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GALLERY SERIES LED LUMINAIRES INSTALLATION & USER'S MANUAL

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# Preface

The document provides basic information on installation and operational instructions for a qualified, trained installer. These instructions provide information for the following product:

#### **Gallery Series Led Luminaires**

Additional product information can be found on our web site at www.altmanlighting.com or by scanning the QR code to the right.

### Have a question regarding this manual?

The material in this manual 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 manual. For comments and suggestions regarding corrections and/or updates to this manual, please visit the Altman Lighting web site at www.altmanlighting.com or contact your nearest <u>Altman Lighting Regional Manager</u>.

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

You can reach us at:

Altman Lighting 1400 East 66th Ave. Denver, CO. 80229 +1 (303) 500-7072 <u>www.altmanlighting.com</u> <u>support@altmanlighting.com</u> <u>sales@altmanlighting.com</u>

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.

Document Number: **49-0230** Version as of: **2022 March 17**  Product Luminaire Installation & User's Manual © Altman Lighting 2022. All rights reserved.





# Important Information

## **Product Safety Notices**

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



- 1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- 2. Do not mount near gas or electric heaters.
- 3. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- 4. Operate only in approved environments. Do not operate outside unless product is designed to do so.
- 5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 6. Do not use this equipment for other than intended use.
- 7. Refer service to qualified personnel.

SAVE THESE INSTRUCTIONS.

### 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. 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.

WARNING: The structure where fixture(s) is to be mounted must be capable of supporting the weight of the fixture and its accessories. This fixture is for temporary, portable mounting only.

WARNING: The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

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.

CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT CONDUCTOR. CONSULTER UN ÉLECTRICIEN QUALIFIÉ POUR VOUS ASSURER QUE LES CONDUCTEURS DE LA DÉRIVATION SONT ADÉQUATS.



# 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 Terms

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 FIVE (5) years and ONE (1) day from date of shipment to correct by repair or replacement any part defect due to faulty material or workmanship.

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.

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.

## Warranty Service

The customer must receive a Return Material Authorization (RMA) number prior to return, return shipment must be visibly marked with the RMA number and the product must be returned (shipping prepaid) to the factory at:

1400 East. 66th Avenue Denver, CO 80229 USA +1-303-500-7072 support@altmanlighting.com

The return must be within THIRTY (30) days of receiving the RMA from Altman. Altman warrants for NINETY (90) days any spare part it manufactures. On spare parts or products Altman does not manufacture, such as lamps, sockets, lenses, roundels, electronics, ignitors, ballasts, etc. Altman will grant the same warranty given Altman by its vendors.



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# About this Manual

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

#### Gallery Series LED Luminaires

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

# Product Descriptions

This manual covers the all Gallery Series LED Luminaires models. Because these fixtures are configured at the time of ordering, please refer to the current product specification sheet for the model numbers and descriptions.

### Accessories

Contact your Authorized Altman Lighting Dealer for price and availability of all accessories for Gallery Series LED Luminairess. Additional information can be found on the Altman Lighting web site at www.altmanlighting.com.

### Gallery Series LED Luminaires Lens Tubes & Gate

Part Number	Description
GAL2550LT *	Additional 25°- 50° Short Zoom Lens Tube (note, requires Gate Assembly GALGALT)
GAL1535LT *	Additional 15°- 35° Long Zoom Lens Tube (note, requires Gate Assembly GALGALT)
GALFLLT *	Additional 85° Flood Lens Tube
GALBWLT *	Additional 15°- 60° Beam Wash Lens Tube
GALGALT *	Additional Gate Assembly (note, required for zoom fixtures)
GALWWLT *	Additional asymmetric wall wash 85° vertical by 80° horizontal wall wash reflector

\* Specify color at time of ordering by adding the following code for color: B = Black or W = White.

### **Gallery Series LED Luminaires Other Accessories**

Part Number	Description
61-0265	RAD (Remote Addressing Device) for addressing fixtures via RDM. Required for DMX models.
MSC	Spare Mini Safety Cable (included with fixture)
GALTH *	Gallery Series Top Hat
GALHTH *	Gallery Series Half Top Hat
GALBD *	Gallery Series Barn Doors
GALGH	Gobo Holder - E Size (37.5mm OD) / Image Area is 28mm
GALCF *	Gallery Series Color Frame (2-15/16" (74.6mm) diameter)
RJ45F-DMXF **	RJ45 Female to DMX 5-Pin Female
RJ45F-DMXM **	RJ45 Female to DMX 5-Pin Male
DMX-MPHX-TERM	DMX Terminator
GALGOBO-RTR-*	Gallery Gobo Rotator for E-Size Gobos, Includes MSC Safety Cable (power supply sold separately)**
GALGOBO-RTR-PS-*	Gallery Gobo Rotator Portable Box Power Supply with IEC power input and RJ45 Ports (DMX in / thru) and C-Clamp
GALGOBO-RTR-Y-*	* Gallery Gobo Rotator Smart Track Power Supply (2 Circuit, 120VAC Track Head)
GALGOBO-RTR-Z-*	Gallery Gobo Rotator Smart Track Power Supply (3 Circuit, 230VAC Track Head)

\* Specify color at time of ordering by adding the following code for color: B = Black or W = White.
\*\* All portable units use RJ45 Connectors for DMX connectivity. For connectivity to any DMX 5-pin system, you will need part numbers RJ45F-DMXF and RJ45F-DMXM.

Gallery Gobo Rotator - please see Altman Lighting web site (www.altmanlighting.com) for additional information on the gallery gobo rotator.



# Gallery Series LED Luminaires Overview

# Gallery Series LED Luminaires Components

### 25°- 50° Short Zoom and 15°- 35° Long Zoom Luminaires

Figure 1 shows the basic features of Short and Long Zoom Gallery Series LED Luminaires.



Figure 1: 25°- 50° Short Zoom and 15°- 35° Long Zoom Luminaire Features

### **Beam Wash Luminaires**

Figure 2 shows the basic features of Beam Wash Gallery Series LED Luminaires.





### **Flood Luminaires**

Figure 3 shows the basic features of Flood Gallery Series LED Luminaires.



### Wall Wash Luminaires

Figure 4 shows the basic features of Wall Wash Gallery Series LED Luminaires.



Refer to "Top Box Overview" on page 9 for more information.

Figure 4: Wall Wash Luminaire Features



# Installation and Setup

## Top Box Overview

There are several mounting configurations for the Gallery Series LED Luminaires:

- Portable C-Clamp / Unistrut
- Smart Track / Track

LIGHTING

Ceiling / Pendant

The model(s) purchased determines how the unit can be mounted. **Figure 5** shows the features and connections on the two versions of the Gallery Series Luminaire top boxes.



# Gallery Gate Installation

The provided Gallery Gate should be installed as shown in Figure 6.

**Note:** The Gallery Gate is only supplied and required for the 25°- 50° Short Zoom Lens and 15°- 35° Long Zoom Lens Luminaires

### To connect Gallery Gate to Gallery LED Engine:

- Step 1. Unscrew the Accessory Cover Lock from the Gallery LED Engine.
- Step 2. Slide the Gallery Gate onto the Gallery LED Engine.
- Step 3. Install the Accessory Cover Lock back onto the Gallery LED Engine.

**Note:** The Gallery Gate needs to be installed with the Shutter side facing the 25°- 50° Short Zoom Lens or 15°- 35° Long Zoom Lens.



# Gallery Lens Installation

The provided Gallery Lens should be installed as shown in Figure 7 and Figure 8.

Note: The 25°- 50° Short Zoom Lens and 15°- 35° Long Zoom Lens Luminaires will attach to the Gallery Gate

### To connect Gallery Lens:

Step 1. Unscrew the Accessory Cover Lock from the Gallery LED Engine

- Step 2. Slide the Gallery Lens onto the Gallery LED Engine
- Step 3. Install the Accessory Cover Lock back onto the Gallery LED Engine





# Safety Cable Installation

The provided Mini Safety Cable (MSC) should be installed as shown in Figure 9.



**IMPORTANT!** The safety cable (supplied with unit) should be used and may be required by local and/or national codes when hanging this luminaire. The mounting structure must be capable of supporting the weight of the fixture, lens, cabling, any accessories, etc.



#### Figure 9: Gallery Safety Cable - Overview

# 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 3.

# 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 (Portablemodels that are mounted with a C Clamp or Unistrut).
- Direct connection to the powered track (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.

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

#### Table 1: AC Input Wiring

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



## Mains Dimming Version

Gallery Series LED Luminaires are available in a 120VAC Mains Dim version which is achieved with standard TRIAC-Based incandescent dimmers (see Table 2, "Compatible Mains Dimmers," on page 11) that "chop" the AC voltage or with standard ELV (electronic low-voltage) dimmers.



Figure 10: Phase Cut Sine Wave Example

Manufacturer	Dimmer Model	Manufacturer	Dimmer Model
	S-603PG	Leviton	IP-106-1LZ
	DVCL-153P		6631-2
	DV-600P		VPE06
	TGCL-153P		6683-IW
	S-600P		6161
Lutron	DVELV-303P		6633-P
	SELV-300P		IPE04
	TG-600P		DLC03P
	CT-103P	Cooper	SLC03P
	MAELV-600		DAL06P
	FAELV-500		C21 350uS
Lightolier	ZP260QEW	Strand Lighting	A21 IGBT
ETC	D Series		A21 SCR

#### **Table 2: Compatible Mains Dimmer**

**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** 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 Models



**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 connections. IEC ac input cables are readily available through most electrical /electronic retailers around the world. One molded VLock IEC to Edison 2 meter (6'-6") cable (part number 54-VL012405200) is included with portable units



**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 11.

### 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 13**, 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.



Figure 13: IEC Connector - Portable Models



#### NOTES:

- Luminaire not shown for clarity.
- Top boxes are not removable (from standard models) and cannot be remotely located.
- Remote top box configurations are available for portable units only. Remote top box models must be ordered specifically as a remote top box set up. Remote top box units have a one (1) meter cable between the luminaire engine and top box. Refer to the Altman Lighting web site www.altmanlighting.com for more details.

# 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.



**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.



**IMPORTANT!** The 2020 National Electrical Code® (NEC) (NFPA-70) contains a new requirement in section 410.69 that disallows the use of insulation colors reserved for the grounded branch circuit conductor (white or gray) or the equipment grounding conductor (green or green with a yellow stripe) for a field-connected control circuit conductor. A decision was made that pink will be an acceptable replacement for gray control conductor. This requirement will become effective on January 1, 2022. See **Table 4 for new 0-10V Wiring** 



Figure 14: 0-10V and Power Wiring



# Canopy / Pendant Mount Models



**IMPORTANT!** 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.



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

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

- Step 1. Install Gallery Series LED Luminaires Mounting Flange to ceiling junction box. Ceiling junction box is octagon-style box (by others). Mounting hole spacing is 3.5-inches (88.9 mm).
- Step 2. Connect wiring to fixture. Refer to "Connecting Power" on page 10 or "0-10V Controlled Models (Sink Current)" on page 14 as applicable
- Step 3. Align fixture bottom mounting flange with top mounting flange screws.
- Step 4. Turn clockwise securing the unit to top mounting flange.
- Step 5. Tighten flange screws.



Figure 15: Canopy / Pendant Mount



# Connecting Data (DMX Models)

Gallery Canopy or Pendent DMX controlled models offer a connection block (Figure 12) inside the luminaire's canopy. For portable units (refer to "RJ45 / XLR Connectors").

Basic DMX512 installation consists of connecting multiple DMX controlled Gallery LED Luminaires together (up to 32 Total devices per DMX string) in "daisy-chain" fashion. 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 connection on the next luminaire or other DMX512 device to be controlled.



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 2) is utilized on the last luminaire (or device) in the chain.

All Canopy and Pendant units will come pre-wired from the factory with the Phoenix connector installed and there is a spare set sent for Customer Wiring. **On Pendant style fixtures (with a stem mount) this connector must be removed prior to threading cable through the mounting stem and then reinstalled.** These connectors are multi-use and highly recommended for DMX wiring use.

Phoenix Connector Installation



(A) Insert and Hold small, flat screwdriver into slot to open wire way

(B) Insert CAT 5 DMX Cable into Wire way. Strip wire to 0.25-in / 6.5 mm.

Figure 16: Canopy / Pendant Connection Block

# RJ45 / XLR Connector Wiring

For information on RJ45 connectors for DMX Input / Output, refer to Table 5 on page 13 for RJ45 and 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	

#### Table 5: RJ45 and XLR Connectors

Only those pins shown are used. Remaining pins on RJ45 and XLR connectors are not used.



# Terminal Block (Phoenix Connector) Wiring

- 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.



# 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 on page 18** 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.

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 (default)	Settings between 1 and 512
DMX Foot Print	1 (default)	
Manufacturer Label	Altman	
Dimming Curve	Linear (default)	Logarithmic

Table 6: DMX Addressing



# Setting a DMX Address via RAD

The Remote Addressing Device (model RAD, sold separately, refer to "Gallery Series LED Luminaires Other Accessories" on page 6 for ordering information) is used to set the DMX address of Gallery Series LED Luminaires (DMX Versions) using DMX/RDM. RDM (Remote Device Management) is an enhancement to DMX512 which allows status information and parameters (such as the DMX address) to be communicated over the DMX LAN.



**Note:** If you do not have a RAD, a RDM compliant console / device that is capable of addressing, can also be used to set the DMX address.

### To set the DMX address using RAD:

Step 1. Connect RAD to the fixture(s) to be addressed using standard DMX cabling.



**Note:** If there are any isolators or splitters in between the RAD and the device(s) they must be capable of bi-directional communication per the RDM Standard. be used to set the DMX address.

#### Step 2. Press NEXT button on RAD.

- Step 3. One of the RDM devices will be discovered and identify itself.
- Step 4. RAD's display will show identified device's DMX address. Identification method varies from device to device many lighting fixtures flash or strobe.
- Step 5. Use RAD's three buttons below the display to change DMX address of identified device.
- Step 6. After a few seconds after the address has been changed, RAD's display will flash as new DMX address is sent to device.
- Step 7. Press NEXT button to identify another device and set its address (repeat addressing steps).
- Step 8. LAST button is used to move back through the previously identified devices.

Step 9. Pushing NEXT button, with no more devices to be found, will display three dashes ( - - - ).



**Note:** If no buttons are pressed on the RAD for about 15 seconds, the RAD will go into sleep mode. In this battery saving mode, one segment will flash on the display. To wake the RAD from sleep, push any of the buttons or cycle the power switch.



# Operation

### Luminaire Features

This section will cover the unique features of the various models. Some features - as described in this section - may or may not be applicable to all models. Each section will let you know what models this feature is applicable to a fixture or series of fixtures.

### **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

Gallery Series LED Luminaires fitted with a short or long zoom lens, has the following features:

- User-settable and lockable zoom and focus control
- 4-blade shutter system (set on two planes)
- Gobo slot for E-size gobos measuring 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.
- End of lens tube accessory holder (same for all models, see "Accessory Holder All Models" on page 23)

### **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 18**.

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.



### Gallery Series



# Installation & Users Manual

#### 15°-35° Degree Zoom Basic Setting



#### Notes:

(A) Focus Knob

(B) Zoom / Beam Angle Knob

(C) All zoom lens tubes are equipped with a graduated scale.

#### Figure 18: Zoom Spot Models - Beam Control

### 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. The can moved as needed either straight out (or in) or at an angle. Figure 19 shows the gate and the four shutter blade handles.

### Gobo Slot

Gallery Series LED Luminaires with zoom spot lenses offer a gobo slot (Figure 19) 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.

### \* 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.





### **Beam Wash Models**

Beam wash models offer a variable beam angle of 15 to 60 degrees and a end of lens accessory holder (see "Accessory Holder - All Models" on page 23 for more information on the accessory holder).

### **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 20. 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 20: Beam Wash Models - Beam Angle Adjustment

### Flood Models

Flood models offer a fixed beam angle of 85 degrees and a end of lens accessory holder ("Accessory Holder - All Models" on page 23) below for more information on the accessory holder). For flood models, beam shaping is achieved through external, four-flap barn doors (sold separately).



### Gallery Series

### **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



Figure 21: Accessory Holder - All Models

A list of available accessories that fit Gallery Series LED Luminaires is found in "Gallery Series LED Luminaires Other Accessories" on page 6.

To open the accessory holder, as illustrated in Figure 16, 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.

### 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 22** 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!



**Note:** All Gallery Series LED Luminaires are fitted with pan and tilt stop studs. The stops prevent the fixture head from panning or tilting beyonds it limits for internal wiring travel. It is important that these stops are never removed from the fixture or internal wiring damage may occur.



# **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.

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

The Gallery Series Luminaire LED requires special care when it comes to cleaning the front reflector assembly. Additional care needs to be taken with the plastic components because they are much easier to scratch or damagethan glass.

The following is a list of cleaning materials required to care for your Gallery Series LED Luminaire:

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

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Reagent grade isopropyl alcohol is good to use on the Gallery Series 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.



Under no circumstances should ammonia-based cleaners, acetone, or other harsh solvents be used on or near the Gallery Series 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 Gallery Series LED Luminaire, please contact Altman Lighting technical support or your local Authorized Dealer.

If you have any questions regarding the use or care of your Gallery Series LED Luminaires, please contact Altman Lighting technical support at support@altmanlighting.com or your local Authorized Dealer.





## 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. Remove lens assembly.
- Step 3. Apply a small amount of reagent grade isopropyl alcohol to lint-free lens tissue.
- Step 4. Wipe all debris, dirt, fingerprints, etc. from lens.
- Step 5. Using a second lint-free lens tissue, wipe off any alcohol residue.

Step 6. Once lens is completely dry, reinstall lens assembly.

### Service and Maintenance

If you have any questions regarding the use or care of your Gallery Series LED Luminaires, please contact Altman Lighting technical support at support@altmanlighting.com or your local Authorized Dealer.



**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.



# Troubleshooting

# Troubleshooting Guide

The chart below provides possible causes and remedies for various error messages and/or symptoms. If this chart is unable to address your issue, please contact your authorized dealer or Altman customer service at 1.303.500.7072 or support@altmanlighting.com for assistance.

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

Description	Symptom	Possible Cause/Remedy	
No light output.	Fixture will not produce or output light and connected to power. Internal LED is illuminated.	<ul> <li>Unit Setting is at 0% local control</li> <li>Unit Setting is at 0% DMX control</li> <li>Set intensity level above 0% or adjust to a higher intensity.</li> </ul>	
LOW light output.	Fixture produces low light output andconnected to power.	<ul> <li>Mains Dim Unit fade pot set to 0, turn local control to 100%.</li> <li>Mains Dim unit - check connected dimmer for upper threshold settings.</li> </ul>	
No power at luminaire.	Luminaire does not power up	<ul> <li>Circuit not energized</li> <li>Verify circuit breaker is turned on.</li> <li>Not plugged in</li> <li>ensure A/C cable is connected to power source.</li> <li>Power cable wired incorrectly</li> <li>verify power cable and connector are wired correctly.</li> <li>See "Connecting Power" on page 9 for more</li> <li>information.</li> </ul>	
DMX Data Control.	Fixture will not respond to DMX commands.	<ul> <li>Not detecting DMX data</li> <li>Disconnect and reconnect DMX input cable.</li> <li>Unit is not set to proper DMX address - check settings.</li> <li>Check all DMX connections (at control source and luminaire).</li> <li>DMX data cable not wired correctly or has a broken conductor</li> <li>Check DMX data cable for proper wiring.</li> <li>See "Connecting to the DMX512 Network" on page 16 for more information.</li> </ul>	
	Unit goes to either full intensity or zero intensity. Does not respond to DMX control.	<ul> <li>Remove power from the Luminaire - Wait 10</li> <li>seconds - reapply power. DMX control board will</li> <li>then boot and allow for control.</li> </ul>	



# Gallery Series LED Luminaires Dimensions

# 15 to 35 Degree Long Zoom Models



# 25 to 50 Degree Short Zoom Models





## Beam Wash Models



# Flood Models





## Wall Wash Models





# **Technical Specifications**

# Gallery Series LED Luminaires Common Specifications

Input Voltage:	120-277VAC 50/60hz
Current Draw:	0.41A @120VAC / 0.20A @ 240VAC
Output:	DMX / DALI Models: >3600 Lumens; LED color temperature dependent MAINS / 0-10 Models: >4000 Lumens; LED color temperature dependent
CRI:	>92
Beam Angle:	Gallery Flood: 85 Degrees (Fixed angle) Gallery Beam Wash: 15-60 Degrees (Variable angle) Gallery 25/50 Zoom: 25-50 Degrees (Variable angle) Gallery 15/35 Zoom: 15-35 Degrees (Variable angle) Gallery Wall Wash: (asymmetric wall wash, 85° vertical by 80° horizontal)
Light Engine:	DALI / DMX Models: 50W LED - Available in 2700K, 3000K, 4000K, and 5000K White. MAINS/0-10V: 52W LED - Available in 2700K, 3000K, 4000K, and 5000K White.
Lumens/Watt:	DMX / DALI Models: 80 MAINS / 0-10: 76.9
Control: MAINS	MAINS Models: 120VAC only DALI Models: Local Dim, DALI Control DMX Models: Local Dim, DMX512A (Fully RDM Compliant) 0 - 10V Models: Local Dim, 0-10V
BTU's/Hour:	DMX / DALI Models: 170.6 MAINS / 0-10 Models: 177.32
Cooling:	Silent Active Cooling (<8 dBA @ 0.5 M)
Thermal:	After 5 Minutes: 35 Degrees Celsius Steady State: 44 Degrees Celsius
Ambient Temperature:	0 to 40 degrees C (32 to 104 degrees F)
Materials:	Construction employs all corrosion-resistant materials and hardware.
Finish:	Black or White
Size & Weight:	Refer to "Gallery Series LED Luminaires Dimensions" on page 25
Compliance:	cETLus Listed to UL1573 & 1574, CE Marked



Common model specifications shown. For specific model specifications, features, and accessories, refer to the product specification sheet or visit the Altman Lighting web site at www.altmanlighting.com.

