

Merlin Zone Control System Operating Instructions

WHAT IS MERLIN?

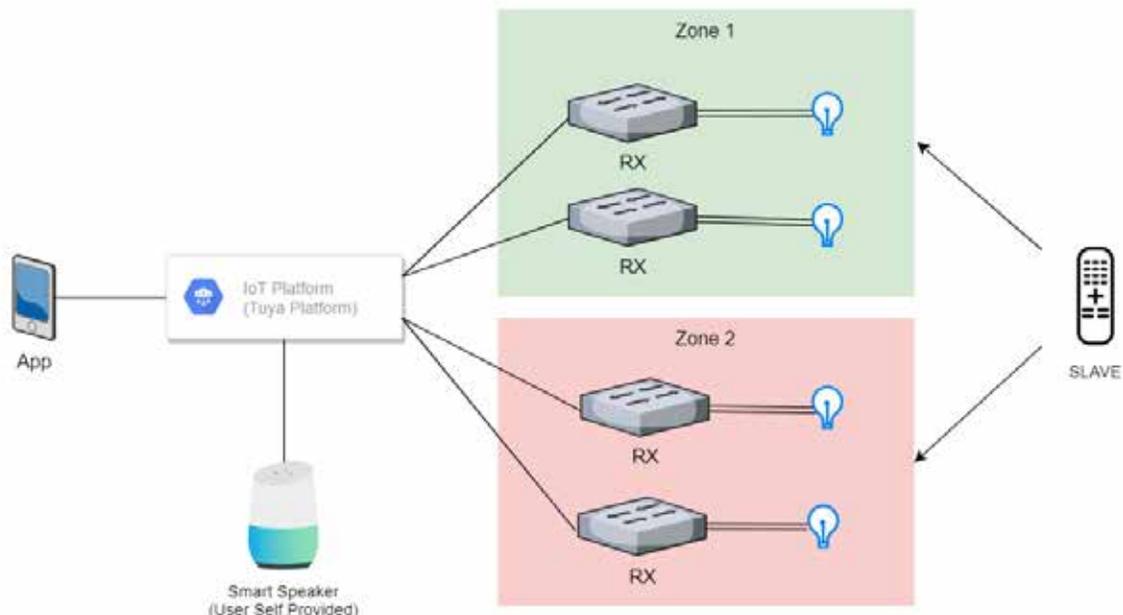
MERLIN is a hybrid WiFi/RF control system, allowing control over the 12V (Secondary) side of landscape lighting systems, to bring a new level of control to your lighting scenes. **MERLIN** enables you to create multiple areas of control over entire runs or single fixtures, giving you the ultimate in flexibility, whether installing with a new system, or retrofitting an existing system.

ILLUMiSMART APP: You can download the **ILLUMiSMART APP** onto your Mobile phone, tablet or iPad, from Apple App Store or Google Play . Using the **ILLUMiSMART APP** gives you control over all **MERLIN RX** within WiFi range. Easily schedule groups, individual zones or fixtures to turn on or off according to sunrise, sunset, timer, or manual control.

MERLIN TX: You can also control the **MERLIN RX** devices via RF using the **MERLIN TX** remote. The usable line of sight communication distance is 305m (1000 feet). 2 x AAA battery (supplied) are required. The function of **MERLIN TX** remote is based on controlling zones. The **MERLIN TX** is capable of controlling 8 zones. Each zone can be bonded to 20 individual **MERLIN RX** devices for a total of 160 devices. Every **MERLIN RX** in the same zone receives the same command from **MERLIN TX**, based on the designated zone you have chosen. If you choose “AL” (meaning ALL ZONES), every **MERLIN RX** will respond.

MERLIN RX: The receiver of commands from either the **ILLUMiSMART APP** or the **MERLIN TX**. This device installed inline on the secondary side of the transformer is capable of switching up to a 25A load. Control complete runs, designated sections, or individual fixtures, as you choose. Simply connect the INPUT wires of the **MERLIN RX** to the low voltage wire coming from the transformer on the line, run, or fixture you wish to control. Connect the OUTPUT wires of the **MERLIN RX** to the fixture side of the line, run or fixture you wish to control. When connecting to, and controlling by the **MERLIN TX**, each **MERLIN RX** is assigned a zone. When using the **ILLUMiSMART APP**, groups are created using the Rooms function.

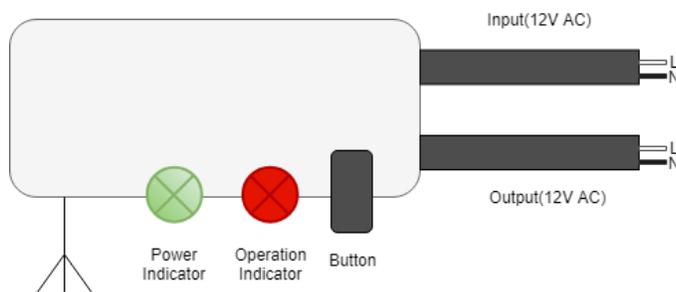
MERLIN WIFI ARCHITECTURE



Merlin Zone Control System Operating Instructions

ABOUT RX DEVICE - HOW TO INSTALL

1. Turn off the power at the transformer.
2. Connect the cable from 12-15VAC transformer to MERLIN RX INPUT cable.
Ensure a tight and moisture sealed connection.
3. Connect the 12-15VAC load to the OUTPUT cable of the MERLIN RX. MAX 25A.
Ensure a tight and moisture sealed connection.
4. Turn on the power at the transformer. The POWER indicator (Green) will be ON, showing normal operational ready status of the MERLIN RX.



Size: 65cm x 10cm x 3.5cm

Material: PC

Package: 14cm x 8.5cm x 10cm

Cable Length: 45cm

ABOUT ILLUMISMART APP

Registering a User Account

After downloading the ILLUMiSMART APP, the first step is to create (register) an account. You may use either your phone number or email address to register the account. Remember your password, and keep it private and safe. After inputting your credentials, you will receive either an email or text message with a confirmation code to complete the registration of your account.

Adding Devices - WiFi Pairing

1. Turn on the power at your transformer. Check the Power indicator on the **MERLIN RX** is ON (Green)
2. Open the **ILLUMiSMART APP**
3. If you have not already done so, create a “Family” or accept the invitation if you have been added to an existing “Family”.
4. Choose Add Device, or press the + button in the top right corner.
5. Choose “Electrical” and “Switch (Wi-Fi)”.
6. Long press the “Connect Button” on **MERLIN RX**, about 5 seconds
7. The **MERLIN RX** device will enter Pairing mode. The operation indicator will be blinking rapidly (Red)
8. Fill in the Wi-Fi router SSID and Password on **ILLUMiSMART APP** (2.4GHz only!)
9. The **ILLUMiSMART APP** will search for the devices in Wi-Fi pairing mode
10. When the App finds the devices (**MERLIN RX**), the system will pull the devices into the Device List automatically.
11. Select the “Room” the device will belong to. You can create separate “Rooms” for different areas of control. I.e; Back Yard, Front Yard, Driveway... etc.
12. I. After the initial pairing process finish, the Operation Indicator will be ON (Red); If the process failed, the Operation Indicator will be OFF. Please try pairing again according to App instruction , and move the **MERLIN RX** closer to the WiFi router if possible. The initial WiFi paring process requires a strong signal, better than -60dBm. After initial pairing, a lower signal strength will still operate the device.

Merlin Zone Control System Operating Instructions

How to Check Paired MERLIN RX Devices

You can check the bonded RX devices by the Device List. Any ILLUMISMART devices will appear in the list.

How to Check the Status of a Device

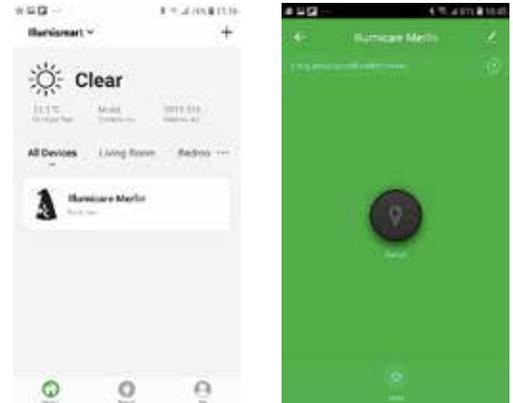
You can click any device icon and check the information of device such as status /name/ zone.

How to Turn ON/OFF the RX

Click any device icon in the Device List , you can see the ON/OFF switch button and control the device.

How to Set Timer Mode

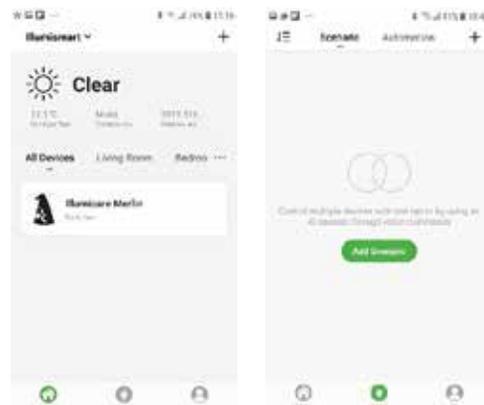
Click on the Device in the Device List. Click the “Timer” icon at the bottom of the screen. Click “Add”. Set the desired time for the event. Click “Repeat” and select the days you would like the timer to activate. Click “Switch” to select whether this is an “ON” or “OFF” event. Click “Save” in the top right corner.



How to Set Astronomical Control?

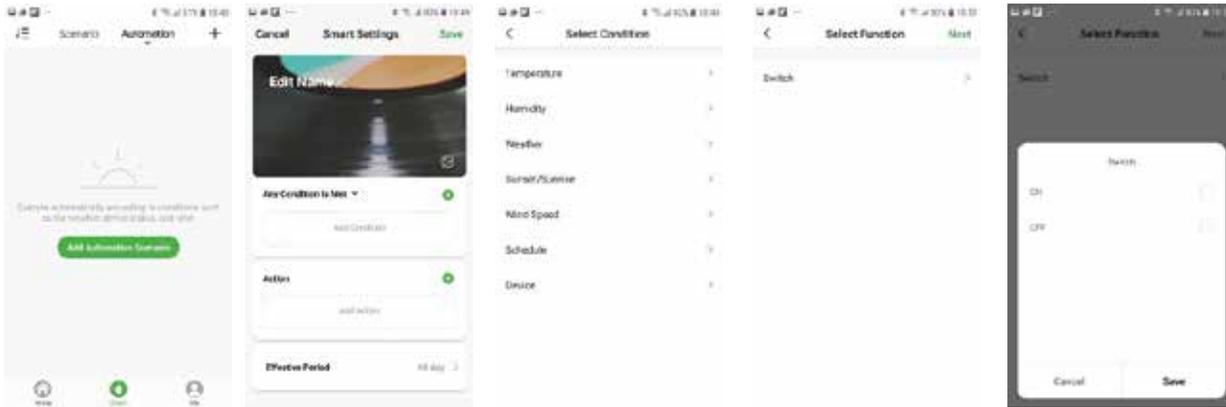
You can set MERLIN RXs into the Automatic mode according to different conditions such as Sunrise/Sunset/time.

Click on “Smart” on the bottom of the screen. Click “Automation” Click “Edit Name” to name your automation event. Eg. Sunset or Nighttime. Click “Add Condition” and select the desired condition, eg Sunset/Sunrise. Click “Add Action”. Click “Device” and select the device you wish to control. Click “Switch” and select whether this is an “ON” or “OFF” event. Click “Save”. (You should create one event to turn your system ON, and another to turn your system OFF as desired. You can have multiple ON/OFF events. Eg. ON at Sunset, OFF at Mid-night. On again at 5AM, OFF at Sunrise.) Repeat as necessary.



Merlin Zone Control System Operating Instructions

How to Set Astronomical Control?



ABOUT MERLIN TX

Bonding Merlin RX With Merlin TX

The **MERLIN TX** needs to be bonded with the **MERLIN RX** to control the device.

1. After connecting the **MERLIN RX** to the transformer, turn on Power. the Power indicator on the **MERLIN RX** is ON (Green)
 2. Press the Zone Button on the **MERLIN TX**, to choose the designated zone.
 3. Press the “Connect Button” on **MERLIN RX** and release immediately. The Operation Indicator (RED) on the **MERLIN RX** will flash twice and enter the Bonding Mode.
 4. Press the ON or OFF button of **MERLIN TX**
- If Bonding process is successful, the Operation Indicator will flash three times and then return to Wi-Fi status.
 - If the process fails, the Operation Indicator will return to Wi-Fi status directly.

Wi-Fi Status: Indicator is ON when Wi-Fi Paired; Indicator is OFF when Wi-Fi unavailable.

Multiple **MERLIN RX** can be added to the same Zone.

How to Control the RXs via Merlin TX

Choose the desired ZONE, and then press ON or OFF button. Choose AL to control ALL zones.



Size: 13cm x 5cm x 2cm

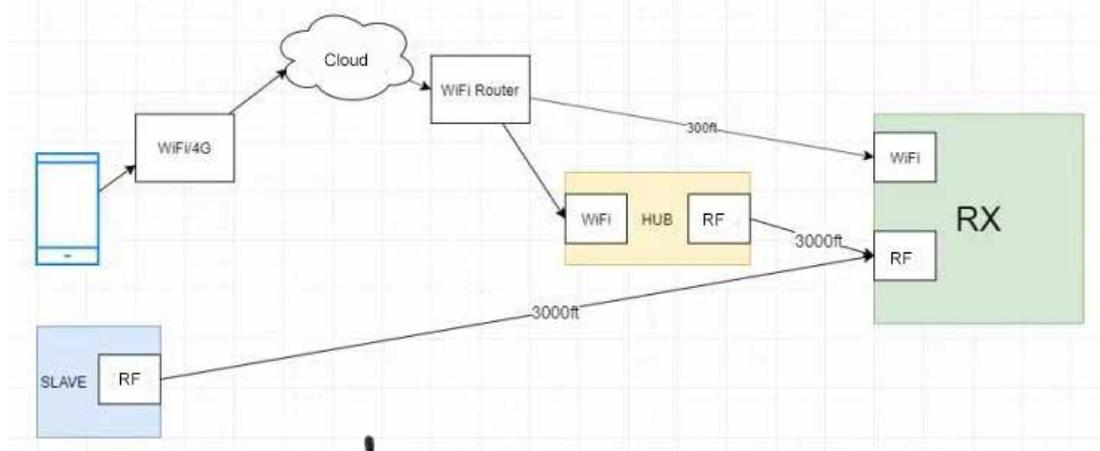
Battery: 2 AAA

Material: ABS

Package: 14cm x 5.5cm x 2.5cm

Merlin Zone Control System Operating Instructions

MERLIN HUB WIFI/RF HYBRID ARCHITECTURE



ABOUT THE MERLIN HUB



Size; 120 x 120 x 29mm

120 x 159 x 181 mm with antenna

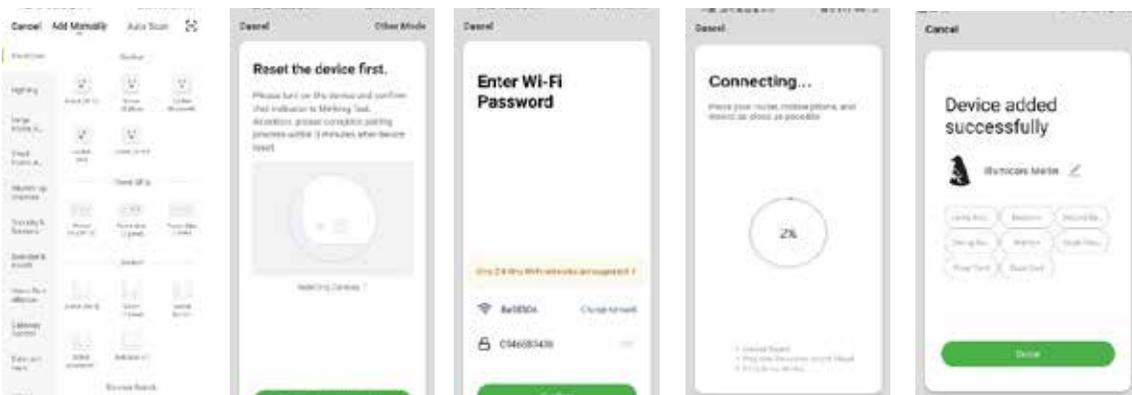
Packaging; 194 x 142 x 57 mm

Material; ABS



Installing the MERLIN HUB

1. Connect the antenna to the **MERLIN HUB** before connecting power. This will ensure there is no damage from static electricity.
2. In the **ILLUMISMART APP**, click the + sign in the top right corner to add a device
3. Select Switch WiFi
4. Press the button on the back of the **MERLIN HUB** (D1) and hold for 5 seconds.
5. Confirm the light (E1) is blinking rapidly
6. Select the 2.4Ghz network in the App, and wait for the app to find the device
7. Once found, you may assign the **HUB** to a room, and change the name if you wish.



Merlin Zone Control System Operating Instructions

Bonding Merlin RX With Merlin TX

The **MERLIN HUB** needs to be bonded (paired) with the **MERLIN RX** via RF.

1. Once the **MERLIN HUB** is powered on, press the button on the
- 2. MERLIN RX** once, quickly, and confirm two flashes of the LED.
3. Press the button on the **MERLIN HUB** (D1) 5 times quickly. The lights on the **HUB** will flash, and the RF connection is made.
4. Next the **MERLIN RX** needs to be assigned to one of the 6 switches or zones in the Illumismart APP
5. Quick press the button on the **MERLIN RX** once, and confirm two flashes of the LED
6. In the app, press the desired switch (E1) ON, OFF, ON. The **MERLIN RX** should respond. It is now paired with the HUB.
7. Repeat the process for subsequent RX devices. They can be grouped together in the same switch, or separately as desired.

E1



For more information on our Merlin Products, visit our YouTube Channel:

<https://www.youtube.com/playlist?list=PLEnX0Y787FiZL3VnJzSGrK-W9V-vr9Ko4s>

