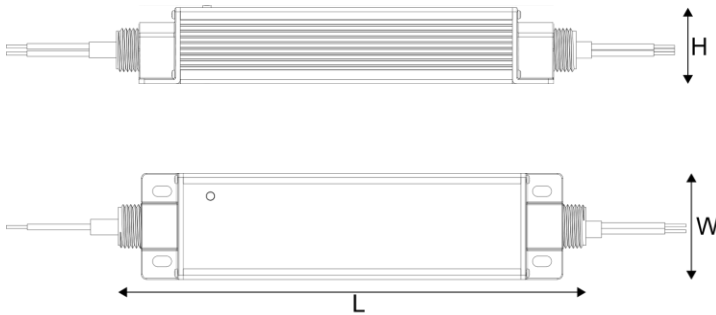


# INSTALLATION INSTRUCTIONS

## FRANCE Model DRV-xxxx-A LED Power Supply

- READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- Read and follow all instructions that are on the product or provided with the product.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- **WARNING:** Risk of Electric Shock. When used outdoors, install only on a circuit protected by a Class A GFCI.
- **AVERTISSEMENT :** Risque d'électrocution. Lorsqu'il est utilisé à l'extérieur, installez uniquement sur un circuit protégé par un disjoncteur différentiel A de classe.
- **WARNING:** Risk of Electric Shock. Protect from weather.
- **AVERTISSEMENT :** Risque d'électrocution. Protéger des intempéries.
- **WARNING:** Risk of Fire. Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician.
- **AVERTISSEMENT :** Risque d'incendie. L'installation implique des méthodes de câblage spécial pour courir le câblage grâce à une structure de bâtiment. Consultez un électricien qualifié.
- Turn power off at fuse or breaker panel before installation, inspection, service or removal.
- For use in Wet, Dry, or Damp locations.
- Power Supply must be properly grounded before operation.
- All wiring must be installed per the National Electrical Code® (NEC) and applicable local codes.
- SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.



Model	L (in)	W (in)	H (in)
DRV-1260-A	8.72	1.97	1.42
DRV-2460-A	8.72	1.97	1.42
DRV-24100-A	10.10	2.72	1.58
DRV-12120-A	10.89	2.72	1.58

**IP68**



**LISTED  
E468013**

### Power Supply Features

- The LED-xxxx-A is a Class 2, power supply for operating France or other LED products.
- For use in Wet, Dry, and Damp location.
- Allowable operating ambient temperature adjacent to the power supply is -30°C to +60°C. No power derating required.
- Low profile, fully potted construction provides maximum durability.
- 10" long input and output leads.
- UL Listed Class P.
- Complies with FCC Part 15 Class B Residential & Commercial.

### Prevention of Overload

Use caution not to overload this power supply with LED's. Overloading can cause power supply over-current shutdown or premature failure. To assure overloading does not occur, assure the total power of the LED string does not exceed the rated watts at maximum operating ambient temperature.

### LED Status Indicator Troubleshooting Chart:

GREEN LED	Operating Correctly
RED LED	Output Overload
Flashing LED	Output seriously overloaded or shorted



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# INSTALLATION INSTRUCTIONS

## FRANCE Model DRV-xxxx-A LED Power Supply

### Step 1 Before you begin

Assure all power to the sign or mounting enclosure is turned off. Read these installation instructions thoroughly before beginning installation work. Electrical wiring of these power supplies shall be performed only by qualified service personnel in accordance with all applicable codes and standards, including fire-rated construction. During installation, please refer to Fig. 1, page 1.

### Step 2 Mounting and primary circuit wiring

**The power supply ground wire (green) and any enclosure containing the power supply must be connected to branch circuit safety ground! Make sure to use the correct wire type for the application.**

In the end installation, power supply spacing to other heat producing components shall be 1 inch (25.4 mm) or more apart when arranged end-to-end, and 4 inches (102 mm) or more apart when arranged otherwise. For connections Use Wire Rated for at Least 90°C (194°F).

**Inside outdoor channel letter, raceway, or sign cabinet qualifying as an electrical enclosure per UL48 or in a remotely mounted electrical enclosure:** Securely mount power supply via integrated mounting holes using a minimum of two No. 8 screws or bolts/nuts. Splice the line and neutral wires to the power supply input leads as indicated on the product label. Bond both branch circuit ground and power supply ground to the electrical enclosure. Any enclosure must have an internal volume not less than three times that of the power supply's volume (3 times volume = 30 cu. In.), and shall provide adequate ventilation to assure the maximum ambient air temperature near the power supply never exceeds 60°C (140°F). If adequate volume or ventilation is not supplied, the warranty is voided.

**Inside outdoor channel letter, raceway, or sign cabinet not qualifying as an electrical enclosure per UL48:** The power supply must be mounted in an electrical enclosure with internal volume not less than three times that of the power supply volume (3 times volume = 30 cu. In.) and which provides adequate ventilation to assure the maximum ambient air temperature near the power supply never exceeds 60°C (140°F). (If adequate volume or ventilation is not supplied, the warranty is voided.) Mount the power supply in the electrical enclosure via integrated mounting holes using a minimum of two No. 8 screws or bolts/nuts. Securely mount power supply/electrical enclosure. Using wet-listed hardware, attach primary circuit conduit to the electrical enclosure. Route branch circuit wiring through the conduit into the electrical enclosure. Splice the line and neutral wires to the power supply input leads as indicated on the product label. *Bond both branch circuit ground and power supply ground to the electrical enclosure.* Attach cover to electrical enclosure.

**Exposed to weather – wet location:** Attach junction box/attachment hardware listed for wet locations to primary end of unit. Securely mount power supply/junction box via integrated mounting holes using a minimum of four No. 8 screws or bolts. Using UL wet listed hardware, attach conduit to the junction box. Route branch circuit wiring through the conduit into box. Splice the line, neutral, and ground wires to the power supply input leads as dictated on the product label. Attach cover to junction box.

### Step 3 Secondary Circuit Wiring

Route the DC wiring from the LED load to the power supply per the requirements of NEC, UL48 and any local codes. Wiring between LED modules and the power supply should be at least AWG 18 and kept as short as possible. An outdoor rated cable must be used (such as PLTC or STJW) if wiring is exposed to weather. Connect + VDC LED wires to the power supply RED output wire. Connect the – VDC LED wires to the power supply BLACK output wire as indicated on the product label. Splices to the power supply output wires must be located within the required electrical enclosure mentioned earlier. Use an NEC compliant splicing method. Use caution not to damage the wire insulation. For Connections Use Wire Rated for at Least 90°C (194°F).

### Step 4 Energize Circuit

Energize the primary circuit. If the LED string lights and the indicator is lit GREEN, the power supply is properly loaded and operating normally.

### Troubleshooting

If, after applying power to the power supply's input leads, the status indicator lights RED, the power supply is overloaded. Remove one or more LED modules from the string until the status indicator lights GREEN. If the LED modules do not light and the status indicator is blinking, a short exists in the LED string. Remove primary power and check all electrical connections for short circuit (pinched wires or defective LED module). Verify the LED modules' positive (+) and negative (-) leads are connected to the power supply's red and black leads respectively. If a portion or all of the LED string does not light and the status indicator is lit GREEN, an open exists in the string. Repair any defective connections. If the modules still fail to light, call Technical Customer Service at France: 615-418-9710.

**Note: A disconnect switch of the appropriate rating must be incorporated in the field within 29.5' (9 meters) of the LED power supply. The switch must be rated for the branch circuit voltage and twice the total actual or rated input current of the power supply or supplies.**

### WARRANTY POLICY

France, a Scott Fetzer Company, warrants to the original purchaser the following products to be free from defects in material and workmanship at the date of shipment. This warranty is conditional based upon proper installation, use and maintenance of the product. This warranty is not applicable to any product not installed and operated in accordance with France specifications and connection diagrams or which have been subjected to abnormal operating conditions.

NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL EXIST IN CONNECTIONS WITH THE SALE OR USE OF SUCH PRODUCTS. All claims under this warranty must be made in writing and delivered to the Company prior to the expiration of the established warranty period from the date of manufacture.

Upon receipt of the claim, the Company shall inspect the part(s) claimed to be defective, and shall repair, or at its option, replace, free of charge, any part(s) determined to have been defective at the time of shipment from the factory. If circumstances are such as to preclude the remedying of warranty defects by repair or replacement, the Company shall, upon the return of the products, refund to buyer any part of the purchase price paid to the Company for the stated products. Inspection shall be performed at the Company's plant or at such other place as may be designated by the Company; and, freight for returning products for inspection shall be paid by the buyer.

The foregoing states the sole and exclusive remedy for any breach of warranty or for any other claim based on any defect in, or non-performance of, the products, whether sounding in contract, warranty or negligence. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE COMPANY SHALL UNDER NO CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE WHATSOEVER ARISING OUT OF, OR IN ANY WAY RELATING TO, ANY SUCH BREACH OF WARRANTY OR CLAIMED DEFECT IN, OR NON-PERFORMANCE OF, THE PRODUCTS.



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# INSTALLATION INSTRUCTIONS

## FRANCE Model DRV-xxxx-E Power supply

- READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- Read and follow all instructions that are on the product or provided with the product.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- **WARNING:** Risk of Electric Shock. When used outdoors, install only on a circuit protected by a Class A GFCI.
- **AVERTISSEMENT :** Risque d'électrocution. Lorsqu'il est utilisé à l'extérieur, installez uniquement sur un circuit protégé par un disjoncteur différentiel A de classe.
- **WARNING:** Risk of Electric Shock. Protect from weather.
- **AVERTISSEMENT :** Risque d'électrocution. Protéger des intempéries.
- **WARNING:** Risk of Fire. Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician.
- **AVERTISSEMENT :** Risque d'incendie. L'installation implique des méthodes de câblage spécial pour courir le câblage grâce à une structure de bâtiment. Consultez un électricien qualifié.
- Turn power off at fuse or breaker panel before installation, inspection, service or removal.
- For use in Dry or Damp locations only.
- Power Supply must be properly grounded before operation.
- All wiring must be installed per the National Electrical Code® (NEC) and applicable local codes.
- SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

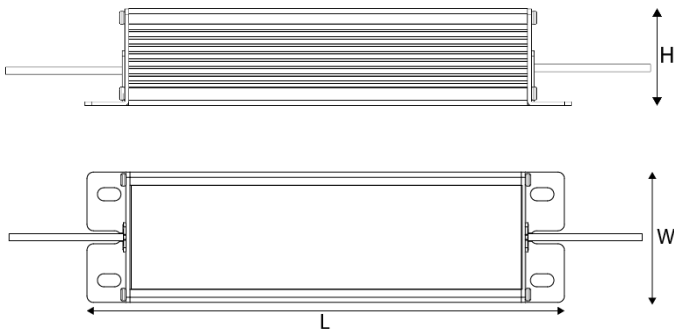


Figure 1

Model	L (in)	W (in)	H (in)
DRV-1230-E	6.26	1.77	1.18
DRV-2430-E	6.26	1.77	1.18
DRV-1260-E	7.21	1.97	1.42
DRV-2460-E	7.21	1.97	1.42
DRV-24100-E	8.98	2.72	1.58
DRV-12120-E	9.76	2.72	1.58

**IP68**



**LISTED  
E468013**

### Power Supply Features

- The LED-xxxx-E is a Class 2, power supply for operating France or other LED products.
- Dry and Damp location use only: must be mounted indoors or outdoors in letters, raceways, transformer cans, or LED cans.
- Allowable operating ambient temperature adjacent to the power supply is -30°C to +60°C. No power derating required.
- Low profile, fully potted construction provides maximum durability.
- 10" long input and output leads.
- UL Listed Class P.
- Complies with FCC Part 15 Class B Residential & Commercial.

### Prevention of Overload

Use caution not to overload this power supply with LED's. Overloading can cause power supply over-current shutdown or premature failure. To assure overloading does not occur, assure the total power of the LED string does not exceed the rated output watts at maximum operating ambient temperature.

# INSTALLATION INSTRUCTIONS

## FRANCE Model DRV-xxxx-E Power supply

### Step 1 Before you begin

Assure all power to the sign or mounting enclosure is turned off. Read these installation instructions thoroughly before beginning installation work. Electrical wiring of these power supplies shall be performed only by qualified service personnel in accordance with all applicable codes and standards, including fire-rated construction. During installation, please refer to Fig. 1, page 1.

### Step 2 Mounting and primary circuit wiring

**The power supply ground wire (green) and any enclosure containing the power supply must be connected to branch circuit safety ground! Make sure to use the correct wire type for the application.**

In the end installation, power supply spacing to other heat producing components shall be 1 inch (25.4 mm) or more apart when arranged end-to-end, and 4 inches (102 mm) or more apart when arranged otherwise. For connections Use Wire Rated for at Least 90°C (194°F).

**Inside outdoor channel letter, raceway, or sign cabinet qualifying as an electrical enclosure per UL48 or in a remotely mounted electrical enclosure:** Securely mount power supply via integrated mounting holes using a minimum of two No. 8 screws or bolts/nuts. Splice the line and neutral wires to the power supply input leads as indicated on the product label. Bond both branch circuit ground and power supply ground to the electrical enclosure. Any enclosure must have an internal volume not less than three times that of the power supply's volume (3 times volume = 30 cu. In.), and shall provide adequate ventilation to assure the maximum ambient air temperature near the power supply never exceeds 60°C (140°F). If adequate volume or ventilation is not supplied, the warranty is voided.

**Inside outdoor channel letter, raceway, or sign cabinet not qualifying as an electrical enclosure per UL48:** The power supply must be mounted in an electrical enclosure with internal volume not less than three times that of the power supply volume (3 times volume = 30 cu. In.) and which provides adequate ventilation to assure the maximum ambient air temperature near the power supply never exceeds 60°C (140°F). (If adequate volume or ventilation is not supplied, the warranty is voided.) Mount the power supply in the electrical enclosure via integrated mounting holes using a minimum of two No. 8 screws or bolts/nuts. Securely mount power supply/electrical enclosure. Using wet-listed hardware, attach primary circuit conduit to the electrical enclosure. Route branch circuit wiring through the conduit into the electrical enclosure. Splice the line and neutral wires to the power supply input leads as indicated on the product label. *Bond both branch circuit ground and power supply ground to the electrical enclosure.* Attach cover to electrical enclosure.

**Exposed to weather – wet location:** Not allowed – must be mounted in weatherproof enclosure. Follow instructions in last paragraph.

### Step 3 Secondary Circuit Wiring

Route the DC wiring from the LED load to the power supply per the requirements of NEC, UL48 and any local codes. Wiring between LED modules and the power supply should be at least AWG 18 and kept as short as possible. An outdoor rated cable must be used (such as PLTC or STJW) if wiring is exposed to weather. Connect + VDC LED wires to the power supply RED output wire. Connect the – VDC LED wires to the power supply BLACK output wire as indicated on the product label. Splices to the power supply output wires must be located within the required electrical enclosure mentioned earlier. Use an NEC compliant splicing method. Use caution not to damage the wire insulation. For Connections Use Wire Rated for at Least 90°C (194°F)

### Step 4 Energize Circuit

Energize the primary circuit. If the LED's do not light, check primary power and/or refer to "Troubleshooting" below. To check if the power supply is overloaded, measure power supply input current. The input current should measure less than maximum 120/277VAC maximum rated current limits printed on the product label. If these limits are exceeded, reduce the number of LED's connected to the power supply.

### Troubleshooting

If after applying power to the power supply the LED modules do not light, a short or open likely exists in the LED string. Remove primary power and check all electrical connections for short circuit, pinched wires or bad splices. Verify the LED modules' positive (+) and negative (-) leads are connected to the power supply's red and black leads respectively. Repair any defective connections. Re-energize the power supply. If the modules still fail to light, remove primary power, disconnect LED load, connect a DC voltmeter to the RED and BLACK output leads, and reapply primary power. If the meter reads less than 11.75 volts, call Customer Service at France: 800-793-4793

**Note: A disconnect switch of the appropriate rating must be incorporated in the field within 29.5' (9 meters) of the LED power supply. The switch must be rated for the branch circuit voltage and twice the total actual or rated input current of the power supply or supplies.**

### WARRANTY POLICY

France, a Scott Fetzer Company, warrants to the original purchaser the following products to be free from defects in material and workmanship at the date of shipment. This warranty is conditional based upon proper installation, use and maintenance of the product. This warranty is not applicable to any product not installed and operated in accordance with France specifications and connection diagrams or which have been subjected to abnormal operating conditions.

NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL EXIST IN CONNECTIONS WITH THE SALE OR USE OF SUCH PRODUCTS. All claims under this warranty must be made in writing and delivered to the Company prior to the expiration of the established warranty period from the date of manufacture.

Upon receipt of the claim, the Company shall inspect the part(s) claimed to be defective, and shall repair, or at its option, replace, free of charge, any part(s) determined to have been defective at the time of shipment from the factory. If circumstances are such as to preclude the remedying of warranty defects by repair or replacement, the Company shall, upon the return of the products, refund to buyer any part of the purchase price paid to the Company for the stated products. Inspection shall be performed at the Company's plant or at such other place as may be designated by the Company; and, freight for returning products for inspection shall be paid by the buyer.

The foregoing states the sole and exclusive remedy for any breach of warranty or for any other claim based on any defect in, or non-performance of, the products, whether sounding in contract, warranty or negligence. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE COMPANY SHALL UNDER NO CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE WHATSOEVER ARISING OUT OF, OR IN ANY WAY RELATING TO, ANY SUCH BREACH OF WARRANTY OR CLAIMED DEFECT IN, OR NON-PERFORMANCE OF, THE PRODUCTS.



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