MedLux® Wall GPI

LED graphic panel illuminator

Non-MRI

INSTALLATION MANUAL





TO AVOID DOING IRREPARABLE DAMAGE TO DRIVE CIRCUITRY NEVER APPLY AC POWER DIRECTLY TO LED LIGHTBOXES!



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1.0 SAFETY

For the safe handling, installation and operation of the MedLux® GPI system, a thorough review and understanding of the material written in this manual must be completed before starting the installation process. Failure to properly install the MedLux® GPI system per these instructions will void your warranty. There are no serviceable components in the MedLux® GPI system. Attempting to repair or alter the MedLux® GPI system in any way will also void your warranty. Always install the MedLux® GPI according to all local, state, and national codes.

Other Important Safety Precautions:

- ✓ All MEDLUX® GPI System components are designed for indoor use and installation ONLY.
- ✓ Make sure that all required safety equipment is present and all workers are familiar with the local safety codes.
- ✓ Installation requires a separate 120-VAC branch circuit (rated at 20 Amps) for service to the power supply assembly(ies).



POWER TO MEDLUX® SYSTEM MUST BE DISCONNECTED BEFORE ATTEMPTING TO WIRE OR SERVICE THIS PRODUCT AT ANY TIME.

2.0 APPROVALS

- 1. <u>UL/cUL:</u> The MedLux® GPI system is constructed as an Indoor Section Sign System per UL 48, ELECTRIC SIGN STANDARD (both US and Canadian Requirements).
- 2. **CE:** The MedLux® GPI system is compliant with all applicable European directives. Approval is pending.
- 3. **LOCAL AUTHORITY:** The subcontractor/installer should secure permits with the appropriate authorities.

3.0 INTRODUCTION

3.1 SCOPE

This manual provides the instructions for the installation of a MedLux® GPI system. All MedLux® GPI System components are designed for Indoor use ONLY. For assistance during the installation process or operation thereafter, please contact Everbrite's Technical Support Group at 1-800-610-6053 between 8:00 am - 5:00 pm CST.

3.2 SYSTEM COMPONENTS - SUPPLIED

The following components are included in the MedLux® GPI system purchased:

- Class 2 rated LED Power Supply(ies)
- MedLux® GPI Light Box
- "Z" Bar Mounting Bracket(s)
- Power Feed Cable(s)
- Optional Seismic Event Retention Bracket
- Graphic Panel (When supplied by Everbrite)
- Installation Instructions

3.3 SYSTEM COMPONENTS - NOT SUPPLIED

The following components are not supplied by Everbrite, LLC and must be made available by the customer to complete the installation process:

- Class 1 Conduit / Junction boxes for incoming mains power wiring
- Double Gang Plastic Wall Box
- Graphic Panel (When supplied by Customer)

3.4 TOOLS AND MATERIALS



The following items are recommended for the installation of this product.

- Tape Measure and Ladder(s)
- Wire Strippers
- Screwdrivers appropriate for hardware
- #10 x 1" sheet metal or lag screws for mounting Power Supply(ies) Qty (2) per unit
- Drill with hole forming bit or saw appropriate for thru-wall

3.5 GLOSSARY OF TERMS

<u>Class 2 Power Supply</u>
An AC/DC power conversion device specifically designed for driving LED loads, with a wide input range of 100 – 277 VAC,

and a 48 Volt regulated DC output. See Figure 1.

<u>Graphic Panel(s)</u>

Panels containing graphics specified by the customer and used to comfort a patient. See an example on the cover page.

4.0 PRE-INSTALLATION

4.1 PRODUCT RECEIPT AND INSPECTION

Upon delivery, **immediately** uncrate the MedLux® GPI product. Inspect the product to ensure that nothing is damaged and that all components have been received. **Immediately** notify the Freight Company of any damaged components. Damaged product must not leave the loading dock until the shipper can verify claim. You will be held responsible for any damage not reported within fifteen (15) days of receipt of shipment.

4.2 SITE PREPARATION

Before beginning site work, notify the business or construction manager of the following:

- Scope of Work include length of installation, any disruptions to electrical service, and what hours you will be working
- Any safety requirements or conditions specific to the installation site.
- Mounting location of the MedLux® Power Supply(ies). See the approved site documentation for approximate location(s).

Also ensure that:

• The installation surfaces for the Power Supply(ies) are flat, clean and free of any debris or obstacles.

4.3 VERIFICATION BEFORE INSTALLATION

- 1. Each MedLux® Power Supply is intended to power <u>only</u> the MedLux® GPI System Component(s) as indicated in these instructions.
- 2. A minimum clearance of 3.0" above the top edge of the GPI frame is required for installation above any MedLux® Wall GPI Light Box.
- 3. The size of the rigid graphic panel being installed requires a certain thickness to support its own weight. The MedLux® GPI requires an image thickness of 1/4".

4.4 ELECTRICAL REQUIREMENTS

Using the site documentation, locate the power supply assembly location(s). Circuits must be wired in accordance with all local and state electrical codes. Per the NEC, a mains disconnect switch is required to be installed within sight of the power supply assembly(ies). A suitably located circuit breaker is an acceptable disconnect.

5.0 INSTALLATION

5.1 THE GPI POWER SUPPLY

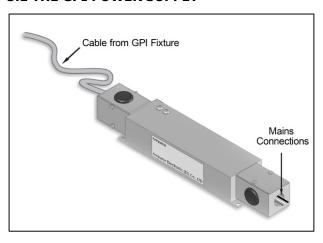


Figure 1: GPIw Power Supply (Non-MRI version)

The power supply converts incoming electrical power down to 48 volts DC. Mount the GPI Power Supply(ies) according to the approved system layout documentation. The power supply assembly is intended for **INDOOR USE**ONLY. All power supply mounting hardware is to be supplied by the customer or subcontractor. Mounting orientation may have mains connections coming into the end bell j-box from any side. To install, proceed as follows:

NOTICE

All Class 1 wiring should be done by a certified electrician.

1. Determine and mark location(s) for mounting the power supply per approved system layout documentation.

NOTICE

One or more power supply units may need to be mounted depending on the system configuration.

2. Mount the GPI Power Supply module using two #10 x 1" sheet metal or lag screws as required.



VERIFY THAT POWER IS OFF FROM THE FACILITY'S MAIN ELECTRICAL POWER SOURCE TO ELIMINATE POSSIBLE ELECTRIC STOCK AND INJURY DURING INSTALLATION.

5.2 GRAPHIC PANEL INSTALLATION



Figure 2: Wall GPI Light Box

In some cases, the graphic panel(s) may be supplied and installed by the customer. See cover of this manual for an example of a typical panel installed. The instructions that follow will detail the installation process.



Contact with any of the internal components of the GPI Light Box can damage or drastically reduce the light output of the product if touched or bumped.

To install or remove graphic panels from the GPI Light box(es), proceed as follows:

For Installations

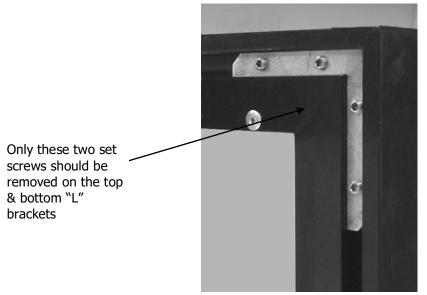


Figure 3: Set Screws & "L" Bracket on Extrusion



A GPI Box could weigh in excess of 100lbs. and could cause personal injury if not handled properly by able bodied personnel.

- 5.2.1 Support the GPI light box upright with access to the set screws and "L" bracket on the back of the left-side extrusion.
- 5.2.2 Remove set screws from the top and bottom of left-side extrusion "L" Bracket. See Figure 3.
- 5.2.3 Remove left-side extrusion from the GPI Light Box.

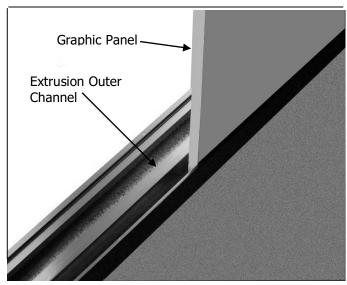


Figure 4: Light Box Channels

- 5.2.4 Slide the graphic panel into the outer most channels of the top and bottom extrusions. See Figure 4.
- 5.2.5 Continue sliding the panel until it butts up to the right-side of the right extrusion of the light box.
- 5.2.6 Reinstall the left-side extrusion and tighten set screws.

5.3 MOUNTING THE LIGHT BOX

Before installing the hardware and supports for a specific GPI Light Box, the installer must first determine the type and number of fasteners needed for the job. Position the "Z" brackets so a sufficient number of wall studs are utilized to support the weight of the panel being installed. Reference the Mounting Specification drawing in Appendix 7.1 for relative weight information.

- 5.3.1 Once the desired wall and location for installation of the GPI Light Box is determined, mark a level line 3" down from what would be the top edge of the box. Extend the line across to within 3" of each vertical side.
- 5.3.2 Mount the "Z" bar support (s) so the bottom edge is aligned with the line marked in step 5.3.1.

 Reference the Mounting Specification drawing in Appendix 7.1 for relative mounting information.
- 5.3.3 Locate and mount the two gang flush junction box as specified in the Mechanical Specification Drawing (Section 7.1).
- 5.3.3 Pull the specified number of power feed cables to the Power Supply(ies). Allow 6' of cable at the connector end to extend from the pull box down the wall.
- 5.3.4 Make Power Interlock Connections between the blue GPI load cable(s) and the yellow source cable(s) before installing onto wall. There is no particular sequence, simply match any yellow with any blue connector.

5.4 FINAL ASSEMBLY OF GPI FIXTURE

- 5.4.1 Lower box and support the GPI light box upright with access to the set screws and "L" bracket on the back of the left-side extrusion. Do not disconnect any of the cables attached to the back of the GPI.
- 5.4.2 Remove set screws from the top and bottom of left-side extrusion. See Figure 3.
- 5.4.3 Remove left-side extrusion from the GPI Light Box.
- 5.4.4 If replacing existing graphic, slide the panel out of the extrusion channels. See Figure 4.
- 5.4.5 If graphic panel is not already installed, slide the new graphic panel into the outer most channels of the top and bottom extrusions until it butts up against the right-side of the light box.
- 5.4.6 Reinstall the left-side extrusion and tighten set screws.
- 5.4.7 Lift evenly from both ends of the light box, leaning the bottom edge out slightly and then lowering it on the "Z" bar support bracket (s).
- 5.4.8 Reinstall seismic support bracket if used.
- 5.4.9 Turn on power to the GPI Light Box.

5.5 GRAPHIC PANEL REPLACEMENT

- 5.5.1 Turn off the GPI. If present, remove the seismic support bracket.
- 5.5.2 Pull the bottom edge of the GPI Light Box away from the wall approximately ½" to 1.0".

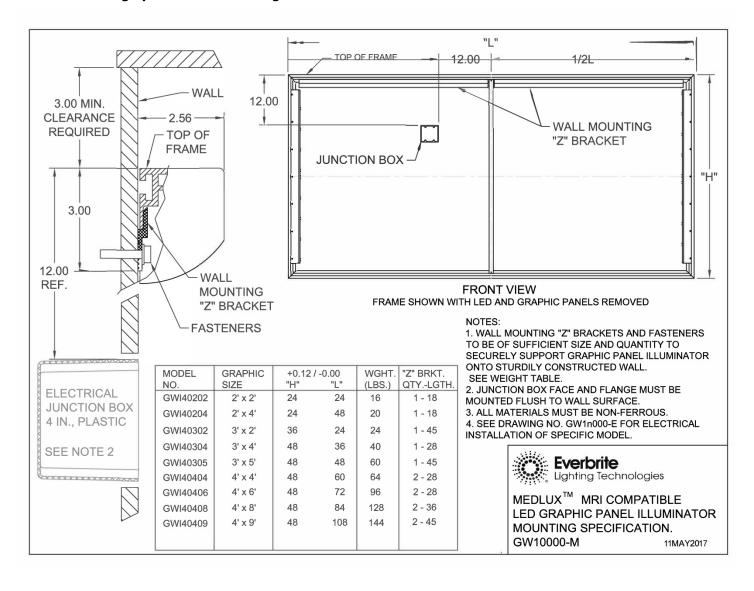
- 5.5.3 Lift evenly from both ends of the light box until it clears the "Z" bar supports attached to the wall behind the box.
- 5.5.4 Proceed to 5.4.1

6.0 SITE CLEAN-UP

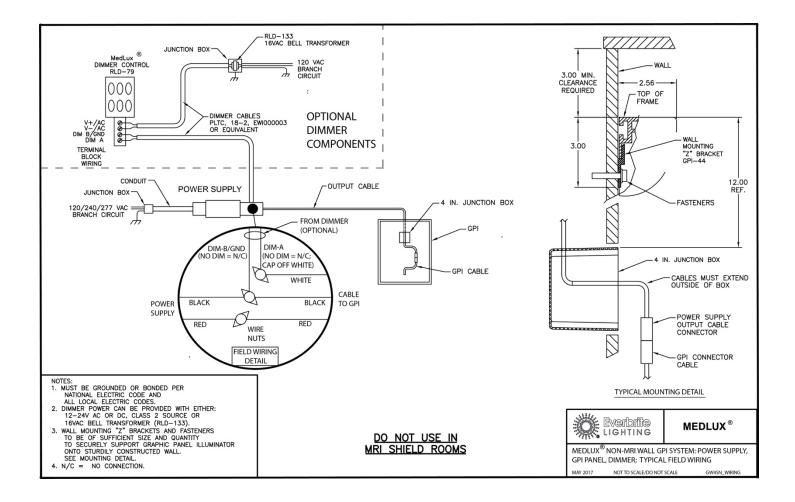
Ensure that all packaging materials, screws, tools, etc. are disposed of properly.

7.0 APPENDICES

7.1 Mounting Specification Drawing



7.2 WIRING DIAGRAM



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