

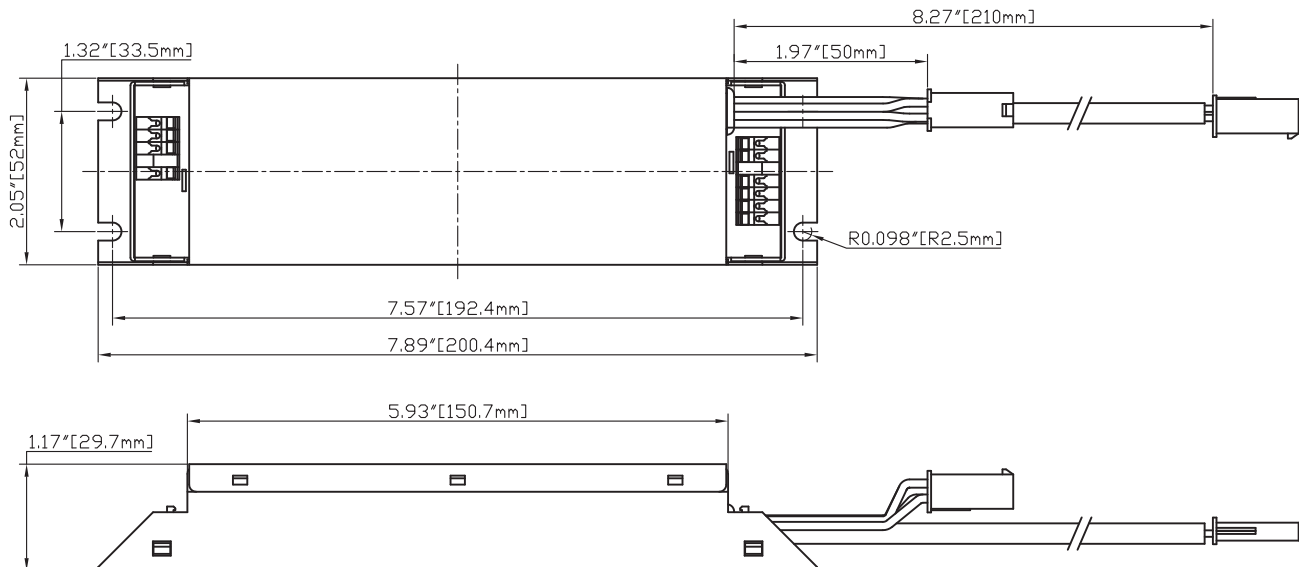
- Emergency LED Driver
- Universal Voltage: 100-277VAC, 50/60Hz
- Output Power: 10W Max.
- Output Current: 0.62A
- Output Voltage Range of 16-55V $\overline{\text{DC}}$
- Long Case and Terminal
- IP20
- U-OUT: 60VDC

This Driver Will Operate The Following LED Modules: Any LED module designed to accept input voltage range of 16-55VDC and can operate up to current of 0.62A.

General Specifications

Input Voltage	100-277V~, 50/60Hz
Input Current	60mA
Input Power	6W
AC LED Driver Input Current (LED Driver Neutral)	3A~ Max.
Standby Input Power	<0.5W
Driver Type	Constant Power
Output Current	0.62A
Output Voltage Range	16-55V $\overline{\text{DC}}$
Output Power	10W Max. (1-10W @ 3000mAh Battery, 1-6W @ 1800mAh Battery, 1-5W @ 1500mAh Battery)
AC LED Driver Output (LED Driver Output +)	3A $\overline{\text{DC}}$ Max., 55V $\overline{\text{DC}}$ Max.
Number of Output Channels	1 Channel
RFI/EMI	FCC Part 15A Non-Consumer
Output Type	LED Class 2
Battery Type	NiCd 9.6VDC / LiFePO4 9.6VDC
Battery Capacity Available	3000mAh, 1800mAh, 1500mAh
Battery Recharge Time	24 Hours@NiCd / 12 Hours@LiFePO4(Refer To Battery chart)
Battery Discharge Time	90 Minutes Min.
Test Switch Remote Mounting Distance	20' (6m) Max.
Rated Ambient (ta)	NiCd 0°C to 55°C (32°F to 131°F) / LiFePo4 10°C to 55°C (50°F to 131°F)
Sound Rating	A
Input Surge Protection	Line-Neutral 2kV, Line & Neutral-Ground 2kV
Protections	Over / Under Voltage Protection Output Open Circuit Protection Overload Protection
Service Life	50,000 hours
Approvals / Class	RoHS, IP20, CEC Title 20, cULus LISTED

Mechanical Data

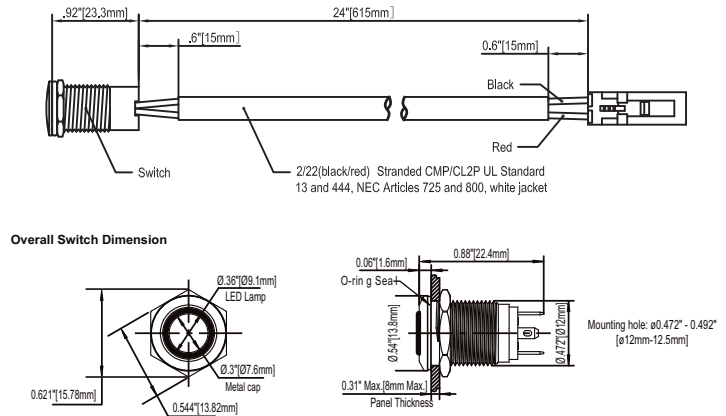


Tolerance=±0.02"

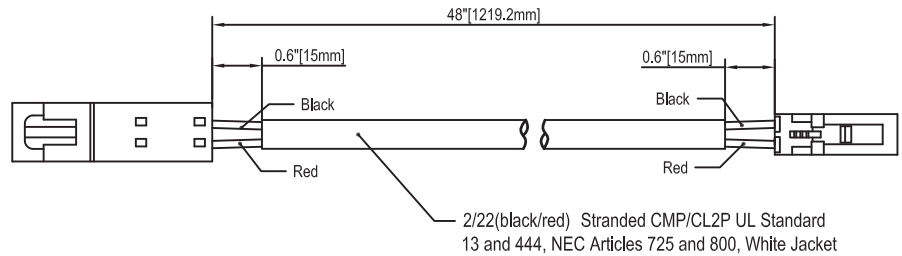
Fulham extends a limited warranty to the original purchaser or first user for a period of 5 years from the date of manufacture when properly installed and operated under normal conditions of use. The usage of appropriate series connected Surge Protection Device (SPD) is required in high risk applications. For complete terms and conditions, please refer to the Warranty Center at www.fulham.com. Specifications subject to change without notice.

Accessories

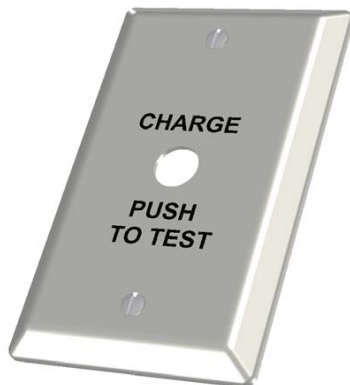
Bi-Color Wet Location Test Switch: FHS-TSTWL-BC



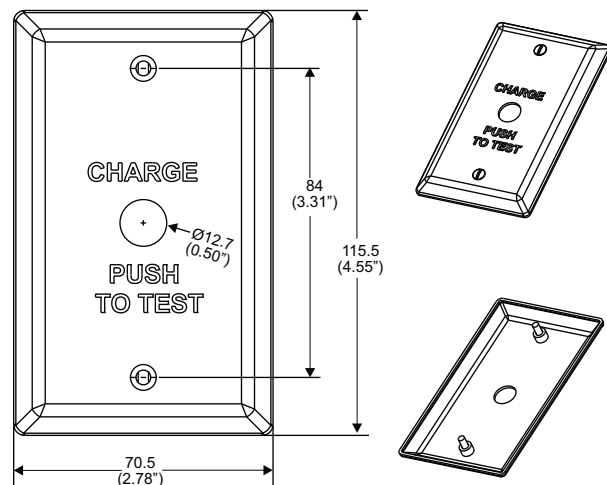
Test Switch Extension: FHS-EXT-48-TST



Wall Plate: FHSWLPWH



Wall plate and screw color:
white with black lettering



1. "Charge push to Test" plate
2. (2) 6-32 x 1/2" LG mounting screws

Fulham extends a limited warranty to the original purchaser or first user for a period of 5 years from the date of manufacture when properly installed and operated under normal conditions of use. The usage of appropriate series connected Surge Protection Device (SPD) is required in high risk applications. For complete terms and conditions, please refer to the Warranty Center at www.fulham.com. Specifications subject to change without notice.



FHSCP-UNV-10P-L-SD SPECIFICATIONS



GENERAL INSTALLATION GUIDELINES FOR LED EMERGENCY DRIVER

IMPORTANT SAFE PRACTICES

When using electrical equipment and this lighting device basic safety precaution should be followed at all times including but not limited to the following:

PLEASE READ CAREFULLY AND FOLLOW ALL INSTRUCTIONS FOR YOUR OWN SAFETY

IMPORTANT: Do not connect battery until fixture is installed.

IMPORTANT: An un-switched AC power source of 100VAC to 277VAC is required.

This device is designed for use in fixtures listed for **dry and damp locations**.

CAUTION: Make sure all electrical connections conform to the National Electrical Code and all applicable local regulations.

CAUTION: Do not let power supply cords touch hot surfaces.

CAUTION: Do not mount near gas or electric heaters.

CAUTION: Do not use outdoors.

CAUTION: Battery is rechargeable NiCd or LiFePO4 type and must be recycled or disposed of properly.

Do not use this emergency driver with accessory equipment other than recommended by manufacturer; failure to follow this may cause an unsafe condition. Servicing should only be performed by qualified service personnel. Do not use this emergency driver for other than intended use.

CAUTION: Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

IMPORTANT: The output EM power will be the maximum of connected battery unless programmed to a lesser value. EM output power will not exceed the battery rating.

IMPORTANT: Indicator (LED light) illuminated indicates battery in charge mode when AC power is applied.

It is recommended and required by applicable code to test emergency function to ensure proper operation of the system; push the test switch for thirty (30) seconds every 30 days to ensure the emergency driver is functioning as LED light source illuminated. Conduct a ninety minute (90) discharge test one time (1) per year; LED light source should be illuminated for a minimum of ninety minutes (90).

ASSEMBLY and FIELD INSTALLATION WIRING: WARNING: AC power must be off before proceeding with assembly or installation of emergency driver.

TESTING SYSTEM: The emergency battery requires a charge minimum of one (1) hour before testing the circuit. A full charge requires twelve (12) or twenty four (24) hours (Refer to battery chart).

IMPORTANT: In order to maintain proper operation and warranty coverage, the battery must be recharged once per year prior to installation.

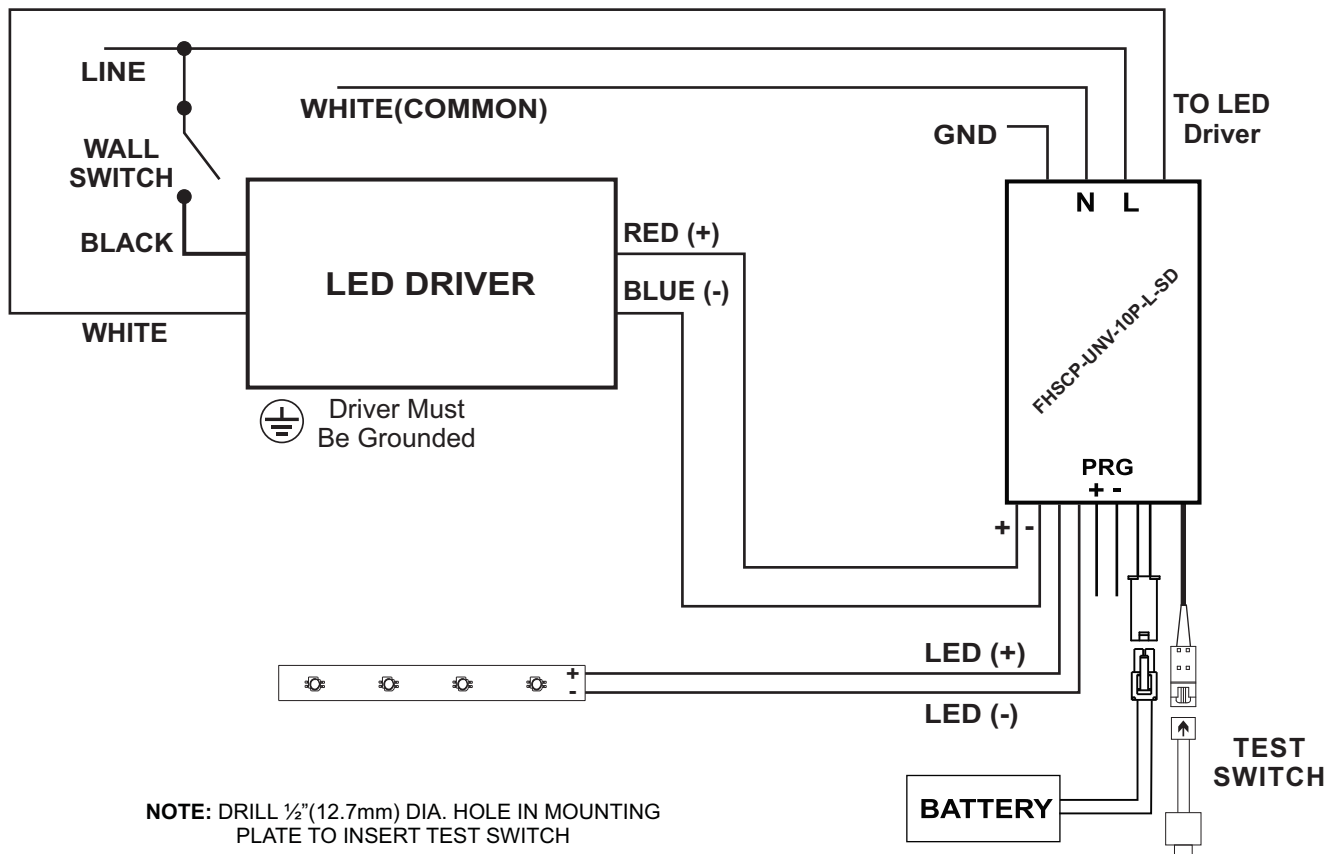
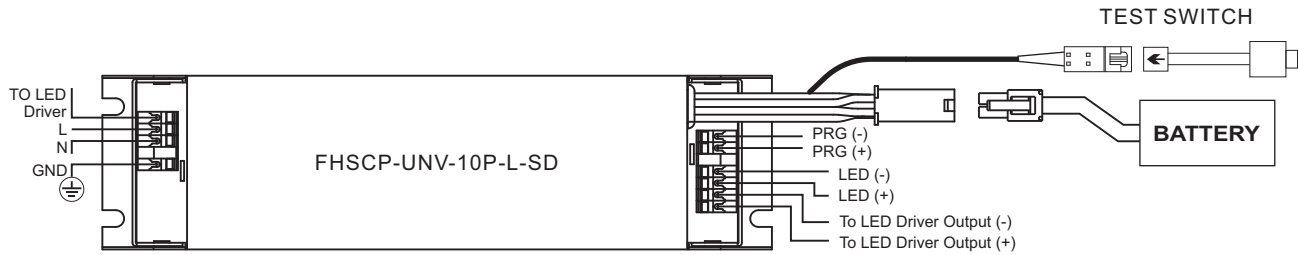
Fulham Head Quarters:
Fulham Co., Inc
12705 South Van Ness Ave.
Hawthorne, CA 90250

Manufacturer:
North China
Fulham Electronic Co. Ltd.
No. 9 Xingchang Road, Nanshao Zhen Changping Science Park, Beijing, P.R. China

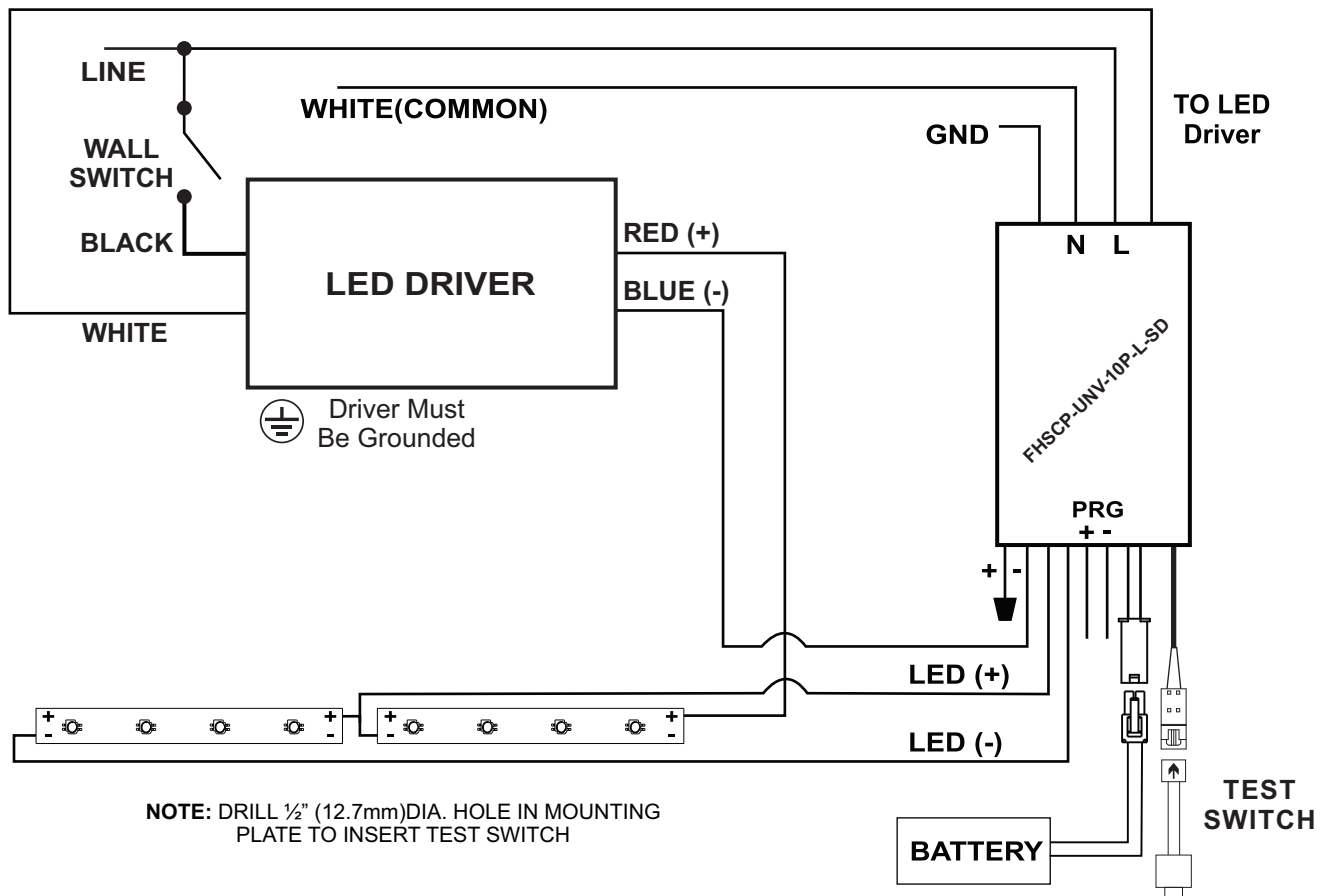
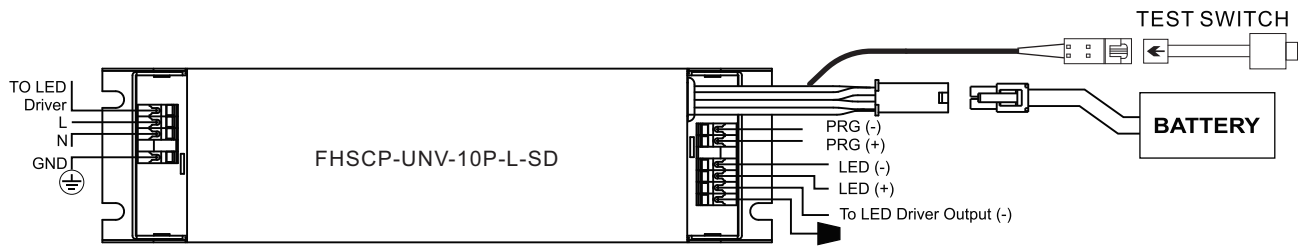
SAVE THESE INSTRUCTIONS

Fulham extends a limited warranty to the original purchaser or first user for a period of 5 years from the date of manufacture when properly installed and operated under normal conditions of use. The usage of appropriate series connected Surge Protection Device (SPD) is required in high risk applications. For complete terms and conditions, please refer to the Warranty Center at www.fulham.com. Specifications subject to change without notice.

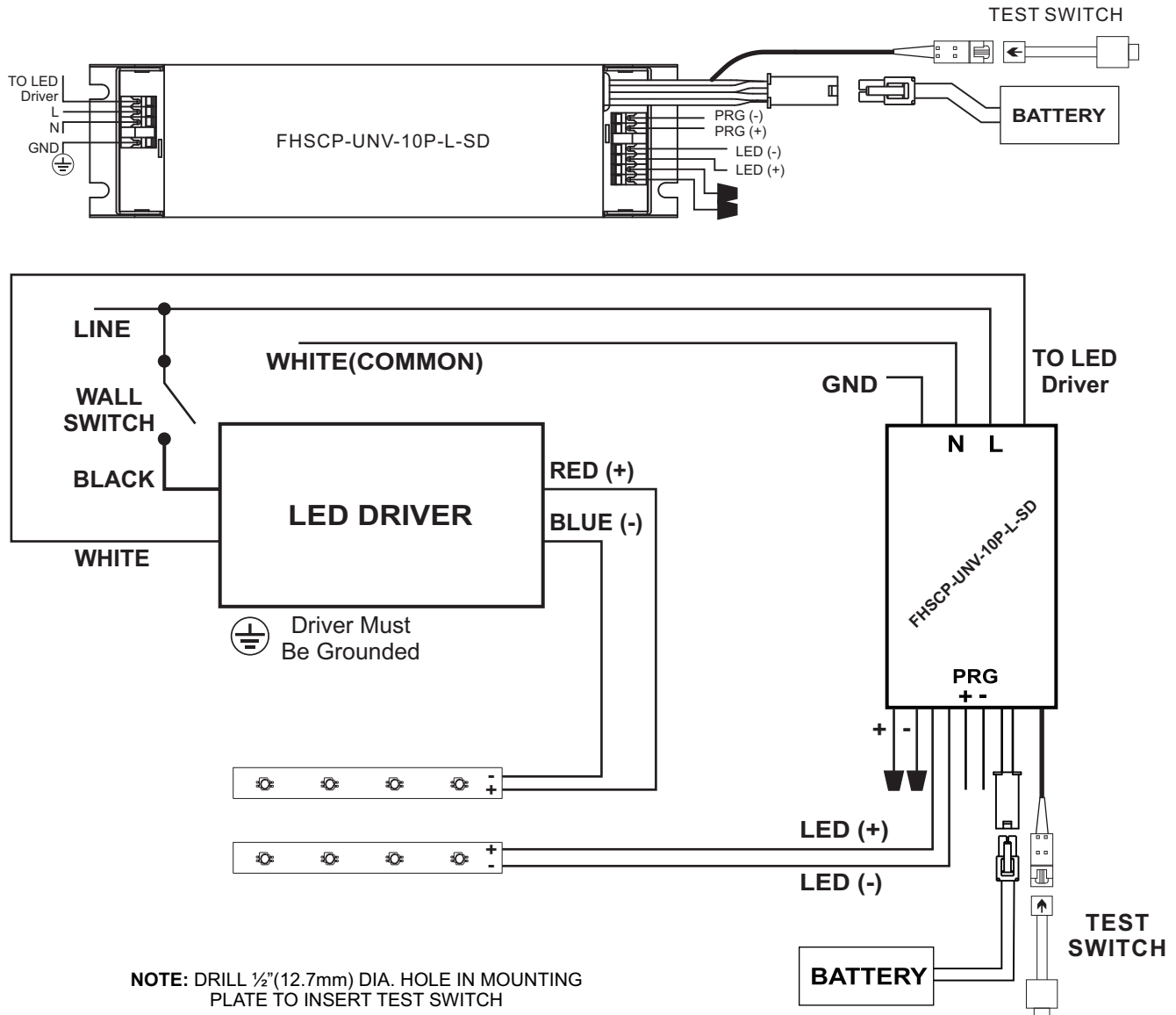
Wiring Diagrams 1



Wiring Diagrams 2



Wiring Diagrams 3



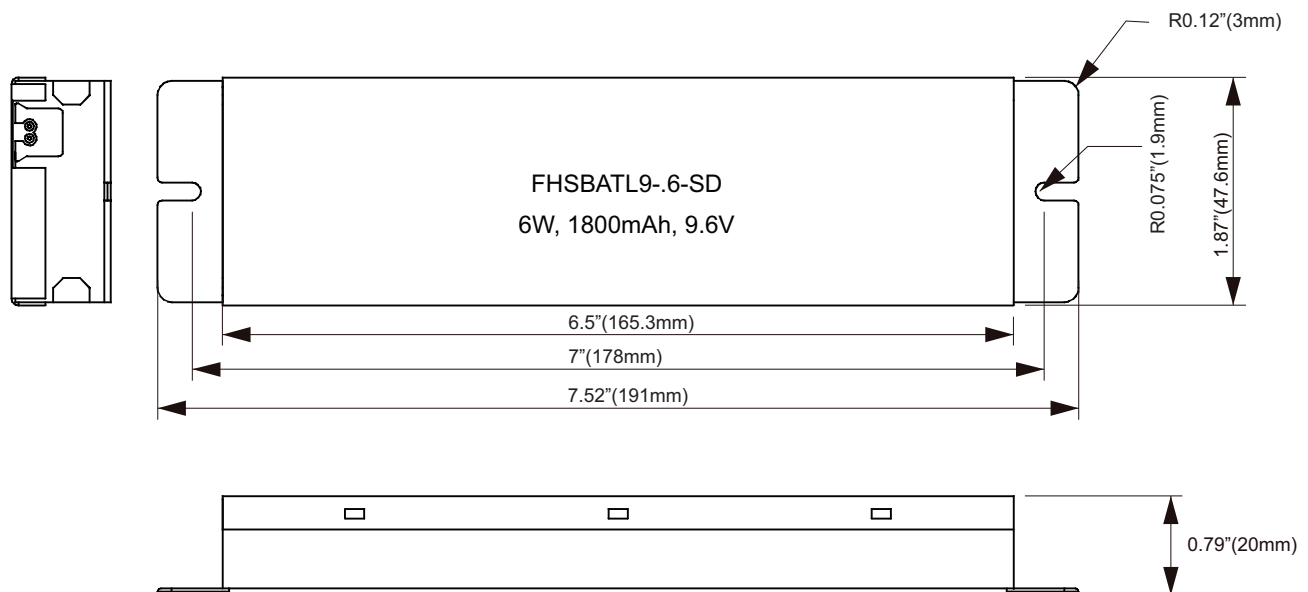
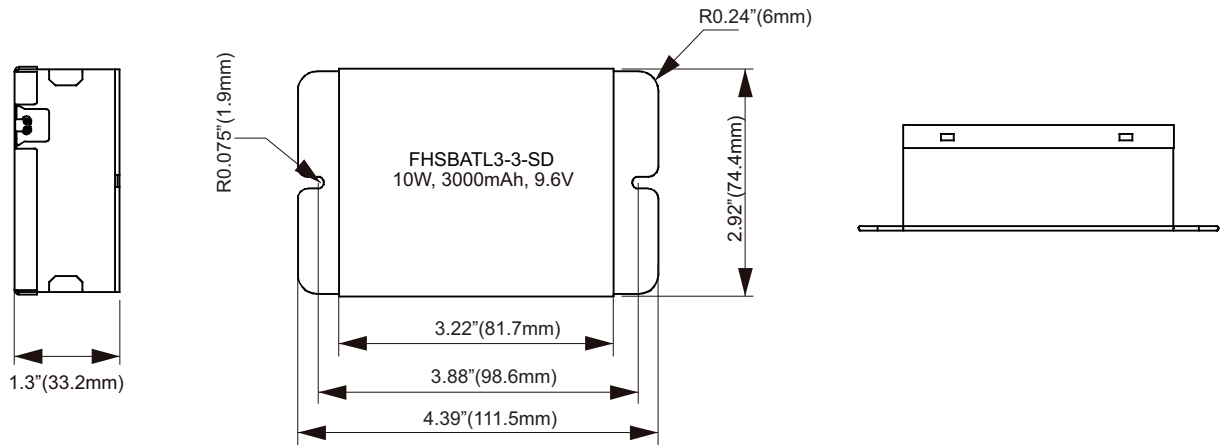
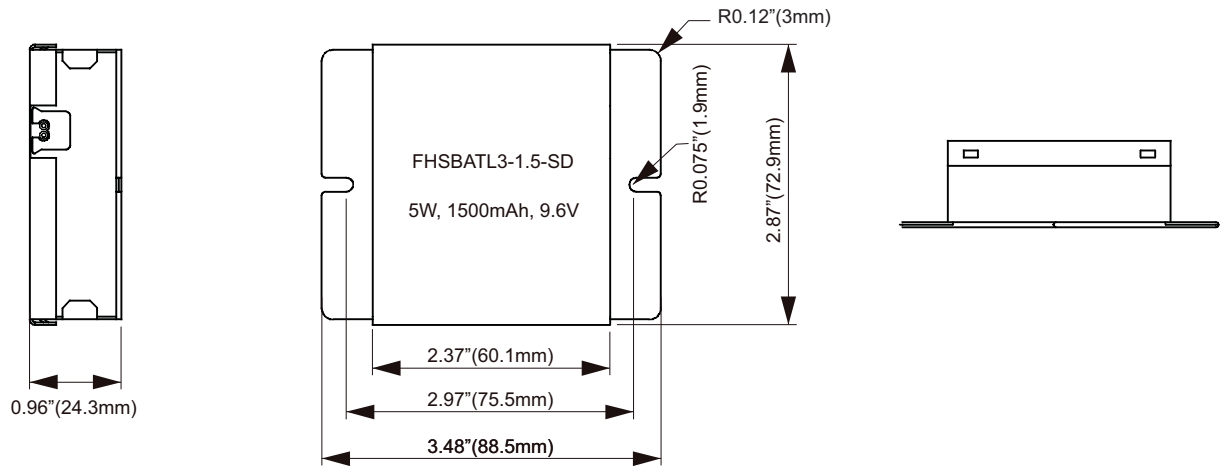
Battery Chart

Fulham Model No.	Chemistry	RoHS	Pack Capacity	Max Load for 90 min.	Battery Voltage	Recharge Time	Battery Dimensions
FHSBATL3-1.5-SD	LiFePO4	Compliant	1500mAh	5W	9.6V	12Hrs	3.48" x 2.87" x 0.96" (88.5 x 72.9 x 24.3mm)
FHSBATL3-3-SD	LiFePO4	Compliant	3000mAh	10W	9.6V	12Hrs	4.39" x 2.92" x 1.3" (111.5 x 74.4 x 33.2mm)
FHSBATL9-.6-SD	LiFePO4	Compliant	1800mAh	6W	9.6V	12Hrs	7.52" x 1.87" x 0.79" (191 x 47.6 x 20mm)
FHSBATL6-1.5L-SD	LiFePO4	Compliant	3000mAh	10W	9.6V	12Hrs	9.13" x 1.63" x 0.97" (232 x 41.4 x 24.7mm)
FHSBATT8-C3L-SD	NiCd	Exempt	3000mAh	10W	9.6V	24Hrs	9.25" x 2.11" x 1.21" (235 x 53.5 x 30.7mm)

CAUTION: Replace battery only with corresponding part number.

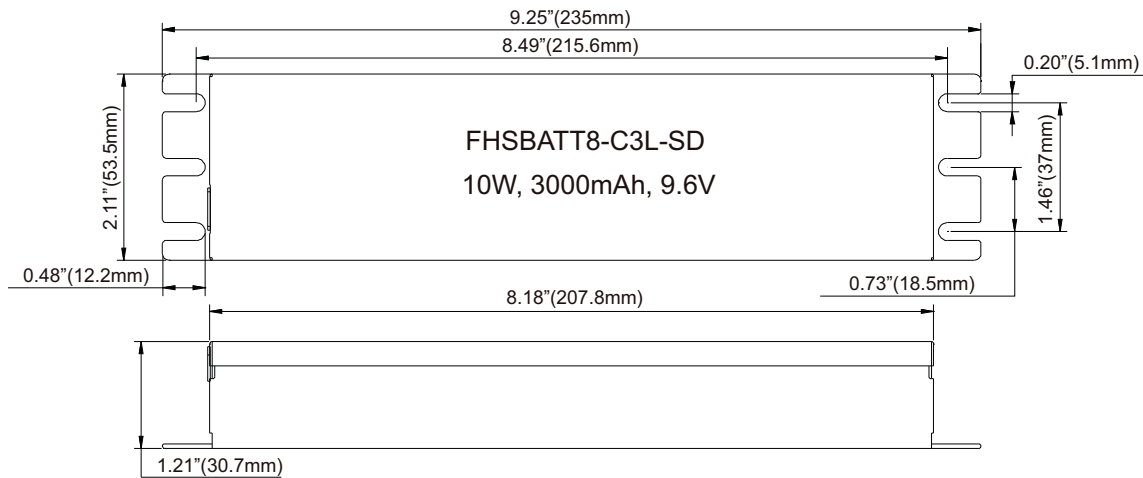
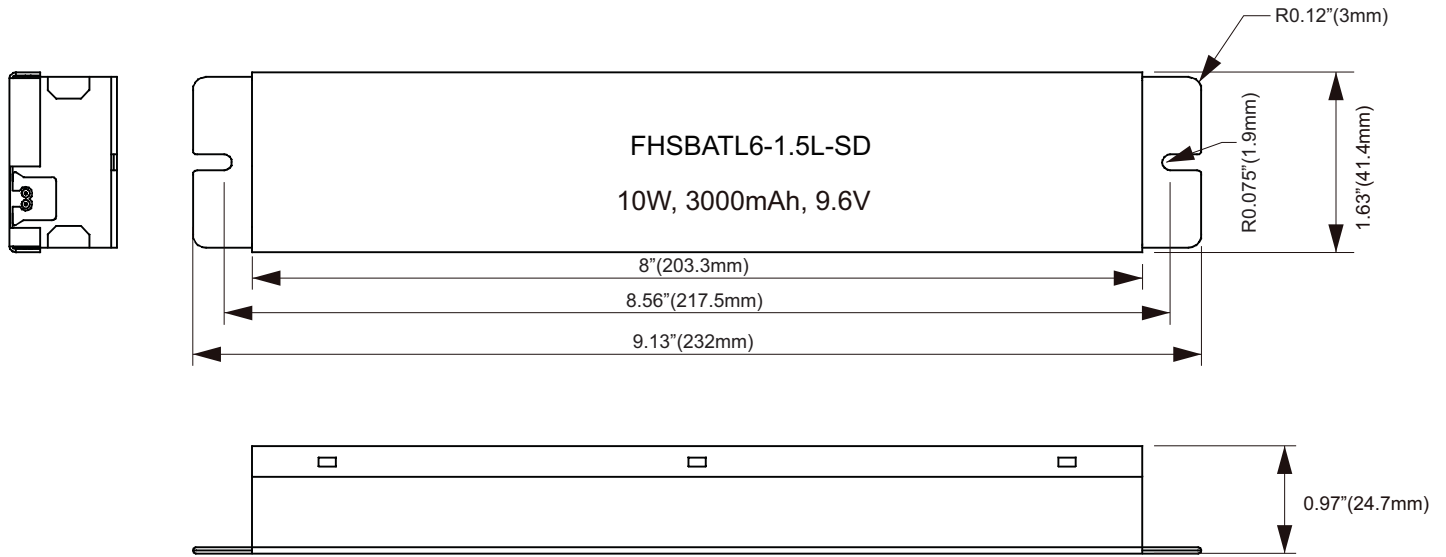
Fulham extends a limited warranty to the original purchaser or first user for a period of 5 years from the date of manufacture when properly installed and operated under normal conditions of use. The usage of appropriate series connected Surge Protection Device (SPD) is required in high risk applications. For complete terms and conditions, please refer to the Warranty Center at www.fulham.com. Specifications subject to change without notice.

Battery Dimensions



Fulham extends a limited warranty to the original purchaser or first user for a period of 5 years from the date of manufacture when properly installed and operated under normal conditions of use. The usage of appropriate series connected Surge Protection Device (SPD) is required in high risk applications. For complete terms and conditions, please refer to the Warranty Center at www.fulham.com. Specifications subject to change without notice.

Battery Dimensions



TEST SWITCH INDICATOR STATUS:

LED Indicator Status	EM Driver Status/Mode
• Solid Green	System OK/AC OK (Self-diagnostic Enabled or Disabled)
• Slow Flashing Red, 4s on/1s off	Battery not detected, check battery switch or connection.
• Flashing Red, 1s on/1s off	Battery failure, replace battery.
• Flashing Green, 2s on/2s off	Self-diagnostic test underway.
• Fast Flashing Red, 0.1s on/0.1s off	Abnormal driver performance, replace driver.
• None. Both LEDs OFF	Normal working in EM mode.
• Very Slow Flashing Red, 1s on/7s off	OTP or other internal protections triggered.

*Notes: OTP = Over Temperature Protection; ensures max temperature ratings are not exceeded.

TEST SWITCH OPERATIONS:

1. EM Test: Press and hold test button to enter EM mode for testing, in all normal AC powered situations including low power standby modes.
2. Manual Self-Diagnostic: quickly press the test button three times within three seconds to force the controller to enter a Self-Diagnostic cycle. To quit the self-diagnostic cycle after engaged press and hold the test button for five seconds.
3. Enable/Disable Auto Self-Diagnostic: Press and hold the test button for two seconds, then release and quickly press the test button two times, then release and press and hold the test button for two more seconds. When properly executed the indicator on the test button will display the appropriate Enable/Disable status. A flashing of 2.5s ON/0.5s OFF means "Enabled", while a flashing of 0.5s ON/2.5s OFF means "Disabled". Once Enable/Disable is set the status color on the test button will remain the same throughout normal operation (refer to Indicator Status Table).

Programming:

Unless otherwise programmed the output will self-program to the maximum rating of the battery. This EM driver can be programmed using the Fulham SmartSet TPSB-100(E). Programming features include the following:

- * Output EM power - 1W to 10W
- * Enable / Disable Self-Diagnostic



* For more detailed programming instructions please see our Programming Instructions and Design Guide found on our website:

- <https://www.fulham.com/PDFs/SpecSheets/Fulham-Design-Guide-Programmable-Drivers.pdf>