



# FHSCP-UNV-15P-S-SD



## Programmable Emergency LED Driver

- Emergency LED Driver
- Universal Voltage: 120-277VAC, 50/60Hz
- Output Voltage Range: 15-55V  $\overline{\text{---}}$
- Output Current: 55-666mA
- Output Wattage: 3W-15W (Factory default 15W)
- Output Type: LED Class 2
- Number of Output Channels: 1 Channel
- Dry and Damp
- EBD Function

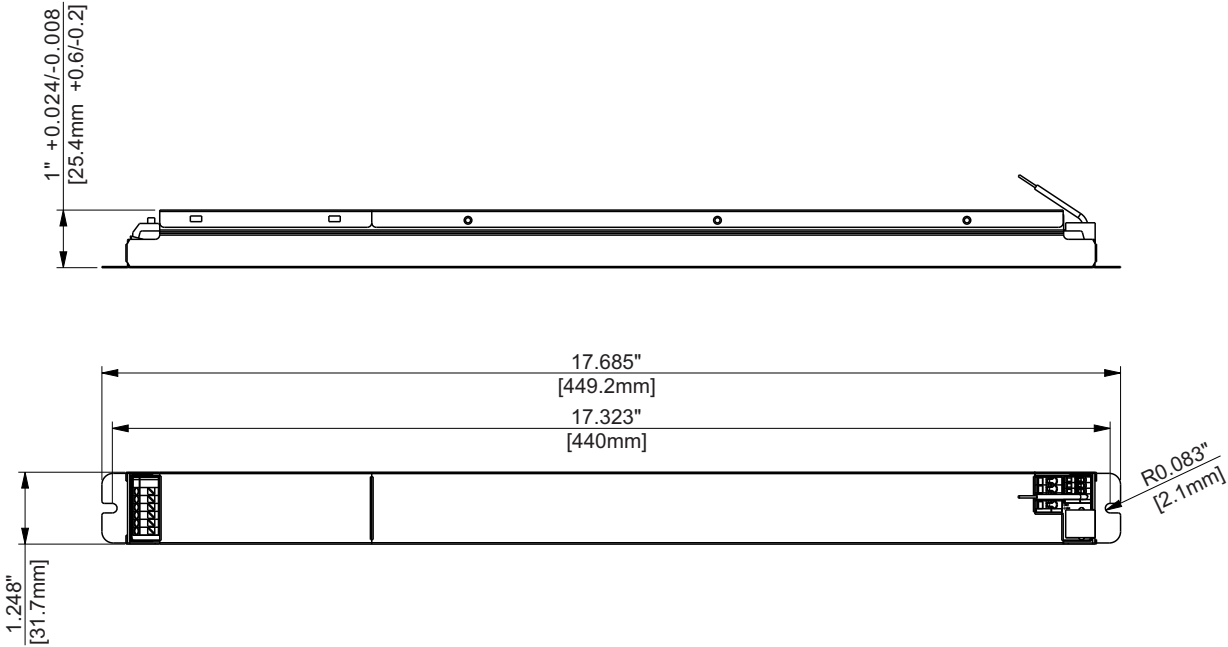
### General Specifications

Input Voltage / Frequency	120-277VAC, 50/60Hz
Input Current	0.12A Max
Input Power	7 W Max
Standby Input Power	<0.85W
Input Power Pass-Through Rating (AC Driver Line)	2A
Max Output Rating (LED+ LED-Terminal)	3A, 55V Max
Output Type	LED Class 2
Output Power	3W-15W
Output Voltage Range	15-55V $\overline{\text{---}}$
Output Current Rated	55-666mA
Number of Output Channels	1Channel
Input Surge Protection	3KV and 6KV Ring Wave
Protections	Output Open Protection Output Overload Protection Output Short Circuit Protection
RFI/EMI	FCC Part15A
Ambient Operating Temperature Rang	0°C To 55°C (32°F To 131°F)
Tc	65°C (149°F)
Sound Rating	A
Battery Type	Ternary Lithium Battery
Battery Voltage	11.1V
Pack Capacity	5000mAh
Battery Rating	55.5Wh
Battery Count	3 Cells
Battery Recharge Time	24 Hours Max.
Battery Discharge Time	1.5 Hours Min.
IP Rating	IP20
Test Switch Remote Mounting Distance	20' (6m) Max.
Service Life	50,000 hours@Tc 65°C (149°F)
Warranty	@Tc 65°C (149°F) 5 years From the date of manufacture when properly installed
Safety Standard	UL 924, UL 1310, CSA C22.2 No.141-10



Mechanical Data

Overall Dimensions	
Length	17.685" [449.2mm]
Width	1.248" [31.7mm]
Height	1" [25.4mm]



Tolerance=0.02"

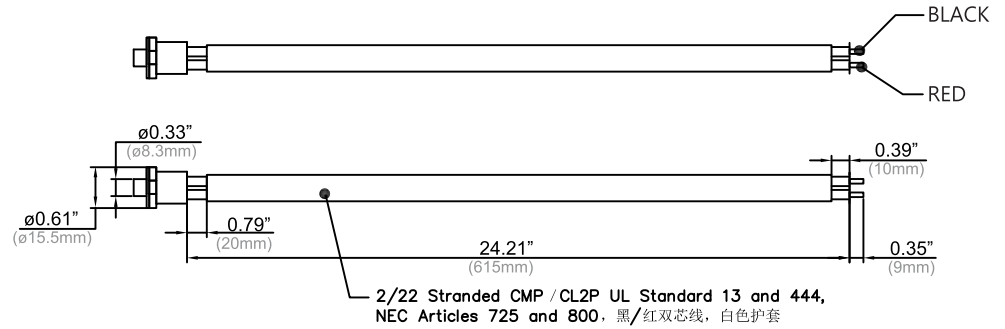


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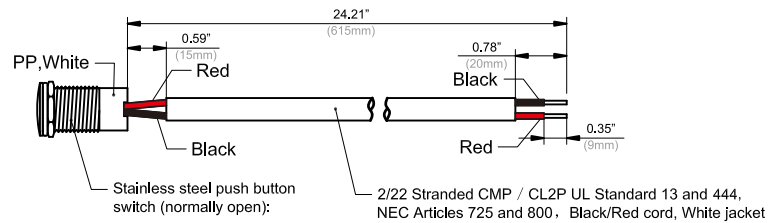
## Accessories

### Test switch wire: FHS-TST-BC-S

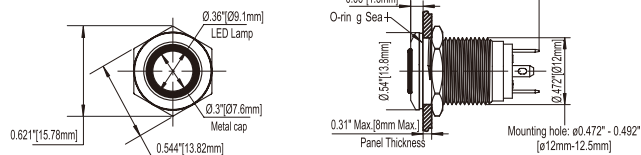


## Optional Accessories

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



#### Overall Switch Dimension





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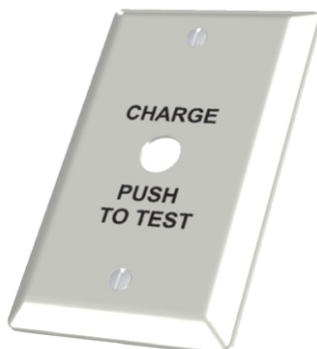
## Optional Accessories

Wall Plate: FHSWLPWH

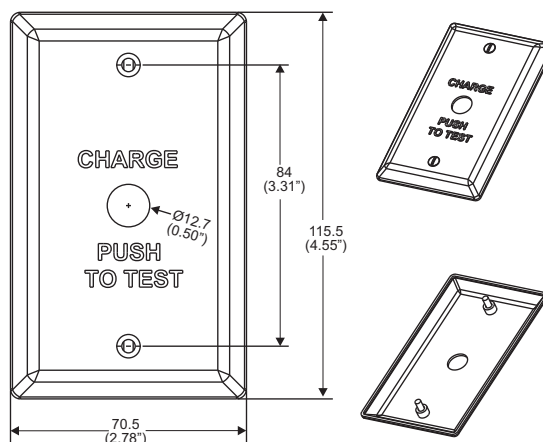


Wall plate and screw color:  
white with black lettering

Wall Plate: FHSWLPPWH(Pure White Wall Plate)



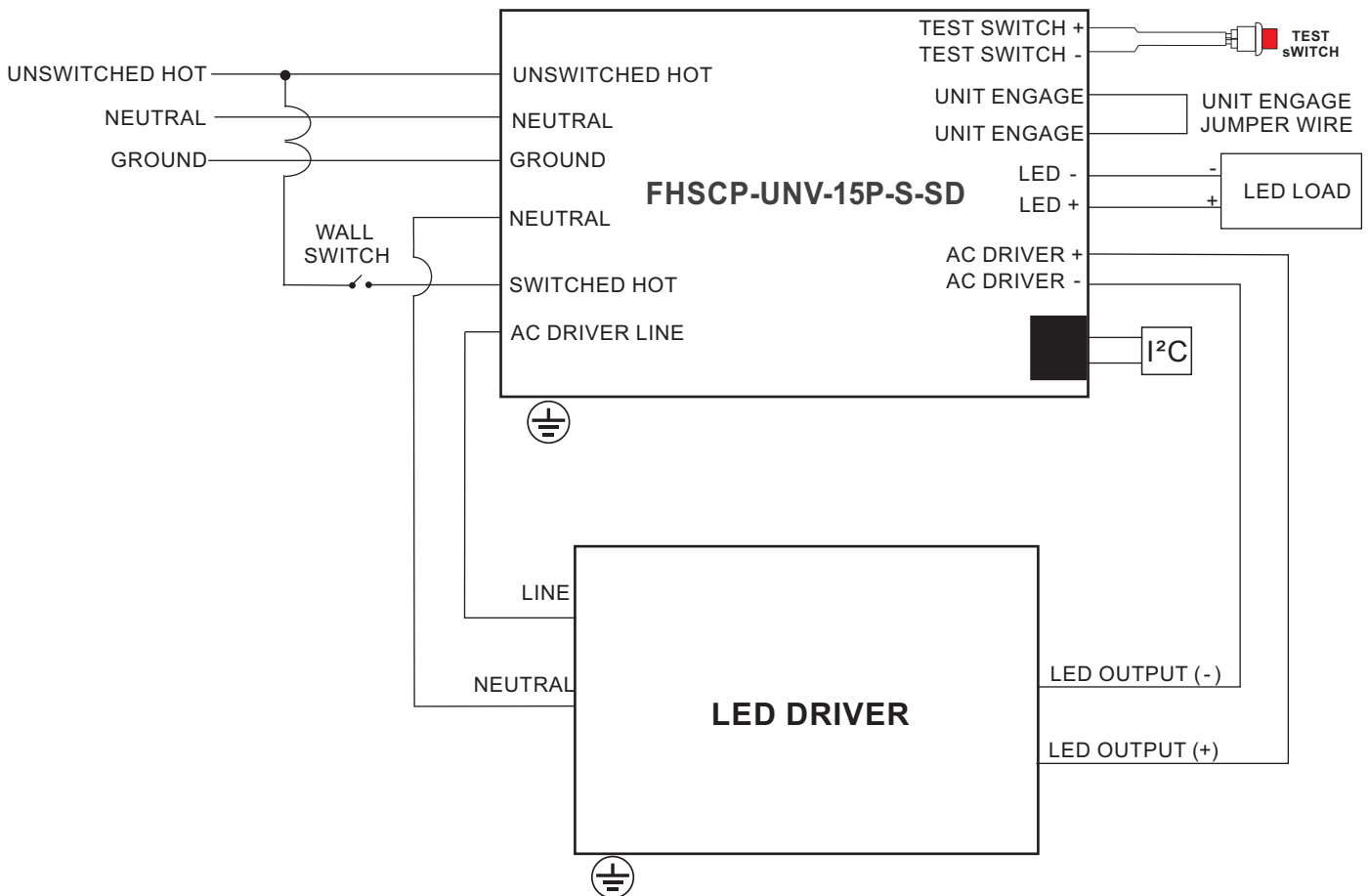
Wall plate and screw color:  
Pure white with black lettering



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



## Wiring Diagram





# FHSCP-UNV-15P-S-SD



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## SELF-DIAGNOSTIC INSTRUCTIONS / OPERATION:

### If the self-diagnostic feature is enabled:

The emergency LED driver will conduct a self-check for thirty(30)seconds every thirty(30)days; and a ninety(90) minutes self-check every 12 months. After every self-check the LED indicator light will indicate a status signal. Check indicator status chart below to diagnose the status signal.

### If the self-diagnostic feature is disabled:

User must conduct a manual test every thirty (30) days to ensure the emergency LED light source illuminates as intended. A full discharge test shall be conducted once a year; the LED light source shall illuminate for a minimum of ninety (90) minutes.

**\*Self-Diagnostic feature is factory enabled**

## TEST SWITCH INDICATOR STATUS:

LED Indicators Status	EM Driver Status / Mode
● Solid Green	System OK / AC OK (Self-Diagnostic Enabled or Disabled)
⦿ Slow Flashing Red, 4s on / 1s off	Battery PACK not found.(Including Self-test/self-diagnostic)
⦿ Flashing Red, 1s on / 1s off	Battery PACK fault. (Including Self-test/self-diagnostic)
⦿ Flashing Green, 1s on / 1s off	Self-Diagnostic test underway
⦿ Slow Flashing Green, 0.1s on / 3s off	Normal working in EM mode. (Including Self-test/self-diagnostic)
⦿ Flashing Red, 4s on / 4s off	No load or output over voltage protection. (Including Self-test/self-diagnostic)
● Slow Red	Over current protection. (Including Self-test/self-diagnostic)
⦿ Flashing Red, 0.5s on / 3s off	Self-diagnose process current fault or Battery voltage <87.5%.
⦿ Flashing Green, 2s on / 0.5s off	Self-Diagnostic Enabled
⦿ Flashing Green, 0.5s on / 2s off	Self-Diagnostic Disabled

## TEST SWITCH OPERATIONS

### EM Test:

Press and hold the test button (>1s) to enter EM mode in normal AC powered.

### Manual Self-Diagnostic:

After charging twelve (12) hours at least, quickly press the test button three(3) times within two (2) seconds to force the controller to enter Self-Diagnostic cycle. To quit the Self-Diagnostic cycle after engaged, press and hold the test button for more than three (3) seconds in the monthly check mode.

### Query Self-Diagnostic Status:

Fast click 2 times within 2s to query the Self-Diagnostic Enabled/Disabled status. The indicator would blink for current status for 3 cycles. 2s ON/0.5s OFF stands for Enabled. 0.5s ON/2sOFF stands for Disabled.

### How to Enable and Disable Self-Diagnostic Status:

Press and hold the test button for one second, then release, and press and hold the test button for 2 seconds.

### Emergency Battery Disconnect:

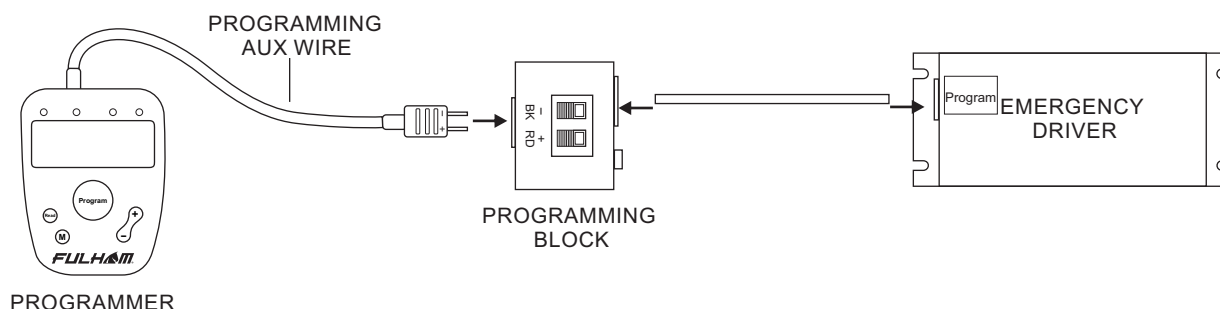
Press and hold the test switch for 5 seconds during EM output condition to turn off EM output. This is useful for production environment to turn off the EM output once a luminaire has completed functionality testing.

# FHSCP-UNV-15P-S-SD

## Programming:

The FHSCP-UNV-15P-S-SD is programmed through the program wire on the emergency driver with the TPSB-100 programmer. Unless otherwise programmed the output will self-program to the maximum rating of the battery. Customer must use the programming harness and programming block that comes with the TPSB-100.

## Programming Wire Diagram



## Programming Features

- Output EM Power - 3W to 15W
- \* Enable / Disable Self-Diagnostic

SmartSet Software



TPSB-100 SmartSet  
Controller

\* 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>



Run time at low power output:

Power ( W )	Run time ( min )
3W	>439
4W	>330
5W	>264
6W	>220
7W	>189
8W	>166
9W	>148
10W	>133
11W	>121
12W	>111
13W	>103
14W	>96
15W	>90





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## Guidelines

### Grounding

- Driver must be grounded by means of the Driver case.

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### LED load

- Fulham's Hotspot Constant Power Emergency LED drivers are designed to drive passive LEDs, -COB's and -LED assemblies. Proper function is not guaranteed when (LED) loads with active components are used.

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### Mounting / Cooling

- Above an output power of 10W, the driver needs to be mounted on a heat conductive surface of at least 100cm<sup>2</sup>. Always test if the surface is sufficient enough before installing the driver.

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### Short-circuit protection

- In case of a short circuit the LED driver switches to protection mode. After the removal of the short-circuit the LED driver will recover automatically.

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### No-load Operation

- In no-load operation the output voltage will not exceed the specified open circuit output voltage.

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### Hot Swapping

- This driver does not support hot swapping of the LEDs

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### Remote Mounting

- Up to 15ft with 18AWG. Contact Fulham for higher remote distance.

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### Battery Maintenance

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

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### Warranty

- Reference Fulham's limited Warranty: <https://cdn.fulham.com/PDFs/Limited-Warranty.pdf>



# FHSCP-UNV-15P-S-SD



## Part Number Matrix

<u>FHS</u>	<u>CP</u>	<u>UNV</u>	<u>15</u>	<u>P</u>	<u>S</u>	<u>SD</u>
LED Driver	Output Type	Input Voltage	Power	Characteristic	Case Type	Special Features
FHS = Fire Horse EM Driver	CP= Constant Power	UNV= 120V-277V	15= 15W	P = Programmable	Stick	SD= Self Diagnostic

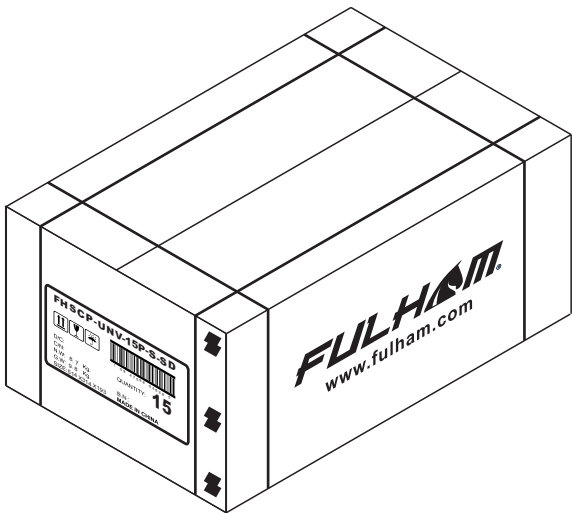
## Product Image: LED Driver

FHSCP-UNV-15P-S-SD



## Packaging

Master Carton



OUTER DIMENSION		
L	W	H
514mm(20.24")	314mm(12.36")	193mm(7.6")
Net Weight	Gross Weight	QUANTITY
8.7kg 19.18lb	9.8kg 21.61lb	15