EZPAN™ EDGELIT PANEL 2X2 INSTALLATION INSTRUCTIONS

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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.

Make certain power is OFF before installing or maintaining fixture.

SAFETY INSTRUCTIONS

WARNING: Risk of fire or electric shock. Suitable for Damp locations.

WARNING: Suitable for 9/16" or 15/16" Flat Tee Grid in both Insulated Ceilings and Non-Insulated Ceilings. Access above ceiling required.

WARNING: Do not handle energized fixture when hands are wet, when standing on wet or damp surfaces, or in water.

WARNING: Vapor barrier must be suitable for 90° C.

WARNING: Fixture to be independently supported to building structure.

RECESSED CEILING MOUNTING

The fixture is suitable only for INDOOR RECESSED CEILING application. Above ceiling access required.

To mount in an insulated or non-insulated ceiling - 9/16" or 15/16" exposed Flat Tee Grid Ceiling follow the steps below.

1. Firmly bend the pre-installed **Grid Clips** (4) up and out as shown in Fig. 1.

2. Rotate and slide the **Fixture** as required to fit through the **Tee-Grid Bar** and place it as indicated by the directional arrow as shown in Fig. 2. Secure the **Fixture** to the **Tee-Grid Bar**.

3. Support wires are required by Installation Codes. Support the **Fixture** to the building structure by **Support Wires (supplied by others)** through the **Grid Clip Hole** as shown in Fig. 3.

4. Make sure that the orientation of the **Splice Box** and **Access Plate** faces an accessible tile to make electrical splices.

5. Loosen **Access Plate Screw** and remove the **Access Plate**. Knock out appropriate **Conduit Knockouts** on the **Access Plate** to route input conduit. Use appropriate conduit connectors as required by code (Fig. 4).

6. Connect wires as shown in wiring diagram. Push all wires back into the **Splice Box**. Use appropriate UL approved wire connectors as required by code to complete wiring. Terminal Block accepts input power wires of 12-18 AWG. Be careful not to pinch wires. **WARNING: To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.**

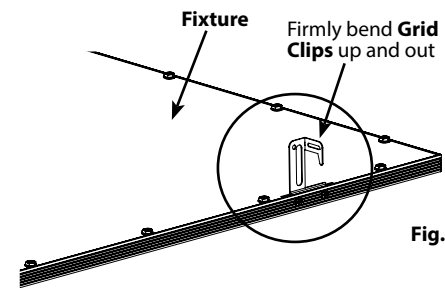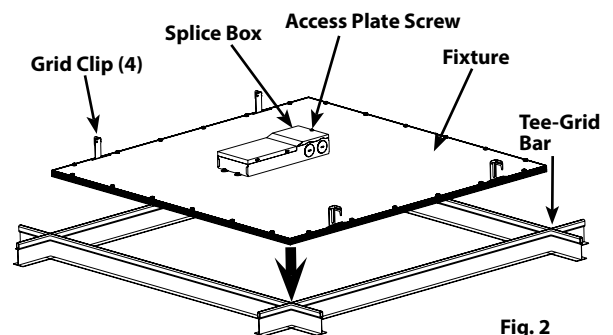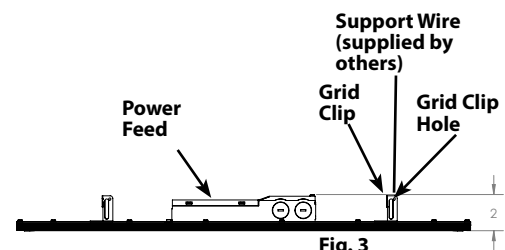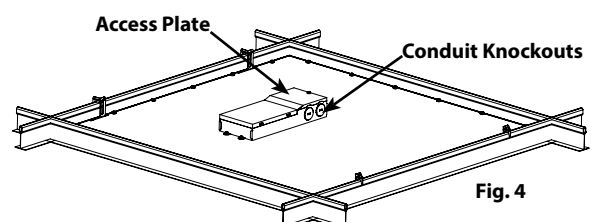7. Replace **Access Plate** and tighten **Access Plate Screw**.

Fixture · Firmly bend **Grid Clips** up and out

Fig. 1

Grid Clip (4) · Splice Box · Access Plate Screw · Fixture · Tee-Grid Bar

Fig. 2

Support Wire (supplied by others) · Power Feed · Grid Clip · Grid Clip Hole

Fig. 3

Access Plate · Conduit Knockouts

Fig. 4

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0-10V DIMMABLE WIRING

Universal voltage driver permits operation at 100V thru 277V, 50 or 60 Hz. 0-10V control wires must be rated for 300V minimum. **Terminal block accepts input power wires of 12-18 AWG**.

1. Connect LINE supply lead to (L) marked on Terminal Block.
2. Connect COMMON supply lead to (N) marked on Terminal Block.
3. Connect the GROUND wire to pre-installed Push-in Connector.
4. Connect DIM+ lead to (DIM+) marked on Terminal Block.
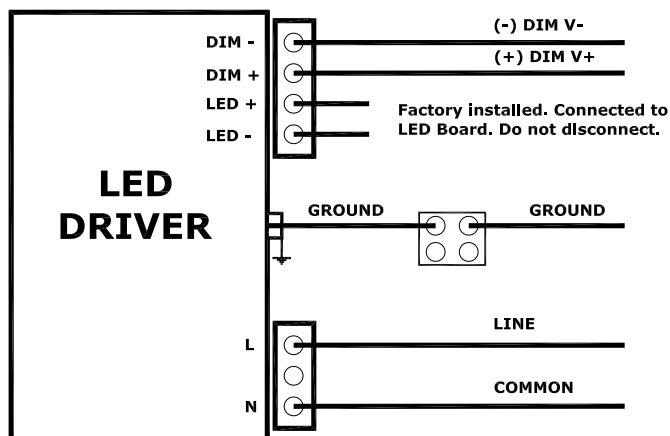5. Connect DIM- lead to (DIM-) marked on Terminal Block.

CLEANING & MAINTENANCE

CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

1. Clean acrylic lens & fixture with non-abrasive cleaning solution.
2. Do not open fixture to clean the LEDs. Do not touch the LEDs.

TROUBLESHOOTING

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

LED DRIVER

DIM - (-) DIM V-
DIM + (+) DIM V+
LED +
LED - Factory installed. Connected to LED Board. Do not disconnect.

GROUND   GROUND

L   LINE
N   COMMON

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.

Easy Installation & Product Help

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EZPAN™ EDGELIT PANEL 2X2 EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS

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Make certain power is OFF before installing or maintaining fixture.

SAFETY INSTRUCTIONS

WARNING: Risk of fire or electric shock. Suitable for Damp locations.

WARNING: Suitable for 9/16" or 15/16" Flat Tee Grid in both Insulated Ceilings and Non-Insulated Ceilings. Access above ceiling required.

WARNING: Do not handle energized fixture when hands are wet, when standing on wet or damp surfaces, or in water.
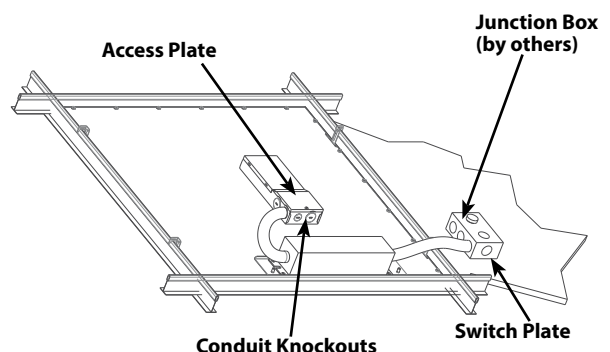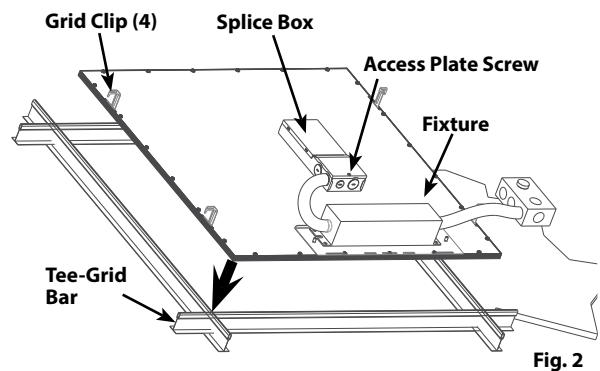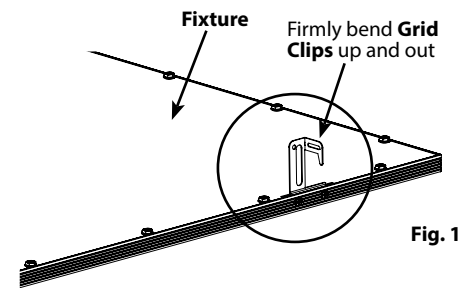
WARNING: Vapor barrier must be suitable for 90° C.

WARNING: Fixture to be independently supported to building structure.

RECESSED CEILING MOUNTING

The fixture is suitable only for INDOOR RECESSED CEILING application. Above ceiling access required.

To mount in an insulated or non-insulated ceiling - 9/16" or 15/16" exposed Flat Tee Grid Ceiling follow the steps below.

1. Firmly bend the pre-installed **Grid Clips** (4) up and out as shown in Fig. 1.

2. Rotate and slide the **Fixture** as required to fit through the **Tee-Grid Bar** and place it as indicated by the directional arrow as shown in Fig. 2. Secure the **Fixture** to the **Tee-Grid Bar**.

3. Support wires are required by Installation Codes. Support the **Fixture** to the building structure by **Support Wires (supplied by others)** through the **Grid Clip Hole.**

4. Make sure that the orientation of the **Splice Box** and **Access Plate** faces an accessible tile to make electrical splices.

5. Loosen **Access Plate Screw** and remove the **Access Plate**. Knock out appropriate **Conduit Knockouts** on the **Access Plate** to route input conduit. Use appropriate conduit connectors as required by code (Fig. 3).

6. Connect wires as shown in wiring diagram. Push all wires back into the **Splice Box**. Use appropriate UL approved wire connectors as required by code to complete wiring. Terminal Block accepts input power wires of 12-18 AWG. Be careful not to pinch wires. **WARNING: To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.**

7. Install the **Switch Plate** (along with the charging indicator) in a suitable **Junction Box (by others)** in an adjacent ceiling tile. It should be located nominal 2 feet from the fixture.

8. Replace **Access Plate** and tighten **Access Plate Screw**.

Fixture Firmly bend **Grid Clips** up and out

Fig. 1

Grid Clip (4) **Splice Box** **Access Plate Screw** **Fixture** **Tee-Grid Bar**

Fig. 2

Access Plate **Junction Box (by others)** **Conduit Knockouts** **Switch Plate**

Fig. 3

EZPAN™ EDGELIT PANEL 2X2 EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS

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WIRING

CAUTION: THIS IS AN EMERGENCY BATTERY BACKUP FIXTURE. Voltage could be present in Battery. To prevent high voltage from being present on output leads, inverter connector must be open. Do not join inverter connector until installation is complete and AC power is supplied to the emergency ballast.

NOTE: Make sure that the necessary branch circuit wiring is available. An unswitched AC source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

Do not use any supply voltage other than those specified below.

> EDGELIT PANEL 2X2 E2   120V-277V, 50/ 60Hz

1. Connect the UNSWITCHED black fixture lead to the HOT supply lead.

2. Connect the two black lead together, if not using a switching method.

3. If switching, connect SWITCHED black lead to a switch.

4. Connect the COMMON fixture lead to the COMMON supply lead.

5. For 0-10V Dimming, connect DIM (+) purple lead and DIM (-) gray lead to 0-10V dimmer connections on the driver.

5. Connect the GROUND wire from fixture to supply ground. Do NOT connect the GROUND of the dimming fixture to the output.

6. All unused leads must be capped and insulated.

7. After installation is complete, supply AC power to the emergency ballast and join the inverter connector.

9. At this point, power should be connected to both the AC ballast and the emergency ballast, and the Charging Indicator Light should illuminate indicating the battery is charging.

10. A short-term discharge test may be conducted after the emergency ballast has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.

TROUBLESHOOTING

1. Is the fixture grounded properly?

2. If discharge test shows less than 90-minutes check Dip Switch on battery setting against wiring diagram.

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 ballast automatically switches to emergency power (internal battery), operating at reduced illumination. The emergency ballast supplies 12W of power in emergency mode for a minimum of 90 minutes.

3. When AC power is restored, the emergency ballast automatically returns to charging mode.

CLEANING

CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

1. Clean acrylic lens & fixture with non-abrasive cleaning solution.

2. Do not open fixture to clean the LEDs. Do not touch the LEDs.

MAINTENANCE

Although no routine maintenance is required to keep the emergency ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:
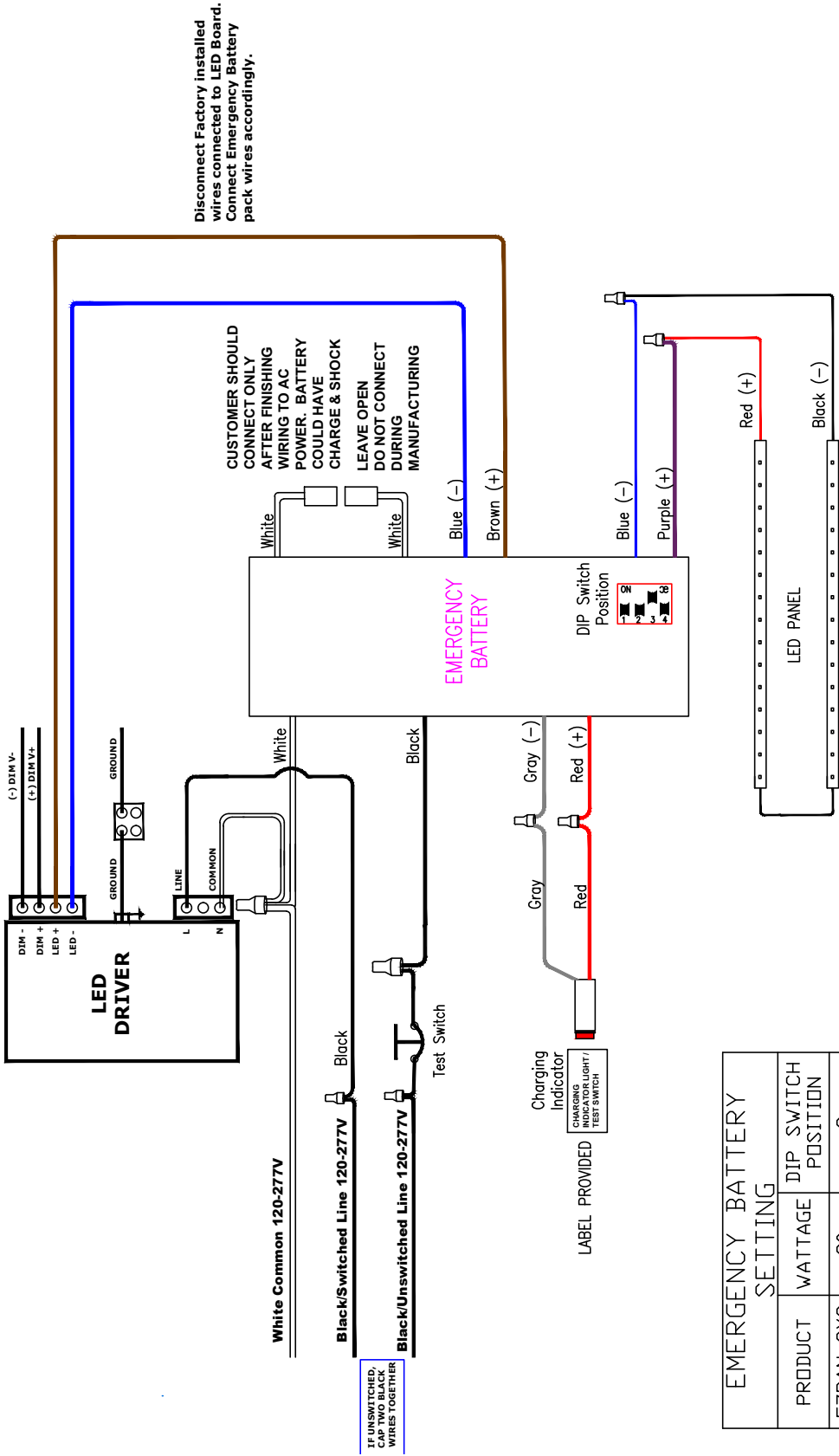
1. Visually inspect the charging indicator light monthly. It should be illuminated.

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.

To reduce the risk of electric shock, disconnect both normal and emergency power supplies and converter connector of the emergency ballast before servicing. Do not attempt to service the emergency ballast. The use of accessory equipment may cause an unsafe condition. Do not use this product for other than intended use. Refer any servicing indicated by these checks to a Qualified Service Personnel.

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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Northvale, New Jersey 07647 USA
EZPAN EDGELIT PANEL 2X2 EM 1116

Easy Installation & Product Help

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rabweb.com
Visit our website for product info

email
Answered promptly sales@rabweb.com

WIRING DIAGRAM for EMERGENCY OPERATION at 120V-277V with 0-10V DIMMING

Emergency Ballast and AC Ballast must be fed from the same circuit

Disconnect Factory installed wires connected to LED Board. Connect Emergency Battery pack wires accordingly.

CUSTOMER SHOULD CONNECT ONLY AFTER FINISHING WIRING TO AC POWER. BATTERY COULD HAVE CHARGE & SHOCK

LEAVE OPEN DO NOT CONNECT DURING MANUFACTURING

LED DRIVER

(-) DIM V-
(+) DIM V+
GROUND

DIM -
DIM +
LED +
LED -

GROUND

LINE
COMMON

L
N

White Common 120-277V

Black/Switched Line 120-277V

Black/Unswitched Line 120-277V

IF UNSWITCHED, CAP TWO BLACK WIRES TOGETHER

Black

Test Switch

White

Black

Gray

Red

Gray (-)

Red (+)

Charging Indicator

LABEL PROVIDED

CHARGING INDICATOR LIGHT/ TEST SWITCH

EMERGENCY BATTERY

White

White

Blue (-)

Brown (+)

Blue (-)

Purple (+)

Red (+)

Black (-)

DIP Switch Position

ON
1 2 3 4

LED PANEL

EMERGENCY BATTERY SETTING		
PRODUCT	WATTAGE	DIP SWITCH POSITION
EZPAN 2X2	30	3
EZPAN 2X2	40	3
EZPAN 2X4	40	3
EZPAN 2X4	50	3

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EZPAN EDGELIT PANEL 2X2 EM 1116

EZPAN™ EDGELIT PANEL 2X4 INSTALLATION INSTRUCTIONS

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Make certain power is OFF before installing or maintaining fixture.

SAFETY INSTRUCTIONS

WARNING: Risk of fire or electric shock. Suitable for Damp locations.

WARNING: Suitable for 9/16" or 15/16" Flat Tee Grid in both Insulated Ceilings and

Non-insulated Ceilings. Access above ceiling required.

WARNING: Do not handle energized fixture when hands are wet, when standing on wet or damp surfaces, or in water.

WARNING: Vapor barrier must be suitable for 90° C.

WARNING: Fixture to be independently supported to building structure.

RECESSED CEILING MOUNTING

The fixture is suitable only for INDOOR RECESSED CEILING application. Above ceiling access required.

To mount in an insulated or non-insulated ceiling - 9/16" or 15/16" exposed Flat Tee Grid Ceiling follow the steps below.

1. Firmly bend the pre-installed **Grid Clips** (6) up and out as shown in Fig. 1.

2. Rotate and slide the **Fixture** as required to fit through the **Tee-Grid Bar** and place it as indicated by the directional arrow as shown in Fig. 2. Secure the **Fixture** to the **Tee-Grid Bar**.

3. Support wires are required by Installation Codes. Support the **Fixture** to the building structure by **Support Wires (supplied by others)** through the **Grid Clip Hole** as shown in Fig. 3.

4. Make sure that the orientation of the **Splice Box** and **Access Plate** faces an accessible tile to make electrical splices.

5. Loosen **Access Plate Screw** and remove the **Access Plate**. Knock out appropriate **Conduit Knockouts** on the **Access Plate** to route input conduit. Use appropriate conduit connectors as required by code (Fig. 4).

6. Connect wires as shown in wiring diagram. Push all wires back into the **Splice Box**. Use appropriate UL approved wire connectors as required by code to complete wiring. Terminal block accepts input power wires of 12-18 AWG. Be careful not to pinch wires. **WARNING: To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.**

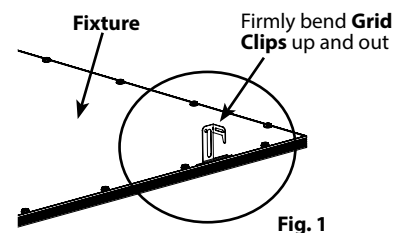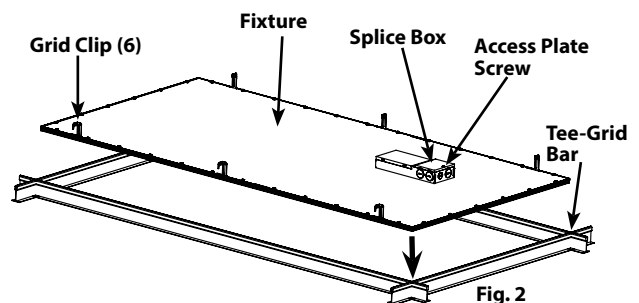7. Replace **Access Plate** and tighten **Access Plate Screw**.

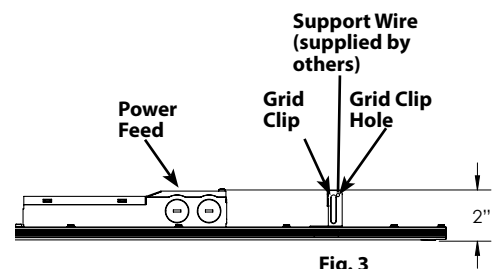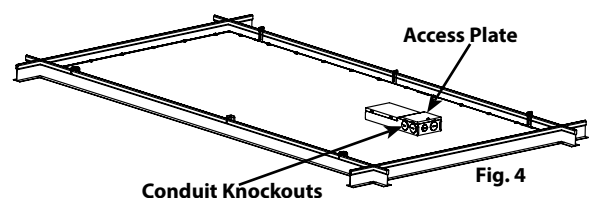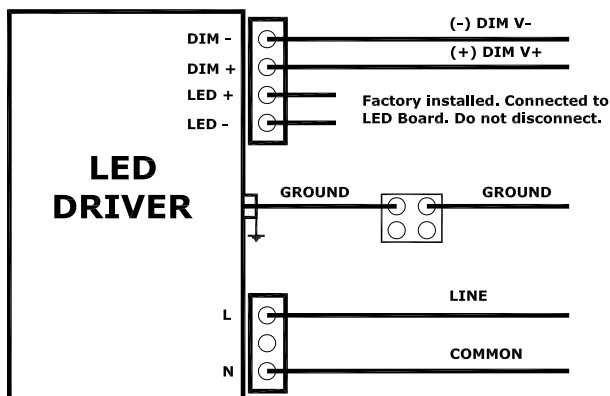**Fixture** — Firmly bend **Grid Clips** up and out

Fig. 1

Grid Clip (6) **Fixture** **Splice Box** **Access Plate Screw** **Tee-Grid Bar**

Fig. 2

Support Wire (supplied by others)

Power Feed **Grid Clip** **Grid Clip Hole** 2"

Fig. 3

Access Plate

Conduit Knockouts **Fig. 4**

EZPAN™ EDGELIT PANEL 2X4 INSTALLATION INSTRUCTIONS

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0-10V DIMMABLE WIRING

Universal voltage driver permits operation at 100V thru 277V, 50 or 60 Hz. 0-10V control wires must be rated for 300V minimum. **Terminal block accepts input power wires of 12-18 AWG**.

1. Connect LINE supply lead to (L) marked on Terminal Block.
2. Connect COMMON supply lead to (N) marked on Terminal Block.
3. Connect the GROUND wire to pre-installed Push-in Connector.
4. Connect DIM+ lead to (DIM+) marked on Terminal Block.
5. Connect DIM- lead to (DIM-) marked on Terminal Block.

CLEANING & MAINTENANCE

CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

1. Clean acrylic lens & fixture with non-abrasive cleaning solution.
2. Do not open fixture to clean the LEDs. Do not touch the LEDs.

TROUBLESHOOTING

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

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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1. Firmly bend the pre-installed **Grid Clips** (6) up and out as shown in Fig. 1.

2. Rotate and slide the **Fixture** as required to fit through the **Tee-Grid Bar** and place it as indicated by the directional arrow as shown in Fig. 2. Secure the **Fixture** to the **Tee-Grid Bar**.

3. Support wires are required by Installation Codes. Support the **Fixture** to the building structure by **Support Wires (supplied by others)** through the **Grid Clip Hole** as shown in Fig. 3.

4. Make sure that the orientation of the **Splice Box** and **Access Plate** faces an accessible tile to make electrical splices.

5. Loosen **Access Plate Screw** and remove the **Access Plate**. Knock out appropriate **Conduit Knockouts** on the **Access Plate** to route input conduit. Use appropriate conduit connectors as required by code (Fig. 4.).

6. Connect wires as shown in wiring diagram. Push all wires back into the **Splice Box**. Use appropriate UL approved wire connectors as required by code to complete wiring. Terminal Block accepts input power wires of 12-18 AWG. Be careful not to pinch wires. **WARNING: To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.**

7. Install the **Switch Plate** (along with the charging indicator) in a suitable **Junction Box (by others)** in an adjacent ceiling tile. It should be located nominal 2 feet from the fixture.

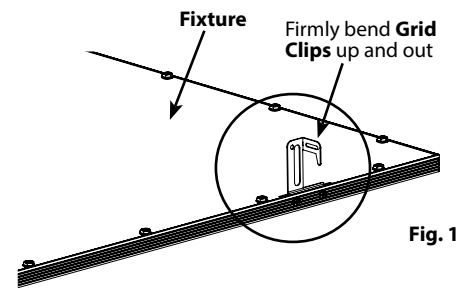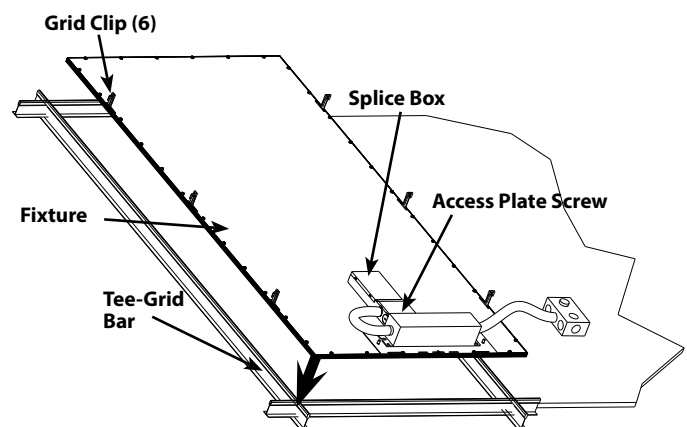8. Replace **Access Plate** and tighten **Access Plate Screw**.

Fixture
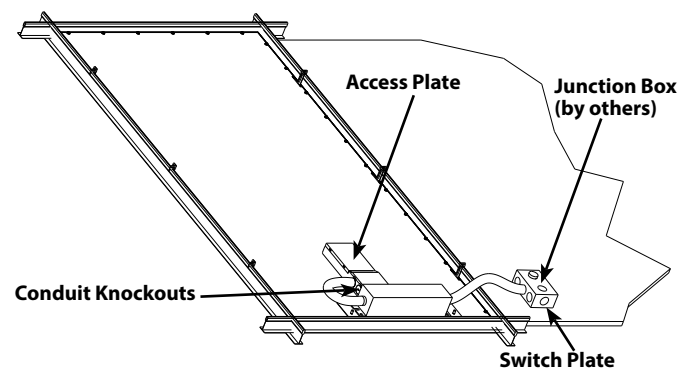Firmly bend **Grid Clips** up and out

Fig. 1

Grid Clip (6)
Splice Box
Fixture
Access Plate Screw
Tee-Grid Bar

Fig. 2

Access Plate
Junction Box (by others)
Conduit Knockouts
Switch Plate

Fig. 3

EZPAN™ EDGELIT PANEL 2X4 EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS

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WIRING

CAUTION: THIS IS AN EMERGENCY BATTERY BACKUP FIXTURE. Voltage could be present in Battery. To prevent high voltage from being present on output leads, inverter connector must be open. Do not join inverter connector until installation is complete and AC power is supplied to the emergency ballast.

NOTE: Make sure that the necessary branch circuit wiring is available. An unswitched AC source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

Do not use any supply voltage other than those specified below.

> EDGELIT PANEL 2X4 E2   120V-277V, 50/ 60Hz

1. Connect the UNSWITCHED black fixture lead to the HOT supply lead.

2. Connect the two black lead together, if not using a switching method.

3. If switching, connect SWITCHED black lead to a switch.

4. Connect the COMMON fixture lead to the COMMON supply lead.

5. For 0-10V Dimming, connect DIM (+) purple lead and DIM (-) gray lead to 0-10V dimmer connections on the driver.

5. Connect the GROUND wire from fixture to supply ground. Do NOT connect the GROUND of the dimming fixture to the output.

6. All unused leads must be capped and insulated.

7. After installation is complete, supply AC power to the emergency ballast and join the inverter connector.

9. At this point, power should be connected to both the AC ballast and the emergency ballast, and the Charging Indicator Light should illuminate indicating the battery is charging.

10. A short-term discharge test may be conducted after the emergency ballast has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.

TROUBLESHOOTING

1. Is the fixture grounded properly?

2. If discharge test shows less than 90-minutes check Dip Switch on battery setting against wiring diagram.

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 ballast automatically switches to emergency power (internal battery), operating at reduced illumination. The emergency ballast supplies 12W of power in emergency mode for a minimum of 90 minutes.

3. When AC power is restored, the emergency ballast automatically returns to charging mode.

CLEANING

CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

1. Clean acrylic lens & fixture with non-abrasive cleaning solution.

2. Do not open fixture to clean the LEDs. Do not touch the LEDs.

MAINTENANCE

Although no routine maintenance is required to keep the emergency ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:
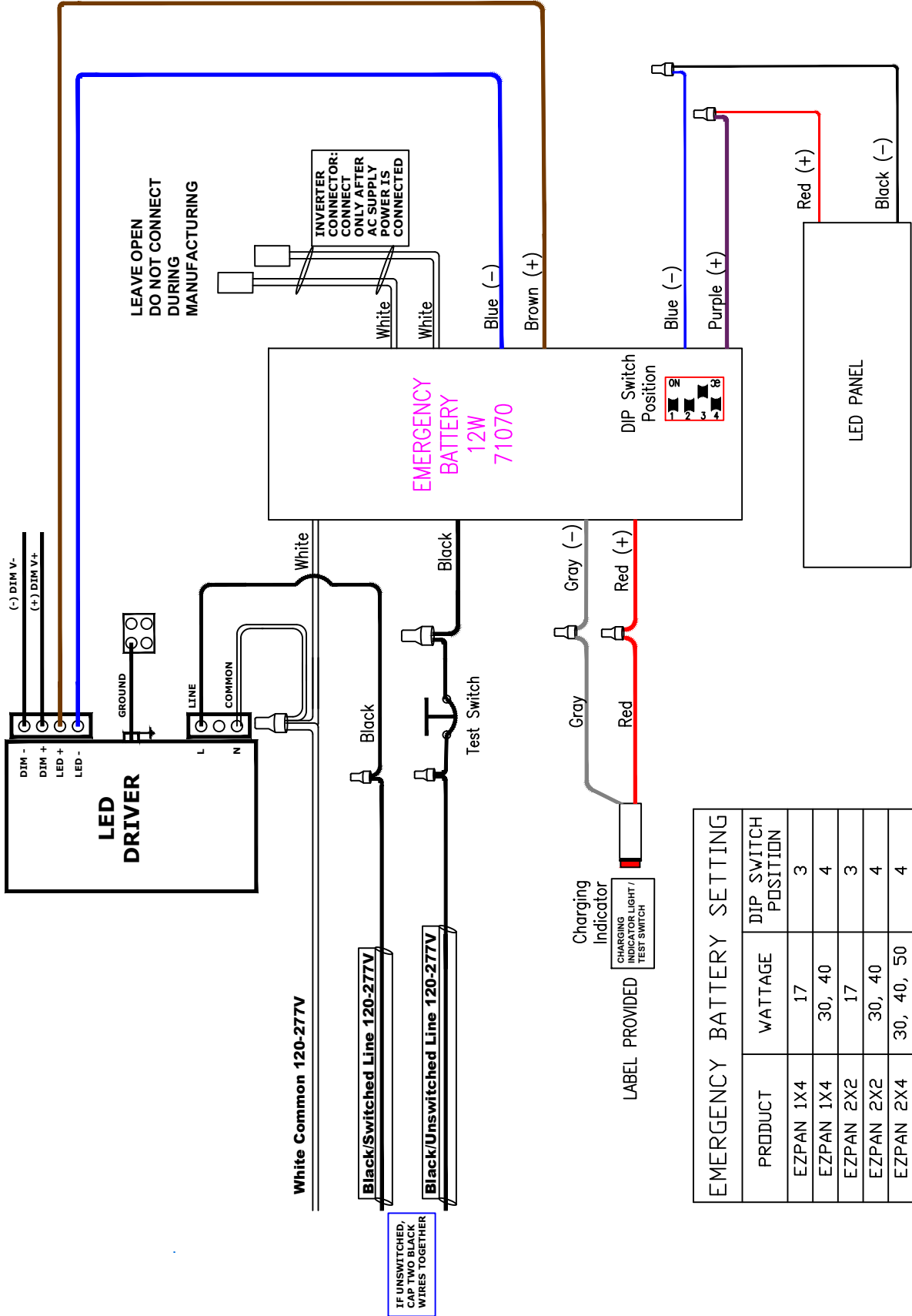
1. Visually inspect the charging indicator light monthly. It should be illuminated.

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.

To reduce the risk of electric shock, disconnect both normal and emergency power supplies and converter connector of the emergency ballast before servicing. Do not attempt to service the emergency ballast. The use of accessory equipment may cause an unsafe condition. Do not use this product for other than intended use. Refer any servicing indicated by these checks to a Qualified Service Personnel.

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.

Easy Installation & Product Help

Tech Help Line	**rabweb.com**	**email**
Call our experts 888 RAB-1000	Visit our website for product info	Answered promptly sales@rabweb.com

WIRING DIAGRAM for EMERGENCY OPERATION at 120V-277V with 0-10V DIMMING

Emergency Ballast and AC Ballast must be fed from the same circuit

Disconnect Factory installed wires connected to LED Board. Connect Emergency Battery pack wires accordingly.

LEAVE OPEN
DO NOT CONNECT
DURING
MANUFACTURING

INVERTER
CONNECTOR:
CONNECT
ONLY AFTER
AC SUPPLY
POWER IS
CONNECTED

White
White
Blue (−)
Brown (+)

Blue (−)
Purple (+)
Red (+)
Black (−)

EMERGENCY BATTERY 12W 71070

DIP Switch Position

ON
1 2 3 4

LED PANEL

White

Black

Gray (−)
Red (+)

Test Switch

Black

Gray
Red

(−) DIM V−
(+) DIM V+

DIM −
DIM +
LED +
LED −

GROUND

LINE
COMMON

L
N

LED DRIVER

Charging Indicator

CHARGING INDICATOR LIGHT / TEST SWITCH

LABEL PROVIDED

White Common 120-277V

Black

Black/Switched Line 120-277V

Black/Unswitched Line 120-277V

IF UNSWITCHED,
CAP TWO BLACK
WIRES TOGETHER

EMERGENCY BATTERY SETTING

PRODUCT	WATTAGE	DIP SWITCH POSITION
EZPAN 1X4	17	3
EZPAN 1X4	30, 40	4
EZPAN 2X2	17	3
EZPAN 2X2	30, 40	4
EZPAN 2X4	30, 40, 50	4

RAB
LIGHTING

EZPAN 1X4, 2X2, 2X4 - EM - 0##+

Lightcloud is a commercial wireless lighting control system & service. It's powerful and flexible, yet easy to use and install. Learn more at **lightcloud.com**

1 (844) LIGHTCLOUD
1 (844) 544-4825

RAB®

© RAB Lighting, Inc
170 Ludlow Avenue Northvale, NJ 07647
Custom manufactured in China

Welcome

Lightcloud™
Dimmer

LCDIMMERW

WE'RE HERE TO HELP:
1 (844) LIGHTCLOUD
or 1 (844) 544-4825

Hello

Lightcloud is a wireless lighting control service. The Lightcloud Dimmer is an in-wall switch that connects wirelessly to a Lightcloud Controller to provide switching, dimming and scene control.

Product Features

Wireless Control & Configuration
Zone Switching & Dimming
Dim Level Indicator
Scene Selection
Nightlight

Contents

Dimmer
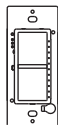
Faceplate
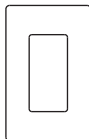
Faceplate Bracket

Instruction Manual
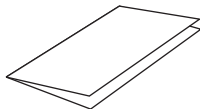
2x 6-32 1/2" Screws

2x 6-32 5/16" Screws

Specifications

PART NUMBER
LCDIMMER/W

INPUT
120-277VAC, 50/60Hz, 2W

OPERATING TEMPERATURE
0°C to 40°C

DIMENSIONS
Dimmer: 1.77"W x 2.7"H x 1.49"D
Faceplate: 2.94"W x 4.69"H x 0.06"D
Faceplace Bracket: 2.8"W x 4.55"H x 0.13"D

18AWG grounding; terminals supporting up to 12AWG wire

WIRELESS RANGE
Line-of-Sight: 1000 feet
Obstructions: 100 feet

What You Need

A Lightcloud Gateway
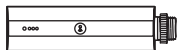
A Ceiling Sensor
(Or similar actuator)

Wiring

WHITE / NEUTRAL

BLACK / HOT

GREEN/ GROUND

PANEL
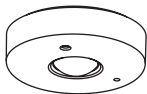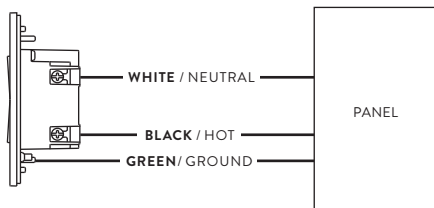
CAUTION

• Use only copper wire.
• Do not operate with the faceplate removed.
• This product should only be installed by a
  qualified electrician and in compliance with
  local and national electrical codes.
• This product should only be installed in a
  UL-approved single gang wall-box enclosure.
• Indoor use only.

Finding a suitable location

Lightcloud uses a wireless mesh network to connect devices such as the Dimmer to the Gateway. Unlike a WiFi router, each Lightcloud device may connect another device to the network. If there is a clear line of sight between two Lightcloud devices, they can be placed up to 1000 feet apart. If the two devices are separated by ordinary drywall construction, try to keep them within 100 feet of each other. Brick, concrete and steel construction may require additional AC-powered Lightcloud devices to go around the obstruction. See the Deployment section of your Gateway for more information.

Setup & Installation

(1) Turn off power ⚠ WARNING
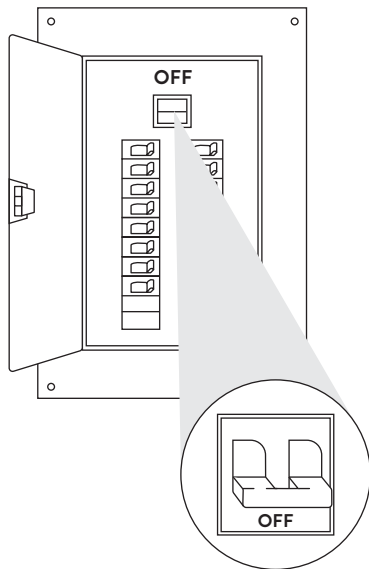
Setup & Installation (cont'd)

② Install the Lightcloud Dimmer

2a Screw the line (black) and neutral (white) wires into the labeled connectors on the back of the Dimmer. Connect the ground wire (green).
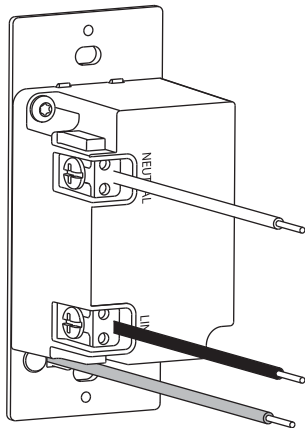
2b Use the two 6-32 1/2" Phillips round head screws to secure the Dimmer to the junction box.
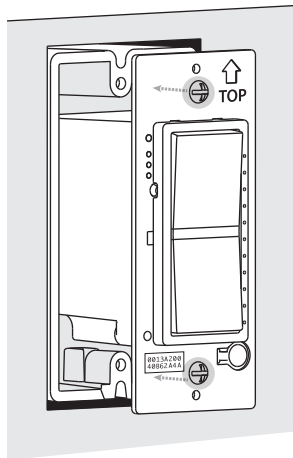
Make sure the arrow labeled "TOP" is pointing up.

Setup & Installation (cont'd)

2 Install the Lightcloud Dimmer *(cont'd)*

2c Use the two 6-32 5/16" Phillips flat-head screws provided to secure the faceplate bracket to the Dimmer.
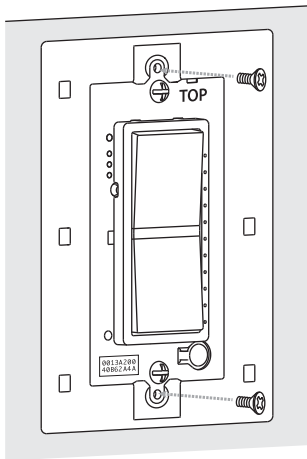
2d Snap the faceplate onto the faceplate bracket.
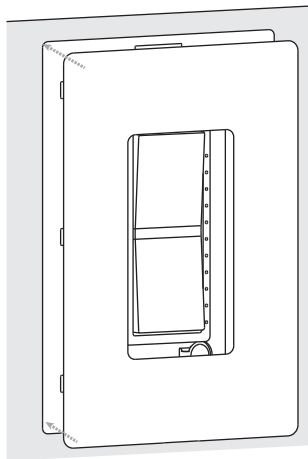
Setup & Installation (cont'd)

③ Labeling your device

DEVICE ID	ZONE NAME	PANEL/CIRCUIT #	DIMMING
0013A200 40B62A4A	Front Desk	2	✓
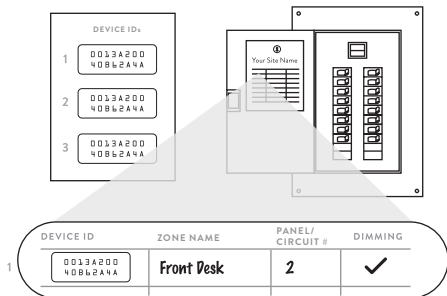
For setup and maintenance, we provide two Lightcloud Device Tables with the Gateway: one that you can attach to your panel and one to hand off to a building manager. Attach the Device Identification stickers included with each device to a row, then write in additional information, such as Zone name, Panel/Circuit Number, and whether or not a zone uses dimming.

④ Power up

To add your Lightcloud Dimmer to your system, enable Setup Mode via the Lightcloud application or call RAB at 1 (844) 544-4825. When the Dimmer powers up, it will automatically try to join, and keep trying until it is able to join.

If you are installing multiple devices, you may wait until they are all installed to enable Setup Mode.

When all devices have been commissioned, remember to disable Setup Mode.

ON
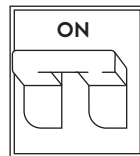
⑤ Confirm device connectivity

Confirm Network Status Indicator is solid green (see details below).

Functionality

Configuration

To pair the Dimmer with a zone, assign scenes or perform other configuration, use the Lightcloud web application or call RAB:

WE'RE HERE TO HELP:
1 (844) LIGHTCLOUD
or 1 (844) 544-4825

Overview
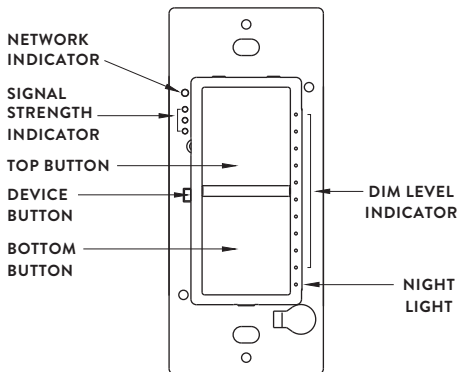
DEVICE BUTTON (*press using paperclip*):
- **Single press:** Indicate in Lightcloud application
- **Hold for 10 seconds:** Force device to leave current Lightcloud network

DIM LEVEL INDICATOR:
- Displays current dim level (Zone mode)

NIGHTLIGHT:
- **White:** Lit when zone is off so you can find the dimmer

SIGNAL STRENGTH INDICATOR:
- Indicates strength of the connection to next Lightcloud Device

NETWORK INDICATOR:
- **Solid green:** Connected to a Lightcloud network
- **Blinking red:** Not connected to a Lightcloud network
  The network and signal strength indicators are lit for 10 minutes following initial power on. To display the indicators later on, simply press the device button once.

TOP AND BOTTOM BUTTONS:
Functionality depends on which mode is being used; see next page for details.

Functionality (cont'd)

Features

The Lightcloud Dimmer can be used in Switch Mode, Dimmer Mode or Scene Mode. To switch between these modes and access other configuration options, use the Lightcloud web application, or call RAB at 1-844-LIGHTCLOUD.

SWITCH MODE: In Switch Mode, the Dimmer is paired with a specific zone to provide switching.
Top and Bottom Buttons:
• **Single Press:** Switch zone on/off

DIMMER MODE: Dimmer Mode takes Switch Mode and adds dimming capabilities.
Top Button:
• **Single press while zone is off:** switch zone on.
• **Single press while zone is on:** dim up to max gradually, stopping at current position if bottom button is pressed.
• **Press and hold while zone is on:** dim up gradually, release to set dim level.
Bottom Button:
• **Single press while zone is on:** switch zone off.
• **Press and hold while zone is on:** dim down gradually, release to set dim level.

SCENE MODE: In Scene Mode, the top and bottom buttons activate preselected scenes. This can be configured using the Lightcloud web application or by calling RAB.

INSTRUCTIONS
EZPAN® WITH SMARTSHIFT 1X4, 2X2, 2X4 INSTALLATION

RAB®

EZPAN 1X4   EZPAN 2X2   EZPAN 2X4

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.

SAFETY INSTRUCTIONS

WARNING: Risk of fire or electric shock. Suitable for damp locations.

WARNING: Suitable for 9/16" or 15/16" flat T-grid in both insulated ceilings and non-insulated ceilings. Access above ceiling required.

WARNING: Do not handle energized fixture when hands are wet, when standing on wet or damp surfaces, or in water.

WARNING: Vapor barrier must be suitable for 90° C.

WARNING: Fixture to be independently supported to building structure.

RECESSED CEILING MOUNTING

The fixture is suitable only for INDOOR RECESSED CEILING application. Above ceiling access required.

To mount in an insulated or non-insulated ceiling - 9/16" or 15/16" exposed Flat Tee Grid Ceiling follow the steps below.

1. Firmly bend the pre-installed **Grid Clips** *(up and out as shown in Fig. 1)*.

2. Rotate and slide the **Fixture** as required to fit through the **Tee-Grid Bar** and place it as indicated by the directional arrow as shown in Fig. 2. Secure the **Fixture** to the Tee-Grid Bar.

3. Support wires are required by Installation Codes. Support the **Fixture** to the building structure by **Support Wires (supplied by others)** through the **Grid Clip Hole** as shown in Fig. 3.

4. Make sure that the orientation of the **Splice Box** and **Access Plate** faces an accessible tile to make electrical splices.
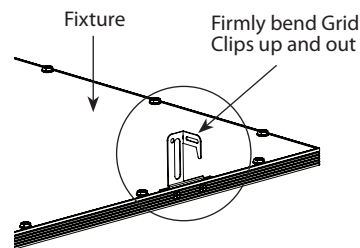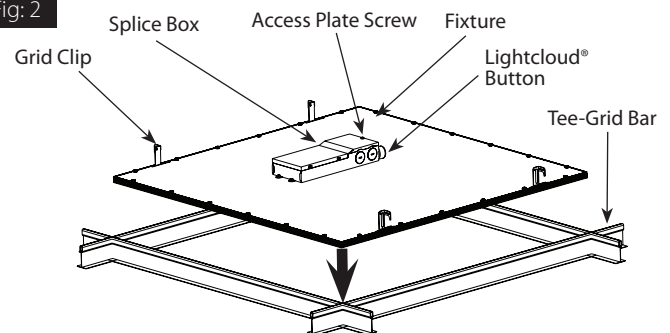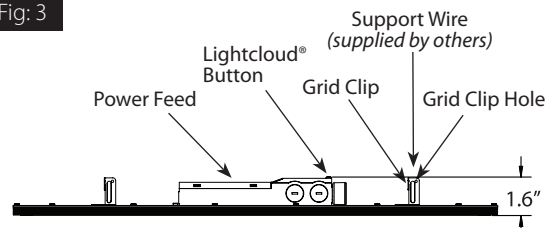
Fig: 1   Fixture   Firmly bend Grid Clips up and out

Fig: 2   Splice Box   Access Plate Screw   Fixture   Grid Clip   Lightcloud® Button   Tee-Grid Bar

Fig: 3   Support Wire *(supplied by others)*   Lightcloud® Button   Grid Clip   Grid Clip Hole   Power Feed   1.6"

INSTRUCTIONS
## EZPAN® WITH SMARTSHIFT 1X4, 2X2, 2X4 INSTALLATION

RAB®

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

RECESSED CEILING MOUNTING *(cont'd)*

5. Loosen **Access Plate Screw** and remove the **Access Plate**. Knock out appropriate **Conduit Knockouts** on the **Access Plate** to route input conduit. Use appropriate conduit connectors as required by code *(Fig. 4)*.

6. Connect wires as shown in wiring diagram. Push all wires back into the **Splice Box.** Use appropriate UL approved wire connectors as required by code to complete wiring. Be careful not to pinch wires. **WARNING: To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.**

7. Replace **Access Plate** and tighten **Access Plate Screw.**

Fig: 4

Access Plate
Lightcloud® Button
Conduit Knockout
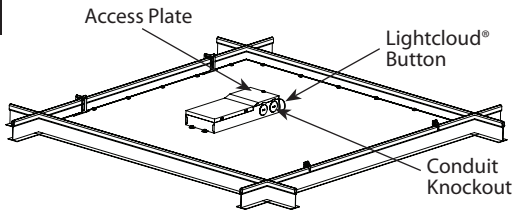
WIRING

WARNING: Lightcloud-enabled fixtures require constant power and shouldn't be placed down circuit from any switching devices.

Universal voltage driver permits operation at 120V thru 277V, 50 or 60 Hz. Follow the wiring directions shown in *Fig 5*.
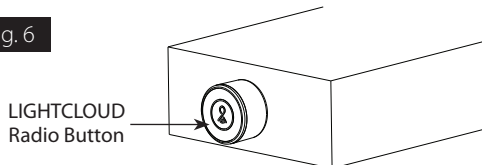
1. Connect the **Black** fixture lead to the LINE supply lead.

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

3. Connect the **GROUND** wire from fixture to supply ground.

Fig. 5

LINE	BLACK	
COMMON	WHITE	LIGHT FIXTURE
GROUND	GROUND	
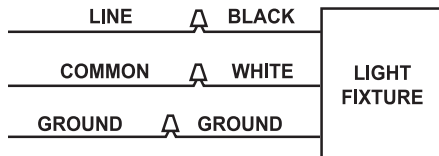
NOTE: To test, triple click the Radio Button through all color temperatures shown in *Fig 6*.

Fig. 6

LIGHTCLOUD Radio Button

LIGHTCLOUD® SMARTSHIFT™

Lightcloud SmartShift technology synchronizes fixture color temperature to align with the natural transition of the sun. SmartShift can be enabled and disabled by calling Lightcloud Support at 1.844.LIGHTCLOUD or logging into the Web App at control.lightcloud.com. Individual SmartShift fixtures can also be manually configured for color temperature.

SmartShift fixtures require a Lightcloud Gateway and should be placed within 100' of another Lightcloud device.

LED Indicators:

Blinking Red = Looking for a network

Solid Green = Connected to network

SmartShift fixtures require a Lightcloud Gateway and should be placed within 100' of another Lightcloud device.

CLEANING

CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

1. Clean glass lens with non-abrasive glass cleaning solution.

2. Do not open the fixture to clean the LED. Do not touch the LED.

TROUBLESHOOTING

1. Check that the fixture is powered.

2. Check that the line voltage at fixture is correct. Refer to wiring directions.

3. Be sure the fixture is grounded properly.

4. Call Lightcloud Support at 1.844.LIGHTCLOUD.

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.