

# L506 Wireless Lamp Control Module Installation Guide

The L506 FET dimmer can drive dimmable CFL loads and other loads:



- 100W Incandescent
- 35W Dimmable CFL or 100W incandescent equivalent
- 25W LED or 100W incandescent equivalent

As an alternative to the L206 lamp socket module, the L506 provides wireless lamp control with a smaller footprint. Designed for standard medium lamp sockets (E26 Edison), the RF-equipped device can be controlled from any INNCOM IRAS device with an RF transceiver. The socket is equipped with a mechanical button that can control the load and assist in device binding. The L506 series will eventually incorporate sibling products designed for other lamp socket types.

## Installation

*The installer must be a trained, experienced service technician.*

*When installing this product:*

1. Read the instructions carefully. Failure to follow them could damage the product or cause hazardous conditions.
2. Check the ratings given in the product guide to make sure the product is suitable for your application..

3. Use the L506 module only with a recognized or listed lamp holder assembly.

**CAUTION:** The distance between the bulb and the shade should be equal to or

greater than required by the original UL listing for the lamp base. Improper placement is a fire hazard.

## Mounting

The L506 may be mounted in vertical/bulb up, horizontal, or vertical/bulb down fixtures. **CAUTION:** The bulb-down orientation should generally be confined to open air installations; if used with a shade, the fixture should be further derated (see table below).

1. If the lamp's Edison socket has a switch, make sure it is in the full on position, then remove or disable it.
2. The L506 dimmer-equipped lamp must be within 60 feet (indoors) of an RF transceiver/repeater.
3. Unplug the lamp cord from the power source (e.g., wall socket).
4. Remove any shade and lamp harp.
5. Remove the bulb; screw the L506 dimmer/switch into the lamp socket.
6. Reinstall the bulb, then the lamp harp (if used). Rotate the harp if necessary to clear the L506 socket. Plug the lamp back into the power supply.

**Derating:** Do not exceed an ambient air temperature of 25°C surrounding the L506 Lamp Controller when operating the lamp with the specified loads and orientations, as outlined in the following table.

Maximum Ratings		
	Vertical Base Down (bulb up) or Horizontal	Vertical Base Up (bulb down)*
Incandescent	100W	60W
Dimmable CFL	35W	20W
LED	25W	10W

\*Open air only. If fixture enclosed, further derating is necessary

## Communications

The L506 can switch on a light using the built-in on/off button. For remote and dimming operation, the L506 must be located within 60 ft. of an originating RF transmitter (any IRAS RF device can be configured as a repeater). The L506 must be commissioned. The outline below assumes the installer understands the commissioning process in general; specific commissioning procedures can be found on the property-specific commissioning sheet.

## Commissioning

The L506 must be bound to an RF control device such as an e528 thermostat.

1. The L506 enters bind mode for the first 2 minutes after powering up;

to re-enter bind mode, unscrew the L506 from the fixture and then screw it back in.

2. On the e528, enter the Service menu.
  - Press and hold the F°/C° button
  - Press and release OFF/AUTO
  - Press and release DISPLAY
  - Release F°/C°
3. Use the UP or DOWN arrows to go to the Address parameter (ADR).
4. Press DISPLAY. Use the UP/DOWN arrows to enter the ADR value from the commissioning sheet.
5. Press OFF/AUTO; a single beep should sound.
6. On the L506, press and hold the built-in on/off button for 5 seconds. The e528 will beep quickly 3 times to confirm binding.

## Operation

Besides being used in the binding operation, the built-in button on the L506 can control the lighting load. Press and hold the button to adjust lighting (dimming) levels up or down. A quick press will turn the light off or on.

The L506 has a status indicator LED. When the lamp is on, the LED is too.

## Technical Specifications

Parameter	Rating
Power	110-120VAC, 50/60Hz 0.9A dimmable output
Standby power	1.3W
Standby current	11mA
Operating Environment	0–25 C°

Parameter	Rating
Dimensions:	63.3mm L x 47.3mm W x 98mm H (with socket)
Approvals	FCC Part 15b, Class A, UL

FCC ID: GTC202516TXR

*This device complies with part 15 of the FCC Rules. 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.*

*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 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.

*Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.*

C ID: 1609A-202516TXR

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

*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.*