EU605 WIRELESS LED BULB

These instructions should be read in conjunction with your System Installation and Operating Manual and be retained for future reference.

This Wireless LED Bulb is designed to work with a Master device (e.g. U-Net Gateway or Control Panel) or with other associated devices (up to 11 devices). The bulb can be powered on or off wirelessly by a Gateway or associated devices. It can be used to control the on/off status of other associated devices as well. The unit is a transceiver which belongs to the member of U-Net series and is compatible with other U-Net enabled systems. The LED Bulb can connect with U-Net wall switches, U-Net on/off plugs, or other EU605 LED Bulbs.

Product Overview



Safety Precautions

- 1. Do not put the unit in humid or dusty places or facing direct sunlight.
- 2. The suitable ambient temperature for the unit is 0°C +40°C (indoor).
- 3. Do not place the unit near combustible substances or any source of heat, e.g. fires, radiators, boilers etc.
- 4. Avoid installing this product in storming or raining weather.
- 5. Turn off or isolate the power supply during installation or maintenance.
- 6. Consult with a professional electrician about proper installation methods if you are not familiar with the techniques.
- 7. This product is not designed for use with dimmable lighting fixtures.

- 8. The alloy case and glass can become very hot while in use or after use. Allow the bulb to cool down a while after switching off.
- 9. This bulb should be installed in a well-ventilated lighting fixture:



Initial Power Up / Auto-binding with Master Device

The LED Bulb must complete the ID learning process before it can function normally in the system. When the unit is powered on and no ID code is stored in the memory, it will enter auto-binding status and can "auto-bind" with a Master device (e.g. U-Net Gateway or Control Panel) provided the device is present. The status will last for 30 seconds and the light will flash (on for 0.5 second; off for 0.5 second). If the auto-binding is successful, the unit's ID code will be learned and recognized by the Master device automatically (and the unit will remember the device's ID as well).

If a Master device is not present and the auto-binding period expires, you will need to power off and then power on again for the LED Bulb to re-enter the auto-binding mode.

Note: If no ID code is stored in the unit and you want to do code learning with a compatible U-Net device of your choice (including non-Master devices), you can force the unit to do so:

- 1) First ensure the LED Bulb is powered on (in auto-binding mode).
- 2) Power off and on the LED Bulb twice (off-on; off-on) within 2.5 seconds. The light will flash quickly for 3 times, indicating the LED Bulb has exited auto-binding mode. Then the light will flash moderately (on for 0.5 second; off for 0.5 second) for 30 seconds and the unit is ready to learn a Master or Slave device ID. If the unit learned a non-Master device in this way, you can later do the code learning with a Master device manually.

Learning ID Code Manually

After the unit already learned one ID code (whether it is a Master device ID or not), you can do ID code learning with other device by following the steps below:

1. First ensure the LED Bulb is turned on.

- Power off and on the LED Bulb twice (off-on; off-on) within 2.5 seconds. The light will begin to flash moderately (on for 0.5 second; off for 0.5 second) for 30 seconds and the unit is ready to learn a device ID.
- 3. Operate the to-be-connected device to emit its ID code to the LED Bulb to complete code learning.
- 4. If the LED flashes rapidly (on for 0.1 second; off for 0.1 second) for 3 times, it can be ascribed to one of the following conditions:
 - a. The LED Bulb failed to learn ID code after it enters the 30-second code learning countdown.
 - b. The LED Bulb enters auto-binding mode and then the user operates the unit to learn a device manually.
 - c. The LED Bulb has already learned 11 non-Master ID codes.

Note:

- 1) To fully control the unit, the auto-binding and/or ID code learning process must be completed.
- 2) When doing manual code learning, two (or more) LED Bulbs cannot be installed in the same lighting fixture.
- 3) The ID code setting is stored in non-volatile memory and is not lost during power-off period.
- 4) Up to 11 ID codes and 1 Master Device ID can be learned. Only the last learned Master Device ID code will be stored.

Clearing ID Code

- 1. First ensure the LED Bulb is on; then power off and on the LED Bulb twice (off-on; off-on) within 2.5 seconds. The unit enters code learning mode and a 30-second countdown starts.
- 2. After 4 seconds into the 30-second countdown, power off and on the LED Bulb twice within 2.5 seconds again. All the stored ID codes will be cleared. The light will flash (on for 1 second; off for 1 second) for 5 seconds. Then the LED Bulb will enter code learning mode automatically and can learn either a Master or Slave device.

Installation

Note:

1) Ensure the unit is installed within transmission range of all devices that it would

need to communicate with.

- 2) Turn off or isolate the power supply during installation or maintenance.
- 3) If multiple LED Bulbs are installed, ensure the distance between any two bulbs is at least 20cm or more.
- 4) For LED Bulb status report, do not connect more than 5 LED Bulbs to one power source/switch.
- 5) If using a ladder is needed, ensure that the ladder is solid and placed on a flat and stable surface.

Screw the bulb into the standard Edison base as indicated and turn on the power to start code learning. The bulb should be installed indoor and should be kept from high temperature and heavy humidity.



Operation

Note: The Bulb can work in one of two modes: either with a gateway (gateway mode) or with associated devices (standalone mode). The two modes should not be mixed and used at the same time. If you want to change the operation mode (ex. switching from working with a gateway to associated devices), you should clear the ID code(s) of the bulb first and then learn the ID code(s) of the device(s) that the bulb will work with.

Gateway Mode:

- When the LED Bulb is powered on, it will start sending the data of its operation status to the Master device after about 2 minutes. Afterwards the LED Bulb will report its status to the Master device once every 60 minutes.
- The Gateway can emit a "Device Status" enquiry command to the unit. The LED Bulb will report to the Gateway of its on/off condition and communication status.
- The LED Bulb will send a signal to the Gateway when it is powered on/off. Refer to the table below for signal types:

Power On/Off	Signal to Gateway (Master device)
LED Bulb is powered on	AC Power ON Line Trigger
LED Bulb is powered off	AC Power OFF Line Trigger

Note:

- 1. The unit must be operated under normal mode (i.e. not Auto-binding or code learning mode).
- 2. The "AC Power OFF Line Trigger" signal will be sent only after the unit has been powered on for a period of time (about 1 minute) and then powered off. That is, rapid turning on/off of the unit will not send the signal to the Gateway.

Standalone Mode:

- When the LED Bulb has completed code learning with a U-Net wall switch, it can be turned on or off by the RF command of the wall switch.
- When the LED Bulb has completed code learning with a U-Net on/off plug or another EU605 LED Bulb. it can be turned on or off by the "All On/All Off" command of the plug or LED Bulb. The bulb can control the on/off status of the associated devices as well.

Command Priority

When the LED bulb receives a user-operated command and a sensor device trigger command, the user-operated command will always prevail. For instance, when the LED Bulb receives an "On", "Remote On", or "All On" command operated by the user, and then receives a "Trigger Off" command emitted by a sensor device, the bulb will not turn off since the "Trigger Off" command is inferior to the previous user-operated command.

Troubleshooting

Symptom	Cause of Failure	Recommendation
LED Bulb does not	1. The bulb is not installed	1. Check the installation and the
illuminate	properly or the mains wire	mains wire connection
	connection is loose	2. Do not disassemble the unit; send
	2. The bulb is out of order	it for repair
The LED Bulb has	1. Nearby RF signal	1. Wait for a while and retry the
completed code learning	interference is occurring	operation
but cannot be controlled		
wirelessly		

Specification

Base	E27
Rated Voltage	220-240V/50Hz
Power Consumption (W)	About 6W
Color Temperature (K)	4000K
Mounting Height (recommended)	2.5m
CRI	>65
Lumen (Im)	about 350 lm
Lifespan (hr)	25000 (hr)
Transmitting Range	Indoor 30m (open space)
Frequency Range	923.00 MHz
Operating Temperature Range	0°C - +40°C (indoor)
Operating Humidity	85% RH

* Specifications are subject to change without notice

Caution:

For lamps with a weight significantly higher than that of the lamps for which they are a replacement, attention should be drawn to the fact that the increased weight may reduce the mechanical stability of certain luminaires and lampholders and may impair contact making and lamp retention.

Federal Communication Commission Interference Statement 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 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.

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.

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Warning:

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.