

## QUICK START GUIDE

This document provides installation and setup procedures for the PRG ReNEW® LED Retrofit Assembly.

For complete operating instructions, refer to the ReNEW LED Retrofit Assembly User Manual available at [www.prg.com/product/renew](http://www.prg.com/product/renew)

For technical assistance, contact PRG RH+A.

### PRG RH+A

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## 1. IMPORTANT SAFETY INSTRUCTIONS

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- + Keep these instructions.
- + Heed all warnings.
- + Follow all instructions.
- + Do not block any of the fixture's ventilation openings.
- + Do not operate at temperatures above 40°C (104°F).
- + Do not install the fixture near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- + Do not install the fixture on or near a flammable surface.
- + Do not operate the fixture with a damaged power lead. If the power lead (cordset) is damaged, it must be replaced.
- + Do not operate the fixture if glass lens is deeply scratched or cracked. Damaged lenses must be replaced.
- + Use the fixture in dry locations only, where humidity does not exceed 90 percent (non-condensing). The fixture is not intended for outdoor use. It is rated IP20.
- + Mount and support the fixture only by the primary suspension holes in the yoke.
- + Suspend the fixture from a suitable structure using only hardware rated for the weight of the fixture.
- + In addition to primary suspension, attach a safety cable to the fixture housing. An appropriate attachment point (hole) is provided in the fixture's housing.
- + Disconnect the fixture from power and DMX control and allow to cool before performing any cleaning or maintenance.



**WARNING!** Do not use an AC power cord that is nicked, frayed or damaged in any way. An approved replacement AC power cord may be obtained from PRG, LLC. Consult the User Manual for available configurations and part numbers.

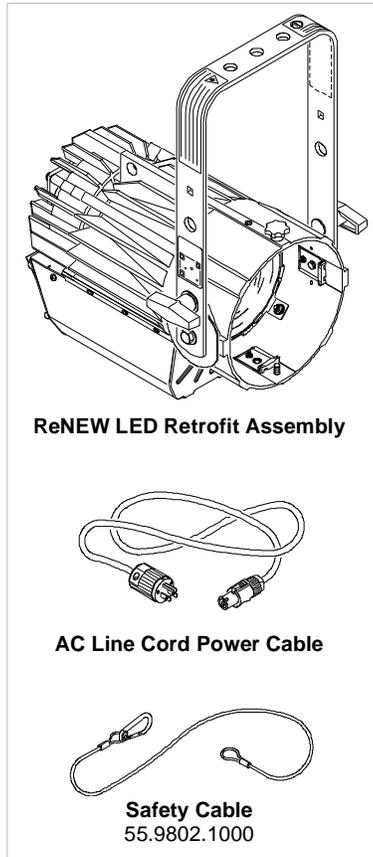


**AVERTISSEMENT!** Ne pas utiliser un cordon d'alimentation qui est entaillé, usé ou endommagé de quelque façon. Un remplacement cordon d'alimentation approuvé peut être obtenu à partir de PRG, LLC. Consultez le manuel de l'utilisateur pour les configurations disponibles et les numéros de pièce .

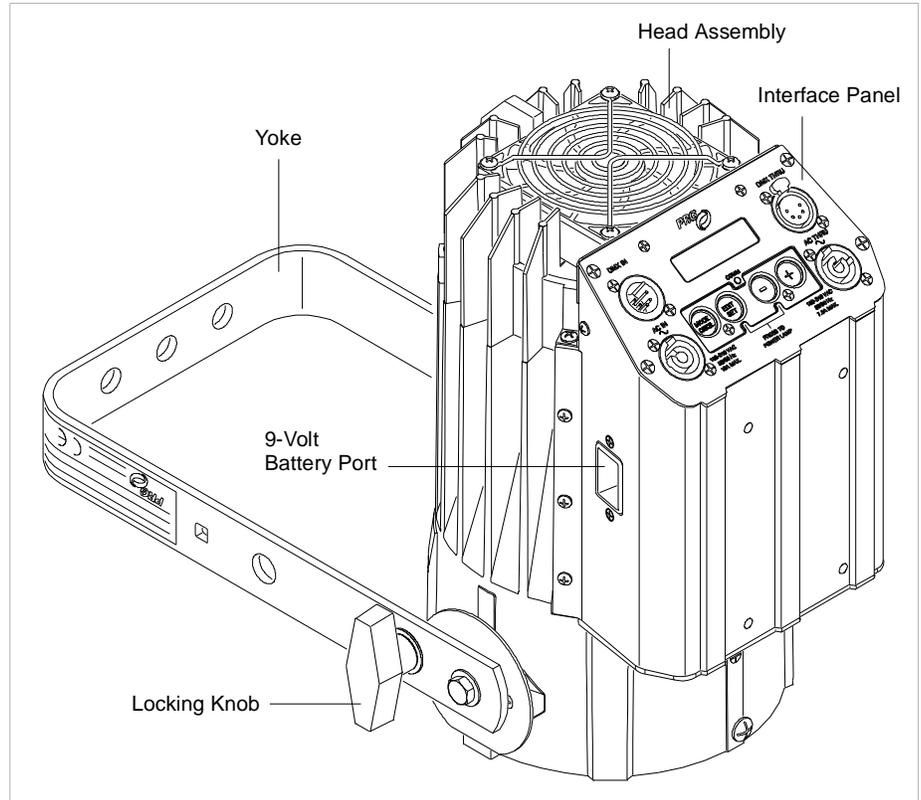
## 2. OVERVIEW

The ReNEW LED Retrofit Assembly is intended for use with a Source Four® ellipsoidal spotlight manufactured by Electronic Theatre Controls (ETC). The LED light engine of the ReNEW Assembly replaces the tungsten light source of the original ETC Source Four spotlight.

### INCLUDED ITEMS



### MAJOR COMPONENTS & CONTROLS



**Note:** An ETC Source Four Lens & Shutter Assembly is not included, and must be installed separately. See next page.

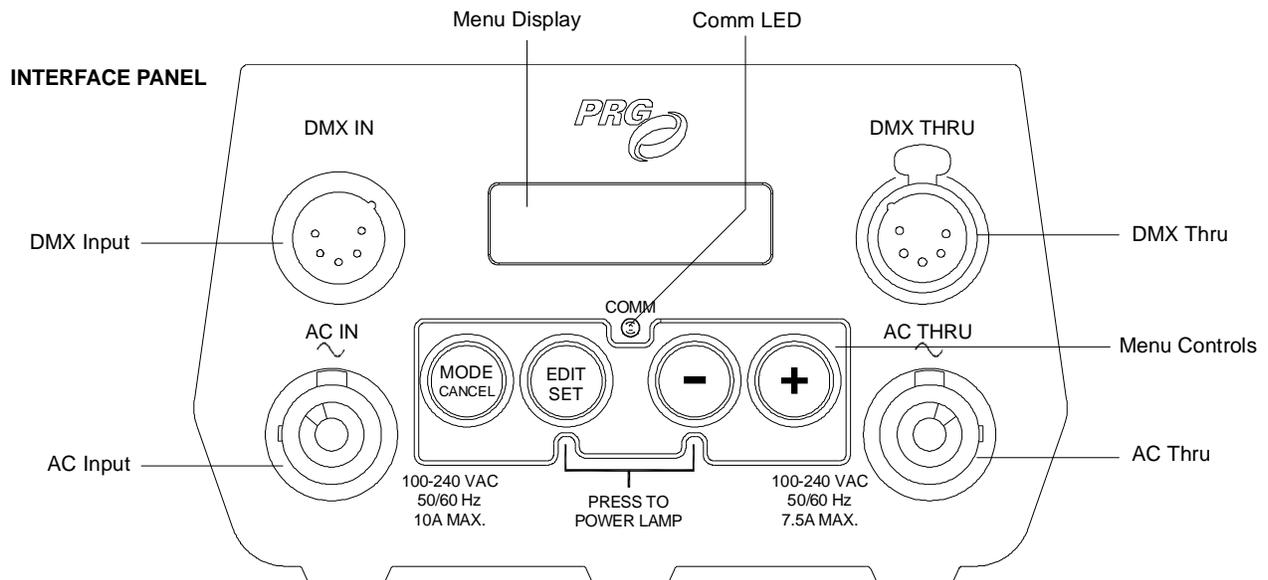


Figure 1: Components Overview

### 3. INSTALLATION

#### Attach Source Four Lens & Shutter Assembly

- Step 1. Insert ETC Source Four Lens & Shutter Assembly (not included) into ReNEW housing (**Figure 2**).
- Step 2. Turn Source Four assembly clockwise. Tighten set screw and locking knob to secure in place.

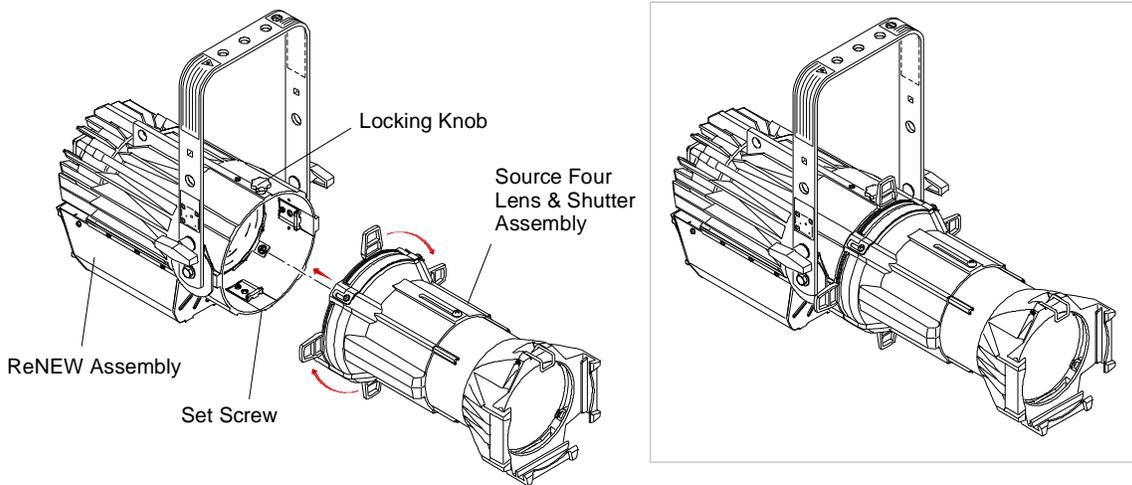
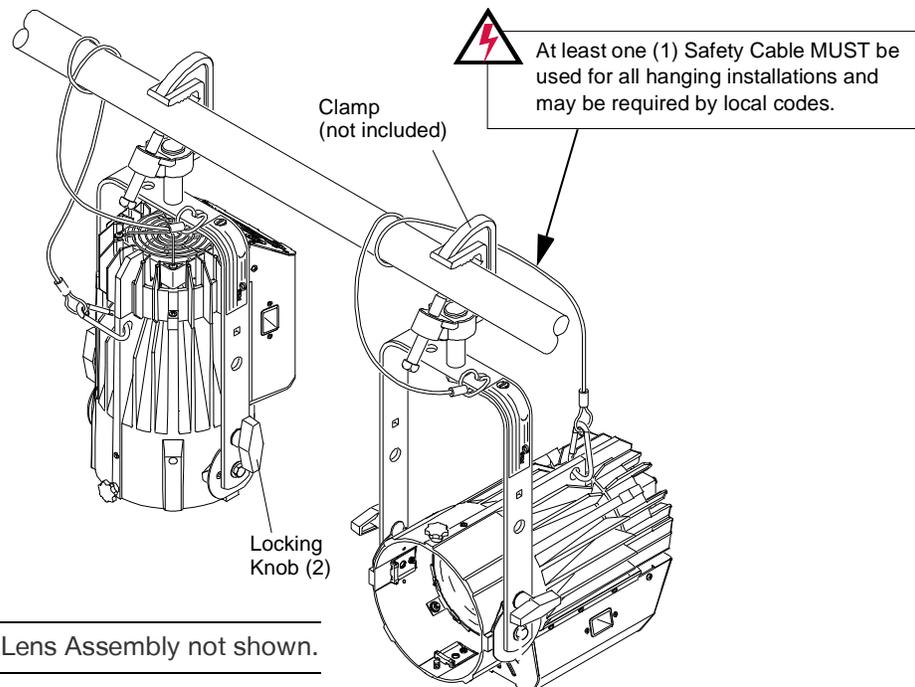


Figure 2: Attaching Source Four Lens Assembly

#### Mount on Pipe

- Step 1. Install clamp (not included) on ReNEW yoke (**Figure 3**).
- Step 2. Carefully lift ReNEW Assembly into mounting position on pipe.
- Step 3. Attach safety cable to yoke, wrap around pipe, and clip onto head assembly as shown.
- Step 4. Rotate head assembly to desired position and secure in place by tightening two yoke locking knobs.



**Note:** Source Four Lens Assembly not shown.

Figure 3: Standard Hanging Configuration

## Connect Data and Power

The ReNEW LED Retrofit Assembly requires standard AC power 100-240 VAC, 50/60 Hz, 2.5A maximum. The ReNEW interface panel provides one Neutrik® powerCON connector for power input (AC IN) and one for power pass-through (AC THRU). Use the provided AC Line Cord Cable to connect power.

The ReNEW Assembly provides two, 5-pin XLR connectors for DMX IN and DMX THRU (out) applications. DMX IN requires a 5-pin, female XLR connector and DMX THRU requires a 5-pin, male XLR connector.

Observe the following guidelines when setting up the system:

- + A maximum of **32** DMX devices may be connected in any one DMX512 data link. However, note that the maximum limit applies to the "daisy-chain" only. Your system or console may require fewer devices on a single data link path. Consult your console documentation for more information.
- + Three additional ReNEW Assemblies may be connected to the AC THRU connector (4 total). A special Jumper Cable is available for this purpose. (Refer to the ReNEW LED Retrofit Assembly User Manual.) Remember to use a DMX terminator at the end of each DMX signal chain. This improves signal quality and reduces the chance of incorrect or spurious control data.



**WARNING:** The ReNEW Assembly has no power on/off switch. Turn off the mains circuit breaker or unplug from wall socket before connecting or disconnecting the Neutrik powerCON connector.

### To connect power and data:

- Step 1. Connect DMX data cable from console to DMX IN connector at first ReNEW Assembly in chain (**Figure 4**).
- Step 2. If required, connect additional DMX data cables from DMX THRU connectors to DMX IN connectors of remaining ReNEW Assemblies in chain.
- Step 3. At last ReNEW Assembly in chain, install male termination connector at DMX THRU connector. (Devices on the same DMX512 chain may not function properly without termination.)
- Step 4. Connect AC Line Cord Cable to AC IN connector at first ReNEW Assembly in chain.
- Step 5. If required, connect AC jumper cables from AC THRU connectors to AC IN connectors of remaining ReNEW Assemblies in chain. *A limit of four (4) ReNEW Assemblies can be connected using AC jumper cables.*
- Step 6. Dress and secure all cables.

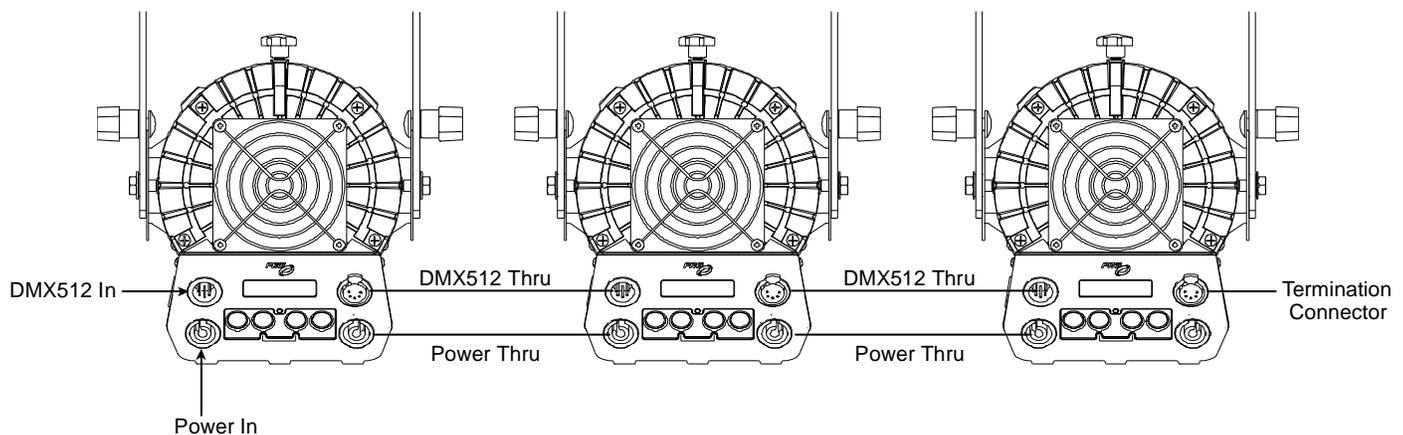


Figure 4: Daisy Chain Configuration

## 4. QUICK SETUP

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### Power Up

Apply power to the ReNEW LED Retrofit Assembly by turning on mains circuit breaker. (The unit has no power on/off switch.) When AC power is applied, the ReNEW menu interface will display a start-up splash screen before loading the default menu for the last mode set. (All settings are retained while power is off.)

### Comm LED Operation

A green Comm LED, located at the ReNEW interface panel, provides feedback during operation:

- + **Solid** - Valid DMX received.
- + **Slow Blink** - DMX is expected but not received.
- + **No Light** - No DMX expected, no DMX received (manual modes only).
- + **Fast Blink** - An internal error has occurred.

The Comm LED goes out after 10 minutes of operation if no errors are present.

### Menu Overview

The menu system is used to configure and operate the ReNEW Assembly. The menu display and controls are located on the interface panel (**Figure 5**).

#### Navigation Mode

The initial mode is Navigation. In this mode, left (<) and right (>) arrows are displayed around the current menu title, such as "< DMX Address >".

- + Pressing the minus [-] or plus [+] buttons moves to the next or previous menu item.
- + Pressing the [Mode/Cancel] button will return to the Mode menu.

#### Edit Mode

Pressing the [Edit/Set] button switches the interface to Edit mode. In this mode, plus (+) and minus (-) symbols are displayed to the left and right of the editable value (such as "- 001 +"). (However, this is not true for the Mode menu, where up/down buttons are displayed.)

- + Pressing the plus [+] or minus [-] buttons will increment and decrement the value.
- + Pressing the [Edit/Set] button again sets the displayed value and returns to the Navigation mode.
- + Pressing the [Mode/Cancel] button while in Edit mode restores the original value before editing began and returns to the Navigation mode.

#### Focus Mode

Use Focus mode to turn on the lamp momentarily for the purpose of aiming and focusing the light.

- + Enter Focus mode from anywhere in the menu by pressing [Edit/Set] and minus [-] buttons together. The ReNEW Assembly will output 100% intensity for five minutes. Time can be added or removed from the timer with the plus [+] and minus [-] buttons.

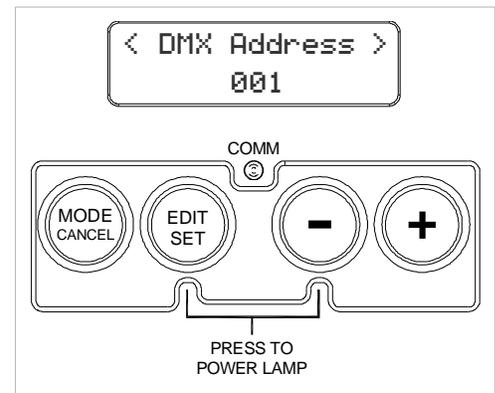


Figure 5: Menu Display and Controls Detail

## DMX Operation

The ReNEW LED Retrofit Assembly is factory set for DMX operation. It closely emulates an 8-bit tungsten fixture, and can be used as one out of the box. There are several configuration changes you may want to make when setting up the ReNEW Assembly, including changing the address, setting the unit for 16-bit intensity control, or changing the dimming curve or response time.

When the ReNEW Assembly is first powered on, it should begin at the DMX Address screen:



(If this is not the case, refer to CHANGING THE MODE on the next page.)

Set DMX address by pressing [Edit/Set]. The menu now allows you to edit the DMX address:



Use [+] and [-] buttons to set the desired DMX address, then press [Edit/Set] again to save the value

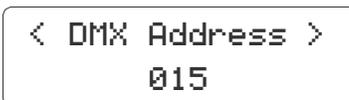


Table 1: DMX Menus

Menu	Menu Description	Setting	Setting Description
DMX Address	Sets the ReNEW Assembly's DMX address.	1-512	DMX512 value
DMX Mode	Sets the ReNEW Assembly's DMX footprint (also known as DMX personality). This provides a trade-off between control and the amount of space occupied on the DMX universe.	1ch 8b inten *	8-bit intensity control, like a conventional dimmer.
		2ch 16b inten	16-bit intensity control, for finer control and smoother operation.
		3ch 16b+fx	16-bit intensity control with additional macro channel settings for automated strobe and fade.
DMX Fault	Defines the ReNEW Assembly's output state upon loss of DMX signal.	Last Look *	Maintains the last DMX command received until valid DMX is restored.
		0% Intensity	Intensity goes to 0% upon loss of DMX.
		100% Intensity	Intensity goes to 100% upon loss of DMX.
DMX Dim Curve	Adjusts the ReNEW Assembly's dimmer curve.	Tungsten *	Power-law response, similar to a tungsten fixture.
		Linear	Linear output.
DMX Smoothing	Applies a smoothing filter to the DMX input, adding some delay to make the output response appear more natural.	None	No filter, instant response.
		Medium	Moderate filtering, reduces flicker induced by step changes to DMX input.
		Maximum *	Heavy filtering, slows output response by a significant amount.

\* default setting

## Changing the Mode

If the ReNEW Assembly is in a different mode than what is desired, it can be changed by pressing the [Mode/Cancel] button (multiple times if necessary) until the Mode menu appears:

```
----- Mode -----  
DMX Control ↓↑
```

Select the desired mode from the list by pressing the [+] and [-] buttons. Once the correct mode is shown, press [Edit/Set] to enter that mode.

- + **DMX Control** - Sets the ReNEW Assembly to be controlled by DMX512. (This is the default mode.)
- + **Manual Intensity** - Sets the ReNEW Assembly's brightness level.
- + **Manual Effects** - Configures effects such as pulse, fade, and strobe.
- + **Utilities** - Used to access special functions and software information.

## Manual Intensity Mode

For installations that need a constant, set amount of light, use the Manual Intensity mode. Change the mode to "Man. Intensity" as described in CHANGING THE MODE above. Once in Manual Intensity mode, the display will show the intensity setting:

```
Intensity  
100%
```

Use the [Edit/Set] button to enter editing mode, and the plus [+] and minus [-] buttons to adjust the output level:

```
Intensity  
- 100% +
```

## Manual Effects Mode

If a strobe or fade effect is desired, use the Manual Effects mode. There are three types of fade effects, as well as a strobe and a random strobe. Adjustable settings include the effect type, effect rate, and effect maximum intensity. Each effect will repeat until the mode or effect type is changed.

- + **Pulse On** - Sawtooth waveform. Fast turn-on with gradual fade out.
- + **Pulse Off** - Reverse sawtooth waveform. Fast turn-off with gradual fade up.
- + **Fade** - Gradual fade up, then gradual fade out.
- + **Fast Strobe** - Strobe effect.
- + **Random** - Random strobe effect.

Refer to the ReNEW LED Retrofit Assembly User Manual for a detailed description of the Manual Effects menu system.

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**Note:** When using multiple ReNEW Assemblies, synchronization between the units is not possible in manual mode. If synchronization is desired, use DMX control.

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## Configuration Using 9-Volt Battery

The ReNEW LED Retrofit Assembly provides a method for configuring the menu system while disconnected from the main AC power source. This is accomplished using a 9-volt battery which is inserted into a port located on the side of the unit. This can be used to set the DMX address before installation, etc.

### To configure unit using battery power:

- Step 1. At side-port, insert and hold 9-volt battery (**Figure 6**). (Polarity does not matter. The battery can be inserted in any orientation.) *Battery must be held in place to supply power.*
- Step 2. Configure menu options as required.
- Step 3. Remove battery.

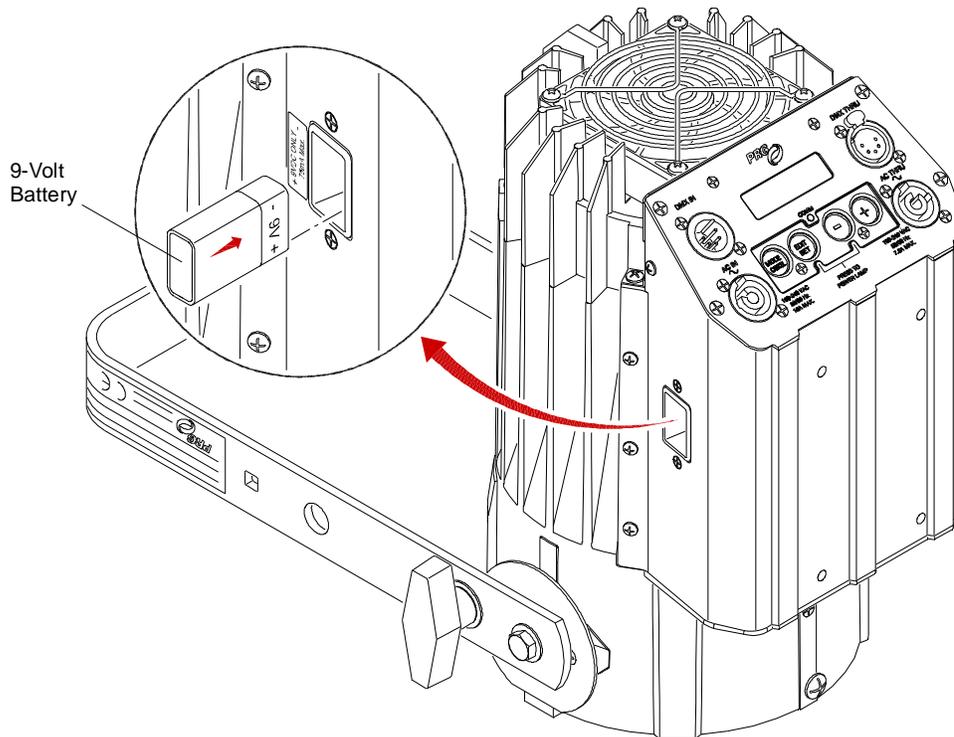


Figure 6: 9-Volt Battery Port