INSTRUCTIONS

OTTER™ FIELD-ADJUSTABLE INSTALLATION

RAB Lighting is committed to creating high-quality, affordable, well-designed and energy-efficient LED lighting and controls that make it easy for electricians to install and end users to save energy. We'd love to hear your comments. Please call the Marketing Department at 888-RAB-1000 or email: marketing@rablighting.com

** DON'T TOSS IT—RECYCLE IT! MAKE THE SUSTAINABLE CHOICE BY RECYCLING THIS FIXTURE AT END OF LIFE WITH A LICENSED RECYCLING PROVIDER. **

OTTER2

OTTER4

OTTER8

IMPORTANT

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.

RAB fixtures must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

WARNING: Make certain power is OFF before installing or maintaining fixture. No user serviceable parts inside.

CAUTION: For proper weatherproof function all gaskets must be seated properly and all screws inserted and tightened firmly. Apply weatherproof silicone sealant around the edge of the ceiling mounting box and/or junction box. This is especially important with an uneven ceiling surface. Silicone all plugs and unused conduit entries.

SURFACE MOUNTING

This fixture can be mounted on a frat surface or in a corner *(accessory sold separately)*.

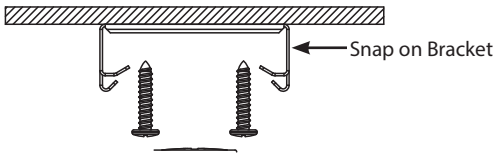
1. Secure the **Snap-On Brackets** on a flat surface where this fixture will be installed *(mounting hardware not included)*. See recommended spacing in Fig. 1. **Snap-On Brackets** should be mounted symmetrical to each other, then align the Housing in place.

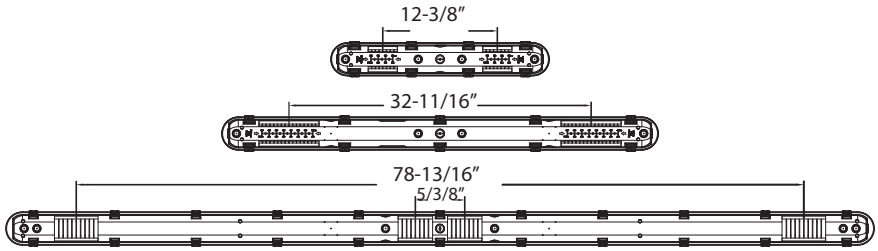
Optional Mounting Options:

- o V-Hook Mount: **Snap-On Brackets** should be attached directly to the **Housing** using included mounting hardware. The **V-Hooks** *(included)* should be attached to the **Snap-On Brackets** and equal length chains *(not included)*. Fixture mounting height and spacing should be determined by application, be sure to use a chain suitable to support 4x the weight of the fixture.
- o Corner Mount, the **Corner Brackets** *(ANGOTTER[2][4][8] sold separately)* should be installed to face each other before the **Snap-On Brackets** and with the same spacing recommendations.

What's in the Box	# of pieces		
VHOOKS	2 for 2ft&4ft	4 for 8ft	
Snap-On Bracket	2 for 2ft&4ft	4 for 8ft	
Cable Strain Relief	1		

Fig. 1





Catalog Number	# of Snap-On Brackets	Recommended Spacing
OTTER2	2	12 3/8"
OTTER4	2	32 11/16"
OTTER8	4	78 13/16" *(outer)*, 5 3/8" *(inner)*

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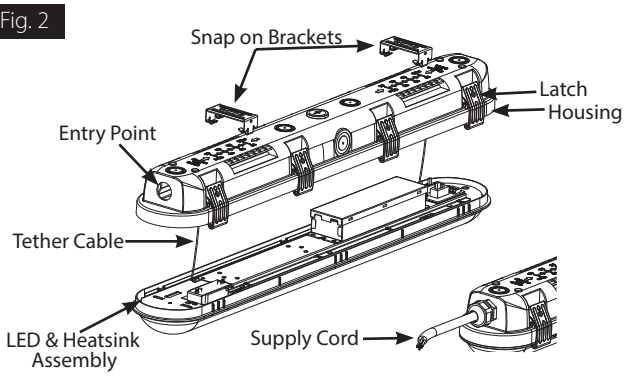
SURFACE MOUNTING *(CONT'D)*

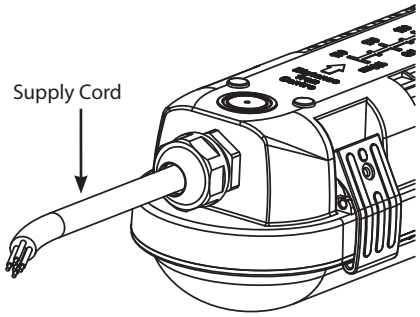
2. Unlatch the **Lens & Heatsink Assembly** from **Housing** and allow to hang freely by the attached **Tethers** *(Fig. 2)*.

Fig. 2



3. Select one of the **Entry Points** *(Knockouts)* on the fixture and remove the knockout. Feed the **Supply Cord** through to make electrical connections *(Fig. 3)*.

Fig. 3



4. Universal voltage driver permits operation at 120V through 277V, 50 or 60 Hz. For 0-10V dimming following the wiring diagram *(Fig. 4)*.

a. Connect the **Black** fixture lead to the **LINE** supply lead.

b. Connect the **White** fixture lead to the **COMMON** supply lead.

c. Connect the **GROUND** fixture lead to Ground supply lead.

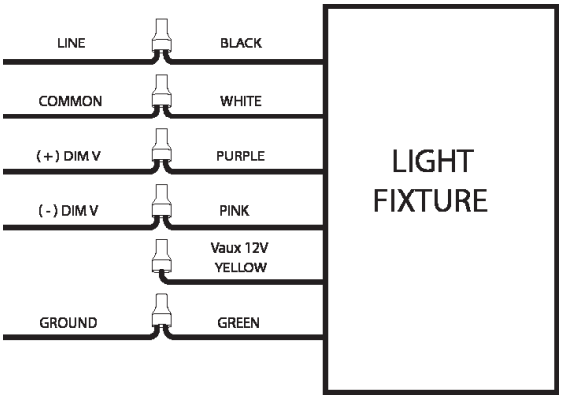
d. Connect the **Purple** fixture lead to the **(V+) DIM** lead.

e. Connect the **Pink** fixture lead to the **(V-) DIM** lead.

f. Cap the **Yellow** fixture lead, if present. Do **NOT** connect.

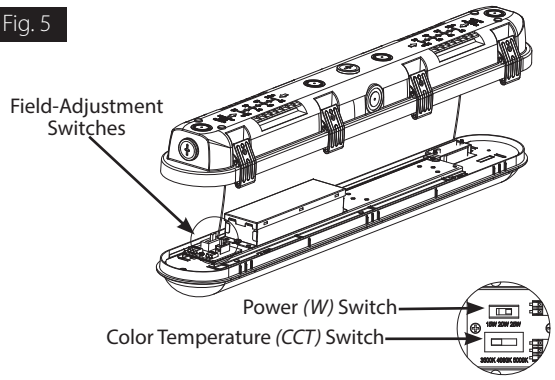
NOTE: Use UL-listed wire connectors to complete supply per code. Avoid pinching wires or routing them against sharp edges.

Fig. 4



5. Locate the **Field-Adjustment Switches** on the **Lens & Heatsink Assembly** and select the **Power** *(W)* and **Color Temperature** *(CCT)* using the on-board dipswitch *(Fig. 5)*.

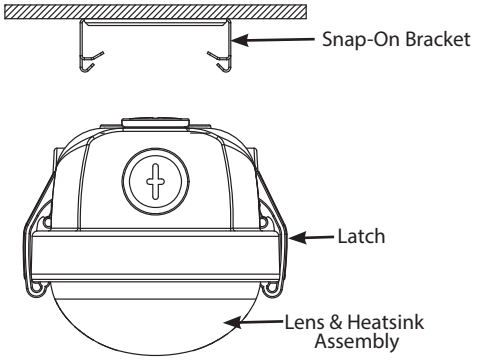
Fig. 5



6. Align the **Lens & Heatsink Assembly** to the **Housing** and confirm the **Gasket** is properly seated. Secure all the **Latches** on both sides of the fixture.

7. Align the fixture with the **Snap-On Brackets** on the ceiling and push the fixture into place until it is set in place *(Fig. 6)*.

Fig. 6



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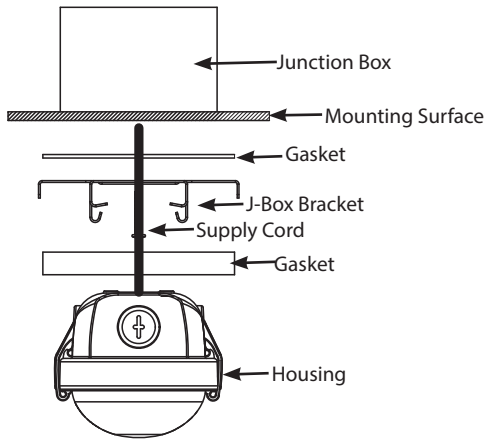
JUNCTION BOX INSTALLATION

Requires separate J-Box Bracket, **JBOTTER[2][4][8]** *(sold separately).*

1. Secure the **J-Box Bracket** to a junction box *(by others)*. Ensure that the **Gasket** is fully seated and feed the **Supply Cord** through *(Fig. 7)* to make electrical connections *(Fig. 4)*.

Fig. 7



Catalog Number	Recommended Spacing
OTTER2	10 13/16"
OTTER4	27 11/16"
OTTER8	5 7/8"

2. Select the **Power** *(W)* and **Color Temperature** *(CCT)* using on-board dipswitch *(Fig. 5)*

3. Align the fixture with the **J-Box Brackets** on the ceiling and push the fixture into place until it is set in place. *See Fig. 8 for OTTER[2][4], see Fig. 9 for OTTER[8].*

Fig. 8

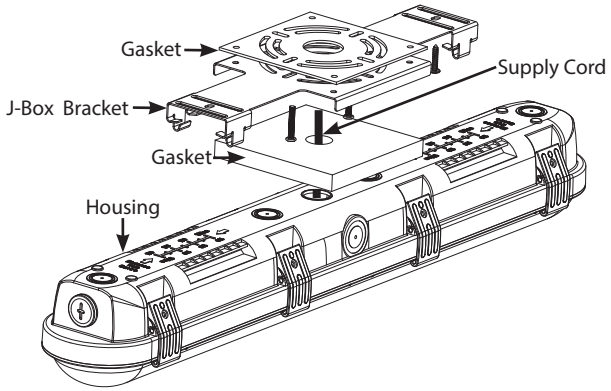
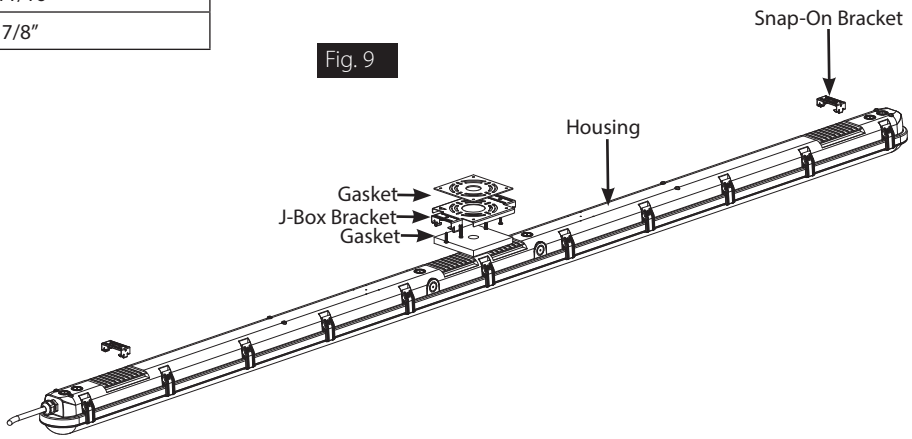


Fig. 9



OCCUPANCY SENSORS

Sensors can be configured for each application. All sensors have the following default behaviors in Occupancy mode. Standard sensors can be configured using the MSR1 Remote *(sold separately)* and Lightcloud Blue sensors can be configured using the mobile app. *(optional remote sold separately for custom settings, CAT# MSR1).*

- Sensing Type: Occupancy
- Brightness: 100%
- Sensitivity: High
- Hold Time: 20 minutes
- Stand-by Level: 20%
- Stand-by time: 1 Minute
- When Vacant: Off
- Daylight: Disabled

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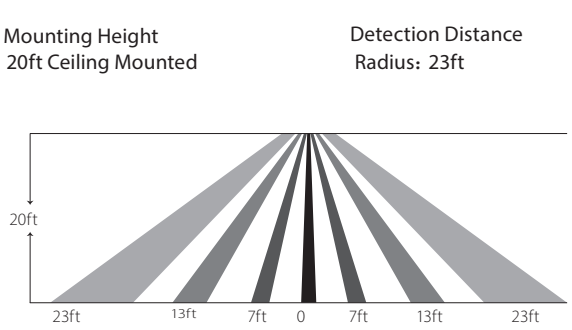
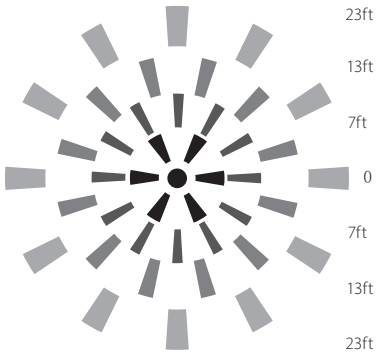
OCCUPANCY SENSORS *(CONT'D)*

PASSIVE INFRARED *(PIR)*

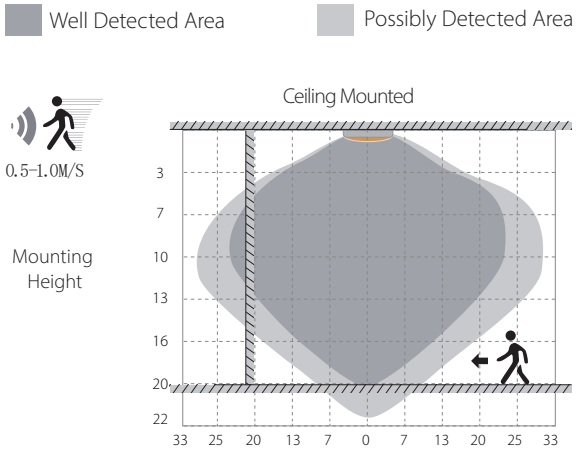
Max Mounting Height: 20ft.
Detection Range: 23ft.

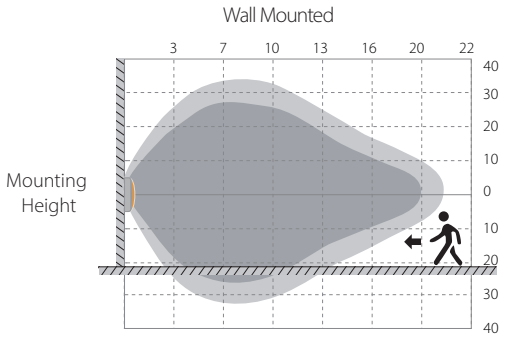




MICROWAVE *(MVS)*

Max Mounting Height: 22ft.
Detection Range: 40ft mounted at 13ft.





CLEANING & MAINTENANCE

Lens should be washed in a solution of warm water and any mild, non-abrasive household detergent, rinsed with clean water and wiped dry.
CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.
WARNING: : Polycarbonate is affected by cleaning agents or other liquids containing partial solvents such as low molecular weight aldehydes and ethers, ketones, esters, aromatic hydrocarbons and perchlorinated hydrocarbons. In addition, chemical attack ranging from partial to complete destruction of polycarbonate occurs in contact with alkalines, alkali salts, amines and high zone concentrations. Please go to rablighting.com for a detailed list of damaging chemicals.
Do not open fixture to clean the LED. Do not touch the LED.

TROUBLESHOOTING

1. Check that the line voltage at the fixture is correct. Refer to wiring directions.
2. Be sure the fixture is grounded properly.

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LIGHTCLOUD BLUE MODELS

LIGHTCLOUD BLUE

Lightcloud Blue is a Bluetooth mesh wireless lighting control system that allows you to control various compatible devices. With RAB's patented Rapid Provisioning technology, devices can be quickly and easily commissioned using the Lightcloud Blue mobile app.
Each device in a system can communicate with any other device, eliminating the need for a Gateway or Hub and maximizing the control system's reach.

ALL FIXTURES MUST BE WIRED TO CONSTANT POWER *(HOT FEED)* FOR WIRELESS COMMUNICATION.

CREATE A RELIABLE MESH

Lightcloud Blue devices should be placed within the specified range ***(~60 ft)*** to communicate within the Bluetooth Mesh network. Building materials such as brick, concrete and steel construction or heavy vegetation, bushes or trees may require additional Lightcloud Blue devices to extend around an obstruction. Contact RAB Lighting for more information.

DOWNLOAD THE MOBILE APP

Lightcloud Blue mobile app is available for IOS and Android mobile phones and tablets. The mobile app is required to commission and configure the Lightcloud Blue fixtures and devices.

Note: The mobile device is NOT part of the mesh network and must be within ≤30 ft from at least one device paired to the Site.

IOS Users

Android Users

GETTING STARTED

1. Confirm your device is powered On.
2. Launch the App and create an account or login.
3. Tap the "add device" icon in the app to start connecting devices.
4. Select the fixture in the app and move it to an Area.
5. You are all set!

RESET TO FACTORY SETTINGS

If your Lightcloud Blue fixture is already paired, you can reset it to factory settings by using below methods.

Method 1: Delete from the App

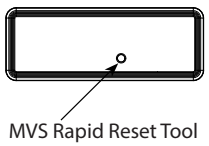
Open the app and access the device settings for the paired device. Be sure that the fixture is online *(green status bars are visible) and select* "DELETE FROM SITE"

Method 2: Manual

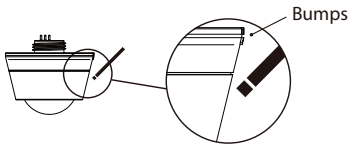
Power the fixture off and on 5 times consecutively. Do NOT allow less than 5 seconds and more than 10 seconds to elapse from switch off to on, do NOT allow more than 2 seconds to elapse from switch on to off. The fixture will flash 3 times, then reset to 100% brightness as default CCT.

Method 3: Rapid Reset Tool

The rapid reset process must be done by a professional electrician qualified by RAB. Reach out to your RAB sales manager to request a Rapid Reset Tool. The tool simply needs to be placed directly on fixture for 2 seconds as shown below. The fixture will flash 3 times, then reset to 100% brightness at default CCT.



MVS Rapid Reset Tool



PIR Rapid Reset Tool

CONFIGURATION

All configuration of Lightcloud Blue products may be performed using the Lightcloud Blue mobile app.

System overview

Resources

POWER OUTAGE RECOVERY

If there is power loss, the Lightcloud Blue light will turn ON AT LAST DIM LEVEL when power is restored. This behavior can be adjusted to LAST STATE using the mobile app. When using Schedules, be sure to add a NANO/LCB *(sold separately)* to maintain accurate timekeeping after a power loss.

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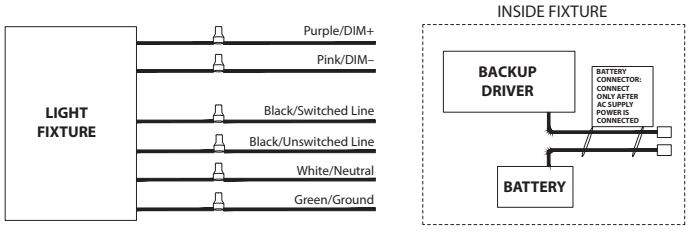
BATTERY BACKUP MODELS

WIRING

CAUTION: FOR BATTERY BACKUP FIXTURE. Voltage can be present in **BATTERY.** To prevent high voltage from being present on output leads, Inverter connector must be open. Do not join **BATTERY** connector until installation is complete and AC power is supplied to the emergency driver *(Fig.10)*.
NOTE: Make sure that the necessary branch circuit wiring is available. An **UNSWITCHED AC** source of power is required. The emergency driver must be fed from the same branch circuit as the LED driver.
CAUTION: Do not use any supply voltage other than 120-277V 50/60 Hz.

1. Connect **UNSWITCHED HOT** fixture lead to **HOT AC** supply line.
2. If using an **UNSWITCHED** circuit, connect **UNSWITCHED** and **SWITCHED** lines together.
3. If using a **SWITCHED** circuit, connect **SWITCHED HOT** AC fixture lead to the external.
4. After installation is complete, supply AC power to the fixture and connect the **BATTERY.**
5. When power is on, the fixture should be on and the **CHARGING INDICATOR LIGHT** should illuminate to indicate the battery is charging.
6. Once the **BATTERY** has charged for at least one hour, a short duration test may be performed by pressing the **Test Button** as shown in Fig. 11. After the battery has charged for 24 hours, a long duration test can be performed by disconnecting power to the fixture.

FIG. 10



OPERATION

1. When AC power is applied the charging indicator light is illuminated indicating that the **BATTERY** is being charged.
2. When power fails the emergency driver automatically switches to emergency power *(internal battery)* operating at reduced illumination.
3. When AC power is restored the emergency driver automatically returns to charging mode.

MAINTENANCE

Although no routine maintenance is required to keep the emergency driver functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

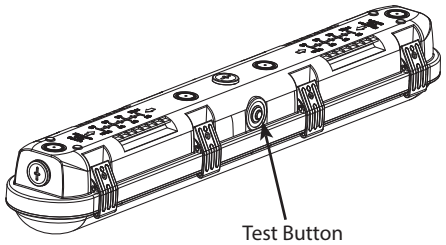
1. Visually inspect the charging indicator light monthly. It should be illuminated
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds.
3. Conduct a 90-minute discharge test once a year. Fixture would operate at reduced illumination for a minimum of 90 minutes.

TROUBLESHOOTING

1. Be sure the fixture is grounded properly.
2. If the charging indicator light does not illuminate after pressing the **Test Button** *(Fig. 11)*, check if battery is connected properly. Check AC power.
3. **Test Button:**

- RED Indicator Light - **On**: Power is on and battery is charging
- RED Indicator Light - **Off**: Power is off or test button being pressed *(battery is discharging)*

FIG. 11



Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation, operation or maintenance.

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P-103053

Easy Answers

rablighting.com
Visit our website for product info

Tech Help Line
Call our experts: 888 722-1000

e-mail
Answered promptly - tech@rablighting.com

Free Lighting Layouts
Answered online or by request

RAB WARRANTY: *RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.*