# **Selecon**

# PLPROFILE4 LED Luminaires



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Document Number: **02.9694.4010 0**Version as of: **07 December 2012** 

PLPROFILE4 LED Luminaire Installation & User's Manual

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# 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

### **Philips Selecon Limited Three-Year Warranty**

Philips Selecon offers a three-year limited warranty of its luminaires against defects in materials or workmanship from the date of delivery. A copy of Philips Selecon three-year limited warranty containing specific terms and conditions can be obtained from the Philips Selecon web site at www.seleconlight.com or by contacting your local Philips Selecon office.

PLPROFILE4 LED Luminaire's powerful LED engine offers exceptional performance and life. Under normal operating conditions, our LED engine has a life expectancy in excess of 50,000 hours, however under worst case operating conditions with the luminaire set to continuous full output it is possible that a small percentage of LED's may require replacement sooner. The Philips Selecon three-year limited warranty includes our guarantee against premature failure of the LED engine.

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# **PREFACE**

# 1. About this Manual

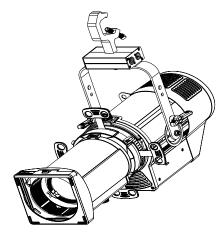
The document provides installation and operation instructions for the following products:

PLPROFILE4 LED Luminaires (refer to "Product Descriptions" for individual product models).

Please read all instructions before installing or using this product. *Retain this manual for future reference*. Additional product information and descriptions may be downloaded at www.seleconlight.com

# 2. Product Descriptions

This manual covers the following PLPROFILE4 LED Luminaire models:



# **PLPROFILE4 LED Luminaire**

Part Number	Description
PLPF4-03	PLPROFILE4 LED Luminaire Engine Only (without lens tube), Black, with C-Clamp, Top Box, Top Box Bolt, Safety Cable and PowerCon AC Input Connector
PLPF4-01-14	PLPROFILE4 LED Luminaire LED Engine, Black, with Axial Ellipsoidal 14-degree Fixed Beam Lens (SPX14LT), C-Clamp, Top Box, Top Box Bolt, Safety Cable and AC Input Cable (PC1XX*)
PLPF4-01-19	PLPROFILE4 LED Luminaire LED Engine, Black, with Axial Ellipsoidal 19-degree Fixed Beam Lens (SPX19LT), C-Clamp, Top Box, Top Box Bolt, Safety Cable and AC Input Cable (PC1XX*)
PLPF4-01-26	PLPROFILE4 LED Luminaire LED Engine, Black, with Axial Ellipsoidal 26-degree Fixed Beam Lens (SPX26LT), C-Clamp, Top Box, Top Box Bolt, Safety Cable and AC Input Cable (PC1XX*)
PLPF4-01-36	PLPROFILE4 LED Luminaire LED Engine, Black, with Axial Ellipsoidal 36-degree Fixed Beam Lens (SPX36LT), C-Clamp, Top Box, Top Box Bolt, Safety Cable and AC Input Cable (PC1XX*)
PLPF4-01-50	PLPROFILE4 LED Luminaire LED Engine, Black, with Axial Ellipsoidal 50-degree Fixed Beam Lens (SPX50LT), C-Clamp, Top Box, Top Box Bolt, Safety Cable and AC Input Cable (PC1XX*)
PLPF4-03-1535	PLPROFILE4 LED Luminaire LED Engine, Black, with Axial Ellipsoidal 15-degree to 35-degree Zoomspot Lens (SPX1535LT), C-Clamp, Top Box, Top Box Bolt, Safety Cable and AC Input Cable (PC1XX*)
PLPF4-03-2550	PLPROFILE4 LED Luminaire LED Engine, Black, with Axial Ellipsoidal 25-degree to 50-degree Zoomspot Lens (SPX2550LT), C-Clamp, Top Box, Top Box Bolt, Safety Cable and AC Input Cable (PC1XX*)

### Notes:

- 1) All PLPROFILE4 LED Luminaires are universal voltage (100 240VAC).
- 2) \*User-specified AC input connector at time of ordering (GR Edison / GP Grounded Stagepin / GTL Twistlock).
- 3) Product accessories can be found in "Accessories" on page 5.

# 3. Accessories

Contact your Authorized Philips Selecon Dealer for price and availability of all accessories for PLPROFILE4 LED Luminaires. Additional information can be found on the Philips Selecon web site at www.seleconlight.com (information also found on the Philips Strand Lighting web site at www.strandlighting.com).

# **PLPROFILE4 LED Luminaire Clamps**

Part Number	Description
SC	Selecon Molded Yoke Rated C-Clamp
MC	Mega Claw, Black Anodized

### **PLPROFILE4 LED Luminaire Lenses**

Part Number	Description
SPX14LT	SPX Axial Ellipsoidal 14-degree Fixed Beam Lens Tube Only
SPX19LT	SPX Axial Ellipsoidal 19-degree Fixed Beam Lens Tube Only
SPX26LT	SPX Axial Ellipsoidal 26-degree Fixed Beam Lens Tube Only
SPX36LT	SPX Axial Ellipsoidal 36-degree Fixed Beam Lens Tube Only
SPX50LT	SPX Axial Ellipsoidal 50-degree Fixed Beam Lens Tube Only
SPX1535LT	SPX Axial Ellipsoidal 15-degree to 35-degree Zoomspot Lens Tube Only
SPX2550LT	SPX Axial Ellipsoidal 25-degree to 50-degree Zoomspot Lens Tube Only

### **PLPROFILE4 LED Luminaire Lens Accessories**

Part Number	Description
20IRIS	20-Leaf SPX Iris
SPXGHB	SPX Gobo Holder, Size B, For Metal Gobos
SPXGHGB	SPX Gobo Holder, Size B, For Glass Gobos
19PACCF	SPX Color Frame, Spare
19PACSMFB	SPX Lens Safety, Mesh
19SPXCF	SPX Replacement Color Frame, 6-1/4" Square, Black

# **PLPROFILE4 LED Luminaire AC Input Power Cables**

Part Number	Description
PC1BE	PL Series Luminaire AC Power Input Cable (39 inches / 1 meter), PowerCon without AC connector (bare end)
PC1GP	PL Series Luminaire AC Power Input Cable (39 inches / 1 meter), PowerCon with Stagepin Connector
PC1GTL	PL Series Luminaire AC Power Input Cable (39 inches / 1 meter), PowerCon with Twistlock Connector
PC1GR	PL Series Luminaire AC Power Input Cable (39 inches / 1 meter), PowerCon with Edison Connector
PC3PC	PL Series Luminaire Interconnection Cable (2.5 meter), PowerCon Male to PowerCon Female for interconnection between units

### PLPROFILE4 LED Luminaire Wireless DMX512 Receivers

Part Number	Description
PL1WDMX03	W-DMX Wireless DMX512 Receiver (Wireless Solutions) Black
PL1LDMX03	Lumen Radio Wireless DMX512 Receiver Black
PL1SDMX03	City Theatrical Wireless DMX512 Receiver Black

# **PLPROFILE4 LED Luminaire Wireless DMX512 Transmitters**

Part Number	Description
PL1WDMXTR	W-DMX Wireless DMX512 (Wireless Solutions) Transmitter
PL1LDMXTR	Lumen Radio Wireless DMX512 Transmitter
PL1SDMXTR	City Theatrical Wireless DMX512 Transmitter

# **PLPROFILE4 LED Luminaire Software Uploader Cable**

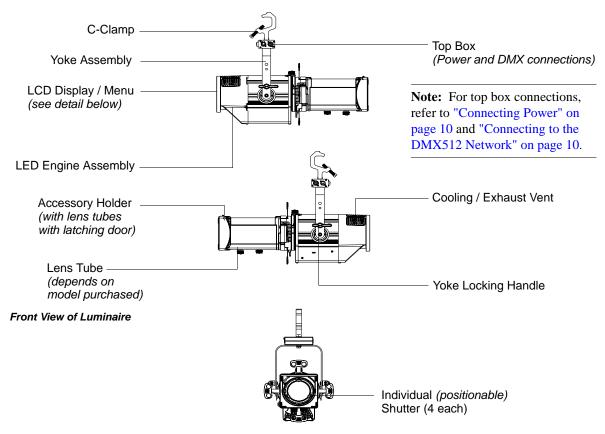
Part Number	Description
PLUPLD	USB Luminaire Software Programming Kit (for updating or reloading luminaire software only) - includes USB to DMX Dongle, Uploader Program, and Carry Bag

# PLPROFILE4 LED LUMINAIRE OVERVIEW

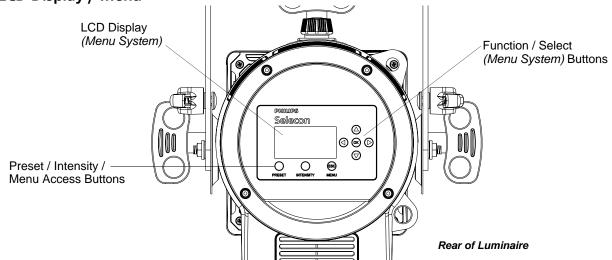
# 1. PLPROFILE4 LED Luminaire Components

# **Luminaire Components**

Side Views of Luminaire



# LCD Display / Menu



Note: For Menu operation and programming details, refer to "LCD Menu Operation" on page 17.

# **INSTALLATION AND SET UP**

# 1. Top Box Connections

All PLPROFILE4 LED Luminaires are supplied with a "Top Box" for AC Input/Output and DMX512 Input/Output Connections. **Figure 1** shows the AC and DMX512 Input and Output (Thru) Connections.

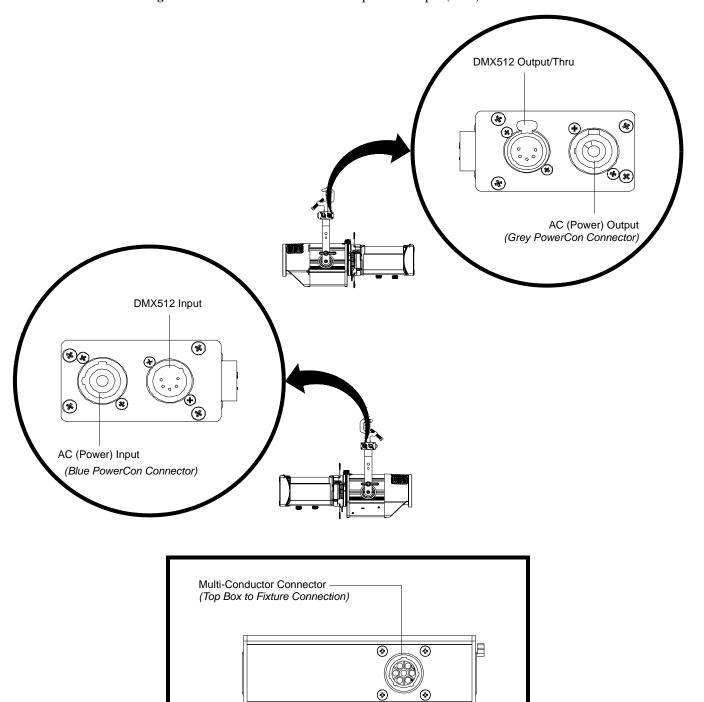


Figure 1: PLPROFILE4 LED Luminaire Top Box Connections

# 2. Power Requirements



**WARNING!** The PLPROFILE4 LED Luminaire should be connected to a constant circuit or a relay device. It should never be connected to a dimmer or circuit controlled by a dimmer.

The PLPROFILE4 LED Luminaire operates on 100 to 240 volts AC (+/- 10%, auto-ranging). The luminaire contains an auto-ranging power supply. Each luminaire can draw up to 600 Watts. Note, the values in **Table 1** are averaged and for reference only.

Table 1: PLPROFILE4 LED Luminaire Voltage vs. Current

Voltage (AC)	Total Current (A)	Maximum number of units that can be linked together*
100	6.0	3
110	5.5	3
120	5.0	4
130	4.6	4
140	4.3	4
150	4.0	5
160	3.8	5
170	3.5	5

Voltage (AC)	Total Current (A)	Maximum number of units that can be linked together*
180	3.3	6
190	3.2	6
200	3.0	6
210	2.9	6
220	2.7	7
230	2.6	7
240	2.5	8



**WARNING!** \*These figures are based on the Maximum Allowable Input Current of 20 Amps (and the maximum power supply limit of 600 Watts). *Do not overload circuits!* 



### IMPORTANT AC POWER CONNECTION NOTES:

- a. When using the daisy-chain connection method, ONLY connect PLPROFILE4 LED Luminaires to AC Output Connection of PLPROFILE4 LED Luminaires. DO NOT CONNECT OTHER TYPES OF LUMINAIRES OR DEVICES!
- b. Use only use approved cable types.
- c. Do not overload circuits!
- d. Do not connect PLPROFILE4 LED Luminaires to dimmed circuits.
- e. The MAXIMUM allowable number of PLPROFILE4 LED Luminaires which can be 'daisy-chained' on one power feed are listed in **Table 1**, above. DO NOT EXCEED!



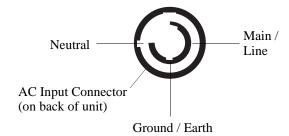
# 3. Connecting Power

**Note:** Refer to **Figure 1 on page 8** for AC Input and Output connections.

If the unit is supplied with an AC input cable, **Table 2** describes how to connect power to your PLPROFILE4 LED Luminaire . Field wiring of the PLPROFILE4 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: PLPROFILE4 LED Luminaire AC Input Connections

Wire Color	Purpose
Brown	Main / Line (120 to 240VAC)
Blue	Neutral
Green/Yellow	Ground

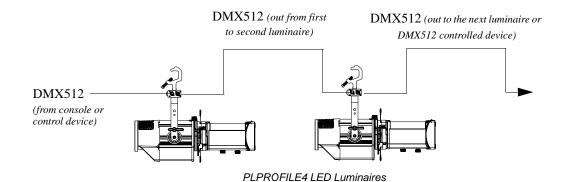


# 4. Connecting to the DMX512 Network

Note: Refer to Figure 1 on page 8 for DMX512 Input and Output/Thru connections.

Basic DMX512 installation consists of connecting multiple PLPROFILE4 LED Luminaires together (up to 30 luminaires) in "daisy-chain" fashion. A cable runs from the control console (or DMX512 control source) to the DMX connector on the first PLPROFILE4 LED Luminaire. Another cable runs from the other DMX connector on the first unit to a DMX connector on the next PLPROFILE4 LED Luminaire (or DMX512 device to be controlled).

**Note:** For more information on DMX512 networking and systems, refer to "Additional Resources for DMX512" on page 1. For PLPROFILE4 LED Luminaire DMX Mapping, refer to "DMX CONTROL" on page 25.



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

Figure 2: Connecting DMX512

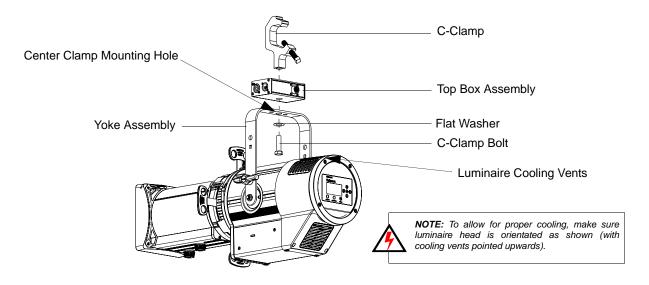
# 5. Mounting

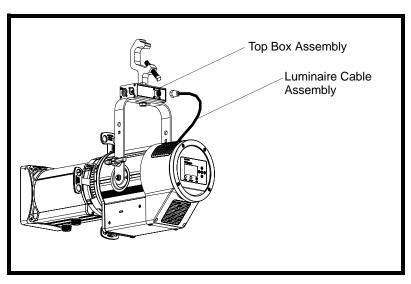


**WARNING!** Before attempting any installation or service, disconnect all power at power source. Dimming the luminaire does not disconnect power. Installation and service should only be performed by a trained and qualified professional.

# **Using Supplied C-Clamp**

As illustrated in **Figure 3 on page 11**, at yoke assembly, thread clamp mounting bolt (with washer installed) through center clamp mounting hole at top of yoke, through Top Box Assembly, and thread bolt into C-Clamp. Securely tighten bolt (by hand) into clamp (but do not overtighten).





**Figure 3: Luminaire Mounting** 

To mount on a telescopic stand, reverse the yoke under the luminaire and bolt to stand. Please note luminaire orientation (see note in **Figure 3**).

**Note:** After installing Clamp and Top Box assembly, connect luminaire cable assembly to Top Box Assembly before mounting luminaire. Please note that the cable connector is keyed.

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### Safety Cable Use

The supplied safety cable MUST always be used when rigging luminaires on bars, truss, etc. (as shown in **Figure 4**). *FOR LUMINAIRE*, the supplied safety cable is recommended for all hanging installation and may be required by national and local codes. Loop safety cable through luminaire yoke assembly as shown and attach to structure. *FOR LENS TUBE*, attach a safety cable (sold separately) to lens tube anchor point and to yoke assembly. You should always consult and follow all local and national codes and regulations for mounting and installation of luminaire.



**WARNING!** If your luminaire is equipment with the eyelet as indicated in **Figure 4**, *DO NOT attach safety cable to this eyelet on luminaire body*. This eyelet feature was included for another purpose other than the safety cable and will be removed from future production models.

# 6. Pan and Tilt Adjustments

# Pan Adjustment

The pan adjustment of a PLPROFILE4 LED Luminaire is achieved by loosening the yoke bolt of the securing clamp attached to the luminaire's yoke assembly. Loosen the bolt, set the luminaire to the desired position and retighten.

### **Tilt Adjustment**

PLPROFILE4 LED Luminaires offer variable tilt settings. The unit can be set at a specific angle (in relation to its mounting position) or at an angle between 0 to 90 degrees. When the yoke is in the position shown in **Figure 4**, you have full range access to shutters the gate etc. If you flip the yoke over some access is reduced but the over all volume the luminaire takes up is reduced. This is particularly useful in tightly hung lighting positions or in theatres with low grids.

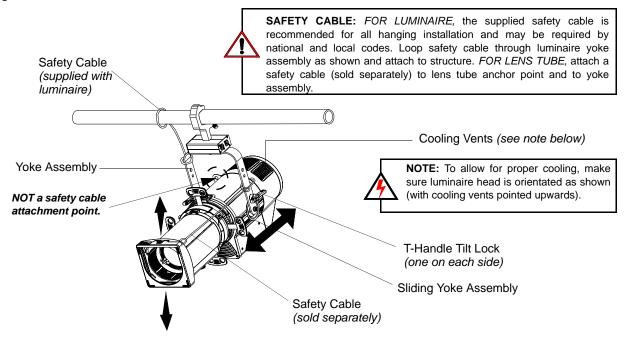


Figure 4: Luminaire Tilt Adjustment

### To adjust and set tilt angle of the luminaire:

- Step 1. Mount luminaire in desired location (see "Mounting" on page 11 for more information).
- Step 2. Loosen, but do not remove, T-Handle Tilt Locks at base of yoke assembly as shown in Figure 4.
- Step 3. Position luminaire to desired tilt position.
- Step 4. Retighten T-Handle Tilt Locks to set position.

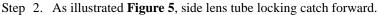
# **FOCUS AND BEAM ADJUSTMENTS**

### 1. Lens Tube Removal and Installation

It is easy and quick to change to the lens tubes on a PLPROFILE4 LED Luminaire. Fixed beam and zoom lens tubes are interchangeable.

### To remove and install lens tubes:

Step 1. Loosen (but do not remove) move lens knob(s) towards front of lens tube assembly. See "Zoom and Focus Adjustments (Zoomspot Models)" on page 14 for more information.



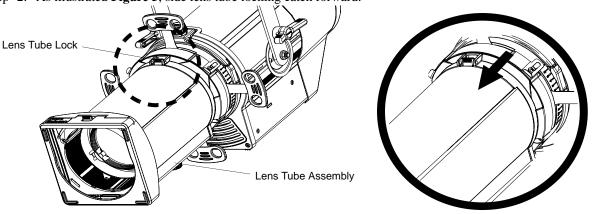


Figure 5: Lens Tube Assembly Removal - Lens Locking Catch

Step 3. Lift lens tube assembly up and away from light engine assembly.

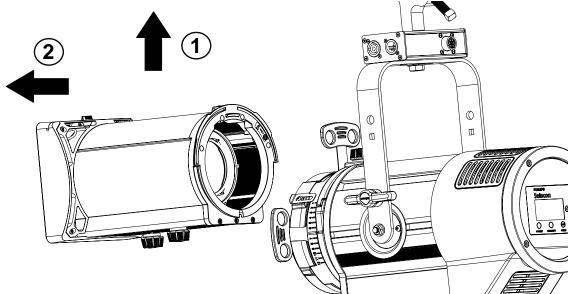


Figure 6: Lens Tube Assembly Removal

Step 4. To install perform process in reverse.



**CAUTION:** Ensure the lens tube locking catch is fully engaged and safety cable is attached before putting fixture into use. For safety cable attachment, refer to "Safety Cable Use" on page 12 for more information.

# 2. Zoom and Focus Adjustments (Zoomspot Models)

Note: Fixed Beam Angle models have hard/soft focus adjustment only.

### To adjust zoom/beam angle and focus:

- Step 1. Make sure all frame shutters are open (out of beam path). See "Beam Shutter Operation" on page 15 for more information.
- Step 2. As shown in Figure 7, loosen Zoom Adjustment Knob and set beam angle as desired.
- Step 3. Hand-tighten Zoom Adjustment Knob to lock position.
- Step 4. Loosen Focus Adjustment Knob.
- Step 5. Move Focus Adjustment Knob along forward (or back) until beam focus is set as desired.
- Step 6. Hand-tighten Focus Adjustment Knob to lock position.

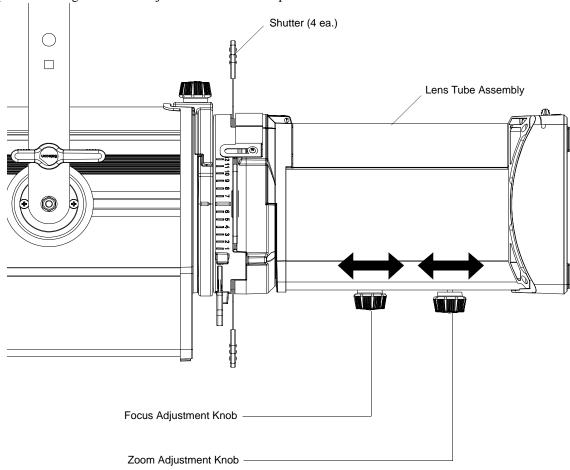
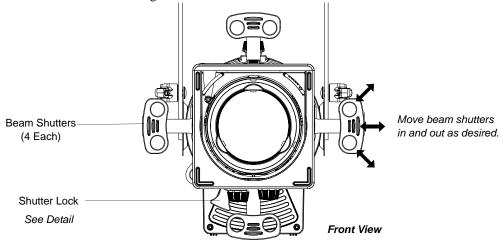


Figure 7: Zoom and Focus Adjustment Knobs

# 3. Beam Shutter Operation

Each PLPROFILE4 LED Luminaire is equipped with four independent shutters (as shown in **Figure 8**) to block or shape light as desired. After the luminaire is installed and positioned, move the shutters in or out as required. Use the shutter lock to lock-in the shutter settings.



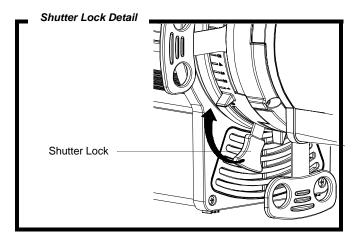


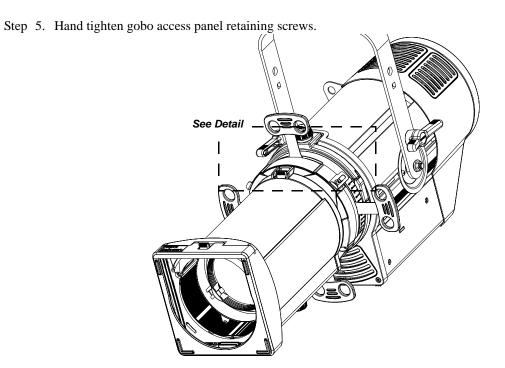
Figure 8: PLPROFILE4 LED Luminaire Beam Shutters

# 4. Gobo/Iris Access Panel

Each PLPROFILE4 LED Luminaire is capable of holding two gobo holders, each containing one "B" sized glass or steel gobo. PLPROFILE4 LED Luminaire are not supplied gobo holders or an iris. These items can be purchased from your local Authorized Dealer. For more information, refer to "PLPROFILE4 LED Luminaire Lens Accessories" on page 5.

### To install or change a gobo:

- Step 1. As shown in **Figure 9 on page 16**, loosen, but do not remove, two retaining screws that secure gobo/iris access panel. Slide open gobo/iris access panel.
- Step 2. Install gobo into gobo holder in desired orientation.
- Step 3. Slide gobo holder into luminaire gobo slot.
- Step 4. Close gobo access door. Make sure gobo holder handle fits inside one of two slots in gobo access panel.



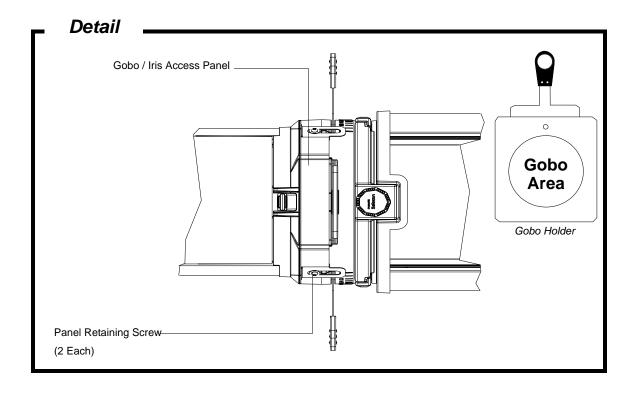


Figure 9: PLPROFILE4 LED Luminaire Gobo Holder and Gobo Installation

# OPERATION AND PROGRAMMING

# 1. LCD Menu Operation

The PLPROFILE4 LED Luminaire's LCD Display and Menu System provides local control for accessing all the fixture's status information, menu options, and settings.

Note: If there are multiple luminaires in a system, changes would need to be made at each LCD Menu as desired.

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.

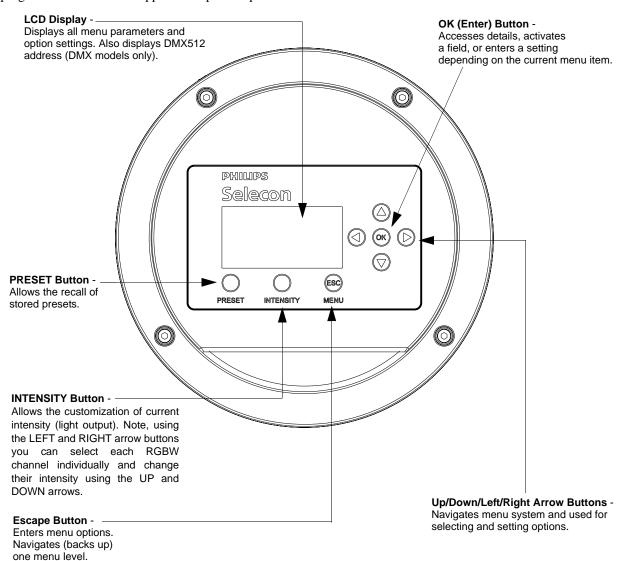


Figure 10: LCD Display and Menu System

# 2. LCD Menu System

The LCD Display Menu system consists of several categories. Use the four arrow buttons as required (refer to **Figure 10**) to access and make changes to the menu items. When the desired menu item is reached, press [OK] to display the menu options. Use navigation and [OK] buttons to view status and configure the LCD Menu as required.

**Note:** Depending on the security settings, certain menu items may be password protected. You must have the set PassPIN in order to access these items. Locked items will have a "Key" icon displayed next to them.

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

- Step 1. At Main Menu, press [ESC] / [MENU] button once. A small window will appear over Main Menu with submenu categories:
  - a. Save as Preset
  - b. Edit a Preset
  - c. Color Mix
  - d. Fan Control
  - e. Settings
  - f. Lock Fixture
  - g. Enter Password
  - h. LED Status
- Step 2. Press [OK] at desired menu item to access and make changes.
- Step 3. Make changes as desired.

Note: For complete menu structure and available options, see "Menu Structure (continued)" on page 20.

Note: When DMX512 signal is present, Edit Preset and Color Mix options will not appear in menu structure.

### To navigate fixture status menus:

- Step 1. At Main Menu, press LEFT or RIGHT arrow button once. Main menu screen will change to fixture status screen will appear as follows (note, depending on which arrow button is pressed, status screens may appear in reverse order):
  - a. DMX Address (note, if fixture is UNLOCKED, hit [OK] to change DMX address)
  - b. Fixture Hours (displays fixture operating hours since last reset)
  - c. Fixture Power (displays Max Power Limit setting (in watts), Present Power consumed by fixture (in watts), and Hours of Use)
  - d. Fixture Status (displays current operational temperature, LED status, and fan speed setting)
- Step 2. Press LEFT or RIGHT arrow buttons to scroll through status screens.
- Step 3. Press [ESC] at anytime to access menu settings. See "To navigate and access menu settings/selections:" on page 18.



# **Menu Structure**

### **MAIN MENU**

### Save as Preset

Sub Menu	Options	Comments
	Off	Users can:  Save the current settings (look) to
Select Preset to Save - (Option)	Scratch Pad	a specific recallable Preset in the fixture's memory.
Scrolls and sets current user-defined color mix to various recallable presets	Warm White*	<ul> <li>Edit the levels (values) for Red, Green, Blue, White, and Intensity values (in percent%) by using the arrow buttons. Once the values are adjusted, the preset is saved as desired.</li> </ul>
in the fixture using arrow buttons.  Note: To edit a current (set) preset,	Cool White*	
see Edit Presets.	Day Light*	*Only intensities may be stored on White Color Temperature presets.
	Preset X (5 through 31)	RGBW in these presets cannot be edited or changed.

### **Edit a Preset**

Options	Comments
Off	Users can:  Edit the current settings (look) to a specific recallable Preset in the fixture's memory.
Scratch Pad	Edit the values for Red, Green, Blue, White, and Intensity values (in percent%) by using the arrow buttons.
Warm White*	Once the values are adjusted, the "Save Preset" menu option appears to save the edits.
Cool White*	NOTES: *Only intensities may be stored on White Color Temperature presets.
Day Light*	RGBW in these presets cannot be edited or changed.  **If a Calibrated Preset's Color Mix is
Preset X (5 through 31)**	changed (5 thru 25), an asterisk '*' is appended to the end of the name to indicate that it has been modified. This only happens if the name matches the original calibrated name, stored in EEPROM. This does not happen if the Intensity is changed, only the color mix.
	Off  Scratch Pad  Warm White*  Cool White*  Day Light*

Continued next page

**Note:** See "To navigate and access menu settings/selections:" on page 18 to learn how to access menus. To save changes, hit [OK]. Press [ESC] to cancel any changes you made.

# **Menu Structure (continued)**

Continued from previous page

### - Color Mix

Sub Menu	Options	Comments
Select Color or Intensity to Adjust - (Option)	Red	Users can:  Edit Red, Green, Blue, White, and Intensity values (in percent%) by using the arrow buttons.  Once the values are adjusted, press [OK] to save the edits.
	Green	
	Blue	
	White	
	Intensity	

Note: When DMX512 signal is present, Color Mix option will not appear in menu structure.

### **Fan Control**

Sub Menu	Options	Comments
Select and Set Fan Speed - (Option)  Note, hit Cancel to cancel any changes you made.	Max	Highlight "Max" button and hit [OK] button on menu. Sets the maximum speed of the fan.
	Level	Level sets the fan to a constant speed (will not vary). Adjust level (on fan speed level bar) using Left and Right arrow buttons, highlight "Level" button in menu, and hit [OK] on menu to use user-defined level.

# Settings

Sub Menu	Options	Comments
SETTINGS - (Option)		
Scrolls and sets the various fixture settings using arrow buttons.	See "Settings" on page 23 for details.	

### **Lock Fixture**

Sub Menu	Options	Comments
LOCK - Are you sure?	Yes (to Lock Fixture) / No	Use arrow buttons to make selection. Press [OK] to accept. Note, a password must be established (set) in order to lock a fixture. Locking the fixture will disable access to changing menu settings.

### **Enter Password**

Sub Menu	Options	Comments
Enter Pass PIN	Enter four-digit password	For details, refer to "Security" on page 21.

Continued next page



### Menu Structure (continued)

Continued from previous page



### **LED Status**

Sub Menu	Options	Comments
LED Status Information  Scrolls through the various levels using arrow buttons as indicated on menu screen. Depending on the arrow button pressed, the screens	LED 1	Displays LED's current status (in percentage%) of Intensity, Red, Green, Blue, and White elements of the LED). Also displays current color temperature (i.e., WARM WHITE), Fan Speed, operational LED junction temperature, power settings.
may appear in a different order that shown in "Options".	Levels	Displays DMX levels for each LED element (Red, Green, Blue, and White) and total power.

# 3. Security

Unwanted changes to the Fixture's Configuration or Setting can be controlled by setting a security level, or Locking the Fixture. Three levels of security are available in addition to completely Locking the Fixture.

PLPROFILE4 LED Luminaires are shipped with default passwords. Users may set their own password (four-digit number). When setting a password, write it down and keep it in a secure location. Note, Philips Selecon does not have records of passwords established by users or owners.

**Note:** Contact Philips Selecon technical support if a unit is locked and the password is lost for instructions on how to reset luminaire.

Note: If the Fixture is locked when it is powered down the fixture will remain in the locked state when powered up.

### **Passwords**

### **Establishing or Changing Passwords**

- Step 1. At a Status Screen, press [MENU] and scroll to "Settings", press [OK].
- Step 2. Go to the Security section.
- Step 3. Select a Level to change (Level 1 PIN / Level 2 PIN / Level 3 PIN).
- Step 4. Press [OK] to edit using the [UP ARROW], [DOWN ARROW], [LEFT ARROW] or [RIGHT ARROW] keys to enter a four-digit password (using 0 to 9).
- Step 5. Press [OK] to save changes. If you hit [ESC] (Escape) password will not be stored and process must be repeated.
- Step 6. Password is set.

**Note:** The current security level is displayed next to the Security heading. Only Passwords at, or below, that level will be displayed for modification. The level can be changed by entering a higher level Password on the "Enter PassPIN line directly below the Security heading, like Step 4 above.

# **Security Levels**

Security Level	Description	Default PassPIN
0	System is locked; the only key that is active is the Menu/ESC Key. When this key is pressed a PassPIN is requested.	Not Applicable
1	All keys are Active. You can select any Preset, and change Intensity, set DMX Address.	1111
2	Editing and Saving of Presets is added to Level 1 functionality.	2222
3	Operationally the same as level 2, however all settings are available on the Settings screen.	3333

# **Locking Fixture**

### To lock the fixture:

- Step 1. At a Status Screen, press [MENU] and scroll to "Lock Fixture".
- Step 2. Press [OK].
- Step 3. Use [LEFT ARROW] or [RIGHT ARROW] keys to highlight "YES" ", press [OK].
- Step 4. Fixture is now locked.

**Note:** When the Fixture is Locked only the [ESC]/[MENU] key is functional. Pressing this key will display a request for a password. When a valid password is entered the fixture is unlocked to the security level of the entered password.

# 4. Presets

Presets are Color Mixes that are stored in the Fixture, they can be recalled to reproduce a specific output from the fixture. Presets are made up of a Color Mix; Red, Green, Blue, and White. They also have Intensity associated with them.

Presets can be recalled via the User interface or by a DMX channel, when under DMX control. The Preset's Intensity is applied if the User Interface is used; if DMX, the DMX Intensity channel is used for Intensity.

# **Presets Types**

Presets are classified as Locked, Protected, or User. The type of preset determines what aspects of the Preset can be modified.

### Locked

Locked Presets are factory Calibrated, and their Color Mix cannot be changed by the user. Their Intensity can be changed. Three Presets (2-4), "Warm White', "Cool White", and "Day Light", are Locked.

Preset 0, the "off" preset is also Locked to the OFF value.

### **Protected**

Protected Presets are also Factory Calibrated, and by default are Protected from changes to their Color Mix. Their Intensity can be changed. Protected Presets are Presets 5-25. They can be Un-Protected by setting "Protected" to "No"; see section on Settings. If Un-Protected these presets function like User Presets.

The Factory Calibrated values for the protected presets can be re-loaded to the original factory calibration settings by setting "Load Factory" to "Yes" "; see section on Settings.

### User

User Presets can have their Color Mix and Intensity changed without restriction.



**Note:** If the Color Mix of a Factory Calibrated Preset is changed, by turning protection Off, an '\*' is appended to the end of the Preset's Name to indicate that the Calibrated values have been changed.

# **Editing Preset Names**

On the Edit Preset screen, the option is available to edit the name of a preset, via Screen button. However, the names of Presets 0-4 cannot be edited.

Use the [LEFT ARROW] and [RIGHT ARROW] keys to select the character to be changed and use the [UP ARROW] and [DOWN ARROW] keys to change that character. The Character Scroll order is A-Z, space, 0-9. If you are scrolling up the Alpha character displays as Upper Case; if you are scrolling down the Alpha character displays as Lower Case. Stop on the character you want, ignoring case, then press the opposite [UP ARROW] or [DOWN ARROW] key if you want to change the case. [OK] to save changes, [ESC] to cancel changes.

# 5. Settings

The following Parameters can be changed on the Settings Screen.

The first column "Security Level" is the minimum security level you have to be at before the line is displayed for editing in the Settings screen.

To edit a value on the Setting Screen, use the [UP ARROW] or [DOWN ARROW] keys to move the highlight to the settings value you wish to change. Press [OK] to begin editing that value. Use the [UP ARROW], [DOWN ARROW], [LEFT ARROW] or [RIGHT ARROW] keys to make changes to the value. Press [OK] when complete to save changes, or [ESC] to cancel changes to that value.

When done making changes on the Settings Screen press [ESC] to re-boot fixture and implement changes. Fixture will not re-boot if nothing was changed.

Security Level	Parameter	Values	Default	Description	
Security	Security				
1	Enter PassPIN	4-Digits (0 to 9)	***	There are 4 levels of security, this allows you to change the level while in the Settings Screen.	
3	Level 1 PIN	4-Digits (0 to 9)	1111	Sets Level 1 PassPIN	
3	Level 2 PIN	4-Digits (0 to 9)	2222	Sets Level 2 PassPIN	
3	Level 3 PIN	4-Digits (0 to 9)	3333	Sets Level 3 PassPIN	
3	Power-Up	1 - 3 or Locked	3	Security Level after Power-Up, if not Locked (Level 0)	
General					
1	Power-Up	Off, Scratch Pad, Warm White, Cool White, Day Light, Preset30, Preset31, Last Set	Cool White	When the Fixture Powers-Up what does it output. Scratch Pad is an automatically saved Preset. Last Set is the last thing coming out of the fixture, this could be Warm White with the intensity changed from that of the Preset.	
3	Reset Hours	No, Yes	No	Resets luminaire's operational hours.	

Presets				
3	Protected	No, 5 - 25	Yes	Determines if the factory Calibrated Presets' Color Mix is protected from changes.
3	Load Factory	No, Yes	No	Reload Factory Calibrated Presets, Intensity changes will also be reloaded.
DMX		•		1
3	DMX Enabled	No, Yes, or Wireless (if equipped)	Yes	Enables or disabled DMX communication through the luminaires DMX512 ports.  Sets the DMX feature to Wireless DMX (if wireless DMX option is installed - sold separately).
1	Address	001 to 512	001	DMX512 address. Note, it can be set if displayed.
2	Мар	8-bit, 16-bit, or 3-Chan	16-bit	Defines size/precision of DMX map. Color Mixing/Intensity in 16-bit provides higher resolution for precision control. 3-Chan provides minimal channel usage.
2	When no DMX	Off, Hold, Hold 8hr (8 hours), or Power-Up	Hold	If DMX is detected and then goes away, this defines what will happen to the output. At end of 8Hr hold Fixture goes to Power-Up setting.
Fan				
3	Normal / Quiet	Normal or Quiet	Quiet	Normal - Normal Mode Provides higher cooling margin for thermally challenging applications. Recommended for full power (RGBW @ 100%) applications with large and numerous changes in power. Quiet - (Quiet Mode) Quite Mode is similar to Normal mode, but it controls fan tightly to reduce fan noise.
3	Max%	0 to 100%	100	Sets the maximum fan speed
3	Min%	0 to 100%	1	Sets the minimum fan speed
Display	1	L		1
3	Flip Display	No, Yes	No	Flips (inverts) Display and Keypad Arrows.

**Note:** To Exit the Settings screen, use the [ESC] key. [ESC] and [OK] can be used to cancel or save changes to an individual parameter. However, once a parameter has been accepted, by pressing [OK] that change cannot be undone/canceled by pressing the [ESC] key.



# **DMX CONTROL**

This section contains information for operating the luminaire using DMX control in 16-Bit, 8-Bit, or 3-Channel (3-Chan) modes. For Menu options and detailed information, see "Settings" on page 23.

**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. 16-Bit Mode

**Table 3** provides DMX channel mapping of all DMX512 control values when the PLPROFILE4 LED Luminaire is in 16-bit DMX512 mode (as set by the luminaire's menu system).

**Table 3: PLPROFILE4 LED Luminaire DMX Channel Mapping (16-Bit Mode)** 

DMX Channel	Parameter	Range DMX	Range%	Default - recom- mended console default values	Description
1	Intensity - High	0 - 65535	0 - 100%	0	16-bit control for Intensity of LED settings.
2	Intensity - Low	0 - 03333	0 - 100 %	U	10-bit control for intensity of EED settings.
3	Red - High Byte	0 - 65535	0 - 100%	0	16-bit control of Red LEDs from 0 to full.
4	Red - Low Byte	0 - 03333	0 - 100 %	U	10-bit control of Red LEDS from 6 to fall.
5	Green - High Byte	0 - 65535	0 - 100%	0	16-bit control of Green LEDs from 0 to full.
6	Green - Low Byte	0 - 65555	0 - 100%	U	16-bit control of Green LEDs from 6 to fail.
7	Blue - High Byte	0 65535	0 - 100%	0	46 hit control of Divis I EDs from 0 to full
8	Blue - Low Byte	0 - 65535	0 - 100%	0	16-bit control of Blue LEDs from 0 to full.
9	White - High Byte	0 05505	0. 4000/	0	40 hit accepted of White I EDs from 0 to full
10	White - Low Byte	0 - 65535	0 - 100%	0	16-bit control of White LEDs from 0 to full.
11	Preset Color Selection	0 - 255	0 - 100%	0	Used to access presets stored in fixture firmware, such as CCT presets, defined gel presets, etc.  No Preset Activated = DMX 0-3 (DEFAULT) Color Preset 0 (Off) = DMX 4 - 7 Color Preset 1 (Scratch Pad) = DMX 8 - 11 Color Preset 2 (Warm White) = DMX 12 - 15 Color Preset 3 (Cool White) = DMX 16 - 19 Color Preset 4 (Daylight) = DMX 20 - 23 Color Preset 5 (Arc White) = DMX 24 - 27 Color Preset 6 (Red) = DMX 28 - 31 Color Preset 6 (Red) = DMX 32 - 35 Color Preset 8 (Daylight Blue) = DMX 36 - 39 Color Preset 9 (Magenta) = DMX 40 - 43 Color Preset 10 (Aqua) = DMX 44 - 47 Color Preset 11 (Medium Amber) = DMX 48 - 51 Color Preset 13 (Blue) = DMX 52 - 55 Color Preset 14 (Light Pink) = DMX 60 - 63 Color Preset 15 (Green) = DMX 64 - 67 Color Preset 16 (Pink) = DMX 68 - 71 Color Preset 17 (Amber White) = DMX 72 - 75 Color Preset 18 (Dark Fuchsia) = DMX 76 - 79 Color Preset 19 (Light Amber) = DMX 88 - 81 Color Preset 20 (Steel Blue) = DMX 88 - 91 Color Preset 21 (Lt. Green/Blue) = DMX 88 - 91 Color Preset 23 (Medium Pink) = DMX 96 - 99 Color Preset 24 (Cyan) = DMX 100 - 103 Color Preset 25 (Purple) = DMX 100 - 103 Color Preset 26 (Custom) = DMX 111 - 115 Color Preset 28 (Custom) = DMX 112 - 123 Color Preset 29 (Custom) = DMX 120 - 123 Color Preset 31 (Custom) = DMX 122 - 121 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 128 - 131
12	Not used (for future use)				

Table 3: PLPROFILE4 LED Luminaire DMX Channel Mapping (16-Bit Mode)

13	Intensity Time	0 - 255	0 - 100%	255	Allows for luminaire timing of intensity. Profile should default to DMX 255 for smoothest console fade times. Refer to "PLPROFILE4 LED Luminaire DMX Timing Channel Detail" on page 30 for more information on timing values.
14	Color Time	0 - 255	0 - 100%	255	Allows for luminaire timing of LEDs. Profile should default to DMX 255 for smoothest console fade times.Refer to "PLPROFILE4 LED Luminaire DMX Timing Channel Detail" on page 30 for more information on timing values.
15	Control	0 - 255	0 - 100%	0	Used to set different modes, parameters, and functions of the luminaire. Set control channel value for desired action. Hold value for at least 3 seconds. Set control channel value to 0 without any scaling.  Default Setting on Console = DMX 0 Display On/Off = DMX 3 - 4 Reset All to Defaults = DMX 5 - 7 Quiet Mode = DMX 11 - 13 Normal Mode = DMX 11 - 13 Normal Mode = DMX 20 - 21 Preset 1 Store = DMX 20 - 21 Preset 2 Store (Intensity Only) = DMX 22 - 23 Preset 3 Store (Intensity Only) = DMX 24 - 25 Preset 4 Store (Intensity Only) = DMX 26 - 27 Preset 5 Store = DMX 30 - 31 Preset 6 Store = DMX 30 - 31 Preset 7 Store = DMX 32 - 33 Preset 8 Store = DMX 34 - 35 Preset 10 Store = DMX 34 - 35 Preset 11 Store = DMX 34 - 34 Preset 12 Store = DMX 40 - 41 Preset 13 Store = DMX 40 - 41 Preset 14 Store = DMX 44 - 45 Preset 15 Store = DMX 45 - 55 Preset 15 Store = DMX 50 - 51 Preset 17 Store = DMX 50 - 51 Preset 17 Store = DMX 50 - 51 Preset 18 Store = DMX 50 - 51 Preset 19 Store = DMX 50 - 61 Preset 23 Store = DMX 60 - 61 Preset 23 Store = DMX 60 - 61 Preset 23 Store = DMX 63 - 63 Preset 24 Store = DMX 64 - 65 Preset 25 Store = DMX 66 - 67 Preset 25 Store = DMX 67 - 71 Preset 26 Store = DMX 76 - 77 Preset 27 Store = DMX 76 - 77 Preset 29 Store = DMX 72 - 73 Preset 28 Store = DMX 76 - 77 Preset 29 Store = DMX 76 - 77 Preset 29 Store = DMX 76 - 77 Preset 30 Store = DMX 76 - 77 Preset 30 Store = DMX 77 - 79 Preset 31 Store = DMX 78 - 79 Preset 31 Store = DMX 80 - 81 Fixture Reset* = DMX 250 - 255

# 2. 8-Bit Mode

**Table 4** provides DMX channel mapping of all DMX512 control values when the PLPROFILE4 LED Luminaire is in 8-bit DMX512 mode (as set by the luminaire's menu system).

**Table 4: PLPROFILE4 LED Luminaire DMX Channel Mapping (8-Bit Mode)** 

DMX Channel	Parameter	Range DMX	Range%	Default - recommended console default values	Description
1	Intensity	0 - 255	0 - 100%	0	8-bit control for Intensity of LED settings.
2	Red	0 - 255	0 - 100%	0	8-bit control of Red LEDs from 0 to full.
3	Green	0 - 255	0 - 100%	0	8-bit control of Green LEDs from 0 to full.
4	Blue	0 - 255	0 - 100%	0	8-bit control of Blue LEDs from 0 to full.
5	White	0 - 255	0 - 100%	0	8-bit control of White LEDs from 0 to full.
6	Preset Color Selection	0 - 255	0 - 100%	0	Used to access presets stored in fixture firmware, such as CCT presets, defined gel presets, etc.  No Preset Activated = DMX 0-3 Color Preset 0 (Off) = DMX 4 - 7 Color Preset 1 (Scratch Pad) = DMX 8 - 11 Color Preset 2 (Warm White) = DMX 16 - 19 Color Preset 3 (Cool White) = DMX 20 - 23 Color Preset 4 (Daylight) = DMX 20 - 23 Color Preset 5 (Arc White) = DMX 24 - 27 Color Preset 6 (Red) = DMX 28 - 31 Color Preset 8 (Daylight Blue) = DMX 36 - 39 Color Preset 9 (Magenta) = DMX 40 - 43 Color Preset 10 (Aqua) = DMX 40 - 43 Color Preset 11 (Medium Amber) = DMX 48 - 51 Color Preset 12 (Lavender) = DMX 56 - 59 Color Preset 13 (Blue) = DMX 60 - 63 Color Preset 14 (Light Pink) = DMX 60 - 63 Color Preset 15 (Green) = DMX 64 - 67 Color Preset 17 (Amber White) = DMX 72 - 75 Color Preset 18 (Dark Fuchsia) = DMX 76 - 79 Color Preset 20 (Steel Blue) = DMX 84 - 87 Color Preset 21 (Lt. Green/Blue) = DMX 88 - 91 Color Preset 22 (Orange) = DMX 96 - 99 Color Preset 23 (Medium Pink) = DMX 96 - 99 Color Preset 25 (Purple) = DMX 100 - 103 Color Preset 27 (Custom) = DMX 110 - 110 Color Preset 27 (Custom) = DMX 110 - 110 Color Preset 28 (Custom) = DMX 110 - 110 Color Preset 29 (Custom) = DMX 120 - 123 Color Preset 30 (Custom) = DMX 120 - 123 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 137
7	Not used (for future use)	<u> </u>		ı	(,
8	Timing	0 - 255	0 - 100%	255	Allows for timing control of both the intensity and color parameters. Channel should default to 255 for smoothest actions using console and/or manual fades. Refer to "PLPROFILE4 LED Luminaire DMX Timing Channel Detail" on page 30 for more information.

Table 4: PLPROFILE4 LED Luminaire DMX Channel Mapping (8-Bit Mode)

9	Control	0 - 255	0 - 100%	0	Used to set different modes, parameters, and functions of the luminaire. Set control channel value for desired action. Hold value for at least 3 seconds. Set control channel value to 0 without any scaling.  Default Setting on Console = DMX 0 Display On/Off = DMX 3 - 4 Reset All to Defaults = DMX 5 - 7 Quiet Mode = DMX 11 - 13 Normal Mode = DMX 14 - 15 Preset 1 Store = DMX 20 - 21 Preset 2 Store (Intensity Only) = DMX 22 - 23 Preset 3 Store (Intensity Only) = DMX 24 - 25 Preset 4 Store (Intensity Only) = DMX 26 - 27 Preset 5 Store = DMX 30 - 31 Preset 6 Store = DMX 30 - 31 Preset 7 Store = DMX 32 - 33 Preset 8 Store = DMX 34 - 35 Preset 9 Store = DMX 34 - 35 Preset 10 Store = DMX 34 - 35 Preset 11 Store = DMX 44 - 44 Preset 12 Store = DMX 44 - 43 Preset 13 Store = DMX 44 - 45 Preset 14 Store = DMX 44 - 45 Preset 15 Store = DMX 48 - 49 Preset 16 Store = DMX 50 - 51 Preset 17 Store = DMX 54 - 55 Preset 18 Store = DMX 56 - 57 Preset 20 Store = DMX 60 - 61 Preset 22 Store = DMX 60 - 61 Preset 22 Store = DMX 63 - 63 Preset 23 Store = DMX 64 - 65 Preset 24 Store = DMX 66 - 67 Preset 25 Store = DMX 67 - 77 Preset 26 Store = DMX 70 - 71 Preset 27 Store = DMX 70 - 71 Preset 28 Store = DMX 74 - 75 Preset 29 Store = DMX 76 - 77 Preset 30 Store = DMX 78 - 79 Preset 31 Store = DMX 78 - 79 Preset 31 Store = DMX 78 - 79 Preset 31 Store = DMX 80 - 81 Fixture Reset* = DMX 25 - 255
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# 3. DMX 3-Channel (3-Chan) Mode

**Table 5** provides DMX channel mapping of all DMX512 control values when the PLPROFILE4 LED Luminaire is in 3-Channel (3-Chan) DMX512 mode (as set by the luminaire's menu system).

**Table 5: PLPROFILE4 LED Luminaire DMX Channel Mapping (3-Chan Mode)** 

DMX Channel	Parameter	Range DMX	Range%	Default - recommended console default values	Description
1	Intensity	0 - 255	0 - 100%	0	8-bit control for Intensity of LED settings.
2	Preset Color Selection  Notes:  Color Presets 5 through 25 are calibrated factory colors and can be reloaded if needed through the fixture's menu system. These colors have been matched to precise X and Y coordinates at the center of the beam at wide angle, we have given you the ability to adjust these colors as your personal perception may vary.	0 - 255	0 - 100%	0	Used to access presets stored in fixture firmware, such as CCT presets, defined gel presets, and more.  No Preset Activated = DMX 0 - 3 Color Preset 0 (Off) = DMX 4 - 7 Color Preset 1 (Scratch Pad) = DMX 12 - 15 Color Preset 3 (Cool White) = DMX 16 - 19 Color Preset 4 (Daylight) = DMX 20 - 23 Color Preset 5 (Arc White) = DMX 24 - 27 Color Preset 6 (Red) = DMX 28 - 31 Color Preset 7 (Yellow) = DMX 32 - 35 Color Preset 8 (Daylight Blue) = DMX 36 - 39 Color Preset 9 (Magenta) = DMX 40 - 43 Color Preset 10 (Kelly Green) = DMX 44 - 47 Color Preset 11 (Medium Amber) = DMX 48 - 51 Color Preset 12 (Lavender) = DMX 52 - 55 Color Preset 13 (Blue) = DMX 60 - 63 Color Preset 14 (Light Pink) = DMX 60 - 63 Color Preset 15 (Green) = DMX 64 - 67 Color Preset 18 (Dark Fuchsia) = DMX 72 - 75 Color Preset 19 (Light Amber) = DMX 80 - 83 Color Preset 19 (Light Amber) = DMX 84 - 87 Color Preset 20 (Steel Blue) = DMX 84 - 87 Color Preset 21 (Lt. Green/Blue) = DMX 88 - 91 Color Preset 22 (Grange) = DMX 92 - 95 Color Preset 23 (Medium Pink) = DMX 96 - 99 Color Preset 24 (Cyan) = DMX 100 - 103 Color Preset 25 (Purple) = DMX 100 - 103 Color Preset 26 (Custom) = DMX 110 - 110 Color Preset 27 (Custom) = DMX 110 - 111 Color Preset 28 (Custom) = DMX 110 - 112 Color Preset 29 (Custom) = DMX 110 - 112 Color Preset 29 (Custom) = DMX 110 - 112 Color Preset 29 (Custom) = DMX 120 - 123 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 127 Color Preset 31 (Custom) = DMX 124 - 131
3	Timing	0 - 255	0 - 100%	255	Allows for timing control of both the intensity and color parameters. Channel should default to 255 for smoothest actions using console and/or manual fades. Refer to "PLPROFILE4 LED Luminaire DMX Timing Channel Detail" on page 30 for more information.

# 4. Lighting Console Settings for Preset White

### 16-Bit Mode

Below are the DMX512 console values and levels\* for Warm White, Cool White, and Day Light presets in 16-bit mode.

	Red Channel		Green Channel		Blue Channel		White Channel	
White Preset	DMX Value	DMX%	DMX Value	DMX%	DMX Value	DMX%	DMX Value	DMX%
Warm White	65535	100	36700	56	0	0	47185	72
Cool White	65535	100	41287	63	8520	13	61603	94
Day Light	65535	100	53739	82	26214	40	58982	90

### 8-Bit Mode

Below are the DMX512 console values and levels\* for Warm White, Cool White, and Day Light presets in 8-bit mode

	Red Channel		Green Channel		Blue Channel		White Channel	
White Preset	DMX Value	DMX%	DMX Value	DMX%	DMX Value	DMX%	DMX Value	DMX%
Warm White (3200K)	255	100	163	64	0	0	217	85
Cool White (4000K)	255	100	194	76	46	18	255	100
Day Light (5600K)	255	100	237	93	130	51	255	100

**Note:** \*Values and levels shown for Preset White (in both 16 and 8-bit modes) are approximate. Due to the characteristics of LED technology, actual values may vary slightly between fixtures.

# 5. PLPROFILE4 LED Luminaire DMX Timing Channel Detail

Timing channel control improves the timed moves of certain groups of parameters. The PLPROFILE4 LED Luminaire provides two 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 169 seconds.
- 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 "PLPROFILE4 LED Luminaire Timing Channel Detail" on page 31 for more information.

**Table 6: PLPROFILE4 LED Luminaire Timing Channel Detail** 

% Value	DMX	= Seconds
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
3	14	2.8
6	15	3
0	16	3.2
	17	3.4
7	18	3.4
1	19	
0		3.8
8	20	4
	21	4.2
	22	4.4
9	23	4.6
	24	4.8
10	25	5
	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

% Value	DMX	= Seconds
	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
	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

% Value	DMX	= Seconds
	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	120	40
	121	41
48	122	42
	123	43
	124	44
49	125	45
	126	46
	127	47
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

% Value	DMX	= Seconds
	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
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	120
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

% Value	DMX	= Seconds
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
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	166
97	247	167
	248	168
	249	169
98	250*	60mS
	251*	80mS
99	252*	100mS
	253*	120mS
	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.

# 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 PLPROFILE4 LED Luminaire requires very little routine maintenance by the user. This section covers portions of the luminaire that can be removed for cleaning.

The PLPROFILE4 LED Luminaire requires 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 PLPROFILE4 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 PLPROFILE4 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 PLPROFILE4 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 PLPROFILE4 LED Luminaire, please contact Philips Selecon technical support or your local Authorized Dealer.

# 2. Lens Cleaning

# Front Lens (Exterior)

# To clean the exterior 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.

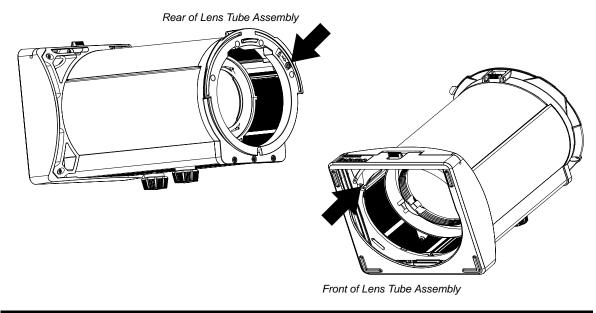
### Front Lens (Interior)

### To clean the interior of front lens:

- Step 1. Turn off luminaire and allow to cool completely.
- Step 2. Place luminaire on a flat, clean surface. Be careful not to scratch or damage luminaire.

**Note:** A long 3 mm Allen hex key is required to perform this procedure.

- Step 3. Remove lens tube assembly from luminaire. Refer to "Lens Tube Removal and Installation" on page 13 for instructions.
- Step 4. As shown in **Figure 11**, using 3 mm Allen hex key, completely remove two Allen head screws securing cover.



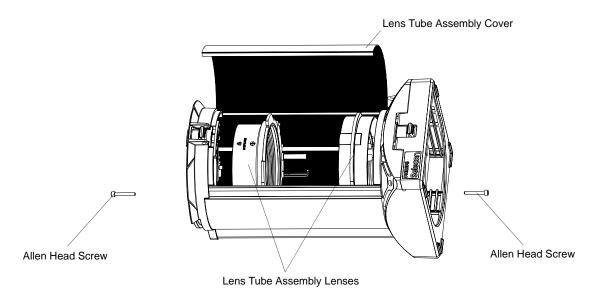


Figure 11: lens Tube Assembly - Lens Cleaning

- Step 5. Swing open lens tube assembly cover. Move lenses, by their knob, back or forth to have access to clean them
- Step 6. Clean interior side of front lens by applying a small amount of reagent grade isopropyl alcohol to lint-free lens tissue.
- Step 7. Wipe all debris, dirt, fingerprints, etc. from lens.
- Step 8. Using a second lint-free lens tissue, wipe off any alcohol residue.
- Step 9. After cleaning is complete, close cover and reinstall two Allen Head screws. Hand-tighten screws only DO NOT OVERTIGHTEN!
- Step 10. Reinstall lens tube assembly onto light engine.

# 3. Service and Maintenance

For all other service and maintenance issues, please contact your local Philips Selecon 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 Philips Selecon office or an Authorized Service Center for technical support and service.

# **TROUBLESHOOTING**

# 1. Troubleshooting Guide

The chart below provides possible causes and remedies for various error messages and/or symptoms.



**WARNING!** Any service and maintenance (including troubleshooting), other than described herein should be performed by an Authorized Philips Selecon Dealer or Service Center.

Description	Symptom	Possible Cause/Remedy	
No light output.	Fixture will not produce or output light	Unit is set to Preset Off Make sure unit is set to proper Preset. DMX command to 0 intensity Adjust intensity to higher level.	
No power at luminaire.	Luminaire does not power up	Circuit not energized verify circuit breaker is turned on. Not plugged in ensure A/C cable is connected to power source. Power cable wired incorrectly verify power cable and connector are wired correctly. See "Connecting Power" on page 10 for more information.	
DMX Data Control.	Fixture will not respond to DMX commands.	Not detecting DMX data Disconnect and reconnect DMX input cable. Unit is not set to be controlled by DMX - check menu settings. Check all DMX connections (at control source and luminaire). DMX data cable not wired correctly or has a broken conductor check DMX data cable for proper wiring. See "Connecting to the DMX512 Network" on page 10 for more information.	
LED (light) is getting dimmer.	Fixture appears not to be operating at full brightness.	Luminaire has detected an over temperature condition The luminaire will reduce power to its LEDs if it senses that the LEDs are operating over the specified temperature. LED temperature is read and recorded through a thermistor imbedded in the LED chip. Fan is not operating. Listen for fan operation or adjust settings to increase fan speed. On luminaires with a display check system status menu for status of fans and LED operation.	
Local programming.	Unit will not allow local programming or changes.	Password protection is on (locked) Input proper password to allow local programming and/or adjustments. Unit is controlled by DMX Disconnect input cables to check issue.	

# **TECHNICAL SPECIFICATIONS**

# 1. PLPROFILE4 LED Luminaire Common Specifications

Source: 4 Each, True RGBW 120 Watt LED chip

Light Output: > 6,000 lumens

Color Temperature: 2300 - 9970K (user adjustable)
Input Voltage: 100V to 240V (+/- 10%, auto-ranging)
Current: 6.0 Amps (100V) / 2.5 Amps (240V)
Max. Thru AC Current: Up to 20 Amps (at thru AC connector)

Frequency: 50/60Hz

Control: On-Board Menu / DMX512A

DMX512 Channels: 15 Channels (16-Bit Mode)

9 Channels (8-Bit Mode)

3 Channels (3-Channel Mode)

Ambient Temperature: 0 to 40 degrees C (32 to 104 degrees F)

Humidity: 5%-95% Non condensing

Cooling: Forced-Air

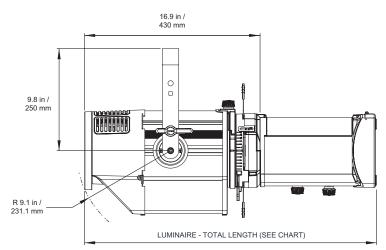
Weight: 24.0 lbs (10.9 kg) - Luminaire only (no mount, AC input cable, lens, or accessories)

Compliance: ETL / cETL Listed (North America models) and CE Marked (International models)

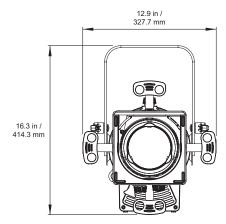
**Note:** Common model specifications shown. For specific model specifications, features, and accessories, refer to the product specification sheet or visit the Philips Selecon web site at www.seleconlight.com for more details.

# 2. PLPROFILE4 LED Luminaire Dimensions

### Side View



### Front View



### **Luminaire Dimensional Chart**

			Lens Tube Length		Luminaire Total Length	
		Angle (°)	Metric (mm)	Imperial (in)	Metric (mm)	Imperial (in)
	Fixed	14	400	15.7	835	32.9
		19	310	12.2	745	29.3
		26	270	10.6	705	27.7
		36	250	9.8	685	27.0
	_	50	200	7.9	635	25.0
	Zoom	15-35	370	14.6	805	31.7
	. 1	25-50	280	11.0	715	28.1





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