2796 9786
Fax: +852 2798 6545

Auckland
19-21 Kawana Street
Northcote, Auckland 0627
New Zealand
Tel: +64 9 481 0100
Fax: +64 9 481 0101

Europe
Rondweg zuid 85
Winterswijk 7102 JD
The Netherlands
Tel: +31 (0) 543-542516

# PHILIPS