



Leggett & Platt[®]
INCORPORATED

HELIOS[™]
the power to connect wirelessly[™]

INSTALLATION INFORMATION FOR ORIGINAL EQUIPMENT MANUFACTURERS



Model Number: LPIC-L0001
Model Number: LPIC-P0001
Model Number: LPIC-S0001

IMPORTANT – PURPOSE OF DOCUMENT

THIS DOCUMENT IS FOR USE ONLY BY ORIGINAL EQUIPMENT MANUFACTURERS (OEMs) WHO PURCHASE THE REFERENCED HELIOS[™] COMPONENTS FROM LEGGETT & PLATT[®], INCORPORATED OR ITS AFFILIATES (L&P). NEITHER THIS DOCUMENT NOR THE INFORMATION IN THIS DOCUMENT IS INTENDED FOR DISTRIBUTION TO, OR USE BY, END USERS OF OEM PRODUCTS WHICH INCORPORATE HELIOS[™] COMPONENTS (END USERS). BY PURCHASING HELIOS[™] COMPONENTS FROM L&P, EACH OEM ASSUMES, AND SHALL HAVE SOLE AND FULL RESPONSIBILITY FOR, PROVIDING APPROPRIATE INSTRUCTIONS FOR USE OF SUCH OEM PRODUCTS.

L&P ASSUMES THAT ALL OEMs WHO PURCHASE FROM L&P AND WHO USE THIS DOCUMENT HAVE EXPERTISE IN THE USE OF ELECTRICAL DEVICES AND COMPONENTS, INCLUDING THE EXPERTISE NECESSARY TO (i) DETERMINE WHETHER OR NOT HELIOS[™] COMPONENTS ARE SUITABLE FOR USE WITH THE OEM'S PRODUCT, AND (ii) PROPERLY AND SAFELY CONFIGURE AND INSTALL HELIOS[™] COMPONENTS. ACCORDINGLY, THIS DOCUMENT IS INTENDED ONLY AS A HELPFUL SUPPLEMENT FOR USE BY THE OEM AND NOT AS A SUBSTITUTE FOR THE OEM'S EXPERTISE OR THE OEM'S RESPONSIBILITY FOR PROPER AND SAFE DESIGN OF ITS PRODUCT AND INSTALLATION AND USE OF HELIOS[™] COMPONENTS. IF ANY OEM USING THIS DOCUMENT LACKS SUCH EXPERTISE OR DOES NOT AGREE TO THE FOREGOING LIMITED PURPOSE STATED FOR THIS DOCUMENT, SUCH OEM SHOULD IMMEDIATELY NOTIFY L&P IN WRITING TO THAT EFFECT AND SHOULD NOT USE THIS DOCUMENT.

PRICES AND OTHER TERMS AND CONDITIONS FOR SALE OF HELIOS[™] COMPONENTS TO ANY OEM ARE GOVERNED BY SEPARATE DOCUMENTS ISSUED OR MADE AVAILABLE TO THE OEM BY L&P, INCLUDING THE INVOICE ISSUED BY L&P AND THE STANDARD TERMS AND CONDITIONS OF SALE LOCATED AT <http://www.Leggett.com/po-terms-conditions.htm>.

SAFETY INFORMATION

L&P EXPECTS THAT THE OEM WILL INCLUDE APPROPRIATE SAFETY WARNINGS AND INFORMATION FOR END USERS OF ALL OEM PRODUCTS WHICH INCORPORATE HELIOS™ COMPONENTS. SUCH WARNINGS AND INFORMATION MUST INCLUDE THOSE SET FORTH BELOW AND OTHER WARNINGS AND INFORMATION AS THE OEM DETERMINES NECESSARY AND APPROPRIATE.

DANGER

To reduce the risk of electrical shock:

- Always unplug the appliance from the electrical outlet before removing
- Do not reach for an appliance that has fallen into water – unplug it immediately
- Do not disassemble or modify any part of this appliance
- Do not install this product in any electrically conductive surface

WARNING

To reduce the risk of burns, fire, electrical shock, or injury to persons:

- This product should not be used by children or persons with disabilities that may hinder their ability to understand all product information and use the product safely. Close supervision is necessary when this product is used near children or persons with disabilities
- Use this product only for its intended use as described in this manual
- Never operate this product if it has a damaged housing, cord, plug cable, or if wet
- Keep cord away from heated surfaces and liquid
- Do not operate where aerosol products are being used or oxygen is being administered
- This product is designed for indoor use only. Do not install or use this product outdoors
- Do not use this appliance with an extension cord or overloaded electrical outlet
- Do not place or leave metallic objects between the charging surface and device being charged
- It is recommended that the Helios™ charger be installed to provide 10 cm of separation from persons

IMPORTANT SAFETY INSTRUCTIONS

- 1. SAVE THESE INSTRUCTIONS** – This manual contains important safety and operating instructions for inductive chargers
Models: LPIC-L0001, LPIC-P0001, LPIC-S0001
- 2.** Before using the inductive charger, read all instructions and cautionary markings on the inductive charger, power supply, and product using the inductive charger
- 3. CAUTION** – To reduce risk of injury, charge only Qi-certified products. Other types of inductive charging devices may cause personal injury and damage

FCC & INDUSTRY CANADA COMPLIANCE

The OEM shall inform end users of the following to the extent applicable:

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS Standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

“Le présent appareil est conforme aux CNR d’Industrie Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes: (1) l’appareil ne doit pas produire de brouillage, et (2) l’utilisateur de l’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.”

Changes or modifications not expressly approved by Leggett & Platt, Incorporated could void the user’s authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

“Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.”

“Conformément à la réglementation d’Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d’un type et d’un gain maximal (ou inférieur) approuvé pour l’émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l’intention des autres utilisateurs, il faut choisir le type d’antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l’intensité nécessaire à l’établissement d’une communication satisfaisante.”

EUROPEAN DECLARATION OF CONFORMITY

We, Leggett & Platt, One Leggett Rd. Carthage, MO 64836, USA, declare under our sole responsibility that the product

Helios Standard LPIC-S0001
Helios Puck LPIC-P0001
Helios Lo-Profile LPIC-L0001

to which this declaration relates is in conformity with the following standard(s) or other normative document(s)

EN 300 330-2 V1.5.1
EN 310 489-3 V1.4.1
EN 301 489-1 V1.8.1
EN 55011:2007/A2:2007-Group 2, Class B
EN 61000-6-1:2007
EN 60950-1:2001

following the provisions of Electromagnetic Compatibility, R&TTE Emissions, and Safety directive(s).

The Technical Construction File is maintained at:

Leggett & Platt, Inc.
Idea Center
1914 S. Baker
Carthage, MO 64836 USA

SAFETY CONSIDERATIONS for OEM INSTALLERS

Safety is dependent on the proper installation and servicing of this charger. It is important to read and follow all instructions before installing this product. To properly install a Helios™ charger you must have a good understanding of electrical procedures and systems, along with proficiency in the installation and service of office and residential work surfaces. There are no adjustments required at any time of the electrical components within the charging mount. **OEMs and installers should not open the charger housings or make modifications to the Helios™ charger or components unless expressly approved in writing by an authorized representative of Leggett & Platt, Incorporated. Any changes or modifications will void the product warranty.**

During Installation

- **DO NOT** connect this charger to an electrical outlet until:
 1. **ALL** other electrical connections are made
 2. Mounting of **ALL** components is complete
 3. **VERIFICATION** that no short circuit exists in the entire system
- **DO NOT** install equipment or route wiring cords in the path of any walkways or moving components
- When drilling into the work surface, **DO** make sure that both sides of the surface are clear of anything that could be damaged

After Installation

- Test the charging mount to ensure that it is working properly (see LED Indicator Lighting)
- File these instructions in a safe place and refer to them when performing maintenance or re-installing

WARNING: Failure to follow all safety precautions and instructions may result in death, serious injury, or property damage. The OEM assumes sole responsibility for such precautions and instructions and for any failure to follow them.

Disclaimer

By proceeding with installation of Helios™ components in OEM products, the OEM agrees that: (i) L&P is not liable under any theory of contract, tort law, or otherwise for any loss, damage, death, personal injury, special, incidental, or consequential damages, or any other damage of any nature arising directly or indirectly from or relating to the improper installation or use of L&P products or components in residential or office furniture or any other application; and (ii) the OEM will defend, indemnify, protect, and hold harmless L&P and each of its affiliates, officers, directors, agents, and employees from and against any such liability, claims, injuries, losses, and damages. In order to safely install and use L&P products and components, full consideration of the work environment (e.g., location of electrical wiring, support members, surface thicknesses, and other electrical and structural components) is required. L&P disclaims responsibility for improper use or installation of products or components and use or installation not consistent with the original manufacturer specifications and recommendations (if any) for such products or components.

Warranty Information

Neither this document nor the statements in this document create any warranties, express or implied, regarding Helios™ components. All information regarding any warranties made by L&P to the OEM purchaser of Helios™ components is located in separate documentation provided by L&P to the OEM. L&P makes no other warranties and specifically disclaims any express or implied warranties of merchantability or fitness for purpose. No warranty shall extend to any person other than the OEM who purchases the Helios™ component from L&P.

CERTAIN PRE-INSTALLATION CONSIDERATIONS

The OEM is solely responsible for taking all steps necessary and appropriate for safe and proper installation of Helios™ components. These steps include, without limitation, the following:

Instructions & Personnel

The OEM should use only properly trained and qualified personnel for installation. The OEM should assure that all such personnel read and fully understand this document prior to beginning installation.

Conduct a “Bench Test”

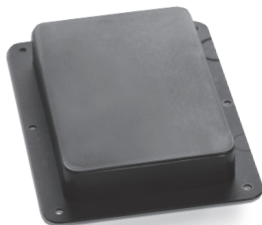
The OEM should conduct a “bench test” to verify that all electronic issues are resolved prior to installation:

- Make sure the Helios™ charger is operational with a Qi-certified secondary device before being installed
- Check the LED harness connection for proper fit (see LED Connection)
- Check the Power Supply connection for proper fit (see Power Supply Connection)
- Dry-fit the Helios™ charger in the predefined surface to make sure there are no obstructions

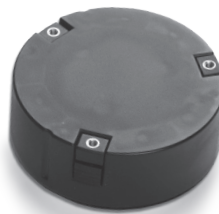
INSTALLATION INSTRUCTIONS

Before discarding any packaging materials, check the Helios™ shipping carton and verify the following items are included:

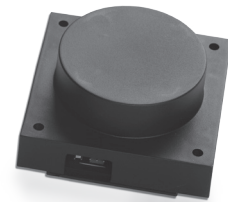
- (1) Helios™ charger enclosure (all three models are shown below for clarity)



LPIC-L0001



LPIC-P0001



LPIC-S0001



(1) Power Supply



(1) LED cord

The work surface will require a recessed pocket that allows the Helios™ charger to be mounted .063 inches from the charging surface and the top surface of the Helios™ enclosure (see Figures 3, 6, & 9). The recessed pocket should be created using best practices for the intended material. The supplied LED indicator requires a thru hole, and in some cases a counter bore, and should be located within 10 inches of the connection point to the Helios™ charger (see Figures 3, 6, and 9). Consideration and implementation of cord management should be used when installing the LED and in some cases the power supply. The Helios™ charger should be positioned on the work surface where the provided power supply can reach an electrical outlet without interfering with walkways or moving components. The Helios™ charger should not be installed in any electrically conductive work surface.

ADDITIONAL INFORMATION – SPECIFIC HELIOS™ MODELS

MODEL NUMBER LPIC-L0001

This Helios™ charger requires (6) #6 x 1/2" Phillips round-head wood screws (not included) to be inserted into the provided holes to hold the charger in place, assuming the work surface is 3/4 inch thick (see Figures 1 and 3). Special consideration for the screw size must be taken by the installer; the screw length should not pierce through the top surface of the work surface and may differ from work surface to work surface.

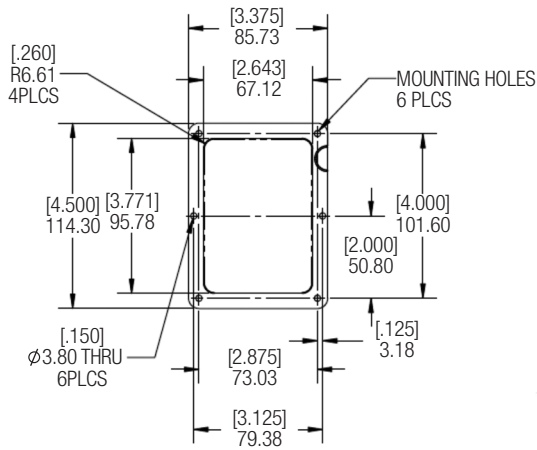


Figure 1

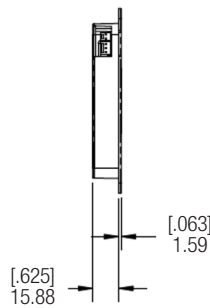


Figure 2

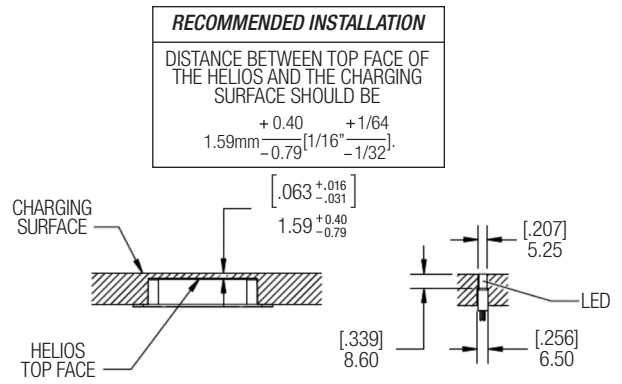


Figure 3

MODEL NUMBER LPIC-P0001

This Helios™ charger requires a 3/32" hex wrench (not included) to secure the charger in place. After installing the Helios™ charger to the desired depth, tighten the three hex-head screws until the wedge nuts are securely in place (see Figures 4 and 6).

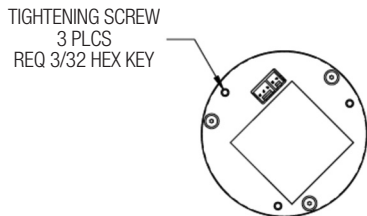


Figure 4

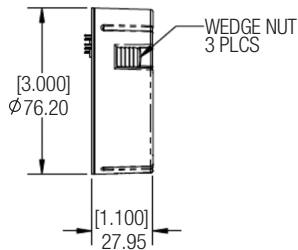


Figure 5

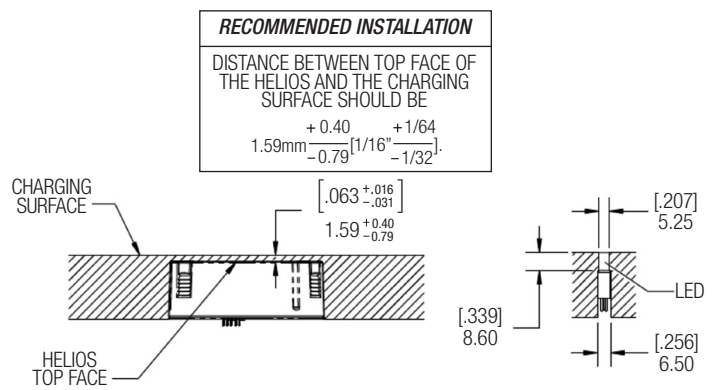


Figure 6

MODEL NUMBER LPIC-S0001

This Helios™ charger requires (4) #6 x 1-1/4" Phillips round-head wood screws (not included) to be inserted into the provided holes to hold the charger in place, assuming the work surface is 3/4 inch thick (see Figures 7 and 9). Special consideration for the screw size must be taken by the installer; the screw length should not pierce through the top surface of the work surface and may differ from work surface to work surface.

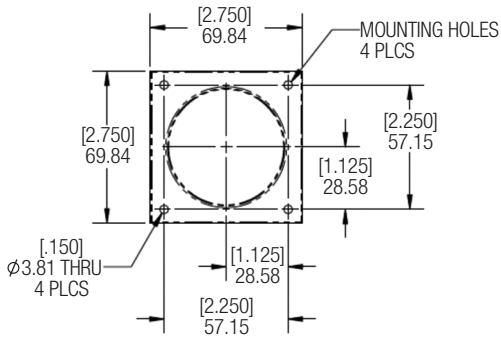


Figure 7

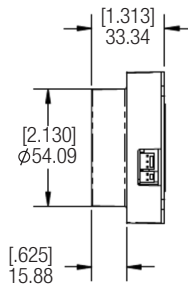


Figure 8

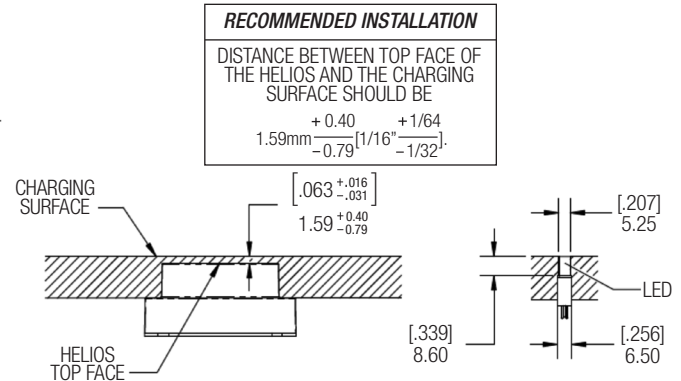


Figure 9

POWER SUPPLY & LED CONNECTION: LPIC-L0001, LPIC-P0001, LPIC-S0001

Connect Power and LED connectors to Helios™ unit as shown in Figures 10, 11, and 12. Pay particular attention to the orientation of the “clip” on the Helios™ PCB and the tab on the mating Molex connectors.

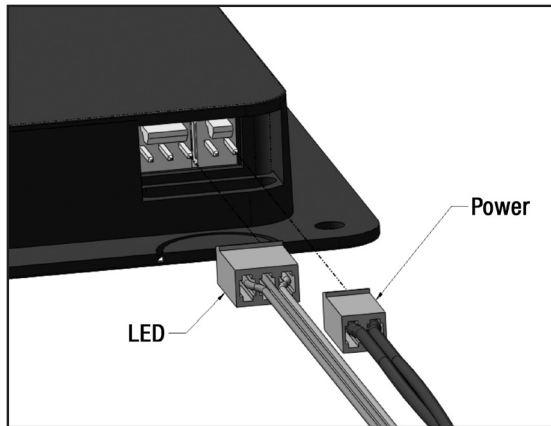


Figure 10 (LPIC-L0001)

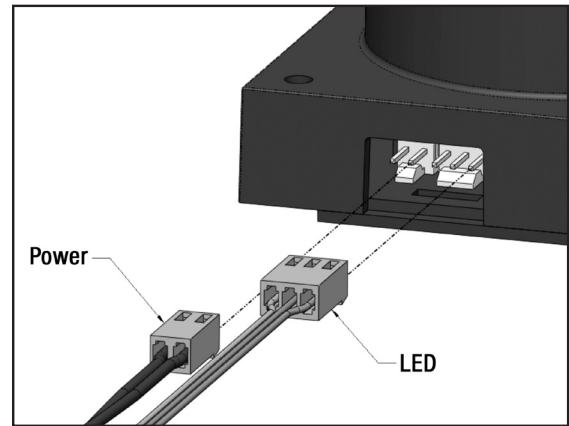


Figure 11 (LPIC-S0001)

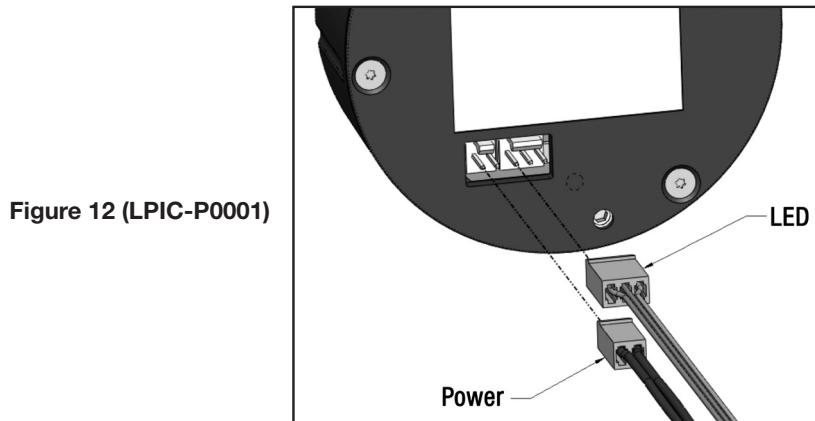


Figure 12 (LPIC-P0001)

LED INDICATOR LIGHT

The Helios™ charger is equipped with a bi-color LED indicator light. The LED has four states: Green, Amber/Yellow, Red, and Off. Each state communicates the following:

LED is Off = Helios™ charger is not charging

- No secondary device is present
- Secondary device is incompatible with the Helios™ charger
- Secondary device is not properly aligned
- Power supply is not properly attached to the Helios™ charger
- Power supply is not plugged into electrical outlet

LED is Green = Helios™ charger is not charging and the secondary device is fully charged

- Secondary device battery is fully charged
- Secondary device coils are aligned and not charging

LED is Amber/Yellow = Helios™ charger is charging

- Secondary device battery is receiving a charge
- Secondary device coils are aligned

LED is Red = Error in charging

- Secondary device battery is not receiving a charge
- Secondary device coils are aligned and there is a fault in the Helios™ charger or there is a fault in the secondary device
- Helios™ charger is over temperature

CAUTION – To reduce risk of injury, charge only Qi-certified products. Other types of inductive charging devices may cause personal injury and damage and will not operate with the Helios™ inductive charger.

POWER SUPPLY INFORMATION

These Helios™ inductive chargers are supplied with a Class II power supply having the following specifications:

Output Voltage: 19VDC 520mA

Input Voltage: 100 – 240VAC 50-60Hz

Operating Temperature: -5°C - +40°C

Operating Humidity: 30% - 85%

Energy Star Rating: V

Country of Origin: China

IMPORTANT – Under no circumstances should the OEM use or supply the end user with a power supply that was not originally provided with the Helios™ product.

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Qi is the universal standard for inductive charging. Qi-enabled devices will work with Qi chargers.