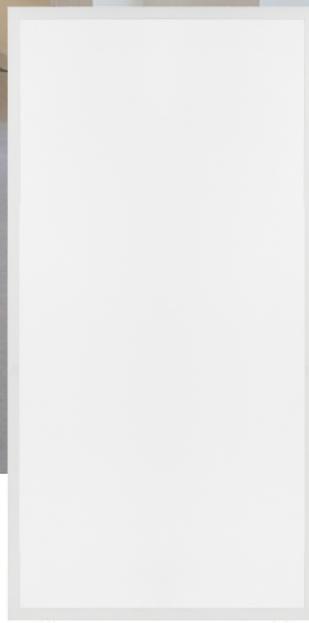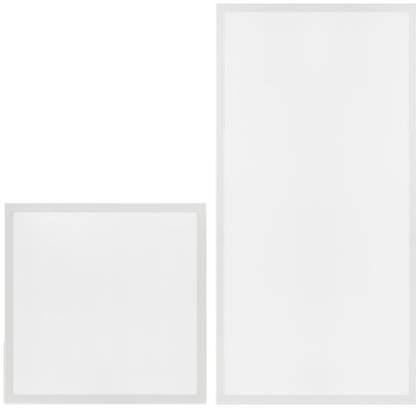# BACK-LIT LED PANEL LIGHT

# BACK-LIT LED PANEL LIGHT

Power&CCT Tunable

APPLICATIONS: Education, healthcare and office.

## PRODUCT SPECIFICATIONS

- Delivering up to 130LPW
- CRI: Ra≥80
- CCT Tunable: 3000K / 3500K / 4000K / 5000K / 6500K
- 5 different power tunable
- Dimmable: 0-10V
- Smooth and comfortable light,no glare

- Estimated Lifetime @ 25°C: ＞54,000 hours
- Power Factor: ＞ 0.95
- Total Harmonic Distortion: ＜ 15% at full load
- Limited Warranty: 5years
- Microwave induction and Bluetooth control are optional
- Operating Temperature Range: -22$^\circ$F to 104$^\circ$F ( -30℃ to 40℃ )

## ORDERING INFORMATION

| MODEL | SIZE | INPUT VOLTAGE | POWER (TUNABLE) | CCT (TUNABLE) | CRI | LUMINOUS EFFICIENCY | DIMMABLE | LIMITED WARRANTY |
|---|---|---|---|---|---|---|---|---|
| BPL5-22-40W-L-H | 2x2 FT | | 20W/25W/30W/35W/40W | 3000K 3500K 4000K 5000K 6500K | Ra＞80 | 130lm/W | 0-10V | 5 years |
| BPL5-14-40W-L-H | 1x4 FT | 120-277VAC | 20W/25W/30W/35W/40W | | | | | |
| BPL5-24-72W-L-H | 2x4 FT | | 30W/40W/50W/60W/72W | | | | | |

## FIXTURE SPECIFICATIONS

| | |
|---|---|
| HOUSING | White high-strength metal frame,seamlessly |
| LENS ASSEMBLY | PMMA Lens and polystyrene diffuser prevents hot spots, shadows and glare, while providinguniform illumination |
| MOUNTING | Recessed Installs into conventional grid ceilings |
| RECOMMENDED USE | Offices / Educational & Retail / Commercial & Institutional |

## PRODUCT DIMENSIONS
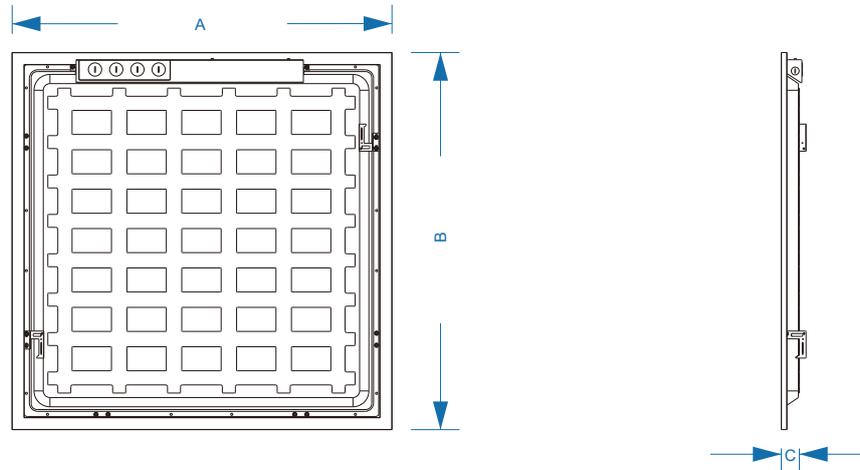
| MODEL | SIZE | A(inch)(mm) | B(inch)(mm) | C(inch)(mm) |
|---|---|---|---|---|
| BPL5-22-40W-L-H | 2x2 FT | 23.74"(603mm) | 23.74"(603mm) | 1.38"(35mm) |
| BPL5-14-40W-L-H | 1x4 FT | 47.75"(1213mm) | 11.93"(303mm) | 1.38"(35mm) |
| BPL5-24-72W-L-H | 2x4 FT | 23.74"(603mm) | 47.75"(1213mm) | 1.38"(35mm) |

## LUMINAIRE AND ELECTRICAL PERFORMANCE

| OPERATING TEMPERATURE RANGE | ESTIMATED LIFETIME @ 25˚C (77˚F) | POWER FACTOR | TOTAL HARMONIC DISTORTION | DIMMABLE |
|---|---|---|---|---|
| -22°F to 104°F (-30°C to 40°C) | 54,000 hours | >0.95 at full load | <15% at full load | 0-10V Dimming |

## POWER&CCT TUNABLE
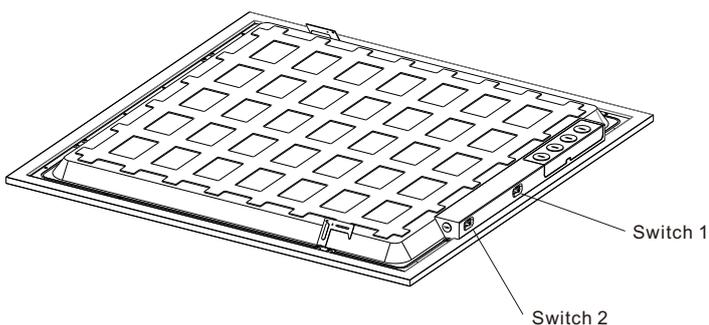
**POWER TUNABLE(SWITCH1)**
2x2FT / 1x4FT

| 20W | 25W | 30W | 35W | 40W |
|---|---|---|---|---|

**POWER TUNABLE(SWITCH1)**
2x4FT

| 30W | 40W | 50W | 60W | 72W |
|---|---|---|---|---|

**CCT TUNABLE(SWITCH2)**
2x2FT / 1x4FT / 2x4FT

| 3000K | 3500K | 4000K | 5000K | 6500K |
|---|---|---|---|---|

Switch 1

Switch 2

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM(2x2FT)



Luminous Intensity Distribution Curve

±180
-150 / 150
-120 / 120
-90 / 90
0.0
313.8
627.7
941.5
1255.3
1569.2
0
-60 / 60
-30 / 30
Unit:cd

| C Plane | [50%MaxAng.] | [10%MaxAng.] |
|---|---|---|
| C270.0_90.0 : | 115.5 | 165.3 |
| C0.0_180.0 : | 115.7 | 165.7 |
| C90.0_270.0 : | 115.5 | 165.3 |

Vertical IsoLux Plot

h(m)
1.0
1.3
2.0
2.7
3.3
0.0  0.7  1.3  2.0  2.7  d(m)

[Unit:lx]  [EMax]=1563.532  [EMax*90%]  [EMax*80%]
[EMax*70%]  [EMax*60%]  [EMax*50%]  [EMax*40%]
[EMax*30%]  [EMax*20%]  [EMax*10%]

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM(1x4FT)



Luminous Intensity Distribution Curve

±180
-150 / 150
-120 / 120
-90 / 90
0.0
334.2
668.5
1002.7
1337.0
1671.2
0
-60 / 60
-30 / 30
Unit:cd

| C Plane | [50%MaxAng.] | [10%MaxAng.] |
|---|---|---|
| C270.0_90.0 : | 103.5 | 160.6 |
| C0.0_180.0 : | 112.9 | 170.2 |
| C90.0_270.0 : | 103.5 | 160.6 |

Vertical IsoLux Plot

h(m)
1.0
1.3
2.0
2.7
3.3
0.0  0.7  1.3  2.0  2.7  d(m)

[Unit:lx]  [EMax]=1652.382  [EMax*90%]  [EMax*80%]
[EMax*70%]  [EMax*60%]  [EMax*50%]  [EMax*40%]
[EMax*30%]  [EMax*20%]  [EMax*10%]

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM(2x4FT)



Luminous Intensity Distribution Curve

±180
-150 / 150
-120 / 120
-90 / 90
0.0
403.9
807.8
1211.7
1615.7
2019.6
0
-60 / 60
-30 / 30
Unit:cd

| C Plane | [50%MaxAng.] | [10%MaxAng.] |
|---|---|---|
| C270.0_90.0 : | 105.4 | 162.3 |
| C0.0_180.0 : | 113.4 | 169.2 |
| C90.0_270.0 : | 105.4 | 162.3 |

Vertical IsoLux Plot

h(m)
1.0
1.3
2.0
2.7
3.3
0.0  0.7  1.3  2.0  2.7  d(m)

[Unit:lx]  [EMax]=2014.141  [EMax*90%]  [EMax*80%]
[EMax*70%]  [EMax*60%]  [EMax*50%]  [EMax*40%]
[EMax*30%]  [EMax*20%]  [EMax*10%]

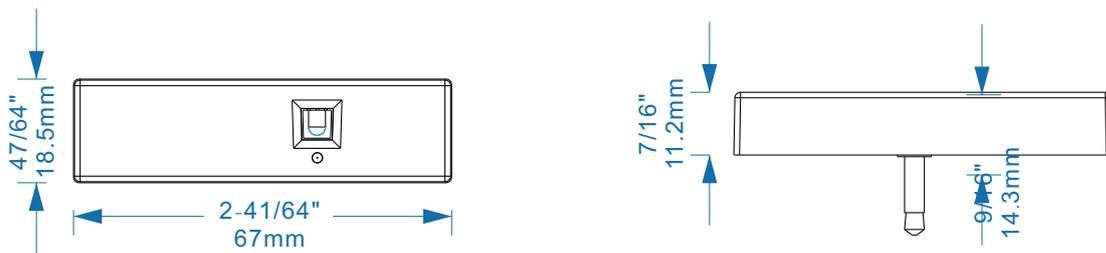## ACCESSORIES (OPTIONAL)

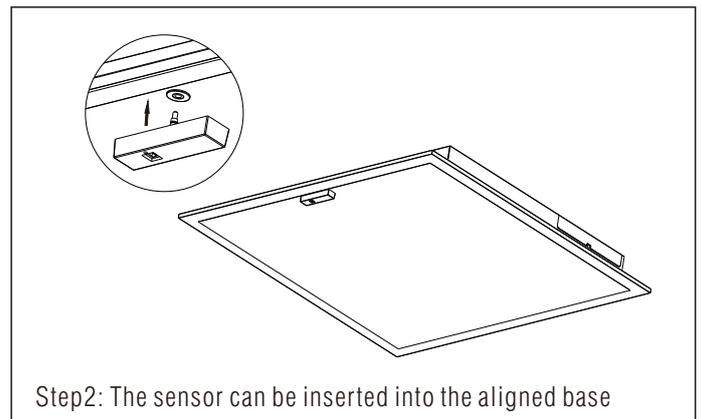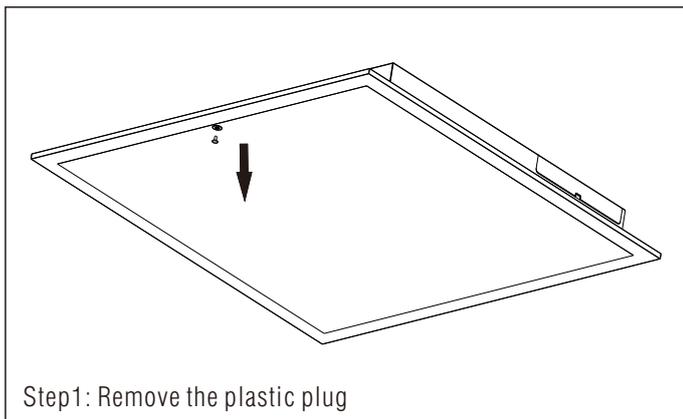| | |
|---|---|
| | **MICROWAVE MOTION SENSOR \| PLUG & PLAY**<br>Model: HD08VR-MA-1<br><br>**INFRARED REMOTE CONTROL**<br>Model: HD05R |
| | **MICROWAVE MOTION SENSOR \| PLUG & PLAY**<br>Model: HD08VR-MB-1(APP CONTROL) |

## MICROWAVE MOTION SENSOR PARAMETERS

| | |
|---|---|
| **FREQUENCY** | 5.8GHz±75MHz |
| **MICROWAVE POWER** | ＜0.3mW |
| **INSTALLATION HEIGHT** | 6m/19.68ft Max |
| **DETECTION DISTANCE** | ≥3m/9ft |
| **DETECTION ANGLE** | 30-150° |
| **DETECTION AREA** | 25% / 50% / 75% / 100% |
| **HOLDTIME** | *Remote control Options*: 5s/ 30s/ 1min/ 3min/ 5min/ 10min/ 20min/ 30min<br>*APP Control Options*: 5s/ 30s/ 1min/ 2min/ 3min/ 5min/ 10min/ 15min/ 20min/25min/ 30min/ 45min/ 60min/ 90min/ 120min |
| **DAYLIGHT THRESHOLD** | Disable/400Lux/350Lux/300Lux/250Lux/200Lux/120Lux/80Lux/50Lux/30Lux/10Lux/2Lux |
| **STANDBY DIMMING LEVEL** | 10% / 20% / 30% / 50% |
| **STANDBY PERIOD** | *Remote control Options*: 0s/ 10s/ 30s/ 1min/ 5min/ 10min/ 30min/ 60min/＋<br>*APP Control Options*: 0s/5s/30s/1min/2min/3min/5min/10min/15min/20min/25min/ 30min/45min/60min/＋∞ |
| **DUSK/DAWN SENSING/PHOTOCELL** | Daylight threshold as 30lux/50lux/80lux/120lux/200Lux/250Lux/300Lux/350Lux/400Lux |
| | Standby period as ＋∞ |
| | Standby dimming level as 10% / 20% / 30% |
| **DUSK/DAWN SENSING/PHOTOCELL** | 1. Adjust "daylight" value higher than 50lux |
| | 2. Preset "standby period" 0S |
| | 3. press MW/PIR button 3 times till MW/PIR icons both blickingon LCD screen, daylight harvesting function enabled.(With BLE verison, press DH button, daylight harvesting function enabled.) |
| **WIRELESS CONTROL RANGE** | ＞20m/65ft(**bluetooth**) |
| **APP DOWNLOAD** | Supported in both APP Store and Google play market |
| **WORKING TEMPREATURE** | -40°F～140°F(-40℃～60℃) |
| **STORAGE TEMPREATURE** | -40°F～176°F(-40℃～80℃) Humidity:85%(non-condensation) |

## MICROWAVE MOTION SENSOR DIMENSIONS

47/64" 18.5mm

2-41/64" 67mm

7/16" 11.2mm

9/16" 14.3mm

## MICROWAVE MOTION SENSOR INSTALLATION

Step1: Remove the plastic plug

Step2: The sensor can be inserted into the aligned base

## REMOTE CONTROL BUTTON FUNCTION INTRODUCTION

| Button | Name | Function |
|---|---|---|
| ON/OFF | ON/OFF | Turn ON or OFF the sensor |
| MW/PIR | NW/PIR | Exchange from Microwave detection to PIR detection, for future use |
| Scene | Reset | Press it to start detection programming; before pressing any otherbuttons, the screen shows default programming (Detection Area 100%,Holdtime 5S, Daylight Disable, Standby Dimming 10%, Standby Period 0S) |
| Start | Start | Press it before you try to memorize program into the remote; Afterpressing it, S on the screen will blink and keeping blinking while makingthe program |
| Memory | Memory | Press it after programming, the blinking S will become a solid M, thatmeans the program has been well memorized |
| Apply | Apply | Press it to deliver the preset program to the specific sensors; every presswill make the whole screen blink gently |
| | Detection area | Also known as "sensitivity", 100% means the highest sensitivity andlongest distance. Press it, specific icon on the screen will blink and pressthe + - buttons to adjust |
| | Hold time | The period that light will stay illuminated 100% after no motion'sdetected; Press it, specific icon on the screen will blink and press the +- buttons to adjust |
| | Daylight Threshold | The preset lux level to compare with ambient brightness when motiongets detected; Press it, specific icon on the screen will blink and pressthe + - buttons to adjust |
| | Stand-by period | The period after holdtime, during which the light keeps standbydimming level; Press it, specific icon on the screen will blink and pressthe + - buttons to adjust |
| | Stand-by dimming level | After holdtime, the light will dim from 100% to optional standby dimminglevels; Press it, specific icon on the screen will blink and press the + -buttons to adjust |
| UP | UP | The main functional buttons to adjust the factors to wanted level |
| DOWN | DOWN | |
| Power % | POWER | Supports to manually change dimming output in detection mode; Pressit, specific icon on the screen will blink and press the + - buttons toadjust |
| Test (2s) | Test mode | Supports to check if the sensor works correctly with a short 2S holdtime;Press it and the holdtime will change to 2S, and it can't be memorized |

Remote display:
PIR 100 %
PW 5 S
100 % 10 %
0 S
M --- lux

Buttons: ON/OFF  MW/PIR  Scene
Start  Memory  Apply
Detection range  Hold time
Stand-by dimming  Stand-by period
Daylight sensor  Test (2s)  Power %

HAISEN®

# APP OPERATION INSTRUCTIONOF SMART SENSOR

## APP DOWNLOAD
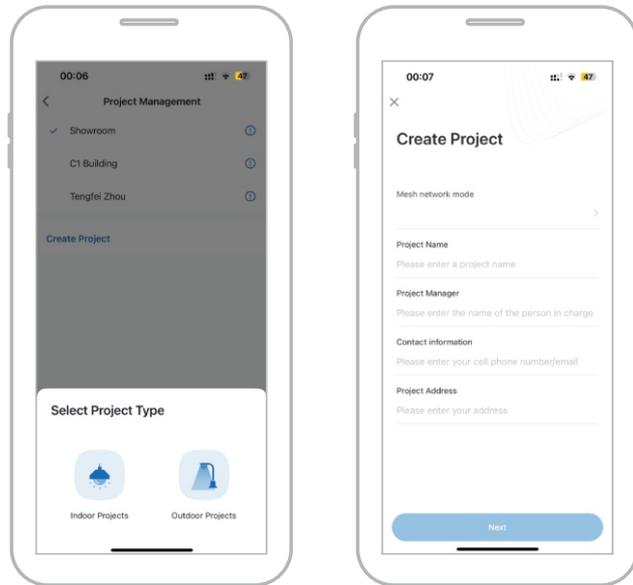Our app HAISEN BLUE has been uploaded onto APP Store & Google Market



## SIGN UP/LOG IN
Please select the region as US (because the server is located in the US.)
if you signing up with phone number; or with mail address without region destriction.
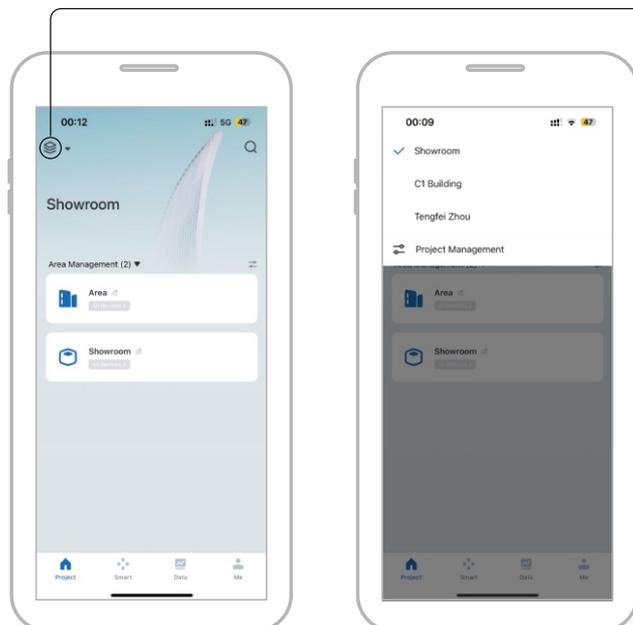
Log in if you already have account.

## PROJECT MANAGEMENT



### CREATE PROJECT

The app is specially designed forindustrial project application, not onlyto control the SMART SENSORs butalso HAISEN's Emergency Driver.It requires you to start a new project firstbefore going on add or control devices.

### MANAGE PROJECT

Press the left top icon, all the projects willbe shown, you can select or manage them.

# APP OPERATION INSTRUCTIONOF SMART SENSOR

## ADDING
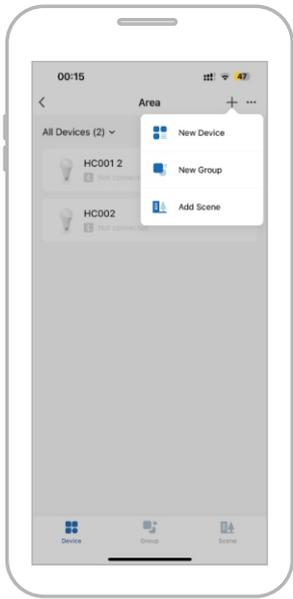


### CREATE PROJECT

Adding New DeviceNew Group/Scenes.

### ADDING NEW DEVICE

The app will automatically search the ready sensors inthe connection area, list themand wait for yourconfirmation on adding.
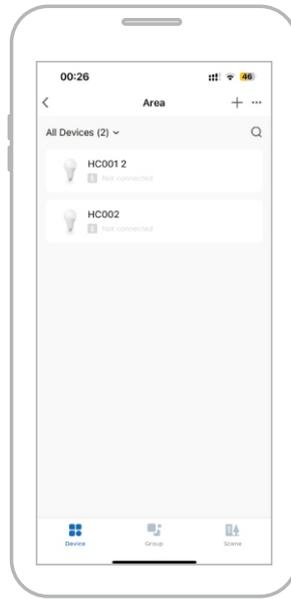
### ADDING NEW GROUP

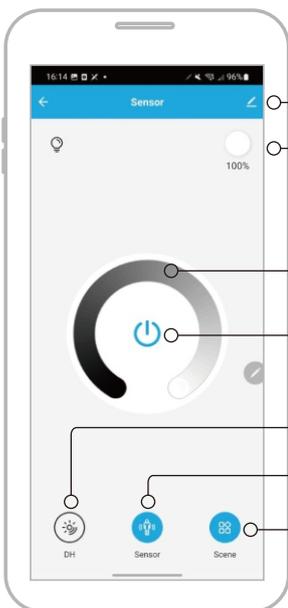The app will show all the devices that canbe added into a group
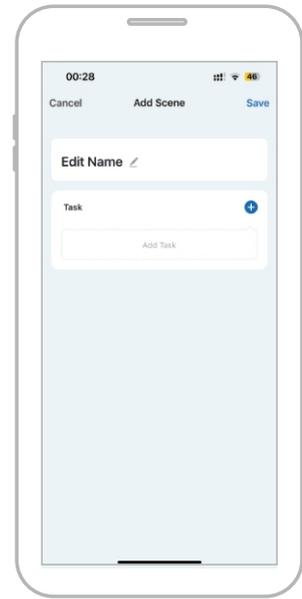
### ADDING SCENES

The app will lead you to edita scene with required taskand save it as a new name.

## CONTROL
Select the sensor or group to control it



- Edit area, rename it or delete it
- Brightness Showing Part
- Brightness Changing
- ON/OFF Button
- Daylight Harvesting Button
- Sensor Setting Button
- Scene Setting Button

### CONTROL PAGE -1

- Send afer programming
- Auto mode
- Reset
- Sensitivity Setting
- Daylight Threshold Setting
- Holdtime Setting
- Standby Period Setting
- Standby Brightness Setting

### CONTROL PAGE -2

## APP OPERATION INSTRUCTIONOF SMART SENSOR

### HIGH-END TRIM

High-end Trimming is a very practical function for customers who prefer to have less than 100% brightness everytime the sensordetects motion, and our steps to approach it is very easy.
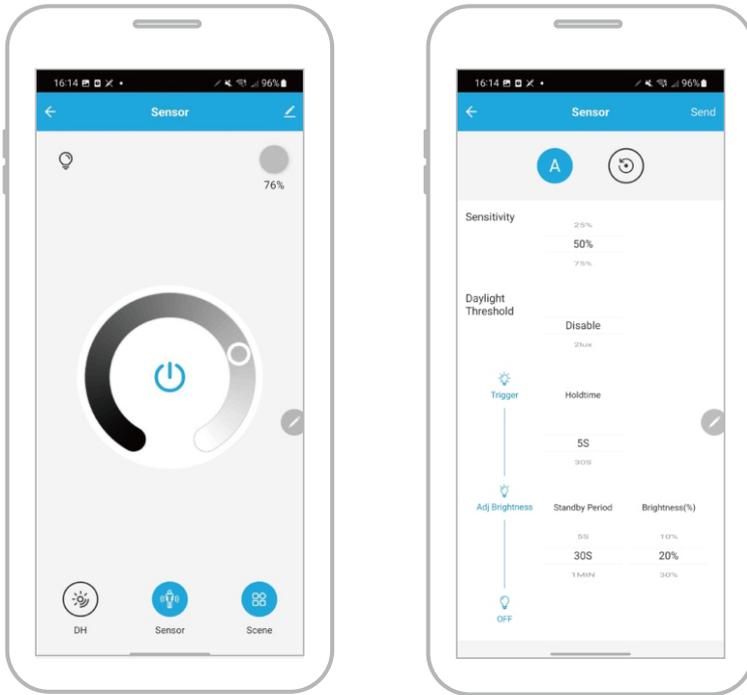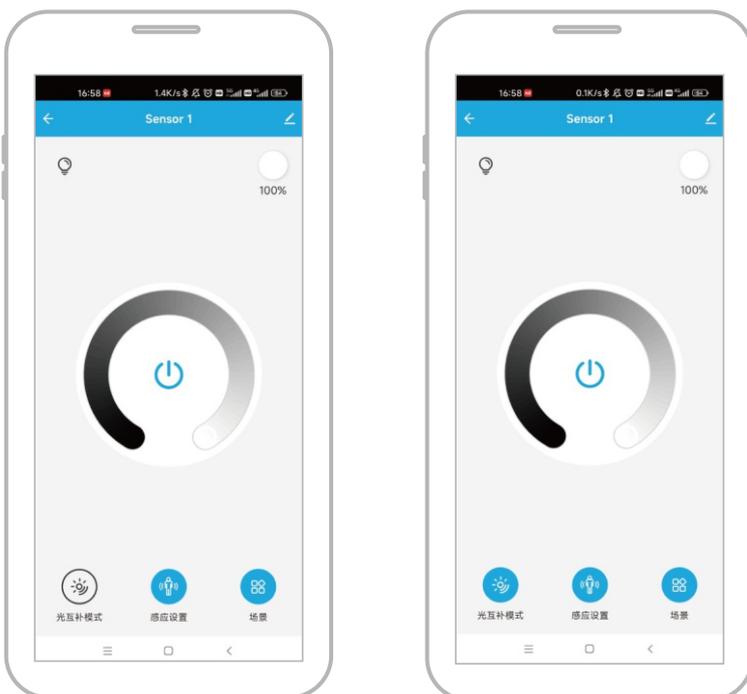


### *STEPS*

- Dim the light to a level, for example 76%, simply by moving the block
- Press "sensor" at the bottom center and start making a program
- Tthen press "A" means running automation
- After setting, the sensor works as dimming to only 76% everytime it detects motion

### DAYLIGHT HARVESTING

Daylight Harvesting function offers the possibility to dim the light brightness along with the change of natural brightness; when outside gets darker, indoor environment should become brighter.
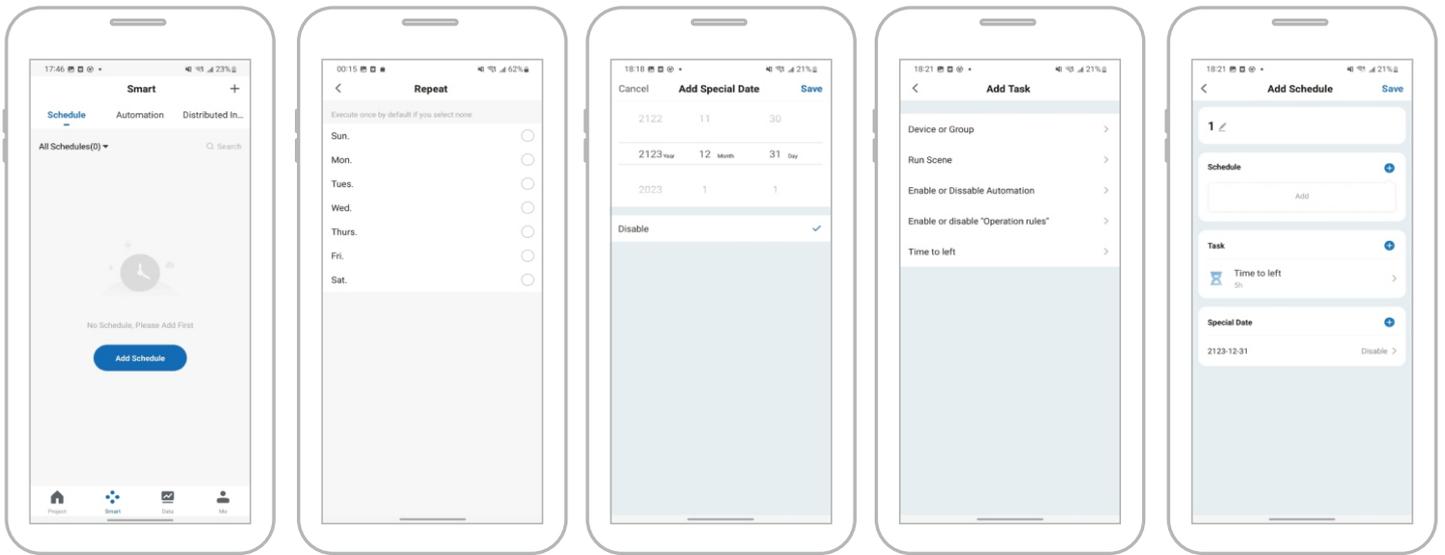


### *STEPS*

- Press "sensor" at the bottom center and start making a program, daylight must be chosen higher than 50lux, meanwell the standby period should be 0S
- After setting, the sensor works as dimming to only 76% everytime it detects motion

## APP OPERATION INSTRUCTIONOF SMART SENSOR

### SMART
This app allows customer to make different schedules,set necessary working conditions and work it automatically.
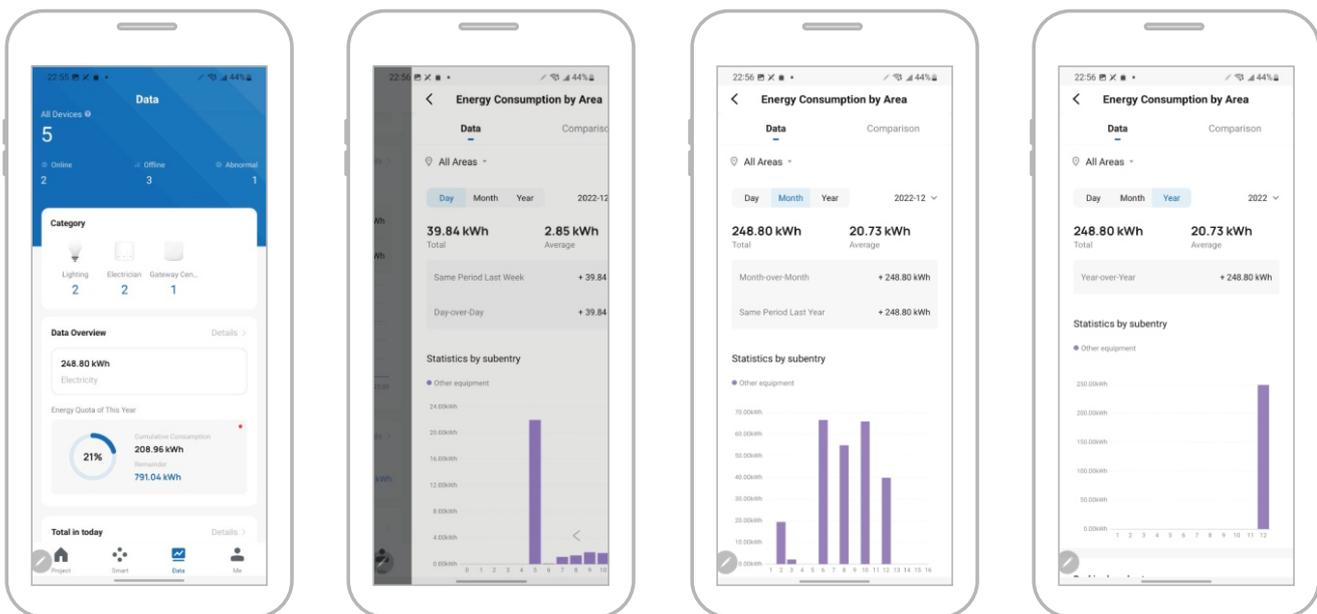
### *Please follow below steps.*



### ENERGY MONITORING
This app supports to monitor energy consumption andautomatically generates data in "DATA" arae.

### *Please follow below steps.*

# INSTALLATION INSTRUCTIONS

⚠ CAUTIONS

## IMPORTANT SAFEGUARDS

When working with electrical equipment, basic safety precautions
should always be followed, including the following:

## READ AND FOLLOW ALLSAFETY INSTRUCTIONS

1. DANGER- Bisk of shock- Disconnect power before installation.
2. This luminaire must be installed by the NEC or your local electrical code.
    If you are not familiar with these codes and requirements, please consult a qualified electrician.
3. Suitable for conventional grid ceilings.
4. Make certain power is OFF before starting installation or attempting any maintenance.
5. Do not touch the LEDs or wires coming from the circuit board during the installation process. Damage may occur.
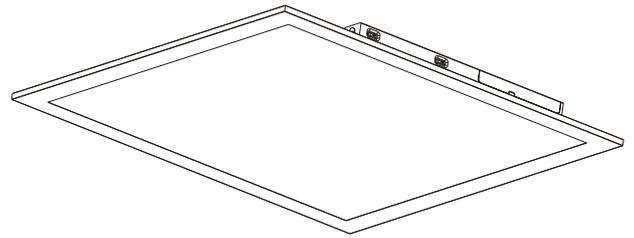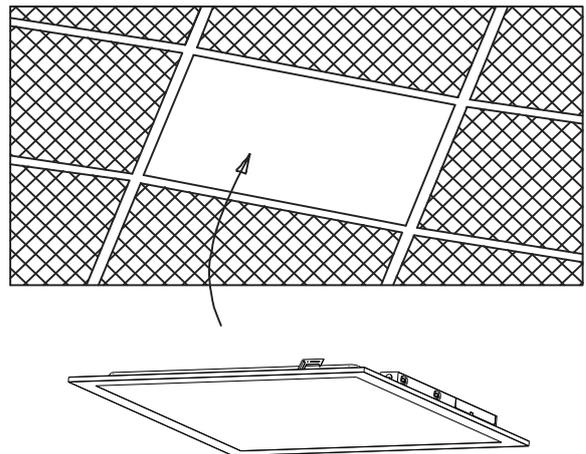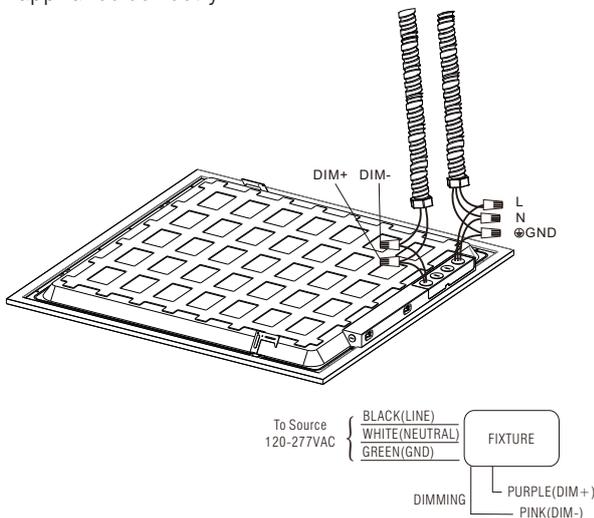
## *Installation Procedure*

Step1: Remove 2x2 or 2x4 or 1x4 the from celling
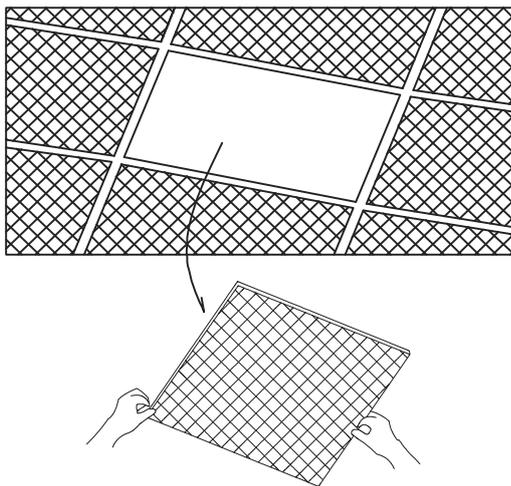
Step2: Place fixture into ceiling grid

Step3: Follow the luminaire wiring diagram to wire the
        appliance correctly

DIM+ DIM-

L
N
⏚GND

To Source
120-277VAC

BLACK(LINE)
WHITE(NEUTRAL)
GREEN(GND)

FIXTURE

DIMMING

PURPLE(DIM＋)
PINK(DIM-)

Step4: Pull the switch to the appropriate gear,Fixed wire
        hose on the panel, Theninstallation is completed

Protective bracket

a    b    c    90°

Wirehose
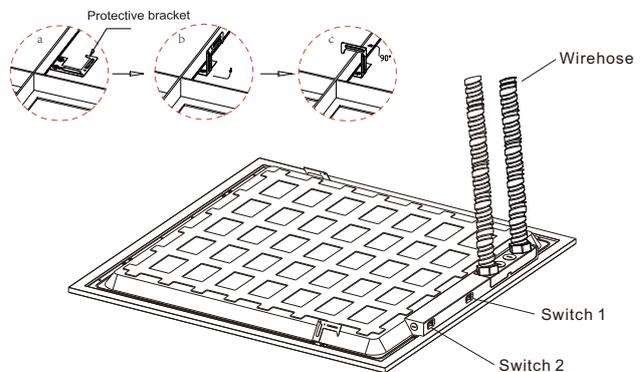
Switch 1

Switch 2

Watt Tunable:Switch1
5 different power:
2*2FT: 20W-25W-30W-35W-40W
1*4FT: 20W-25W-30W-35W-40W
2*4FT: 30W-40W-50W-60W-72W

CCT Tunable:Switch2
3000K-3500K-4000K-5000K-6500K

# PACKAGING INFORMATION

## *PACKAGING/WEIGHT*

| PART NO. | SIZE | OUTER CARTON SIZE (L*W*H) | QTY/CARTON (PCS) | NET WEIGHT (KG)(LBS) | GROSS WEIGHT (KG)(LBS) | 20GP (PCS) | 40HQ (PCS) |
|----------|------|----------------------------|-------------------|----------------------|------------------------|------------|------------|
| BPL5-22-40W-L-H | 2x2FT | 613*170*625mm 24.13"*6.7"*24.6" | 4 pcs | 1.8kg 3.96lbs | 9.5kg 20.9lbs | 1648 | 3920 |
| BPL5-14-40W-L-H | 1x4FT | 1223*170*325mm 48.15"*6.7"*12.79" | 4 pcs | 2.0kg 4.4lbs | 9.5kg 20.9lbs | 1680 | 3904 |
| BPL5-24-72W-L-H | 2x4FT | 1223*170*625mm 48.15"*6.7"*24.6" | 4 pcs | 4.0kg 8.8lbs | 17.8kg 39.16lbs | 864 | 2036 |

## *PACKAGING*
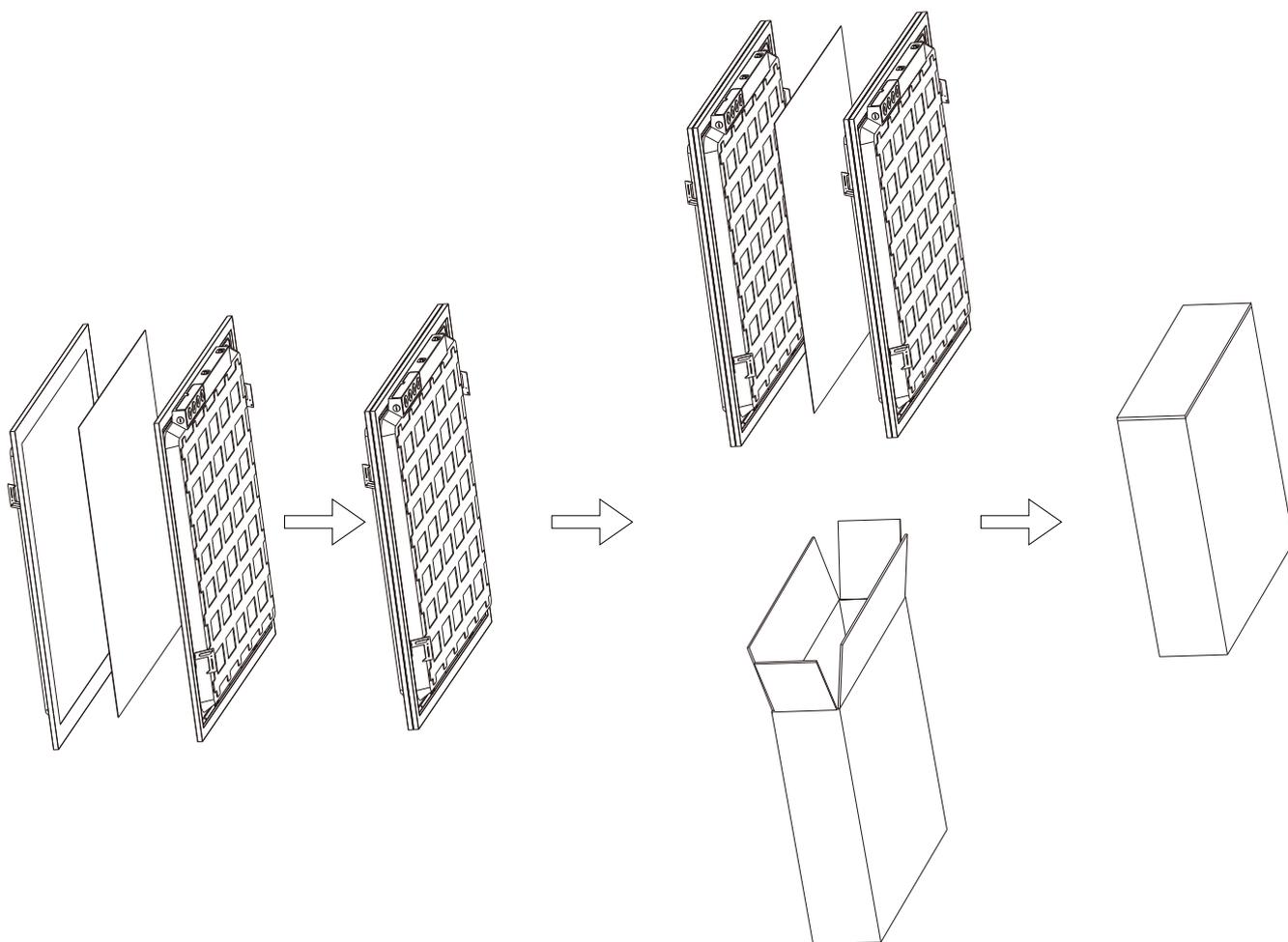
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Web site: www.gielight.com
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GIELIGHT 金杰亮