ACE LEDS CONSTANT POWER

Input Voltage 120-277 V
Output Power 7 W (Constant)

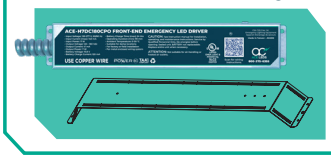
ACE-H7DC180CPO FRONT-END EMERGENCY LED DRIVER

Supplies Power to the LED Driver in Emergency Mode

Primary Specifications:

Emergency-mode Output Power	Input Power	Input Current	Input Voltage	Output Voltage	Output Current	Emergency Operating Time	Ambient Operating Temperature	Battery Voltage	Battery Charge Current
7 W	11 W	140 mA	120-277 Vac 50/60Hz	120 - 180 Vdc[1]	41 mA	90 min.	0 - 50 °C	10.8 V	120 mA

Optional Flat Panel Mounting Bracket Accessory Kit:



ACEH7DC180CPOK
Kit includes:
Front-End Emergency LED Driver and (FPEL-BRKT-EM) mounting bracket

Description:

The ***ACE-H7DC180CPO*** from AC Electronics is an emergency lighting DC power supply that supplies power to an LED driver in emergency-mode. The ***ACE-H7DC180CPO*** enables normal lighting LED fixtures to be used for both normal and emergency operation. The ***ACE-H7DC180CPO*** contains a battery, a high-efficiency battery charger, control circuitry, a 0-10 Vdc dimming control circuit, and high-efficiency power converter circuits, in a single metal enclosure. In normal-mode the ***ACE-H7DC180CPO*** uses the unswitched AC line power to charge the internal battery and passes the switched input AC line power to the input of the normal LED driver. In the event of a normal power failure, the ***ACE-H7DC180CPO*** switches to emergency-mode and supplies power to the fixture's LED driver for 90 minutes, in addition the ***ACE-H7DC180CPO*** utilizes the LED driver's 0-10 Vdc dimming circuit to adjust the power drawn by the LED driver to regulate the power at a constant level. When normal power returns, the ***ACE-H7DC180CPO*** returns to normal-mode. The ***ACE-H7DC180CPO*** can be used in switched or unswitched fixture applications. The ***ACE-H7DC180CPO*** is also suitable for operating Type B LED tubes (TLEDs) and other integrated LED modules provided that their power drawn is equal to or less than the power output capability of the ***ACE-H7DC180CPO***.

Additional Specifications:

Surge protection: ..... 3 kV
Maximum case temperature Tc: ..... 66 °C
Storage time (max) and Storage Temperature:
..... 12 months (20 °C to 55 °C)
Battery Type: ..... Lithium-ion
Battery Recharge Time: ..... 24 Hours
Metal enclosure IP rating: IP30
Dimensions: 9.5 in L x 1.7 in W x 1.24 in H, Mounting Length 8.9 in

[1]The emergency-mode output voltage operating range is 120 - 180 Vdc, typical is 170 Vdc.

*Warranty: 5 years based on a maximum case temperature of ≤ 60 °C, 3 years warranty based on a maximum case temperature of ≤ 66 °C

Features, Benefits, and Applications:

- Constant output power: Maintains constant emergency light levels over the full 90-minute runtime.
- Small design suitable for small fixtures
- Suitable for mounting external of the fixture
- Includes input over voltage surge protection, output short circuit, open circuit, and over–voltage protection, as well as over-temperature protection for improved reliability.
- Two-wire universal input: Reduces wiring errors and reduces installation time and complexity.
- Includes a miniature illuminated test switch status indicator: Enables mounting the switch in small spaces.
- Suitable for indoor and damp locations.
- Compatible with a variety of LED fixtures and LED drivers, Type B LED tubes, and integrated LED modules.
- Suitable for both single and double ended Type B LED tubes (TLEDs).

Safety and Regulatory Compliance:

- UL and cUL Listed as an Emergency Lighting and Power Equipment (UL924)
- UL Listed for both field and factory installation
- CEC Title 20 compliant: Certified in CA Title 20 Appliance Efficiency Database – Battery Charger
- EMI: Complies to FCC commercial limits
- RoHS compliant

WARNING!: Risk of Electrical Shock! Do not connect battery connectors until the driver is fully wired to a load!

5-Year USA-Backed Warranty*

See complete AC Electronics/ACE LEDS Warranty information for details.

For questions or to place an order contact us at oemsales@aceleds.com or 800-375-6355
or your local WPG Americas Sales representative at inquiry@wpgamericas.com or 888-WPG8881

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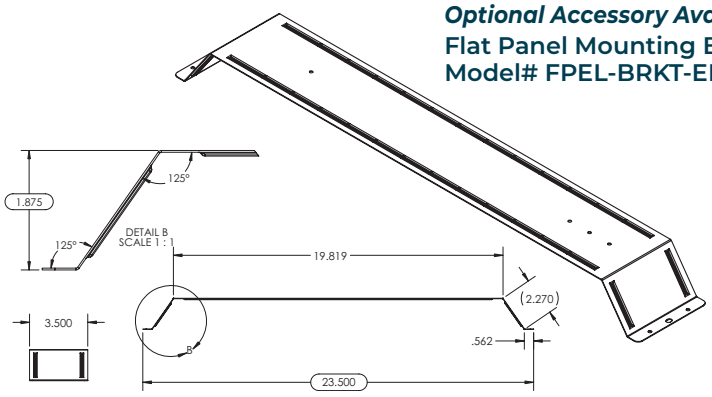
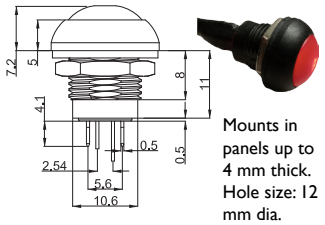
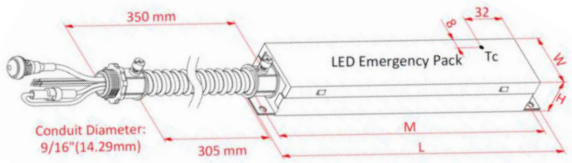
Optional Accessory Available:
Flat Panel Mounting Bracket
Model# FPEL-BRKT-EM





Mounts in panels up to 4 mm thick. Hole size: 12 mm dia.

miniature illuminated test switch



Lead Lengths					
Black	30.7"	Orange	30.7"	Test Switch/	27.56"
White	30.7"	Purple	30.7"	LED Indicator	23.62"
Yellow/Black	30.7"	Pink	30.7"	Battery Connector	37"
Red	30.7"	Yellow	30.7"		
Blue	30.7"	Brown	30.7"		

Dimensions			
Length	9.5"	Height	1.24"
Width	1.7"	Mounting Length	8.9"

INSTALLATION:

The ***ACE-H7DC180CPO*** Front-End Emergency LED Driver may be used with either a switched or unswitched fixture. An unswitched (constant hot) lead must be connected to this Front-End Emergency LED Driver to allow the battery to charge properly and to maintain a charge when normal AC power is available. This ***ACE-H7DC180CPO*** unit must be installed in environments where the ambient temperature is maintained within the specified operating temperature range. The ***ACE-H7DC180CPO*** comes in a single metal enclosure with a separate miniature illuminated test switch status indicator. This Front-End Emergency LED Driver is suitable for installation external of the fixture or in sealed and gasketed fixtures. The maximum remote mounting distance to the LOAD is 18 feet. The Front-End Emergency LED Driver metal case should be grounded. Tinned stranded copper lead-wires, 18 AWG 600 V, 105°C are required for installation.

Specifications:

Emergency lighting shall be provided by using the AC Electronics ***ACE-H7DC180CPO*** Front-End Emergency LED Driver. The ***ACE-H7DC180CPO*** shall contain a battery, a high-efficiency battery charger, control circuitry, a 0-10 Vdc dimming control circuit, a high-efficiency two-wire universal input converter (120 through 277 Vac), and high-efficiency power converter circuits, all contained in a single metal enclosure. A separate miniature illuminated test switch status indicator with installation hardware shall be provided for the purposes of performing periodic testing and indicate status change of the battery and battery-charger. The ***ACE-H7DC180CPO*** shall be capable of delivering a constant power of 7 W to a compatible load of 120 – 180 Vdc for a minimum of 90 minutes. The ***ACE-H7DC180CPO*** utilizes the LED driver's 0-10 Vdc dimming circuit to adjust the power drawn to regulate the power at a constant level. The ***ACE-H7DC180CPO*** shall have a maximum of 11 W input power and shall comply with emergency standards established by the current NEC and shall meet CEC Title 20 (California Energy Commission) efficiency standards. The ***ACE-H7DC180CPO*** shall comply with part 15 of the FCC Rules. The ***ACE-H7DC180CPO*** shall be UL Listed for field or factory installation. The ***ACE-H7DC180CPO*** is suitable for indoor and damp locations.

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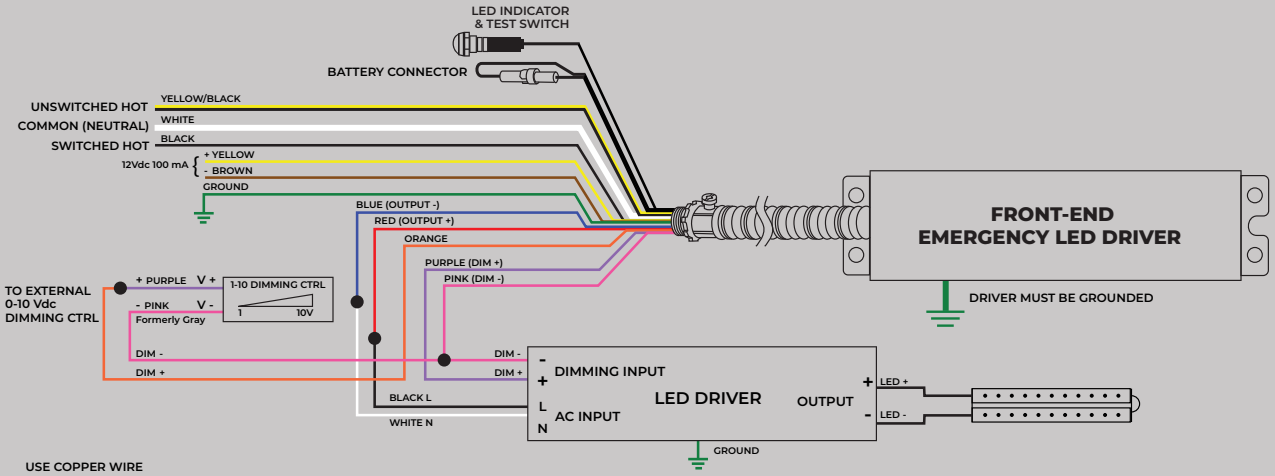
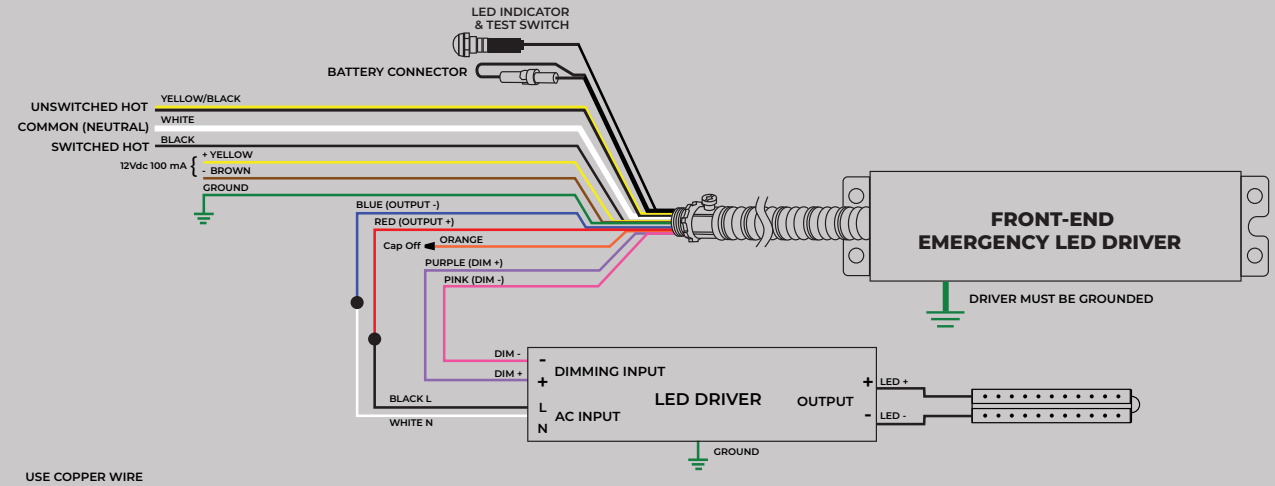
WIRING DIAGRAM FOR OPERATING ONE SINGLE FIXTURE

A. WITH DIMMABLE LED DRIVER
WITH EXTERNAL DIMMING CONTROLLER



B. WITH DIMMABLE LED DRIVER
WITHOUT EXTERNAL DIMMING CONTROLLER



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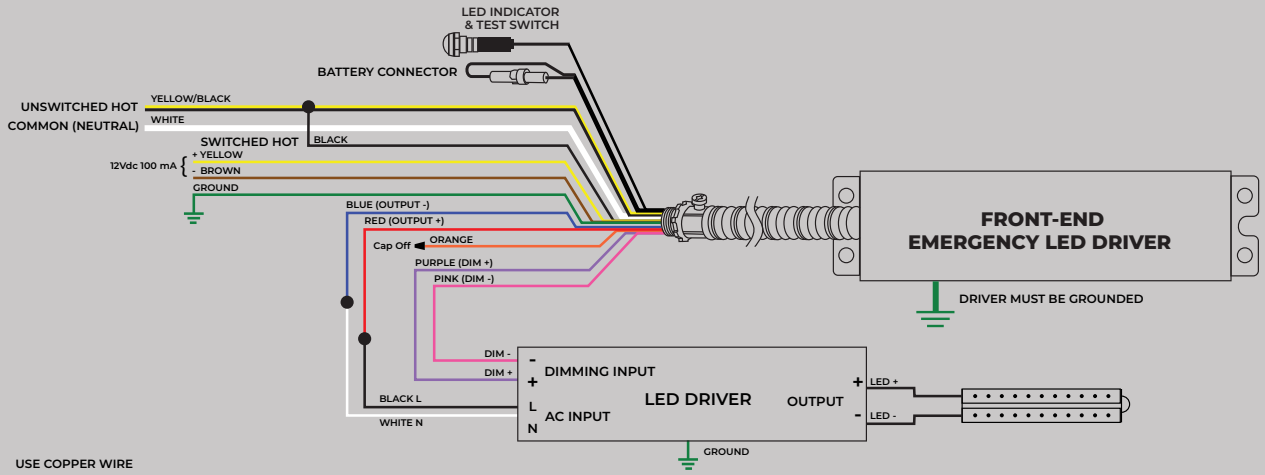
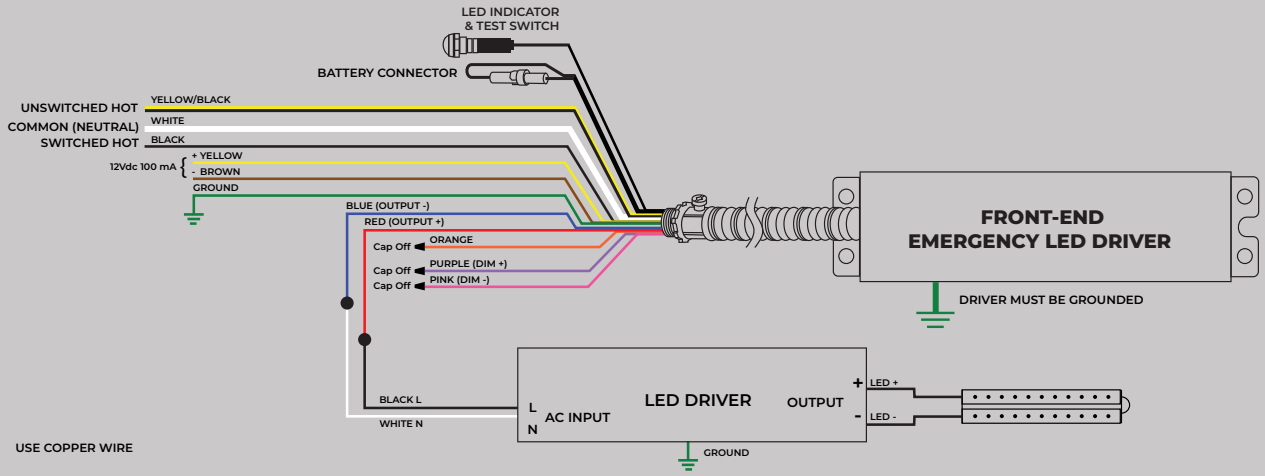
C. WITH DIMMABLE LED DRIVER
WITHOUT EXTERNAL DIMMING CONTROLLER
(NOTE: FOR THIS UNSWITCHED LINE APPLICATION, CONNECT THE SWITCHED HOT (BLACK WIRE) TO THE UNSWITCHED HOT (YELLOW/BLACK WIRE)).



D. FOR APPLICATIONS WITHOUT A DIMMABLE LED DRIVER
(NOTE: FOR THIS CONFIGURATION, THE LED DRIVER'S POWER DRAW MUST NOT EXCEED THE EMERGENCY LIGHTING POWER SUPPLY'S OUTPUT POWER RATING.)



***AC Electronics/ACE LEDS warrants to the purchaser that each Emergency LED Driver will be free from defects in material or workmanship for a period of 5 years when operated at max case temp of up to <60°C and 3 years warranty based on a maximum case temperature of ≤ 66 °C when properly installed and under normal conditions of use. See aceleds.com for complete warranty policy.**

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