

## PREFACE

### About this Guide

The document provides basic information on installation instructions for a qualified, trained installer. For complete product installation and operation information, refer to the Gallery Series LED Luminaires Installation and User's Manual found on our web site at [www.altmanlighting.com](http://www.altmanlighting.com).

Please read all instructions before installing or using this product. *Retain this guide for future reference.*

### Have a question regarding this guide?

The material in this guide is for information purposes only and is subject to change without notice. Altman Lighting assumes no responsibility for any errors or omissions which may appear in this guide.

Should you find an error, have a suggestion or question regarding your Altman Lighting product, we would love to hear from you.

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**Note:** Information contained in this document may not be duplicated in full or in part by any person without prior written approval of Altman Lighting. 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.

### Our Commitment

Altman Lighting continually engages in research related to product improvement. New materials, production methods and design refinements are introduced into existing products without notice as a routine expression of the philosophy. For this reason any current Altman Lighting product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise noted.

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Gallery Series LED Luminaires Quick Start Guide

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## IMPORTANT INFORMATION

### Product Safety 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 unless the product is specified to operate in outdoor environments.*
- 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 THIS GUIDE FOR FUTURE REFERENCE.**

## Warnings



**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.

**WARNING:** This Lighting Fixture IS NOT for residential installation or use.

**THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY:**

**A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.**

**CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE**

## FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## Altman Lighting Product Warranty

### Warranty Term

Altman Lighting, Inc., a subsidiary of Altman Stage Lighting Company, Inc., herein referred to as Altman, warrants each new product (except for spare parts or products Altman does not manufacture) for a period of TWO (2) years from date of shipment to correct by repair or replacement any part defect due to faulty material or workmanship. Under these same terms products with an LED light source shall be warranted for a period of THREE (3) years.

Altman warrants for NINETY (90) days any spare part it manufactures. On spare parts or products Altman does not manufacture, including, but not limited to, lamps, sockets, lenses, roundels, electronics, ignitors, ballasts, etc.; Altman will grant the same warranty given Altman by its vendors.

Altman assumes no responsibility for damage or faulty performance caused by misuse, improper installation, careless handling or where repairs have been attempted by others.

This warranty is in lieu of all warranties or guarantees expressed or implied and no representative or person is authorized to assume Altman any other liability with the sale of Altman's products.

For complete warranty terms and conditions, please refer to our web site at [www.altmanlighting.com](http://www.altmanlighting.com).

### Warranty Service

In order to request warranty service, you must receive a Return Material Authorization (RMA) number prior to return.

Return shipments must be visibly marked with the RMA number; the product must be returned (*shipping prepaid*) to the factory at:

Altman Lighting Inc.  
Attention: RMA # \_\_\_\_\_  
57 Alexander Street  
Yonkers, NY 10701

The return must be within THIRTY (30) days of receiving the RMA from Altman.

## INSTALLATION AND SET UP

### Power Requirements



**WARNING!** The Gallery Series LED Luminaires 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 unless the unit is specifically designed to do so (MAINS dimming models - 120VAC only). Read this section carefully on how to properly connect your fixture.



**WARNING!** All Gallery Series LED Luminaires are shipped prewired from the factory. The wiring information in **Table 1** is shown for field wiring information and must be performed by a qualified and licensed electrician. Before performing any field wiring, refer to and read the warnings contained in "**Important Information**" on page 1.

### Connecting Power

Units are powered in one of two ways depending on the model(s) purchased.

- Direct connection to a AC power source for the portable unit via their IEC to Edison input cable (Portable models that are mounted with a C Clamp or Unistrut).
- Direct connection to the powered circuit (Track Mount / Smart Track Models or Ceiling / Pendant Models) Field wiring of the fixture is straight forward. A total of three wires/conductors need to be brought to the unit. The following wiring scheme, as shown in **Table 1**, is required for direct connection models.

**Table 1: AC Input Wiring**

Wire Color (120V Models)	Purpose
Black	Main / (L)ine
White	(N)eutral
Green	Ground / Earth
Wire Color (100 - 240VAC Models)	Purpose
Brown	Main / (L)ine
Blue	(N)eutral
Green/Yellow	Ground / Earth



**IMPORTANT!** All Gallery Series LED Luminaires must be connected to and properly grounded to an viable earth ground.

### MAINS Dimming Versions

Gallery Series LED Luminaires are available in a 120VAC Mains Dim version which is achieved with standard TRIAC-Based incandescent dimmers (see **Table 2 on page 3**) that "chop" the AC voltage or with standard ELV (electronic low-voltage) dimmers.

**Table 2: Compatible Mains Dimmers**

Compatible Phase-Cut, 120VAC Dimmers				
Manufacturer	Dimmer Model	Manufacturer	Dimmer Model	
Lutron	S-603PG	Leviton	IP-106-1LZ	
	DVCL-153P		6631-2	
	DV-600P		VPE06	
	TGCL-153P		6683-IW	
	S-600P		6161	
	DVELV-303P		6633-P	
	SELV-300P		IPE04	
	TG-600P		Cooper	DLC03P
	CT-103P			SLC03P
	MAELV-600		DAL06P	
Lightolier	ZP260QEW	Philips Strand Lighting	C21 350uS	
			A21 IGBT	
ETC	D Series			A21 SCR

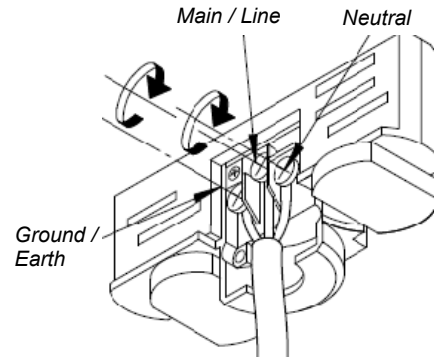


**WARNING!** Phase-Cut Dimmers are only available for 120VAC systems. The use of any other type of dimmer will damage the unit and void the product's warranty. **Table 2 on page 3** represents a number of manufacturers dimmers that have been tested with the product. As this list represents some of the larger dimmer manufacturers it is recommended when utilizing an alternate dimming manufacturer that the Gallery Series Luminaire is tested with any alternate dimmer prior to utilization. Please note that the majority of phase-cut dimmers tested have resulted in proper dimming performance. For additional information, please contact customer service.

### Smart Track Mount Models

**To connect Smart Track models to track:**

- Step 1. If not done at factory, connect AC wiring as shown in **Figure 1**. Also refer to **Table 1 on page 3**.
- Step 2. As shown in **Figure 2**, connect fixture to track as follows:
  - a. Turn Knob **A** Clockwise 90 Degrees for physical mechanical attachment.
  - b. Turn Knob **B** Clockwise 90 Degrees for circuit #1 power
  - c. Turn Knob **B** Counterclockwise 90 Degrees for circuit #2 power.



**Figure 1: Track Adapter Power Wiring**



**IMPORTANT!** Ensure that the track head is fully seated into the track prior to moving to the next step.

### Portable Models

Portable models are supplied with a locking IEC power input connector. Similar to other electronic devices. This type of connector is used due to its reliability and inability to cross the main / neutral / ground ac connections. IEC ac input cables are readily available through most electrical /electronic retailers around the world.



**Note:** Some models are MAINs dimmable models. These units are for 120VAC markets only and a list of approved dimmers is listed in **Table 2 on page 3**.

**To connect power to portable models:**

- Step 1. Make sure the AC cable is not connected to an AC power source.
- Step 2. As illustrated in **Figure 3**, position AC input cable in direct relation to the IEC connector on the side luminaire top box assembly.
- Step 3. Press AC input cable IEC connector firmly into IEC connector on top box assembly.
- Step 4. The luminaire is now ready to connect to an AC source.

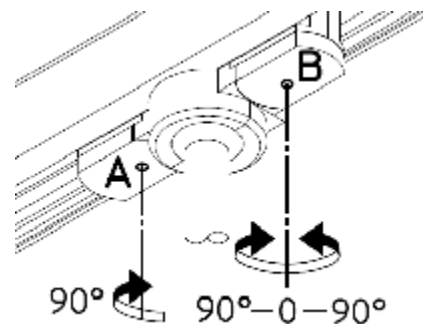
### 0-10V Controlled Models (Sink Current)

Gallery Series LED Luminaires' 0-10V drivers only operate with dimmers that sink current. *They are not designed to operate with 0-10V controls systems that source current*, as used in theatrical and entertainment systems. Developed in the 1980's, the 0-10V sinking current controls method is adopted by the International Electrotechnical Commission (IEC) as apart of the IEC 60929 Annex E standard.

The method to dim the output current of the driver is done via the +Dim/-Dim signal lines. This input responds to a 0-10V signal, delivering 1%-100% of the output for the luminaire.

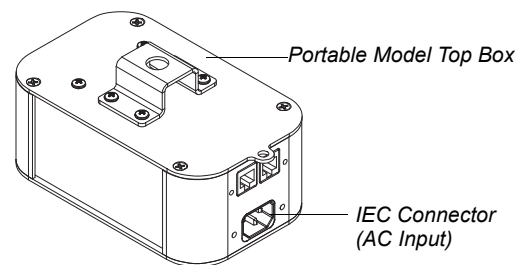
**Compatible 0-10V Dimmers include but are not limited to:**

- Lutron: Nova Series
- Lutron: Diva Series
- Leviton: Illuma Tech Series.



Note: Luminaire not shown for clarity.

**Figure 2: Installing Fixture on Track**



**Figure 3: IEC Connector - Portable Models**

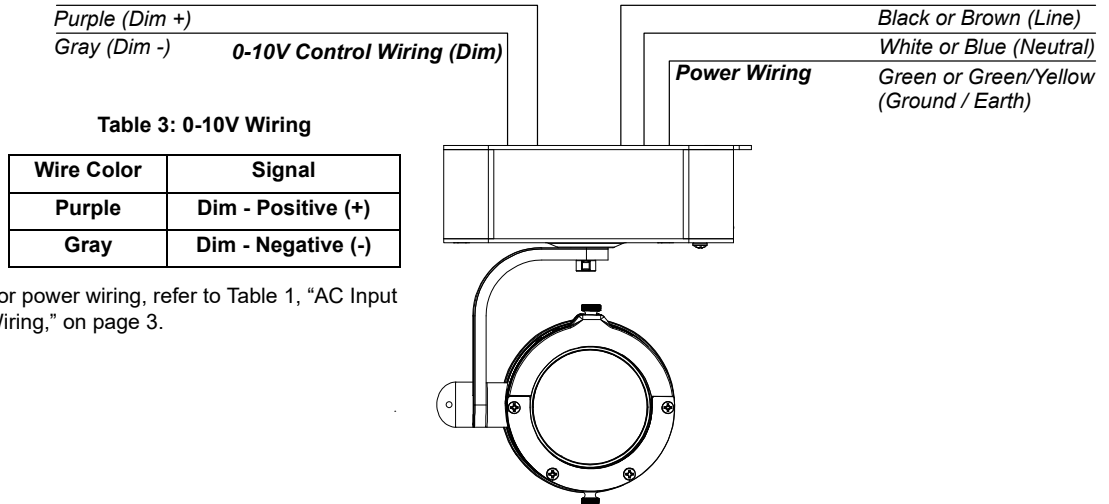
**NOTES:**

- Luminaire not shown for clarity.
- Top boxes are not removable and cannot be remotely located.



**IMPORTANT!** As all 0-10 Volt dimmers offer different features and options please consult the dimmer manufacturers wiring guide for additional information when wiring to 0-10V operated Gallery Series LED Luminaires.

**Wiring - Power and 0-10V Control**



For power wiring, refer to Table 1, "AC Input Wiring," on page 3.

Figure 4: 0-10V and Power Wiring

**Canopy / Pendant Mount Models**

**Note:** Ceiling junction box and junction box screws are not included with Gallery Series LED Luminaires and are by others.



**WARNING!** Canopy / pendant mount models must be installed by qualified professional installer and should be done in accordance with local and national codes.

**To wire and install canopy / pendant mounted models:**



**WARNING!** Make sure power to the junction box is completely disconnected. Failure to do so could lead to serious injury or death.

- Step 1. Install Gallery Series LED Luminaires Mounting Flange to ceiling junction box.
- Step 2. Connect wiring to fixture. Refer to **"Connecting Power" on page 3** or **"0-10V Controlled Models (Sink Current)" on page 4** as applicable.
- Step 3. Align fixture bottom mounting flange with top mounting flange screws.

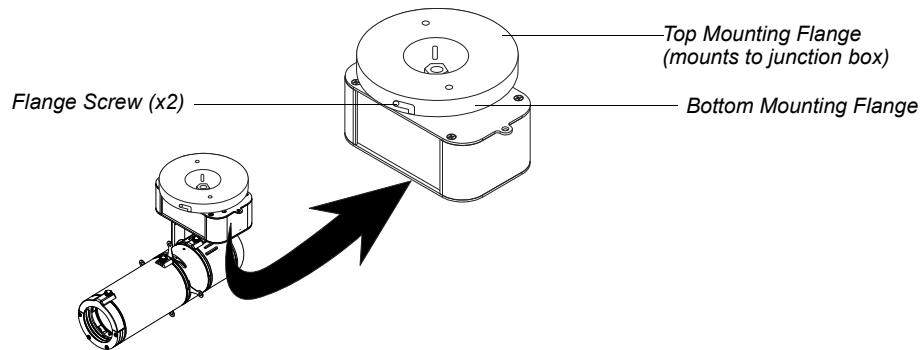


Figure 5: Canopy / Pendant Mount

- Step 4. Turn clockwise securing the unit to top mounting flange.
- Step 5. Tighten flange screws.

## Connecting to the DMX512 Network

DMX controlled models offer either a connection block (Figure 6) inside the luminaire's canopy or pendant mount or via on-board RJ45 connectors for portable units (refer to "RJ45 / XLR Connectors" on page 6).

Basic DMX512 installation consists of connecting multiple DMX controlled Gallery Series LED Luminaires together (up to 32 Total devices per DMX string) in "daisy-chain" fashion or Track application. A cable runs from the DMX512 control source to the DMX INPUT connection on the first luminaire. From the DMX OUTPUT of the luminaire another cable runs to the DMX IN connector on the next luminaire (or DMX512 device to be controlled).



**IMPORTANT!** At the end of each DMX Daisy chain, it is highly recommended that a DMX TERMINATOR (Altman Lighting part number DMX-MPHX-TERM for the connectors shown in Table 4) is utilized on the last luminaire (or device) in the chain.

## Connection Block Terminal

For direct connections, refer to Table 4 and Figure 6.

Table 4: DMX Connector Block Wiring

DMX Connection	Wire Color	Signal	Factory Wired	Connection	Customer Connection	Connection
DMX Input	White / Orange	Data In (+)	Male	Pin 1 (Left)	Female	Pin 3 (Right)
	Orange	Data In (-)		Pin 2 (Center)		Pin 2 (Center)
	White / Brown	Data In (Common)		Pin 3 (Right)		Pin 1 (Left)
DMX Output	White / Green	Data Out (+)	Female	Pin 1 (Left)	Male	Pin 3 (Right)
	Green	Data Out (-)		Pin 2 (Center)		Pin 2 (Center)
	Brown	Data Out (Common)		Pin 3 (Right)		Pin 1 (Left)

### Notes:

- All pin information is read from left to right from the back of the connector (looking at wiring inlet).
- (DMX Version Ceiling mount) One (1) piece of Category 5 Belden 1592A cable for all data connectivity. Three (3) of the conductors are used for data input and three (3) conductors for data output. Note, the White/Blue & Blue conductors are not used. Both Data Input and Output utilize a Phoenix Contact 3 position terminal block for use with 20-24 AWG.

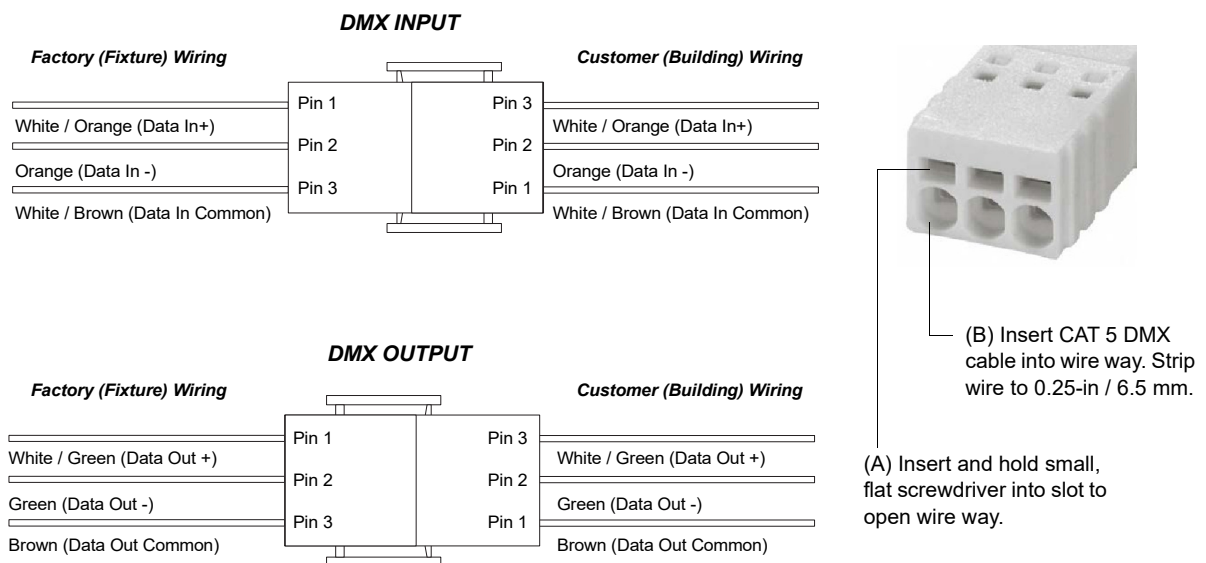


Figure 6: DMX Connector Wiring

## RJ45 / XLR Connectors

For models with RJ45 connectors for DMX Input / Output, refer to Table 5 on page 7 for RJ45 and XLR connector wiring.

Table 5: DMX RJ45 &amp; XLR Connector Wiring

DMX Connections - RJ45 and XLR Connectors		
DMX Signal	RJ45 Connector*	XLR Connector*
Common (Drain)	Pin 7	Pin 1
DMX -	Pin 2	Pin 2
DMX +	Pin 1	Pin 3

**Note:** \* Only those pins shown are used. Remaining pins on RJ45 and XLR connectors are not used.

## Setting a DMX Address via RDM

Gallery Series LED Luminaires are full featured Remote Device Management (RDM) compliant. All DMX and Luminaire settings are programmed via a RDM ANSI E1.20 complaint device. As many of the RDM devices and software work differently please consult the RDM programmer manufacturer for specific operational instructions. **Table 6** shows the list of the settings and features that can be set via RDM.

**Note:** The entire DMX infrastructure must be RDM compliant in order to achieve system-wide RDM functionality.

Table 6: DMX Addressing

Item	Value	Additional Values
RDM Protocol Version	0100	
Device Model ID	LED Driver 40W	
Product Category	Specialized LED Dimmer	
Boot Version	0.00	
Software Version ID	V000001.12	
DMX 512 Start Address	1 ( <i>default</i> )	Settings between 1 and 512
DMX Foot Print	1 ( <i>default</i> )	
Manufacturer Label	Altman	
Dimming Curve	Linear ( <i>default</i> )	Logarithmic

## OPERATION

### Luminaire Features

This section will covers a few of the unique features of the various models. Some features - as described in this section - may or may not be applicable to all models. Refer to the Installation and User's Manual for more details.

#### DMX Models

### Focus Button

Each DMX Model is equipped with a "focus button" located on the top box assembly on the luminaire head side. This button is programmed for full on/off control of the luminaire whether DMX is active or inactive. Pressing this button will bring the luminaire to full, if off or off, if at full. If the DMX system is active and the DMX Value is changed from its current value, the prevailing DMX signal will then take control of the luminaire.

**Note:** Any change in the DMX value will over ride the focus button (last action takes precedence).

#### Zoom Spot Models

### Zoom and Focus Control

Zoom and focus is easily accomplished by the two knobs located on the zoom spot lens tube. The front knob (towards the end of the lens tube) controls the fixture's zoom / beam angle. The rear knob (closest to the LED engine) controls the focus of the beam. Refer to **Figure 7 on page 8**.

To change the fixture's beam angle, simply loosen (do not remove) the zoom / beam angle knob and set as desired. Re-tighten by hand once desired beam angle is achieved. Repeat this for the focus of the fixture.

**Note:** Keeping the lens knobs loose and slightly snug will allow smooth movement of the lenses along the lens tube when making adjustments. Loosening the knobs too much will make fine/precision adjustments difficult and may misalign the lenses and give poor focus adjustment through the focus range.

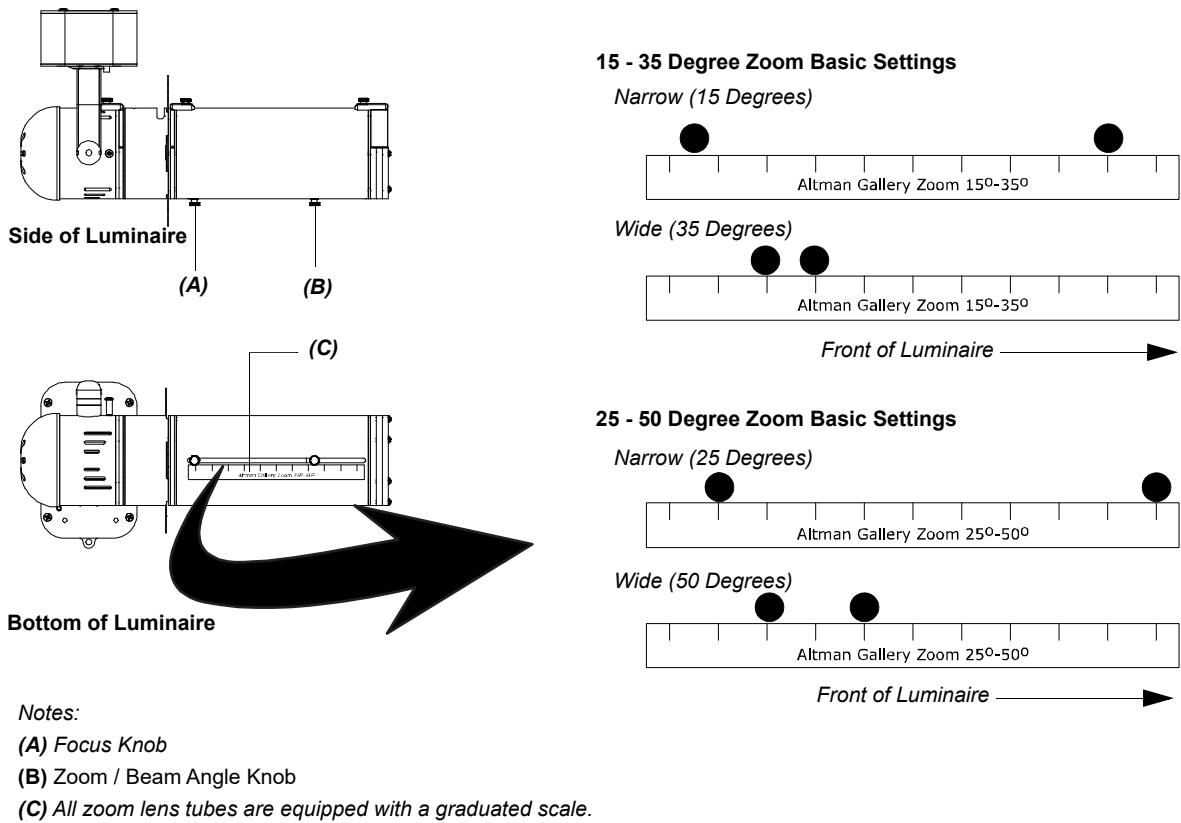


Figure 7: Zoom Spot Models - Beam Control

Zoom Spot Models

4-Blade Shutter

Gallery Series LED Luminaires with zoom spot lenses have a gate assembly that contains four-blade shutters that can be moved by hand in and out of the beam for shutter cuts. They can be moved as needed either straight out (or in) or at an angle. **Figure 8** shows the gate and the four shutter blade handles.

**\* Gate Assembly Notes:**

- Gate Assembly must be installed with shutter blades closest to lens tube for proper focusing and optimal performance.
- Gate Assembly can rotate 360 degrees for gobo or shutter cuts.

Note: Luminaire shown in exploded view for clarity. Track model shown, same for all zoom spot models.

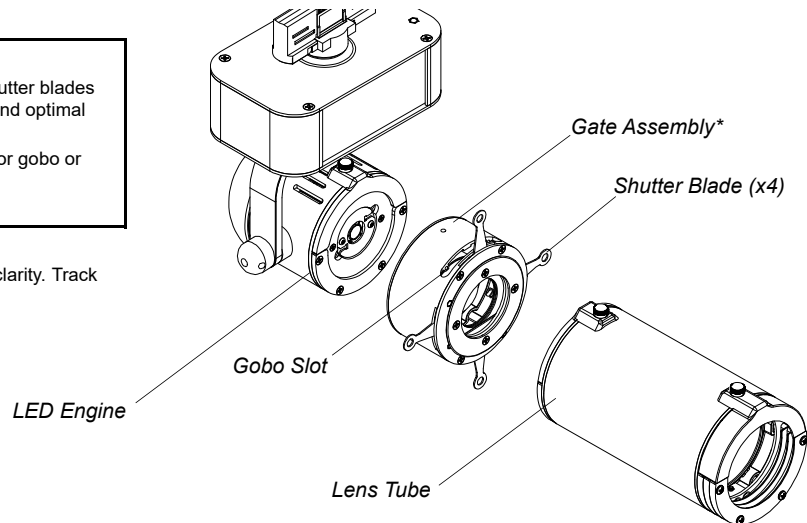


Figure 8: Zoom Spot Models - Shutter Blades



Zoom Spot Models

**Gobo Slot**

Gallery Series LED Luminaires with zoom spot lenses offer a gobo slot (**Figure 8 on page 8**) to hold one E-size gobo with the dimensions of 37.5 mm OD with a 28 mm image area. Gobo holder is included with all zoom spot models and can be purchased as an additional accessory.

**IMPORTANT!** Please note that some gobos, depending upon their reflectivity level may need to be blackened in order to obtain superior projections. Additional beam shaping is obtained through the four (4) integrated shutters.

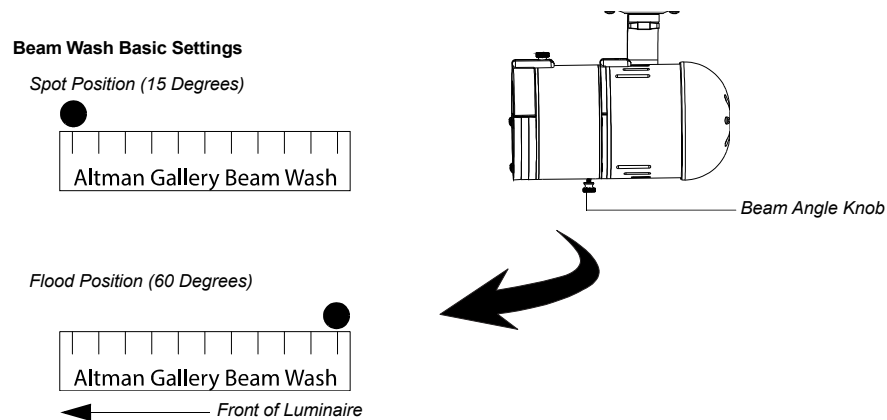
Beam Wash Models

**Beam Wash Models Beam Angle Adjustment**

Gallery Series LED Luminaires that have the beam wash lens are designed and are ideal to project a soft edge, even beam of light. For beam wash models, beam shaping is achieved through external, four-flap barn doors (sold separately).

To adjust the beam angle, simply loosen, do not remove, the beam angle knob as illustrated in **Figure 9**. Once the desired angle is achieved, re-tighten the beam angle knob.

**Note:** Keeping the beam angle knob loose and slightly snug will allow smooth movement of the lens along the lens tube when making adjustments. Loosening the knob too much will make fine/precision adjustments difficult and may misalign the lens.



**Figure 9: Beam Wash Models - Beam Angle Adjustment**

ALL Models

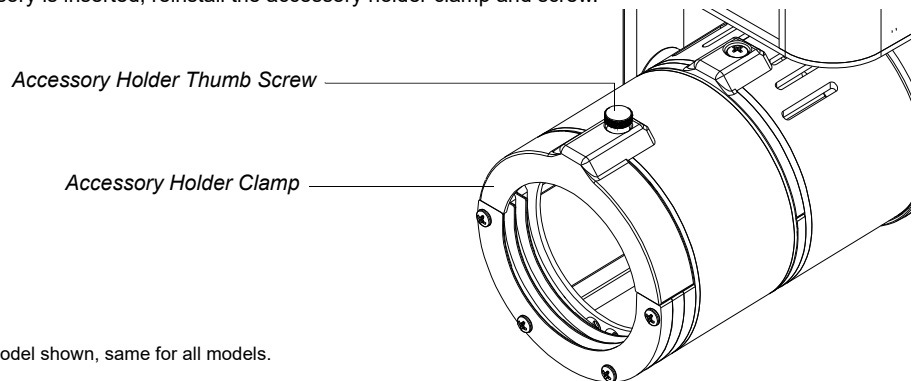
**Accessory Holder - All Models**

All Gallery Series LED Luminaires have a end of lens accessory holder. This holder is easily opened to accept such optional accessories (all sold separately or by others) as:

- 4-Flap Barn Doors
- Top Hat
- Half Top Hat
- Color (Gel) Frame

A list of available accessories that fit Gallery Series LED Luminaires is found in the product's specification sheet.

To open the accessory holder, as illustrated in **Figure 10**, remove the thumb screw holding the accessory holder clamp and insert the accessory. Once the accessory is inserted, reinstall the accessory holder clamp and screw.



Note: Beam Wash model shown, same for all models.

**Figure 10: Accessory Holder - All Models**

ALL Models

### Pan & Tilt - All Models

All Gallery Series LED Luminaires can have their pan and tilt set by hand (without the use of tools).

To adjust pan or tilt, loosen (do not remove) thumb screw or knob as indicated in **Figure 11** and adjust pan or tilt as desired. Once positioned as desired, re-tighten, by hand or tool (see note on tilt knob), the thumb screw or knob. Do not over tighten!

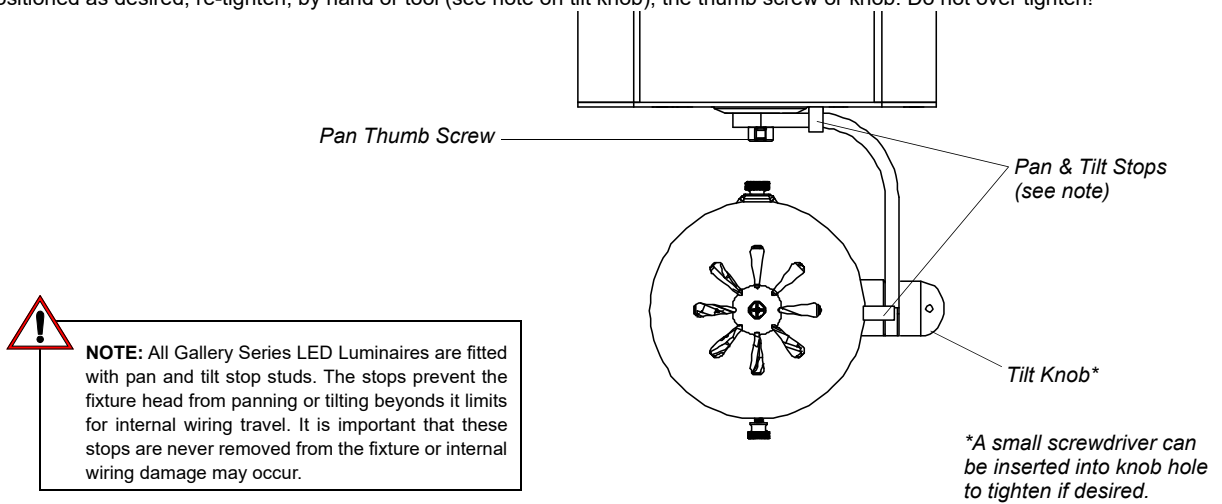


Figure 11: Fixture Pan & Tilt

## 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. **AT NO TIME SHOULD THE LED BE TOUCHED.**

### Special Cleaning and Care Instructions

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

The Gallery Series LED Luminaires 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 Gallery Series LED Luminaires:

- 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 Gallery Series LED Luminaires 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 Gallery Series LED Luminaires. 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 Gallery Series LED Luminaires, please contact Altman Lighting technical support or your local Authorized Dealer.

### Service and Maintenance

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