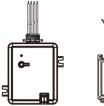
**A WARNING** 

Shork Hazard. May result in serious inquiry or death.

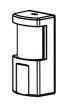
Turn off power at circuit breaker before installing the unit.

## The wireless system includes

Power Pack 0-10V dimming module + At least one wireless transmitter.













PPA401S (10A) / PPA401PF(1A) Fixture Mounted Power Pack AC 120-277V 50-60HZ

BMS401 PIR Sensor Battery AAA

BCS401 PIR & Daylight Sensor Battery 123A

WP4013 Manual Dimmer Battery CR2032 3V

BDS401 Daylight Harvest Sensor Battery CR2450 3V

#### Note:

- 1.1 One Power Pack dimming module can be linked with 4 PIR sensors, 5 manual control dimmers, and 1 daylight sensor at most.
- 1.2 One wireless transmitter can control unlimited Power Packs during the RF communication distance, 100 feet at most.
- 1.3 Do not fixed install components before setting up all parameters ideally .
- 1.4 This system use Radio Frequency 433.96MHZ communication technology.
- 1.5 Once paired, the memory will keep forever, even power off.
- 1.6 Hold the PAIR/TEST button on dimming module for 5s, you will hear 4 beeps indicate exit all grouping, all memory lost.

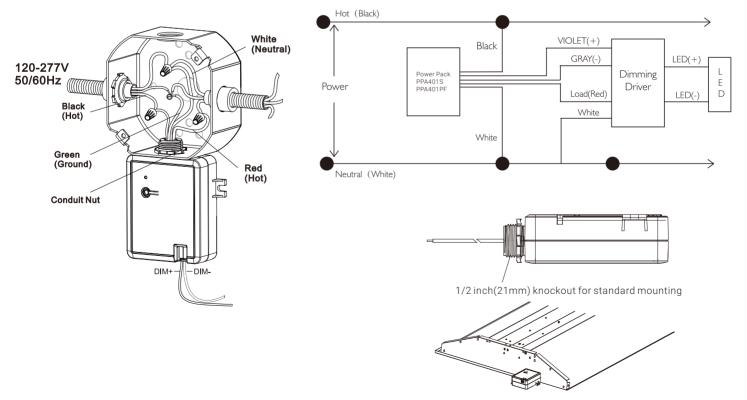
## STEP 1: Install Power Pack 0-10V dimming module

Install in center of room to maximize RF coverage.

#### Note:

- 2.1 PPA401S with 10A relay is usually for multiple fixtures , PPA401PF with 1A relay is for per fixture .
- 2.2 After installing Power Pack, you have to switch on the power, the Power Pack will begin to run the test mode, lights soft on then soft off. After running test mode, there is 10s FREE Pair time, then begin next step.
- 2.3 \*FREE Pair: Each time power up, after running test mode, the pair channel of Power Pack is open for 10s, you can FREE Pair any wireless transmitters with ALL Power Packs around (during the RF talking distance) by just holding the PAIR button on wireless transmitter, no need to push pair button on power pack.

### **Wiring Schematic**



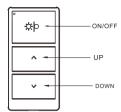
Note for dimming multiple fixtures:

- 2.4 If do not need dimming function, disconnect the purple and grey wire separately with a wire nut.
- 2.5 Connect all purple and grey wires together, feed into DIM+/DIM- terminals to dim lights in a row.

### **STEP 2: Connect Wireless Transmitters to Power Pack**

NOTE: 3.1 Insure that in the same time there is only one system is being set up in the building, or transmitter from other system maybe linked incorrectly.

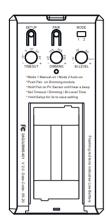
# Pair the WP4013 wireless manual dimmer with Power Pack



Quick Setup:

- 1. Push PAIR on power pack, the small led on dimming module will flash quickly.
- 2. Push ON/OFF button for 3s to PAIR with power pack
  You will hear a beep indicating the dimmer has linked with the power pack.
- 3. Try the buttons to see if light is successfully controlled

### Pair the BMS401 wireless PIR sensor with Power Pack



Mode 1 Occupancy Mode: Light need to be manually switched on with manual dimmer, delay time 30min, automatically off if no people detected in 30min. This mode is usually for meeting room.

Mode 2 Auto-Mode : Light automatically on once detect people , automatically off or go down to dimming level after people leave .

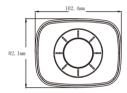
- 1. Push PAIR on Power Pack, the small led on dimming module will flash quickly.
- 2.Push PAIR on PIR sensor for 3s, you will hear a beep indicate the sensor has linked with the Power Pack
- 3.Set Timeout: 10s (as test mode) 5min 10min 30min 60min

Set Dimming level: Off, 10%, 30%, 50% (After people leave, light will turn off or dim down to this level) Set Bi-Level: 10min, 30min, 60min, stay on

Hold SETUP for 3s to save setting, small LED on sensor will blink once indicate set up successfully.

Note:3.2 Every time you change settings, DO remember to HOLD SETUP for 3s to save.

### Pair the BCS401 wireless PIR sensor with Power Pack

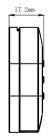


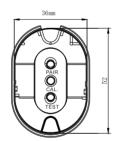
Quick Setup:

- 1.Push PAIR on Power Pack dimming module, the small led on dimming module will flash quickly.
- 2.Push PAIR on sensor until hear a beep indicate the sensor has linked with the dimming module .
- 3. For detail Mode setting, please refer to BCS401 manual.

IMPORTANT: If connect more than 1 PIR sensor(BMS401 and BCS401) to 1 power pack, DO remember set the same value of Timeout, Dimming level and Bi-level time for all PIR sensors.

### Pair the BDS401 day light harvest sensor to Power Pack





- 1. Push PAIR on Power Pack 0-10V dimming module
- 2. Hold PAIR for 3s on Daylight Sensor until hear a beep.
- 3. Hold CAL. for 3s until red light flash to calibrate the daylight sensor, the sensor will collect the current light level, and dim the light according to this level in the future.
- 4. Hold TEST for 3s until red light flash to enter into test mode. Cover the sensor to see if lights dim up , shine the sensor to see if lights dim down . It takes about 10s to dim lights , if the performance is not good , hold the CAL. again to collect another light level .
- 5. Hold TEST again until red and green light flash to quit test mode After quitting test mode, the daylight sensor will react and dim the lights every half an hour according to daylight level

#### Note:

- 3.3 If you have several sensors or dimmers need to pair, remember always need to push the PAIR/TEST button on dimming module first, then pair one transmitter a time.
- 3.4 You can skip any one of the step if you don't have the corresponding wireless transmitter .
- 3.5 If you want to add another wireless transmitter to the existing system, or quickly pair a lot of Power Packs, use FREE Pair function (see Note 2.3). Turn off the power, then turn on again, after running test mode, you will have 10s to add another wireless transmitter.

# **STEP 3: Mount the wireless transmitters**

- 3.1 Mount PIR sensors: Insure the PIR sensors have a line-of-view of all room occupants ( You can add up to 4 sensors to expand the detect range ). Do NOT mount behind, or close to any hot object .
  - BMS401: Attach the sensor on any magnetic shelf or use screws to fix the rear cover on the wall then slide down the sensor . BCS401: Use 3M adhesive or screw to fix the rear cover , then screw on the sensor .
- 3.2 Mount the daylight sensor: Use 3M adhesive to mount BDS401 sensor about 2m away from the window, the transparent cover should facing the window, so it will get enough natural sunlight. DO NOT mount too close to electric lights.