

18010-X



INSTRUCTION MANUAL

DIMMABLE EMERGENCY LIGHTING CONTROL DEVICE



IMPORTANT SAFEGUARDS

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. To reduce the risk of electrical shock, disconnect all power sources before servicing.
2. An unswitched, normal AC power source and a direct, unswitched connection to a generator or central inverter supplied emergency panel is required (120 through 277 VAC, 50/60 Hz).
3. This product is for use with generator or inverter supplied emergency lighting operating with auto or preset 0-10V dimming level. Make sure all connections are in accordance with the National or Canadian Electrical code and any local regulations.
4. This product is UL Listed for factory or field installation, and use with grounded.
5. This product is suitable for use in dry or damp locations. Do not use outdoors. This product is also suitable for installation in sealed and gasketed junction box or fixtures. Do not mount in near gas, heaters, air outlets or other hazardous location.
6. Use this product in -20°C minimum, 65°C maximum ambient temperatures (Ta).
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition and void warranty.
8. Do not use this product for other than intended use.
9. Installation and service should be performed by qualified service personnel.
10. This product should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.




INSTALLATION



CAUTION: MAKE CERTAIN BOTH THE AC POWER AND EMERGENCY POWER ARE OFF UNTIL THE INSTALLATION IS COMPLETE.

1. OPERATING SPECIFICATIONS

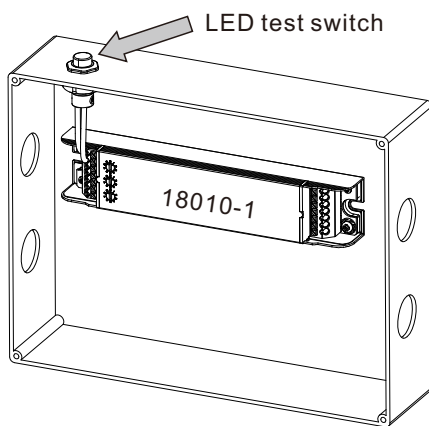
Set the emergency power by dipswitch A and B, set the 0-10V dimming level by dipswitch C.

	A	Emergency Power (P)					
		1. P = A x 100 + B x 10 2. P = 1000W (A=0, B=0)					
	B						
	C	0-10V Dimming Level (K)					
		C	0	1	2	--	9
		K	Auto	1V	2V	--	9V

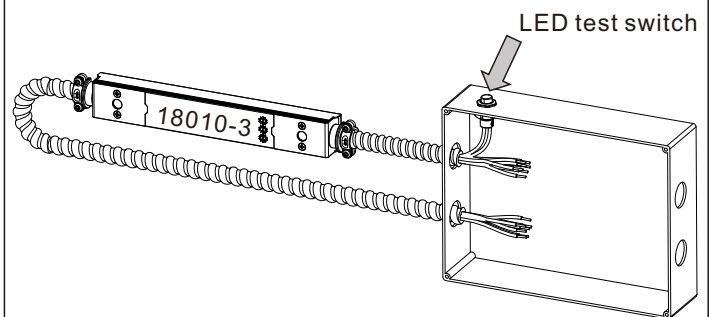
2. INSTALLING THE 18010-X

The 18010-X can be mounted inside or outside the junction box or luminaire.

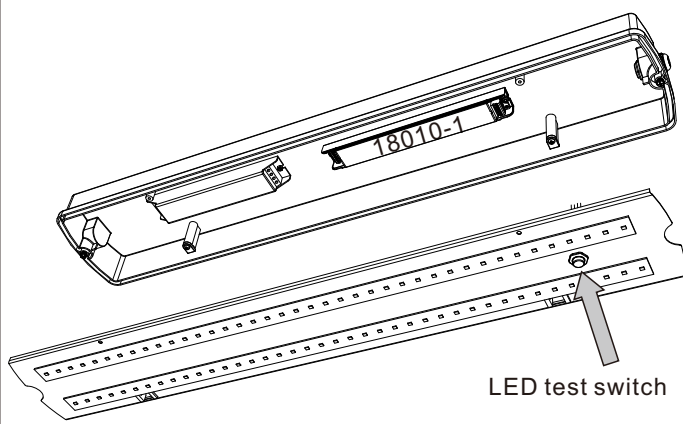
INSIDE THE JUNCTION BOX



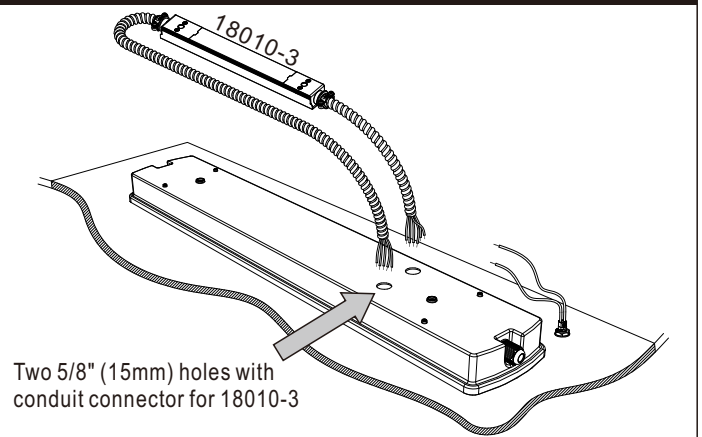
OUTSIDE THE JUNCTION BOX



INSIDE THE LUMINAIRE



OUTSIDE THE LUMINAIRE



Two 5/8" (15mm) holes with conduit connector for 18010-3

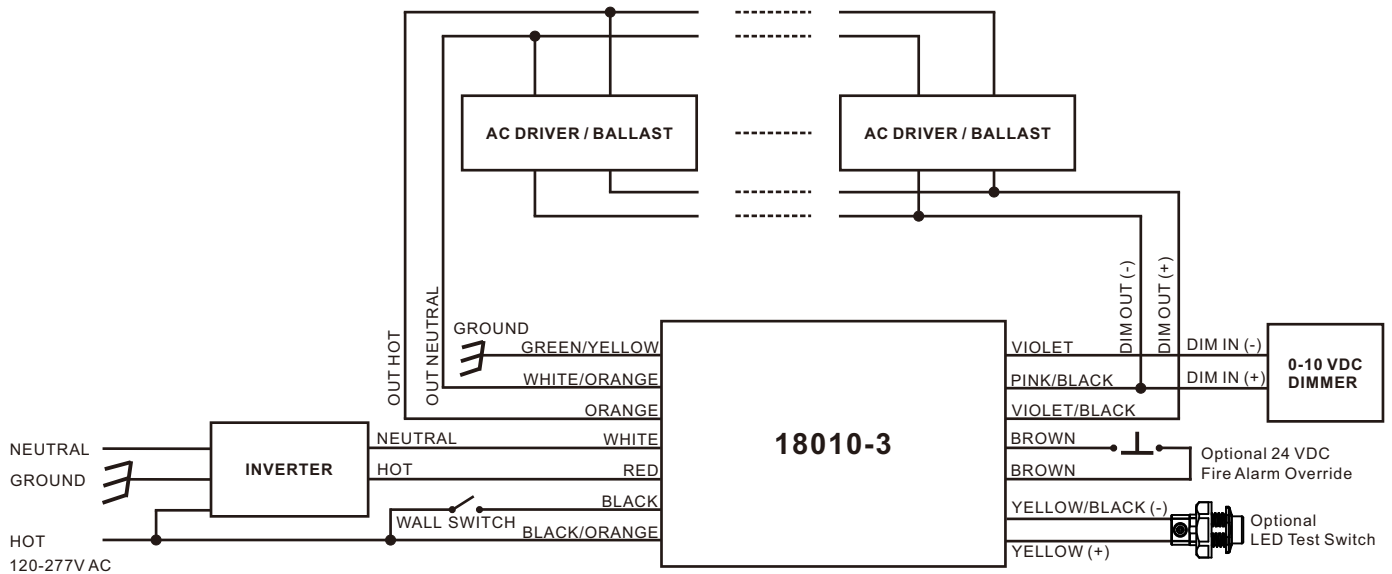
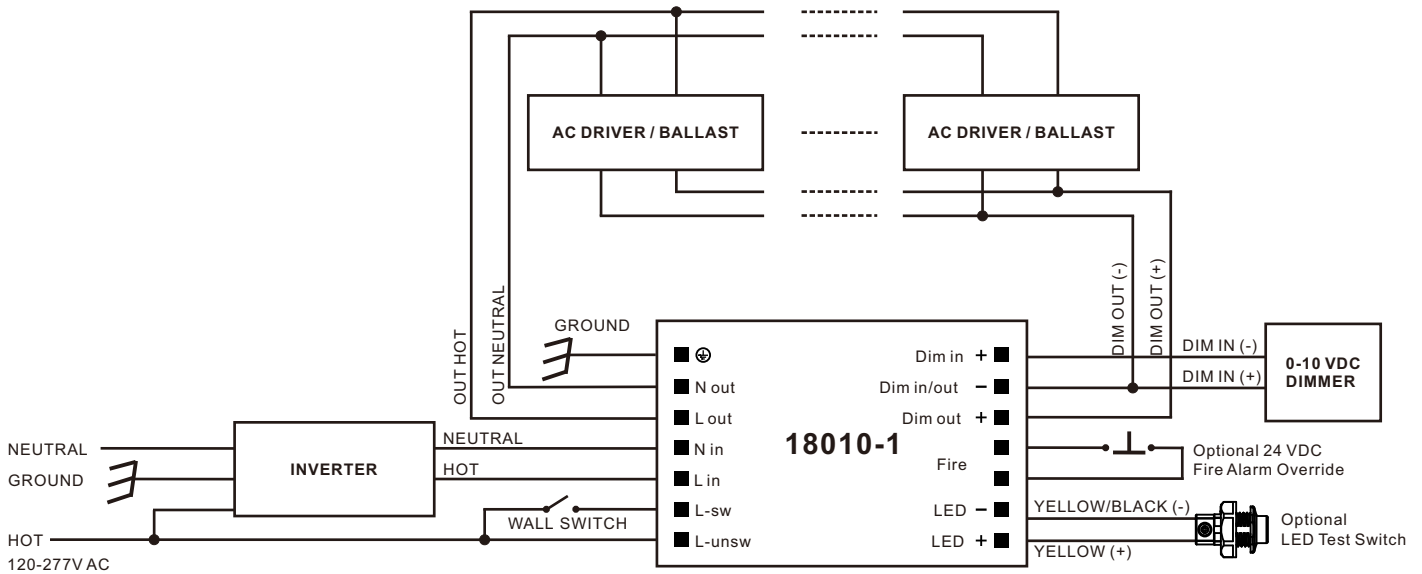
3. INSTALLING THE LED TEST SWITCH (OPTIONAL)

Select a convenient location for the LED test switch so that it can be seen after installation. Drill a 1/2" (12 mm) hole for mounting the LED test switch. Connect the wires from the LED test switch to the 18010 according to the wiring diagram.

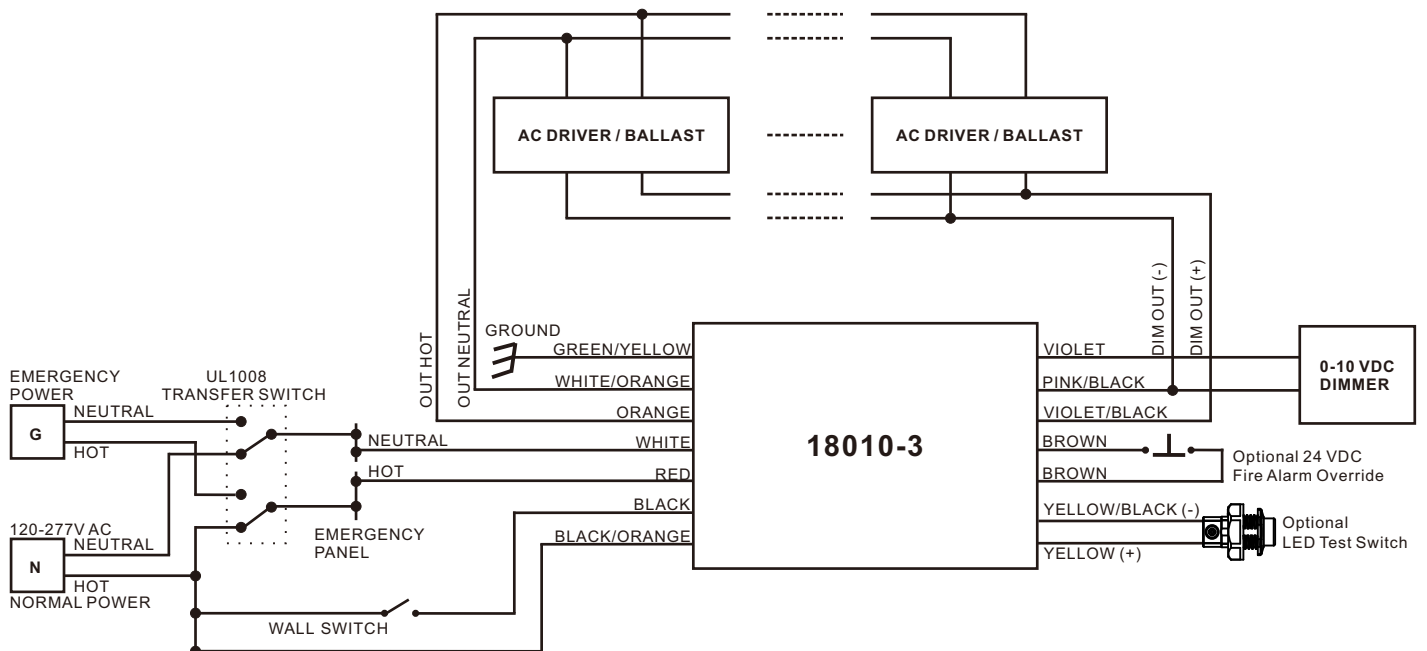
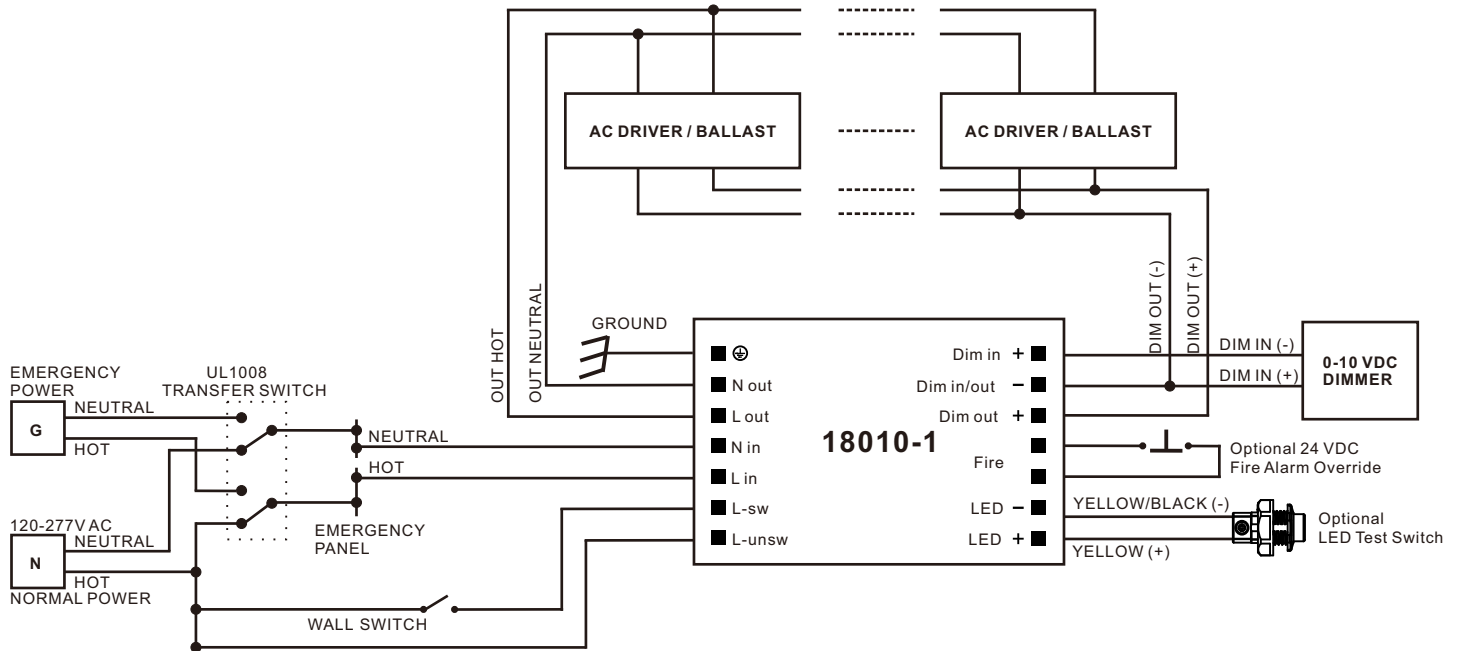
WIRING

1. The 18010-X requires an unswitched AC power supply of 120-277 volt, 50/60Hz.
2. Ensure the input current of the 18010-X does not exceed 5A. The total power of 0-10V dimmable load does not exceed 600W @120V and 1385W @277V.
3. Refer the wiring diagrams below for wiring. Consult the factory for other wiring diagram.

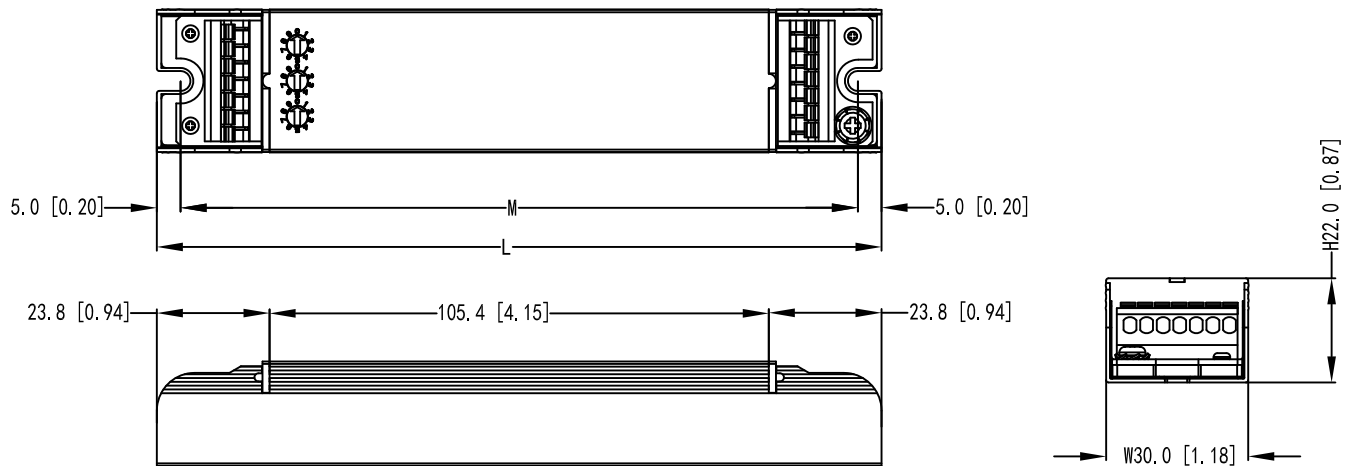
EMERGENCY POWER SUPPLY BY SINGLE INVERTER



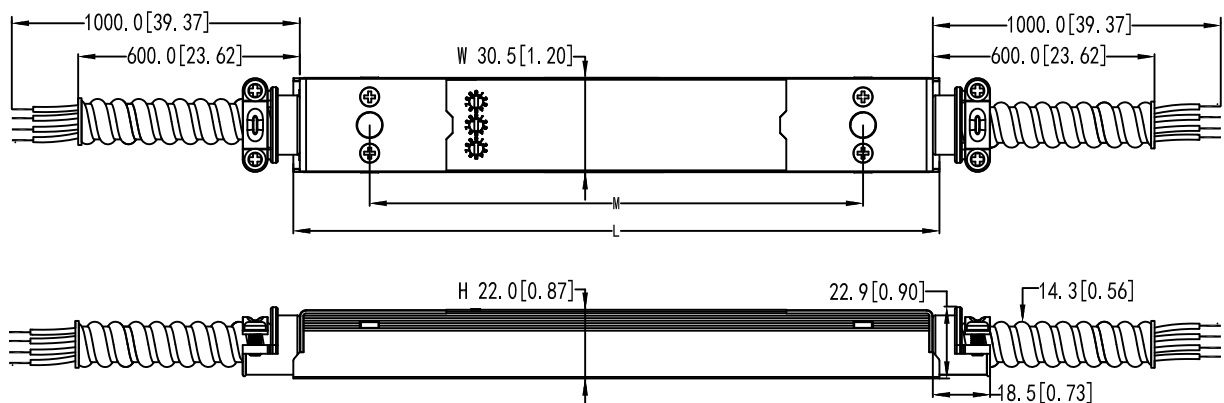
EMERGENCY POWER SUPPLY BY GENERATOR OR CENTRAL INVERTER



DIMENSION

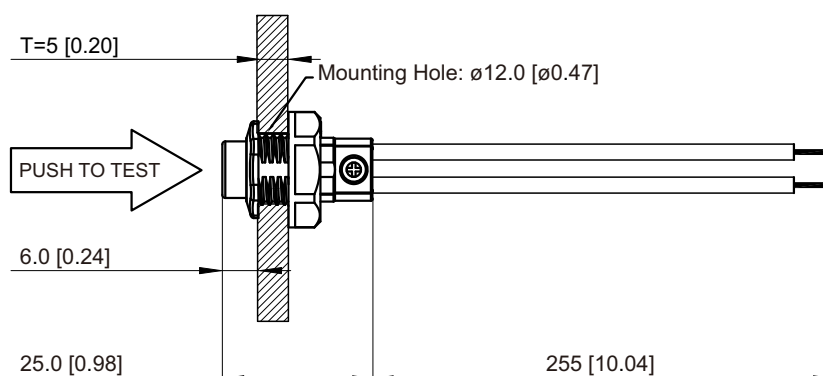


Item No.	L mm [inch]	M (Mounting) mm [inch]	W mm [inch]	H mm [inch]
18010-1	153 [6.02]	143 [5.63]	30 [1.18]	22 [0.87]



Item No.	L mm [inch]	M (Mounting) mm [inch]	W mm [inch]	H mm [inch]
18010-3	211 [8.31]	162 [6.38]	30 [1.18]	22 [0.87]

LED TEST SWITCH



Dimension unit: mm [inch]

OPERATION / TESTING / MAINTENANCE

OPERATION

The 18010-X dimmable emergency lighting control device can work in conjunction with both an auxiliary generator or a central inverter system and single inverter to power existing fluorescent or LED fixtures for emergency lighting at full or reduced illumination with designed or preset dimming level regardless of the wall switch position or normal dim setting.

TESTING AND MAINTENANCE

1. **APD** (Auto Preset Dimming) **technology** (The dipswitch C is set to 0)

a) Initial Auto Test

When the system is connected properly and powered on after a power failure, the 18010-X will perform an initial Auto Test:

Bypassing the wall switch and overriding the dimmer to detect the connected dimmable load's maximum power - **P_{Max. load}**, calculating the dimming level - **K** (which will dim the load in emergency mode) base on the **P_{Max. load}** and the emergency power (Set by the dipswitch A and B), dimming the load with the dimming level **K** to simulate emergency mode.

b) Auto adjusting

18010-X is constantly detecting the **P_{Max. load}** in normal mode, the Initial Auto Test will be restarted automatically when **P_{Max. load}** increases.

2. Preset dimming (The dipswitch C is set to 1-9)

The dimming level **K** is preset to 1-9V.

MANUAL TEST (Optional)

- Press the LED test switch (LTS) one time to simulate emergency mode.
- Press the LTS 2 times continuously within 3 seconds to restart the Initial Auto Test.

LED TEST SWITCH (LTS) CONDITIONS

- LTS On: Normal Condition
- LTS Off: Power Failure
- LTS Gradual Change: In Testing Mode