INSTRUCTION MANUAL

IMPORTANT SAFEGUARDS

All wiring practices and connections should comply with the National Electrical Code and local safety guidelines and regulations. Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency LED driver access is required

READ AND FOLLOW ALL SAFETY INSTRUCTIONS:

1. To prevent electrical shock, do not engage the battery connector until installation is complete and AC power is supplied to the unit.
2. To reduce the risk of electrical shock, disconnect both normal and emergency power sources before servicing.
3. This is a sealed unit. Replace the entire unit when necessary.
4. Installation and servicing should be performed by qualified personnel only.
5. This unit must be grounded. Not for use in heated air outlets or hazardous locations.
6. This unit must be connected to the unswitched normal source of power with a nominal voltage of 120-277 Vac, 50/60.
7. This unit must be fed from the same branch circuit as the AC LED driver during normal mode.
8. This unit should be mounted in locations and heights where it will not readily be subjected to tampering by unauthorized personnel.
9. This unit is suitable for mounting externally to lighting fixtures. It is suitable factory or field installation.
10. This product is suitable for use in damp locations where the ambient temperature is in the range of 0°C minimum to 55°C maximum. This product is also suitable for use in sealed and gasketed fixtures.
11. This product is not suitable for heated air outlets, wet, or hazardous locations.
12. Use of accessory equipment not recommended by the manufacture may cause an unsafe condition, void the warranty, or result in noncompliance with regulations.
13. Do not mount near gas or electric heaters. Do not use this product outdoors or for any use other than its intended use.
14. Install in accordance with the National Electrical Code and local regulations.

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc. 88 Maxwell F 714.259.9969
www.LedraBrands.com Irvine, CA 92618 P 714.259.9959

Installation Instructions

NU SERIES: ACE – EMERGENCY BACK UP

*Installation Instructions are applicable for other versions.



WARNING – PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLATION
READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE INSTALLING OR MAINTAINING THIS PRODUCT.
TURN OFF POWER PRIOR TO ANY WORK ON THE SYSTEM OR PRODUCT.
DO NOT INSTALL DAMAGED PRODUCT.
AMBIENT TEMPERATURE AT LUMINAIRE LOCATION SHOULD NOT EXCEED 40 °C DURING NORMAL OPERATION.

Installing, wiring, and maintenance must be done by qualified persons or a certified electrician in accordance with all local and National Electrical Codes. Warranty is voided in case of unauthorized modifications and/or improper use. Save these instructions. Use as reference when service or maintenance is performed. CAUTION – For Non – IC fixtures, do not install any fixture assembly closer than 6 inches (15.24cm) from any combustible material (insulation). New Construction Mounting Plate driver compartments are rated for through wiring. Refer to product label for voltage requirements and properly ground fixture in accordance with all local and national electrical codes. If building and product supports optional dimming, connect dimming leads to dimming control system (provided by others). Refer to product label for dimming requirements. Isolate dimming wires individually if not in use.

EMERGENCY BATTERY Emergency Battery Backups are UL Listed Emergency LED driver that allow the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the Emergency LED driver switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can. The Constant Power design of the Emergency LED driver maintains the output wattage to the LED array even as the system voltage diminishes. UL 924 Listed for U.S. and Canada. UL 1310 Certified, Output Class 2 Compliant. Includes single-piece TBTS test switch and charge indicator accessory kit. For use with switched and unswitched fixtures, and includes Two-wire universal AC input. Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements. Rated for use in Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Luminaries.

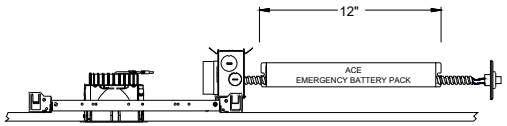
OPERATION
Normal Mode – A.C. power is present. The A.C. driver operates the LED load as intended. The ILB is in the standby charging mode. The TBTS will be lit providing a visual indication that the battery is being charged.

Emergency Mode – The A.C. power fails. The Emergency LED driver senses the A.C. power failure and automatically switches to the Emergency Mode. One or multiple LEDs are illuminated, for a minimum of 90 minutes. When the A.C. power is restored, the Emergency LED driver switches the system back to the Normal Mode and resumes battery charging.

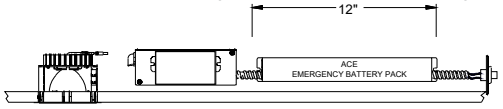


When replacing Emergency LED driver, it is important to use the LED charge indicator light supplied with the new unit. LED charge indicator lights are unit specific and do not interchange with other brands, nor do they necessarily work from one emergency ballast to another due to model differences and revisions.

NC - NEW CONSTRUCTION
WITH EM BATTERY (REMOTE TEST SWITCH)



RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)



⚠ WARNING ⚠

- **To avoid possible electrical shock, before installing light fixtures, disconnect power by turning off the circuit breakers both to the outlet box and to its associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.**
- **Verify that supply voltage is correct by comparing it with the luminaire label information.**
- **Make all electrical and ground connections in the accordance with the National Electrical Code (NEC) and any applicable local code requirements.**
- **Wait for fixture and driver to cool before servicing and performing maintenance.**

⚠ ADVERTENCIA ⚠

- **Para evitar un choque eléctrico, antes de instalar luminarias, desconecte la alimentación apagando los interruptores de circuito en el panel de servicio y en las paredes. Si no es posible bloquear los interruptores en la posición de apagado, sujete una etiqueta de seguridad en el panel de servicio.**
- **Compruebe que la tensión de alimentación es correcta comparándola con la información en la etiqueta de la luminaria.**
- **Haga todas las conexiones eléctricas y puesta a tierra de acuerdo con el código eléctrico nacional (NEC) y los requisitos del código local aplicable.**
- **Espere hasta que la luminaria y el controlador se enfríen antes de empezar el servicio y mantenimiento.**

⚠ AVERTISSEMENT ⚠

- **Pour éviter les chocs, avant d'installer des appareils d'éclairage, coupez l'alimentation en désactivant les disjoncteurs et l'emplacement du commutateur mural. Si vous ne pouvez pas verrouiller les disjoncteurs en position d'arrêt, fixer un avertissement sur le panneau de service.**
- **Vérifiez que la tension d'alimentation est correcte en le comparant avec les informations d'étiquette de luminaire.**
- **Effectuer tous les raccordements électriques et mise à la terre dans la conformité avec le Code électrique National (NEC) et des exigencies du code local applicable.**
- **Laisser suffisamment de temps pour l'appareil et pilote refroidir avant d'effectuer l'entretien et la maintenance.**

⚠ CAUTION ⚠

- **All wiring must comply with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, consult a qualified electrician.**
- **PPE Personal Protective Equipment such as gloves and safety glasses should always be used when installing, maintaining or servicing.**
- **Risk of fire. Keep combustible material away from fixtures.**

⚠ PRECAUCION ⚠

- **Todo el cableado debe cumplir con los códigos eléctricos nacionales y locales y ANSI/NFPA 70. Si no está familiarizado con el cableado, consulte a un electricista.**
- **Al instalar, mantener o reparar, siempre se debe utilizar equipo de protección personal como guantes y lentes de seguridad**
- **Riesgo de incendio. Mantenga los materiales combustibles lejos de las luminarias.**

⚠ MIS EN GARDE ⚠

- **Tout le câblage doit être effectué conformément aux codes électriques locaux et nationaux et ANSI/NFPA 70. Si vous êtes peu familier avec câblage, vous devez utiliser un électricien qualifié.**
- **Équipement de protection personnelle comme des gants et des lunettes de sécurité doivent être utilisé en tout temps lors de l'installation, maintenance ou entretien.**
- **Risque d'incendie. Garder les matières combustibles loin de luminair**

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc. 88 Maxwell F 714.259.9969
www.LedraBrands.com Irvine, CA 92618 P 714.259.9959

alphabet bruck LEDRABRANDS

INSTRUCTIONS FOR USE

CAUTION: Before installing, make certain the power is shut off and Emergency Backup unit is disconnected.

STEP 1 - Emergency Driver Installation:

Mount Emergency Driver onto ceiling grid using T-Grid mounting kit provided by Ledra or mount to a metal plate by others.

NOTE: The Emergency Backup must be in close proximity to the fixture or remotely located. Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others.

STEP 2A - New Construction Mounting:

Place new construction plate in desired location. Adjust bar hangers to size and secure New Construction Mounting Plate as required using integral nails. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided).

STEP 2B - Retrofit Mounting:

Place retrofit box in desired location. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided).

STEP 3 - Wiring:

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 normal AC driver. Some wiring connections will be pre-wired from factory.

i. Connect UNSWITCHED lead from building wiring to BLACK/YELLOW striped lead from the emergency driver.
ii. Connect SWITCHED lead from building wiring to solid BLACK lead from Normal AC driver.
iii. Connect the COMMON lead from building wiring to both BLACK/WHITE striped lead and solid WHITE lead from the emergency driver.

STEP 4 - Fixture Installation:

Carefully remove bezel from LED Module Assembly. Use suction cup (provided) to remove bezel. Connect the quick disconnect from driver compartment to LED Module Assembly. Insert the LED Module Assembly through the ceiling cutout. Hand tighten the Phillips head fastening screws to secure the LED Module Assembly.

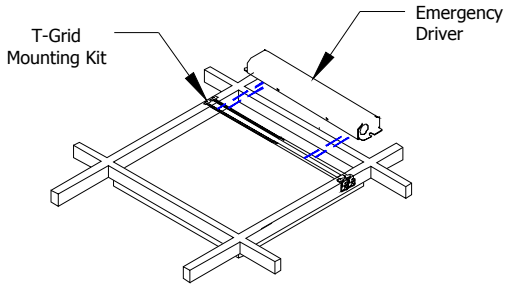
STEP 5 - Test Switch / LED Indicator Installation and Wiring:

Mount the supplied Test Switch / LED Indicator in a convenient location near the luminaire or mount it to a wall plate/junction box where it is visible and accessible by maintenance personnel. Connect quick disconnect from Test Switch / LED Indicator to quick disconnect from emergency driver

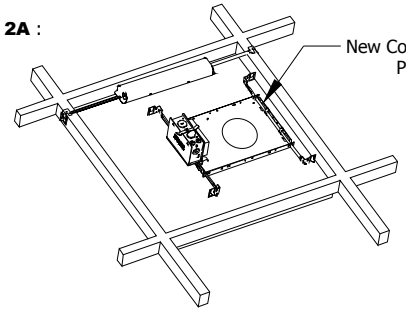
STEP 6 - Apply AC Power:

After the wiring connections and installation are complete, supply AC power to the luminaire and engage the battery connector. With AC power connected to both the AC LED driver and the emergency LED driver, and with the battery connector engaged the LED indicator should illuminate indicating that the battery is charging correctly.

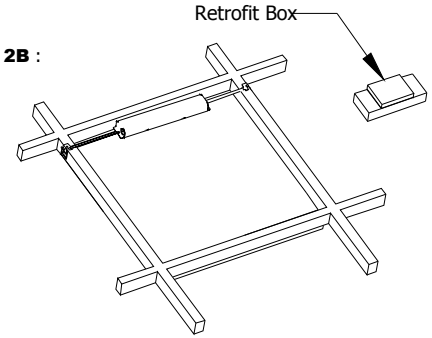
STEP 1 :



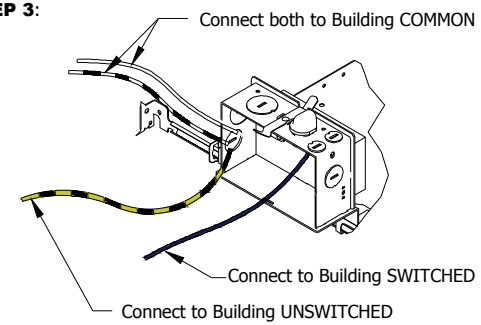
STEP 2A :



STEP 2B :

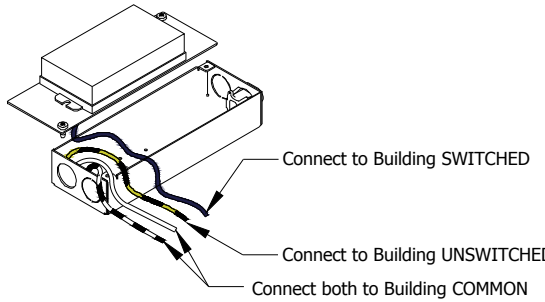


STEP 3:



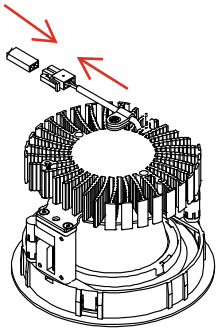
(Referencing New Construction Mounting)

STEP 3:

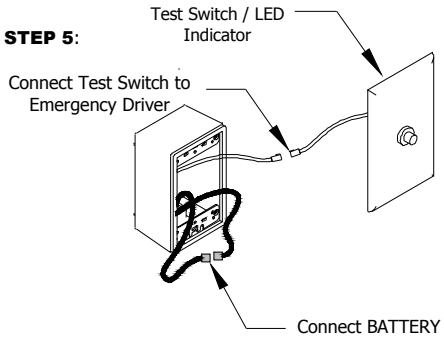


(Referencing Retrofit Mounting)

STEP 4:



STEP 5:



In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

STEP 7 - Testing and Maintenance:

No routine maintenance is necessary to keep the emergency LED driver functional. However, periodic testing of emergency lighting equipment is required per NFPA-101.

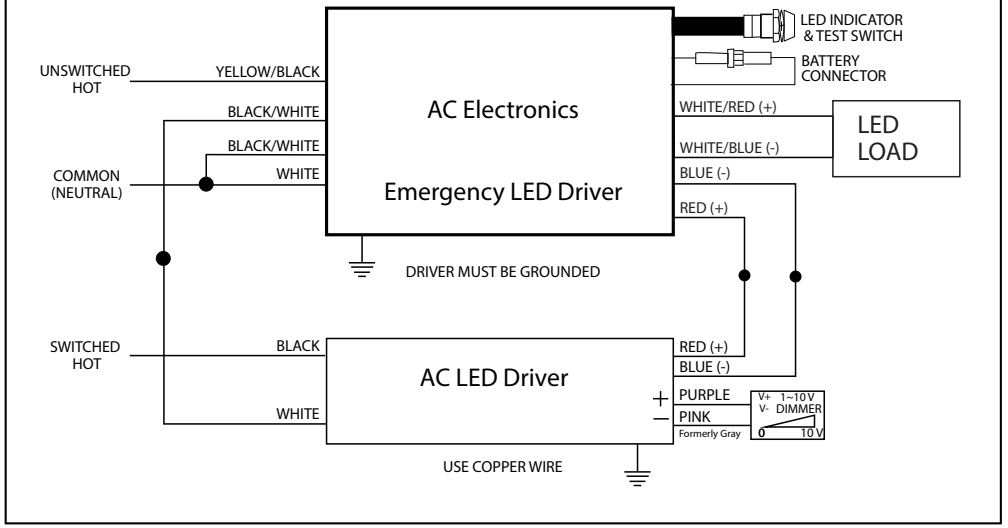
Normal Mode - visually inspect that the LED Indicator/Test Switch is illuminated. If the LED Indicator/Test Switch is illuminating continuously, then that is an indication the battery is charging correctly.

Monthly Testing – A monthly test (with a minimum of 3 weeks and a maximum of 5 weeks between intervals) should be conducted for not less than 30 seconds. The emergency LED driver should properly operate the LED load for the full duration of this test.

Annually Testing – An annual test should be conducted for a full 90 minutes. The emergency LED driver should properly operate the LED load for the full duration of this test.

NOTE: Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency LED driver access is required.

WIRING DIAGRAM FOR ACE EMERGENCY LED DRIVER



In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

Installation Instructions

NU SERIES: IOTA – EMERGENCY BACK UP

*Installation Instructions are applicable for other versions.



WARNING – PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLATION
READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE INSTALLING OR MAINTAINING THIS PRODUCT.
TURN OFF POWER PRIOR TO ANY WORK ON THE SYSTEM OR PRODUCT.
DO NOT INSTALL DAMAGED PRODUCT.
AMBIENT TEMPERATURE AT LUMINAIRE LOCATION SHOULD NOT EXCEED 40 °C DURING NORMAL OPERATION.

Installing, wiring, and maintenance must be done by qualified persons or a certified electrician in accordance with all local and National Electrical Codes. Warranty is voided in case of unauthorized modifications and/or improper use. Save these instructions. Use as reference when service or maintenance is performed. CAUTION – For Non – IC fixtures, do not install any fixture assembly closer than 6 inches (15.24cm) from any combustible material (insulation). New Construction Mounting Plate driver compartments are rated for through wiring. Refer to product label for voltage requirements and properly ground fixture in accordance with all local and national electrical codes. If building and product supports optional dimming, connect dimming leads to dimming control system (provided by others). Refer to product label for dimming requirements. Isolate dimming wires individually if not in use.



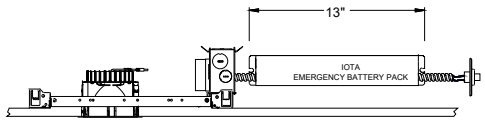
EMERGENCY BATTERY Emergency Battery Backups are UL Listed Emergency LED driver that allow the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the Emergency LED driver switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can. The Constant Power design of the Emergency LED driver maintains the output wattage to the LED array even as the system voltage diminishes. UL 924 Listed for U.S. and Canada. UL 1310 Certified, Output Class 2 Compliant. Includes single-piece TBTS test switch and charge indicator accessory kit. For use with switched and unswitched fixtures, and includes Two-wire universal AC input. Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements. Rated for use in Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Luminaries.

OPERATION
Normal Mode – A.C. power is present. The A.C. driver operates the LED load as intended. The ILB is in the standby charging mode. The TBTS will be lit providing a visual indication that the battery is being charged.

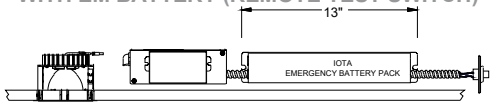
Emergency Mode – The A.C. power fails. The Emergency LED driver senses the A.C. power failure and automatically switches to the Emergency Mode. One or multiple LEDs are illuminated, for a minimum of 90 minutes. When the A.C. power is restored, the Emergency LED driver switches the system back to the Normal Mode and resumes battery charging.

When replacing Emergency LED driver, it is important to use the LED charge indicator light supplied with the new unit. LED charge indicator lights are unit specific and do not interchange with other brands, nor do they necessarily work from one emergency ballast to another due to model differences and revisions.

NC - NEW CONSTRUCTION
WITH EM BATTERY (REMOTE TEST SWITCH)



RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)



⚠ WARNING ⚠

- **To avoid possible electrical shock, before installing light fixtures, disconnect power by turning off the circuit breakers both to the outlet box and to its associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.**
- **Verify that supply voltage is correct by comparing it with the luminaire label information.**
- **Make all electrical and ground connections in the accordance with the National Electrical Code (NEC) and any applicable local code requirements.**
- **Wait for fixture and driver to cool before servicing and performing maintenance.**

⚠ ADVERTENCIA ⚠

- **Para evitar un choque eléctrico, antes de instalar luminarias, desconecte la alimentación apagando los interruptores de circuito en el panel de servicio y en las paredes. Si no es posible bloquear los interruptores en la posición de apagado, sujete una etiqueta de seguridad en el panel de servicio.**
- **Compruebe que la tensión de alimentación es correcta comparándola con la información en la etiqueta de la luminaria.**
- **Haga todas las conexiones eléctricas y puesta a tierra de acuerdo con el código eléctrico nacional (NEC) y los requisitos del código local aplicable.**
- **Espere hasta que la luminaria y el controlador se enfríen antes de empezar el servicio y mantenimiento.**

⚠ AVERTISSEMENT ⚠

- **Pour éviter les chocs, avant d'installer des appareils d'éclairage, coupez l'alimentation en désactivant les disjoncteurs et l'emplacement du commutateur mural. Si vous ne pouvez pas verrouiller les disjoncteurs en position d'arrêt, fixer un avertissement sur le panneau de service.**
- **Vérifiez que la tension d'alimentation est correcte en le comparant avec les informations d'étiquette de luminaire.**
- **Effectuer tous les raccordements électriques et mise à la terre dans la conformité avec le Code électrique National (NEC) et des exigencies du code local applicable.**
- **Laisser suffisamment de temps pour l'appareil et pilote refroidir avant d'effectuer l'entretien et la maintenance.**

⚠ CAUTION ⚠

- **All wiring must comply with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, consult a qualified electrician.**
- **PPE Personal Protective Equipment such as gloves and safety glasses should always be used when installing, maintaining or servicing.**
- **Risk of fire. Keep combustible material away from fixtures.**

⚠ PRECAUCION ⚠

- **Todo el cableado debe cumplir con los códigos eléctricos nacionales y locales y ANSI/NFPA 70. Si no está familiarizado con el cableado, consulte a un electricista.**
- **Al instalar, mantener o reparar, siempre se debe utilizar equipo de protección personal como guantes y lentes de seguridad**
- **Riesgo de incendio. Mantenga los materiales combustibles lejos de las luminarias.**

⚠ MIS EN GARDE ⚠

- **Tout le câblage doit être effectué conformément aux codes électriques locaux et nationaux et ANSI/NFPA 70. Si vous êtes peu familier avec câblage, vous devez utiliser un électricien qualifié.**
- **Équipement de protection personnelle comme des gants et des lunettes de sécurité doivent être utilisé en tout temps lors de l'installation, maintenance ou entretien.**
- **Risque d'incendie. Garder les matières combustibles loin de luminair**

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

INSTRUCTIONS FOR USE

CAUTION: Before installing, make certain the power is shut off and Emergency Backup unit is disconnected.

STEP 1 - Emergency Driver Installation:

Mount Emergency Driver onto ceiling grid using T-Grid mounting kit provided by Ledra or mount to a metal plate by others.

NOTE: The Emergency Backup must be in close proximity to the fixture or remotely located. Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others.

STEP 2A - New Construction Mounting:

Place new construction plate in desired location. Adjust bar hangers to size and secure New Construction Mounting Plate as required using integral nails. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply. Close driver compartment.

STEP 2B - Retrofit Mounting:

Place retrofit box in desired location. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply. Close driver compartment.

STEP 3 - Wiring:

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 normal AC driver. Some wiring connections will be pre-wired from factory.

i. Connect UNSWITCHED lead from building wiring to BLACK/ORANGE striped lead from the emergency driver.
ii. Connect SWITCHED lead from building wiring to solid BLACK lead from Normal AC driver.
iii. Connect the COMMON lead from building wiring to one of the WHITE/ BLACK striped leads and solid WHITE lead from the emergency driver.

STEP 4 - Fixture Installation:

Carefully remove bezel from LED Module Assembly. Use suction cup (provided) to remove bezel. Connect the quick disconnect from driver compartment to LED Module Assembly. Insert the LED Module Assembly through the ceiling cutout. Hand tighten the Phillips head fastening screws to secure the LED Module Assembly.

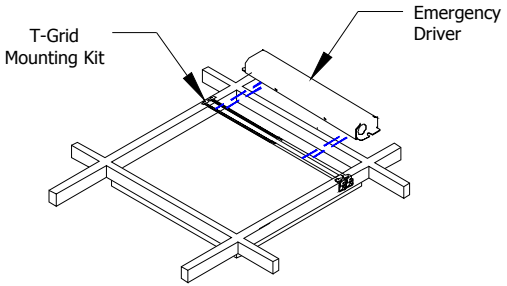
STEP 5 - Test Switch / LED Indicator Installation and Wiring:

Mount the supplied Test Switch / LED Indicator in a convenient location near the luminaire or mount it to a wall plate/junction box where it is visible and accessible by maintenance personnel. Connect WHITE/RED striped lead from emergency driver to solid WHITE lead from Test Switch / LED Indicator. Connect RED/ BLACK striped lead from emergency driver to solid RED lead from Test Switch / LED Indicator.

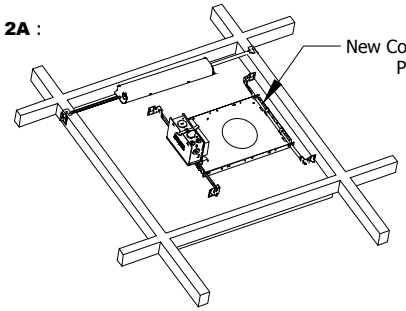
STEP 6 - Apply AC Power:

After the wiring connections and installation are complete, supply AC power to the luminaire and engage the unit connector. With AC power connected to both the AC LED driver and the emergency LED driver, and with the battery connector engaged the LED indicator should illuminate indicating that the battery is charging correctly.

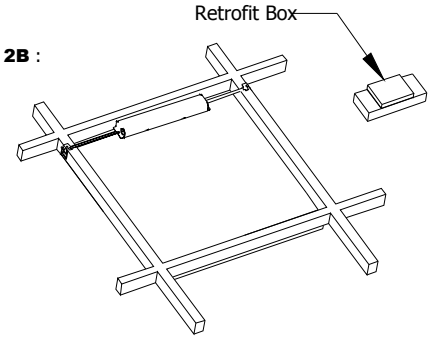
STEP 1 :



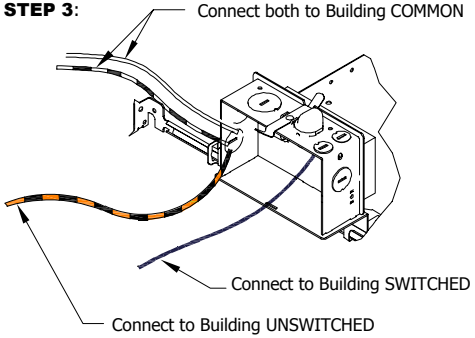
STEP 2A :



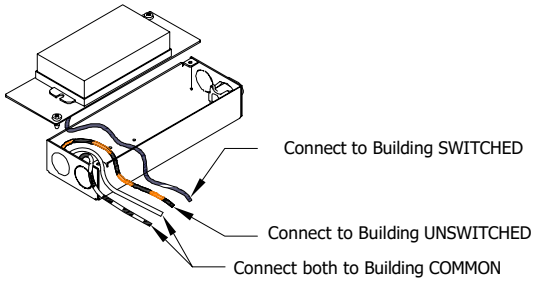
STEP 2B :



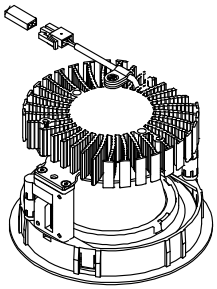
STEP 3:



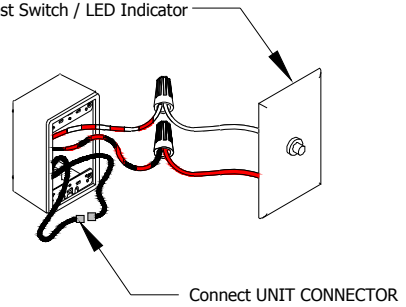
STEP 3:



STEP 4:



STEP 5:



In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

STEP 7 - Testing and Maintenance:

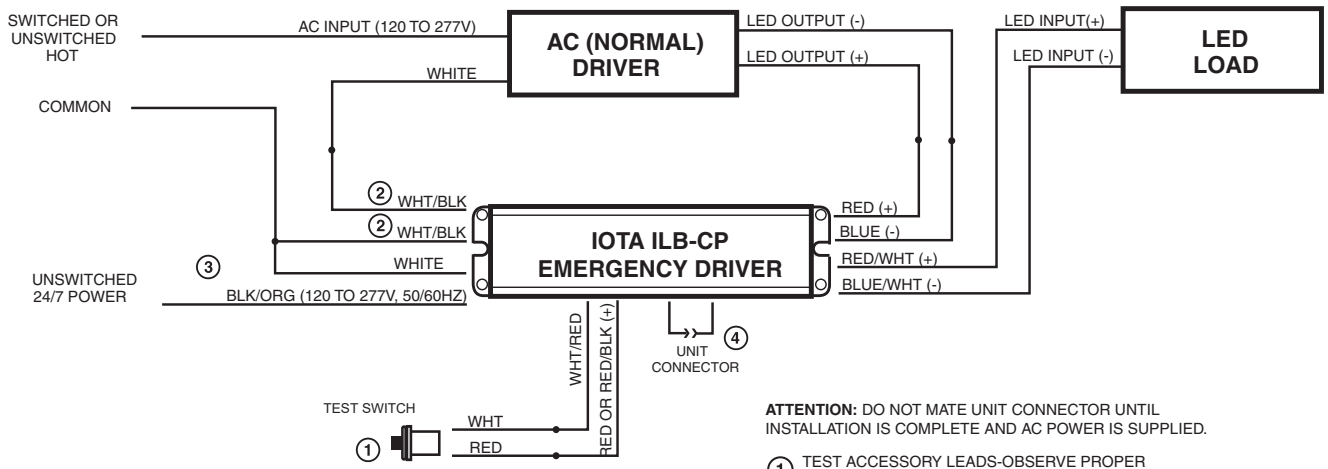
Pressing the test switch turns off the light on the test switch and forces the unit into emergency mode, interrupting power to the designated A.C. driver. The LED load is now being lit by the ILB unit. After releasing the test switch, the fixture returns to normal operation after a momentary delay. To simulate a "BLACK OUT" use the circuit breaker to turn off A.C. power.

Initial Testing – Allow the unit to charge approximately 1 hour, then conduct a short discharge test. Allow a 24 hour charge before conducting a one hour test. The ILB is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule:

Monthly Testing – Insure that the test switch light is illuminated. Conduct a 30 second discharge test by depressing the test switch. At least one LED should operate at reduced output.

Annually Testing – Insure that the test switch is illuminated. Conduct a full 90 minute discharge test. The unit should operate as intended for the duration of the test.

NOTE: Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency LED driver access is required.



ATTENTION: DO NOT MATE UNIT CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

1. TEST ACCESSORY LEADS-OBSERVE PROPER POLARITY WIRING.
2. NO POLARITY ON WHT/BLK LEADS. USE EITHER LEAD FOR CONNECTION TO BUILDING COMMON (SWITCHED OR UNSWITCHED) AND OTHER FOR CONNECTION TO AC DRIVER.
3. CONNECT UNSWITCHED POWER. IF A SINGLE BUILDING COMMON IS PRESENT, CONNECT THE WHITE WIRE TO THE COMMON. IF A SEPERATE UNSWITCHED CONDUCTOR FEED IS PRESENT, CONNECT THE WHITE LEAD TO THE COMMON FROM THE UNSWITCHED FEED.
4. MATE UNIT CONNECTOR AFTER INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

Installation Instructions

NU SERIES: ACE – INTEGRATED EMERGENCY BACK UP

*Installation Instructions are applicable for other versions.



WARNING – PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLATION
READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE INSTALLING OR MAINTAINING THIS PRODUCT.
TURN OFF POWER PRIOR TO ANY WORK ON THE SYSTEM OR PRODUCT.
DO NOT INSTALL DAMAGED PRODUCT.
AMBIENT TEMPERATURE AT LUMINAIRE LOCATION SHOULD NOT EXCEED 40 °C DURING NORMAL OPERATION.

Installing, wiring, and maintenance must be done by qualified persons or a certified electrician in accordance with all local and National Electrical Codes. Warranty is voided in case of unauthorized modifications and/or improper use. Save these instructions. Use as reference when service or maintenance is performed. CAUTION – For Non – IC fixtures, do not install any fixture assembly closer than 6 inches (15.24cm) from any combustible material (insulation). New Construction Mounting Plate driver compartments are rated for through wiring. Refer to product label for voltage requirements and properly ground fixture in accordance with all local and national electrical codes. If building and product supports optional dimming, connect dimming leads to dimming control system (provided by others). Refer to product label for dimming requirements. Isolate dimming wires individually if not in use.

EMERGENCY BATTERY Emergency Battery Backups are UL Listed Emergency LED driver that allow the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the Emergency LED driver switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can. The Constant Power design of the Emergency LED driver maintains the output wattage to the LED array even as the system voltage diminishes. UL 924 Listed for U.S. and Canada. UL 1310 Certified, Output Class 2 Compliant. Includes single-piece TBTS test switch and charge indicator accessory kit. For use with switched and unswitched fixtures, and includes Two-wire universal AC input. Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements. Rated for use in Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Luminaries.

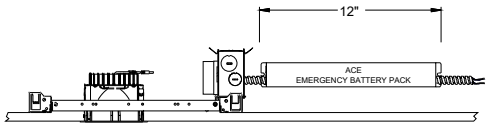
OPERATION
Normal Mode – A.C. power is present. The A.C. driver operates the LED load as intended. The ILB is in the standby charging mode. The TBTS will be lit providing a visual indication that the battery is being charged.

Emergency Mode – The A.C. power fails. The Emergency LED driver senses the A.C. power failure and automatically switches to the Emergency Mode. One or multiple LEDs are illuminated, for a minimum of 90 minutes. When the A.C. power is restored, the Emergency LED driver switches the system back to the Normal Mode and resumes battery charging.

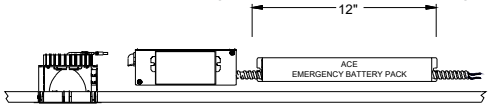


When replacing Emergency LED driver, it is important to use the LED charge indicator light supplied with the new unit. LED charge indicator lights are unit specific and do not interchange with other brands, nor do they necessarily work from one emergency ballast to another due to model differences and revisions.

NC - NEW CONSTRUCTION
WITH EM BATTERY (REMOTE TEST SWITCH)



RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)



⚠ WARNING ⚠

- **To avoid possible electrical shock, before installing light fixtures, disconnect power by turning off the circuit breakers both to the outlet box and to its associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.**
- **Verify that supply voltage is correct by comparing it with the luminaire label information.**
- **Make all electrical and ground connections in the accordance with the National Electrical Code (NEC) and any applicable local code requirements.**
- **Wait for fixture and driver to cool before servicing and performing maintenance.**

⚠ ADVERTENCIA ⚠

- **Para evitar un choque eléctrico, antes de instalar luminarias, desconecte la alimentación apagando los interruptores de circuito en el panel de servicio y en las paredes. Si no es posible bloquear los interruptores en la posición de apagado, sujete una etiqueta de seguridad en el panel de servicio.**
- **Compruebe que la tensión de alimentación es correcta comparándola con la información en la etiqueta de la luminaria.**
- **Haga todas las conexiones eléctricas y puesta a tierra de acuerdo con el código eléctrico nacional (NEC) y los requisitos del código local aplicable.**
- **Espere hasta que la luminaria y el controlador se enfríen antes de empezar el servicio y mantenimiento.**

⚠ AVERTISSEMENT ⚠

- **Pour éviter les chocs, avant d'installer des appareils d'éclairage, coupez l'alimentation en désactivant les disjoncteurs et l'emplacement du commutateur mural. Si vous ne pouvez pas verrouiller les disjoncteurs en position d'arrêt, fixer un avertissement sur le panneau de service.**
- **Vérifiez que la tension d'alimentation est correcte en le comparant avec les informations d'étiquette de luminaire.**
- **Effectuer tous les raccordements électriques et mise à la terre dans la conformité avec le Code électrique National (NEC) et des exigencies du code local applicable.**
- **Laisser suffisamment de temps pour l'appareil et pilote refroidir avant d'effectuer l'entretien et la maintenance.**

⚠ CAUTION ⚠

- **All wiring must comply with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, consult a qualified electrician.**
- **PPE Personal Protective Equipment such as gloves and safety glasses should always be used when installing, maintaining or servicing.**
- **Risk of fire. Keep combustible material away from fixtures.**

⚠ PRECAUCION ⚠

- **Todo el cableado debe cumplir con los códigos eléctricos nacionales y locales y ANSI/NFPA 70. Si no está familiarizado con el cableado, consulte a un electricista.**
- **Al instalar, mantener o reparar, siempre se debe utilizar equipo de protección personal como guantes y lentes de seguridad**
- **Riesgo de incendio. Mantenga los materiales combustibles lejos de las luminarias.**

⚠ MIS EN GARDE ⚠

- **Tout le câblage doit être effectué conformément aux codes électriques locaux et nationaux et ANSI/NFPA 70. Si vous êtes peu familier avec câblage, vous devez utiliser un électricien qualifié.**
- **Équipement de protection personnelle comme des gants et des lunettes de sécurité doivent être utilisé en tout temps lors de l'installation, maintenance ou entretien.**
- **Risque d'incendie. Garder les matières combustibles loin de luminair**

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc. 88 Maxwell F 714.259.9969
www.LedraBrands.com Irvine, CA 92618 P 714.259.9959

alphabet bruck LEDRABRANDS

INSTRUCTIONS FOR USE

CAUTION: Before installing, make certain the power is shut off and Emergency Backup unit is disconnected.

STEP 1 - Emergency Driver Installation:

Mount Emergency Driver onto ceiling grid using T-Grid mounting kit provided by Ledra or mount to a metal plate by others.

NOTE: The Emergency Backup must be in close proximity to the fixture or remotely located. Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others.

STEP 2A - New Construction Mounting:

Place new construction plate in desired location. Adjust bar hangers to size and secure New Construction Mounting Plate as required using integral nails. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply. Close driver compartment.

STEP 2B - Retrofit Mounting:

Place retrofit box in desired location. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply. Close driver compartment.

STEP 3 - Wiring:

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 normal AC driver. Some wiring connections will be pre-wired from factory.

i. Connect UNSWITCHED lead from building wiring to BLACK/YELLOW striped lead from the emergency driver.
ii. Connect SWITCHED lead from building wiring to solid BLACK lead from Normal AC driver.
iii. Connect the COMMON lead from building wiring to both BLACK/WHITE striped lead and solid WHITE lead from the emergency driver.

STEP 4 - Fixture Installation:

Carefully remove bezel from LED Module Assembly. Use suction cup (provided) to remove bezel. Connect the quick disconnect from driver compartment to LED Module Assembly. Insert the LED Module Assembly through the ceiling cutout. Hand tighten the Phillips head fastening screws to secure the LED Module Assembly.

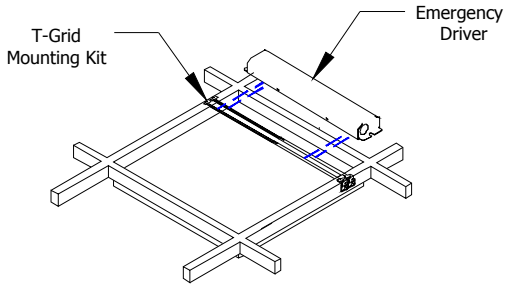
STEP 5 - Connect LED and Test Switch / LED Indicator :

Test Switch / LED Indicator is mounted on the bezel of the fixture. Connect the quick disconnect from fixture LED to corresponding whip. Connect the quick disconnect from the Test Switch / LED Indicator to the corresponding whip

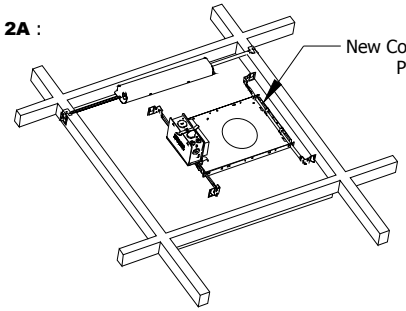
STEP 6 - Apply AC Power:

After the wiring connections and installation are complete, supply AC power to the luminaire and engage the battery connector inside the wiring compartment. With AC power connected to both the AC LED driver and the emergency LED driver, and with the battery connector engaged the LED indicator should illuminate indicating that the battery is charging correctly.

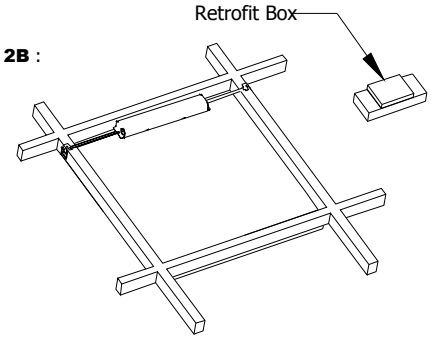
STEP 1 :



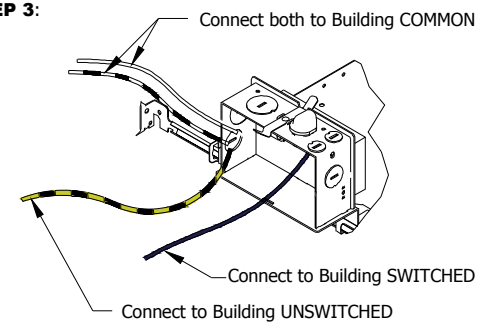
STEP 2A :



STEP 2B :

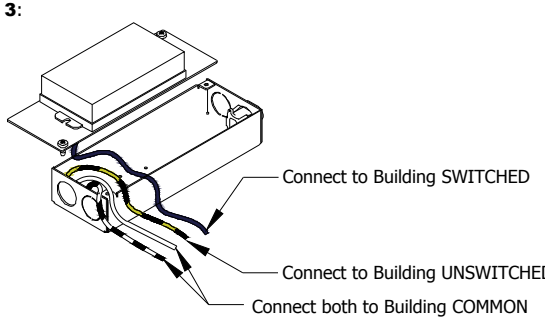


STEP 3:



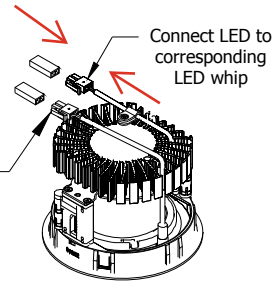
(Referencing New Construction Mounting)

STEP 3:

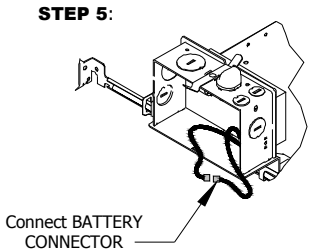


(Referencing Retrofit Mounting)

STEP 4:

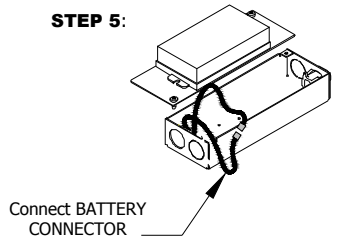


STEP 5:



(Referencing New Construction Mounting)

STEP 5:



(Referencing Retrofit Mounting)

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

STEP 7 - Testing and Maintenance:

No routine maintenance is necessary to keep the emergency LED driver functional. However, periodic testing of emergency lighting equipment is required per NFPA-101.

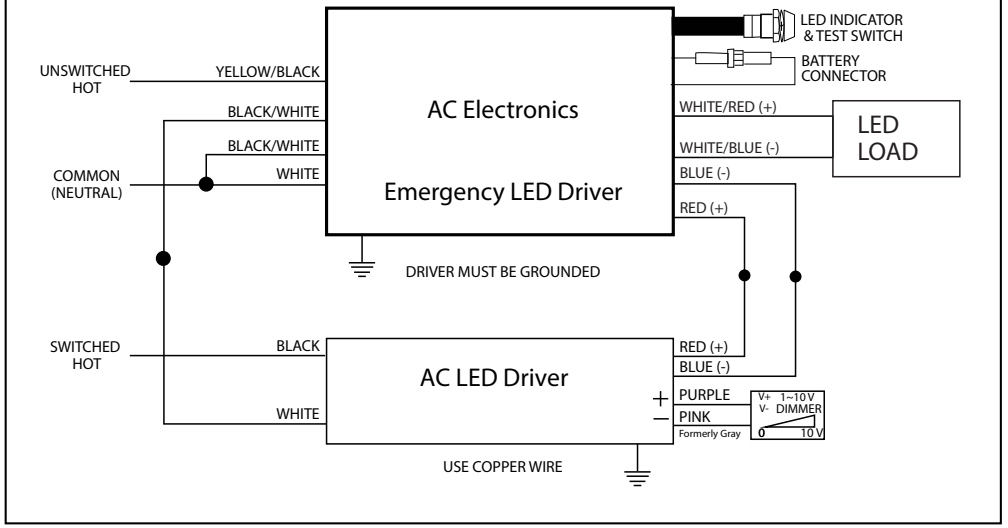
Normal Mode - visually inspect that the LED Indicator/Test Switch is illuminated. If the LED Indicator/Test Switch is illuminating continuously, then that is an indication the battery is charging correctly.

Monthly Testing – A monthly test (with a minimum of 3 weeks and a maximum of 5 weeks between intervals) should be conducted for not less than 30 seconds. The emergency LED driver should properly operate the LED load for the full duration of this test.

Annually Testing – An annual test should be conducted for a full 90 minutes. The emergency LED driver should properly operate the LED load for the full duration of this test.

NOTE: Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency LED driver access is required.

WIRING DIAGRAM FOR ACE EMERGENCY LED DRIVER



In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

Installation Instructions

NU SERIES: IOTA – INTEGRATED EMERGENCY BACK UP

*Installation Instructions are applicable for other versions.





WARNING – PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLATION
READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE INSTALLING OR MAINTAINING THIS PRODUCT.
TURN OFF POWER PRIOR TO ANY WORK ON THE SYSTEM OR PRODUCT.
DO NOT INSTALL DAMAGED PRODUCT.
AMBIENT TEMPERATURE AT LUMINAIRE LOCATION SHOULD NOT EXCEED 40 °C DURING NORMAL OPERATION.

Installing, wiring, and maintenance must be done by qualified persons or a certified electrician in accordance with all local and National Electrical Codes. Warranty is voided in case of unauthorized modifications and/or improper use. Save these instructions. Use as reference when service or maintenance is performed. CAUTION – For Non – IC fixtures, do not install any fixture assembly closer than 6 inches (15.24cm) from any combustible material (insulation). New Construction Mounting Plate driver compartments are rated for through wiring. Refer to product label for voltage requirements and properly ground fixture in accordance with all local and national electrical codes. If building and product supports optional dimming, connect dimming leads to dimming control system (provided by others). Refer to product label for dimming requirements. Isolate dimming wires individually if not in use.

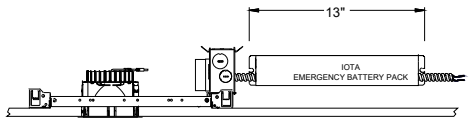
EMERGENCY BATTERY Emergency Battery Backups are UL Listed Emergency LED driver that allow the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the Emergency LED driver switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can. The Constant Power design of the Emergency LED driver maintains the output wattage to the LED array even as the system voltage diminishes. UL 924 Listed for U.S. and Canada. UL 1310 Certified, Output Class 2 Compliant. Includes single-piece TBTS test switch and charge indicator accessory kit. For use with switched and unswitched fixtures, and includes Two-wire universal AC input. Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements. Rated for use in Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Luminaries.

OPERATION
Normal Mode – A.C. power is present. The A.C. driver operates the LED load as intended. The ILB is in the standby charging mode. The TBTS will be lit providing a visual indication that the battery is being charged.

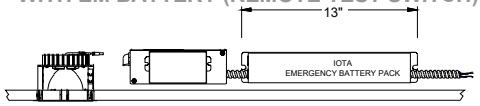
Emergency Mode – The A.C. power fails. The Emergency LED driver senses the A.C. power failure and automatically switches to the Emergency Mode. One or multiple LEDs are illuminated, for a minimum of 90 minutes. When the A.C. power is restored, the Emergency LED driver switches the system back to the Normal Mode and resumes battery charging.

When replacing Emergency LED driver, it is important to use the LED charge indicator light supplied with the new unit. LED charge indicator lights are unit specific and do not interchange with other brands, nor do they necessarily work from one emergency ballast to another due to model differences and revisions.

NC - NEW CONSTRUCTION
WITH EM BATTERY (REMOTE TEST SWITCH)



RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)



⚠ WARNING ⚠

- **To avoid possible electrical shock, before installing light fixtures, disconnect power by turning off the circuit breakers both to the outlet box and to its associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.**
- **Verify that supply voltage is correct by comparing it with the luminaire label information.**
- **Make all electrical and ground connections in the accordance with the National Electrical Code (NEC) and any applicable local code requirements.**
- **Wait for fixture and driver to cool before servicing and performing maintenance.**

⚠ ADVERTENCIA ⚠

- **Para evitar un choque eléctrico, antes de instalar luminarias, desconecte la alimentación apagando los interruptores de circuito en el panel de servicio y en las paredes. Si no es posible bloquear los interruptores en la posición de apagado, sujete una etiqueta de seguridad en el panel de servicio.**
- **Compruebe que la tensión de alimentación es correcta comparándola con la información en la etiqueta de la luminaria.**
- **Haga todas las conexiones eléctricas y puesta a tierra de acuerdo con el código eléctrico nacional (NEC) y los requisitos del código local aplicable.**
- **Espere hasta que la luminaria y el controlador se enfríen antes de empezar el servicio y mantenimiento.**

⚠ AVERTISSEMENT ⚠

- **Pour éviter les chocs, avant d'installer des appareils d'éclairage, coupez l'alimentation en désactivant les disjoncteurs et l'emplacement du commutateur mural. Si vous ne pouvez pas verrouiller les disjoncteurs en position d'arrêt, fixer un avertissement sur le panneau de service.**
- **Vérifiez que la tension d'alimentation est correcte en le comparant avec les informations d'étiquette de luminaire.**
- **Effectuer tous les raccordements électriques et mise à la terre dans la conformité avec le Code électrique National (NEC) et des exigencies du code local applicable.**
- **Laisser suffisamment de temps pour l'appareil et pilote refroidir avant d'effectuer l'entretien et la maintenance.**

⚠ CAUTION ⚠

- **All wiring must comply with national and local electrical codes and ANSI/NFPA 70. If you are unfamiliar with wiring, consult a qualified electrician.**
- **PPE Personal Protective Equipment such as gloves and safety glasses should always be used when installing, maintaining or servicing.**
- **Risk of fire. Keep combustible material away from fixtures.**

⚠ PRECAUCION ⚠

- **Todo el cableado debe cumplir con los códigos eléctricos nacionales y locales y ANSI/NFPA 70. Si no está familiarizado con el cableado, consulte a un electricista.**
- **Al instalar, mantener o reparar, siempre se debe utilizar equipo de protección personal como guantes y lentes de seguridad**
- **Riesgo de incendio. Mantenga los materiales combustibles lejos de las luminarias.**

⚠ MIS EN GARDE ⚠

- **Tout le câblage doit être effectué conformément aux codes électriques locaux et nationaux et ANSI/NFPA 70. Si vous êtes peu familier avec câblage, vous devez utiliser un électricien qualifié.**
- **Équipement de protection personnelle comme des gants et des lunettes de sécurité doivent être utilisé en tout temps lors de l'installation, maintenance ou entretien.**
- **Risque d'incendie. Garder les matières combustibles loin de luminair**

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

INSTRUCTIONS FOR USE

CAUTION: Before installing, make certain the power is shut off and Emergency Backup unit is disconnected.

STEP 1 - Emergency Driver Installation:

Mount Emergency Driver onto ceiling grid using T-Grid mounting kit provided by Ledra or mount to a metal plate by others.

NOTE: The Emergency Backup must be in close proximity to the fixture or remotely located. Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others.

STEP 2A - New Construction Mounting:

Place new construction plate in desired location. Adjust bar hangers to size and secure New Construction Mounting Plate as required using integral nails. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply. Close driver compartment.

STEP 2B - Retrofit Mounting:

Place retrofit box in desired location. Open wiring compartment and use knockouts to connect building electrical conduit to wiring compartment using appropriate hardware (not provided). Connect line, neutral, and ground wires to building electrical supply. Close driver compartment.

STEP 3 - Wiring:

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 normal AC driver. Some wiring connections will be pre-wired from factory.

i. Connect UNSWITCHED lead from building wiring to BLACK/ ORANGE lead from the emergency driver.
ii. Connect SWITCHED lead from building wiring to solid BLACK lead from Normal AC driver.
iii. Connect the COMMON lead from building wiring to one of the WHITE/ BLACK leads and solid WHITE lead from the emergency driver.

STEP 4 - Fixture Installation:

Carefully remove bezel from LED Module Assembly. Use suction cup (provided) to remove bezel. Connect the quick disconnect from driver compartment to LED Module Assembly. Insert the LED Module Assembly through the ceiling cutout. Hand tighten the Phillips head fastening screws to secure the LED Module Assembly.

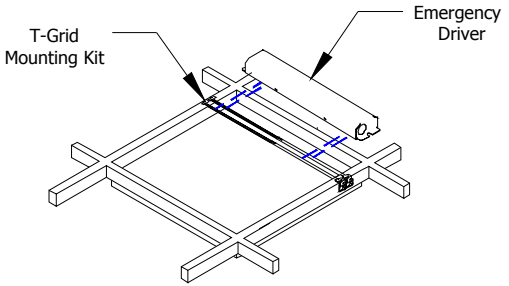
STEP 5 - Connect LED and Test Switch / LED Indicator :

Test Switch / LED Indicator is mounted on the bezel of the fixture. Connect the quick disconnect from fixture LED to corresponding whip. Connect the quick disconnect from the Test Switch / LED Indicator to the corresponding whip

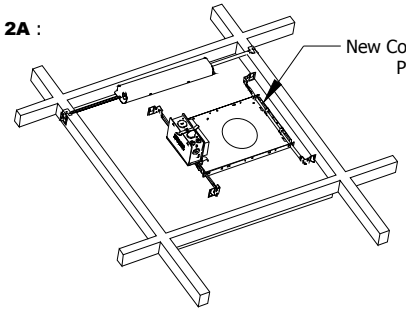
STEP 6 - Apply AC Power:

After the wiring connections and installation are complete, supply AC power to the luminaire and engage the battery connector inside the wiring compartment. With AC power connected to both the AC LED driver and the emergency LED driver, and with the battery connector engaged the LED indicator should illuminate indicating that the battery is charging correctly.

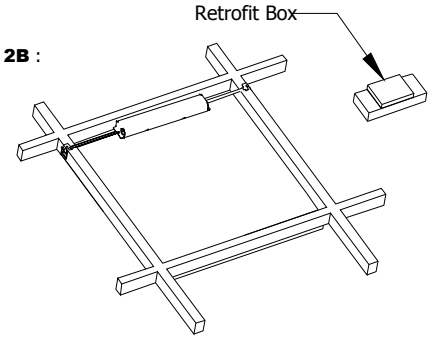
STEP 1 :



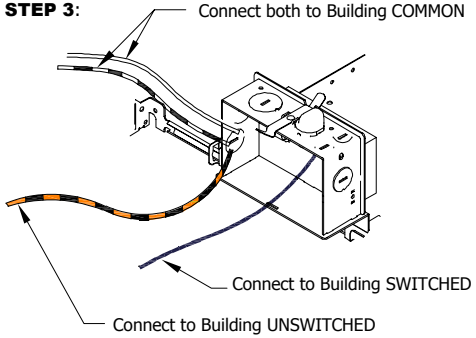
STEP 2A :



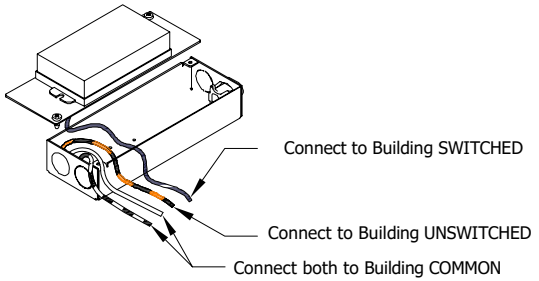
STEP 2B :



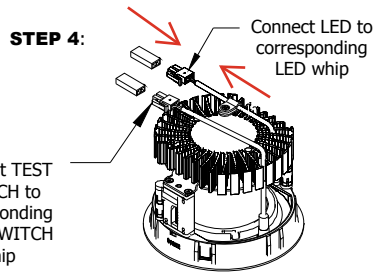
STEP 3:



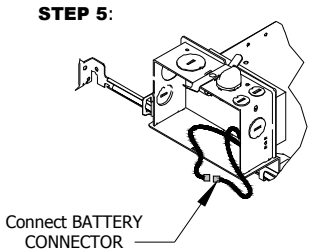
STEP 3:



STEP 4:

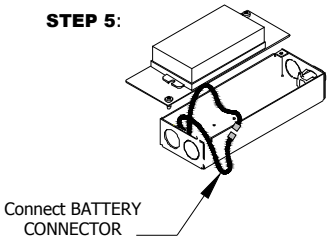


STEP 5:



(Referencing New Construction Mounting)

STEP 5:



(Referencing Retrofit Mounting)

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS

STEP 7 - Testing and Maintenance:

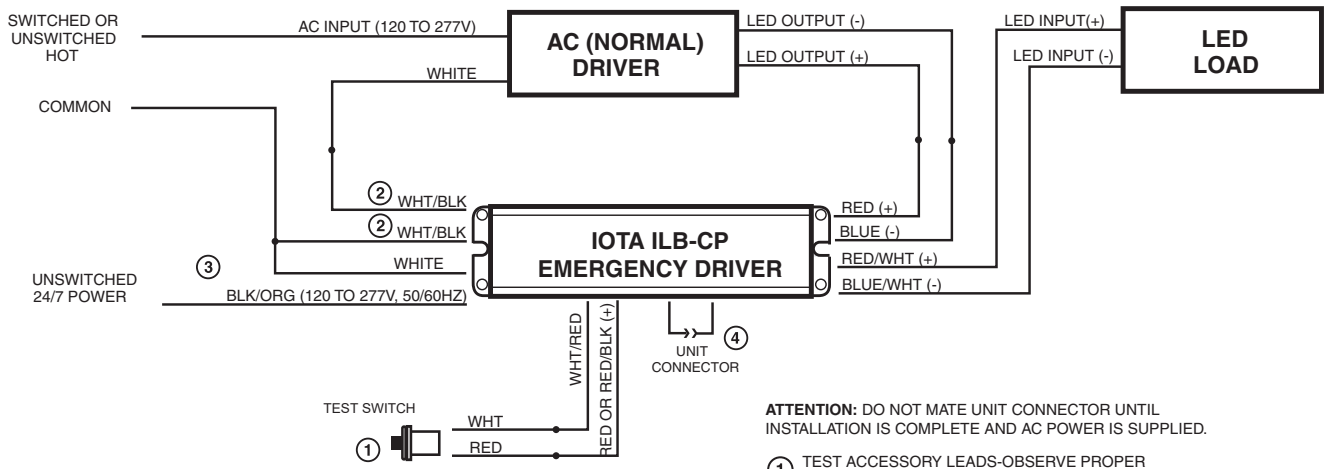
Pressing the test switch turns off the light on the test switch and forces the unit into emergency mode, interrupting power to the designated A.C. driver. The LED load is now being lit by the ILB unit. After releasing the test switch, the fixture returns to normal operation after a momentary delay. To simulate a "BLACK OUT" use the circuit breaker to turn off A.C. power.

Initial Testing – Allow the unit to charge approximately 1 hour, then conduct a short discharge test. Allow a 24 hour charge before conducting a one hour test. The ILB is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule:

Monthly Testing – Insure that the test switch light is illuminated. Conduct a 30 second discharge test by depressing the test switch. At least one LED should operate at reduced output.

Annually Testing – Insure that the test switch is illuminated. Conduct a full 90 minute discharge test. The unit should operate as intended for the duration of the test.

NOTE: Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency LED driver access is required.



ATTENTION: DO NOT MATE UNIT CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

1. TEST ACCESSORY LEADS-OBSERVE PROPER POLARITY WIRING.
2. NO POLARITY ON WHT/BLK LEADS. USE EITHER LEAD FOR CONNECTION TO BUILDING COMMON (SWITCHED OR UNSWITCHED) AND OTHER FOR CONNECTION TO AC DRIVER.
3. CONNECT UNSWITCHED POWER. IF A SINGLE BUILDING COMMON IS PRESENT, CONNECT THE WHITE WIRE TO THE COMMON. IF A SEPERATE UNSWITCHED CONDUCTOR FEED IS PRESENT, CONNECT THE WHITE LEAD TO THE COMMON FROM THE UNSWITCHED FEED.
4. MATE UNIT CONNECTOR AFTER INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

Ledra Brands Inc.
www.LedraBrands.com
88 Maxwell
Irvine, CA 92618
F 714.259.9969
P 714.259.9959

alphabet bruck
LEDRABRANDS