

## INSTRUCTION MANUAL

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# EURO CHARGER AUTOMATIC BATTERY CHARGER



**MODEL # 091-90-XX**

**NOTE :**

**This charger is designed for vehicles with  
3 batteries and negative ground.**

**3 YEAR WARRANTY**



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# **INTRODUCTION**

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The Euro Charger, Model 091-90-xx is a compact, completely automatic single channel battery charger designed specifically for the fire service and emergency vehicles. Of rugged construction, the charge is made to withstand the shock and vibration encountered in vehicle mounted equipment. Utilizing components which meet international safety requirements makes this charger ideal for worldwide applications.

# **BATTERY CHARGER FEATURES**

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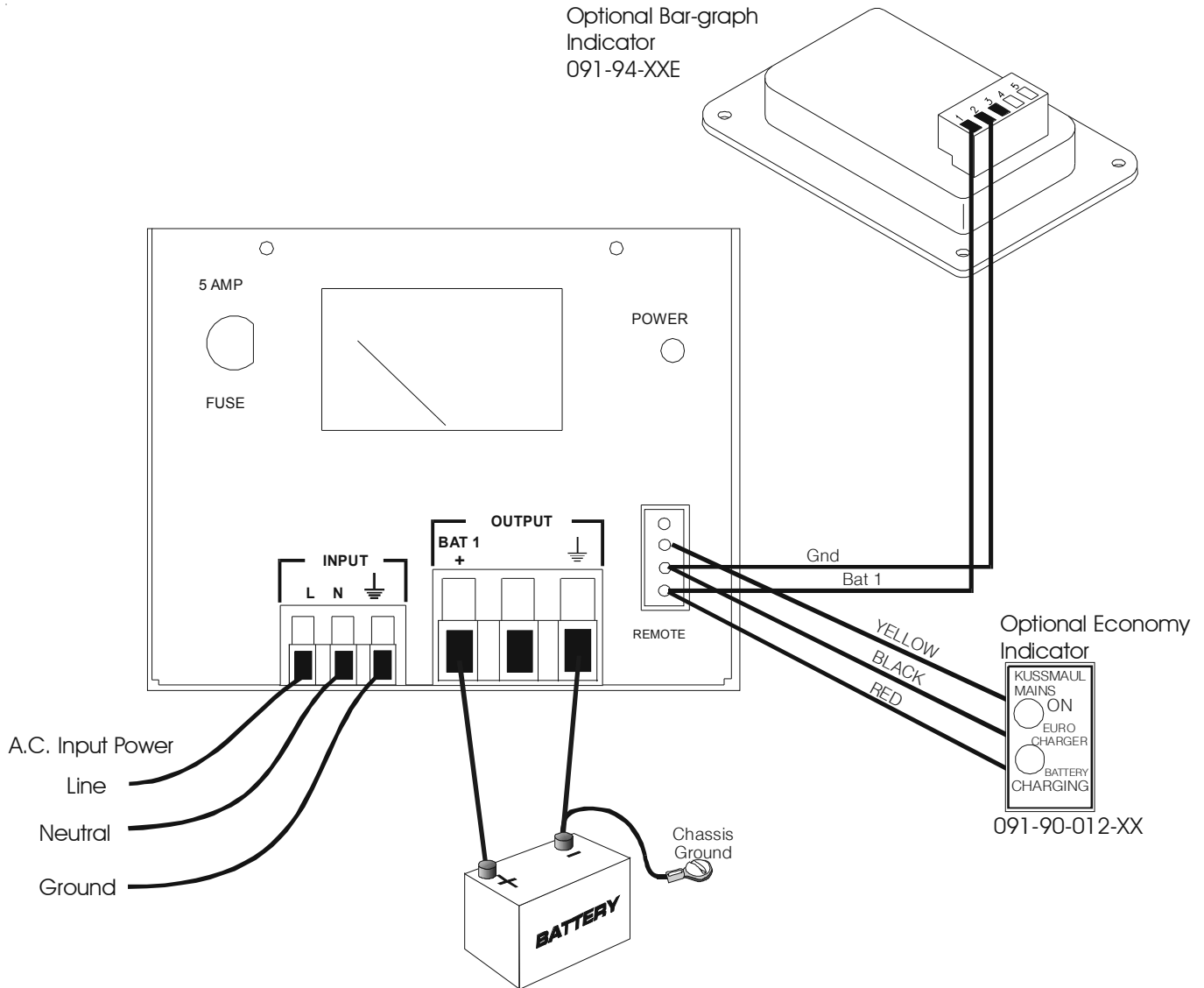
Completely automatic operation, charges battery on demand  
Input voltage, switch selectable, 115 volt or 230 volts  
Output voltage regulated, eliminates overcharging battery  
Output, current limited to protect charger from overloading  
Optional charge indicators

# **INSTALLATION**

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1. The Euro Charger Automatic Battery Charger should be installed in an area with adequate ventilation.
2. Mount the charger using the four holes provided.
3. Connect the wiring from the batteries to the output terminal strip.
4. Double check battery wiring. Verify that battery voltage appears at the charger output terminals.
5. Set the voltage selector to either the 115 volt or 230 volt position to match the input source available.
6. Connect the input power to the input power terminal strip and energize charger.
7. Verify that power indicator is illuminated and charger is charging.

# INSTALLATION WIRING DIAGRAM



**IMPORTANT:** Charger output wire size is 14 awg. Wire size is for a maximum length of 20 feet. If wiring is to be longer, larger wiring is required. Additional information is available on request.

# SPECIFICATION & OUTLINE

## SPECIFICATIONS:

**Input:** see chart

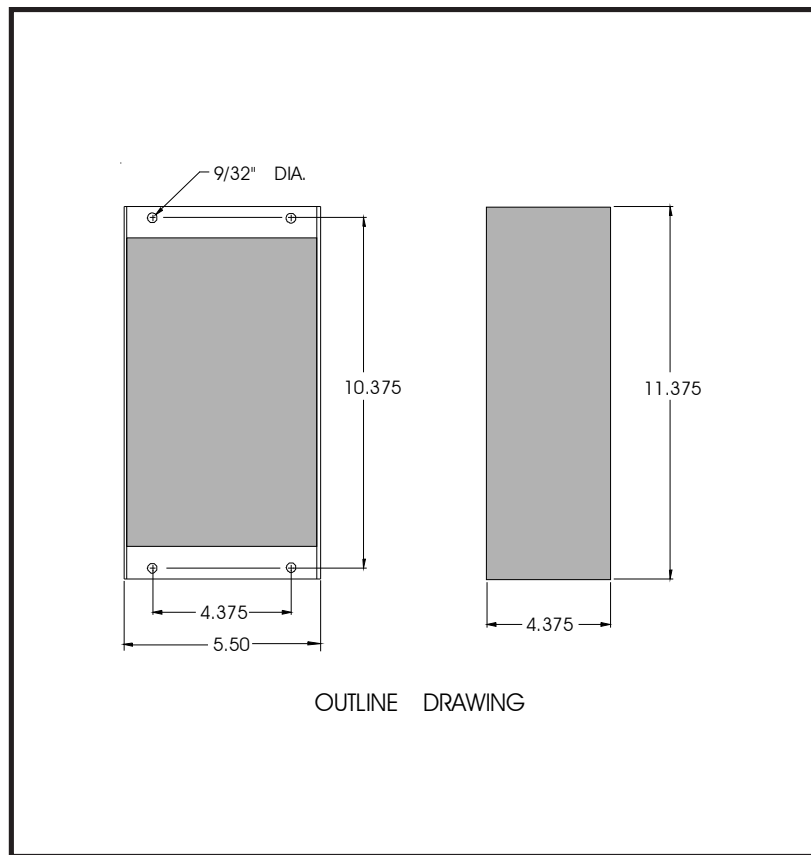
**Output:** see chart

**Output Current:** see chart

**Charge Indicator:** 0-20 amps 5%

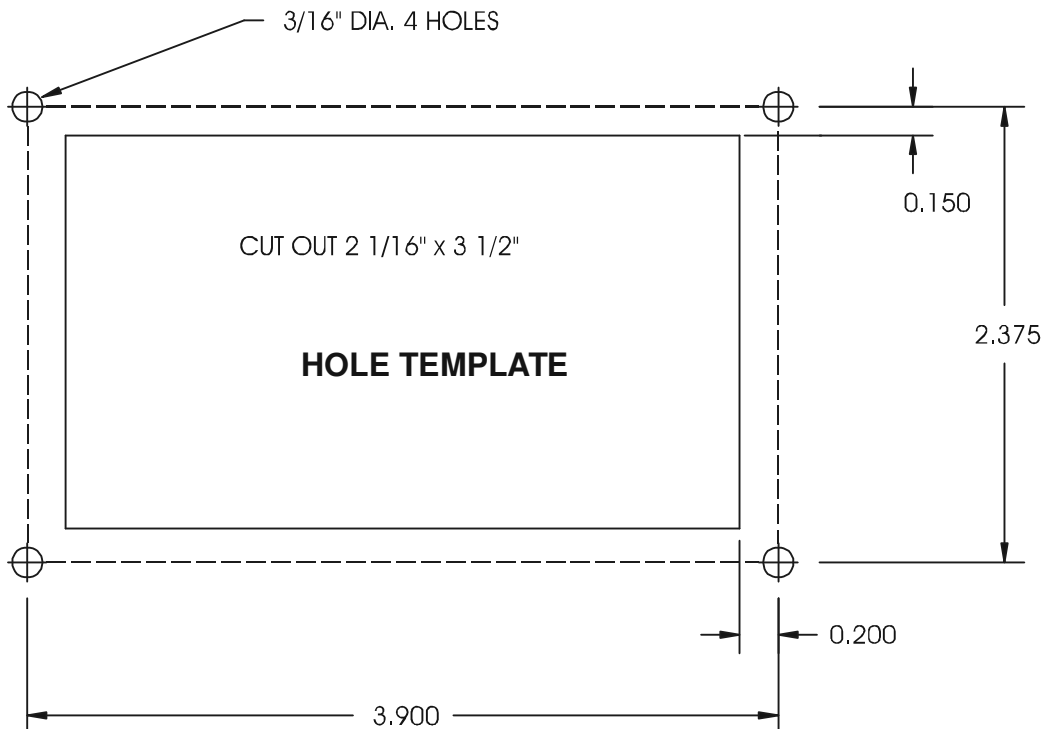
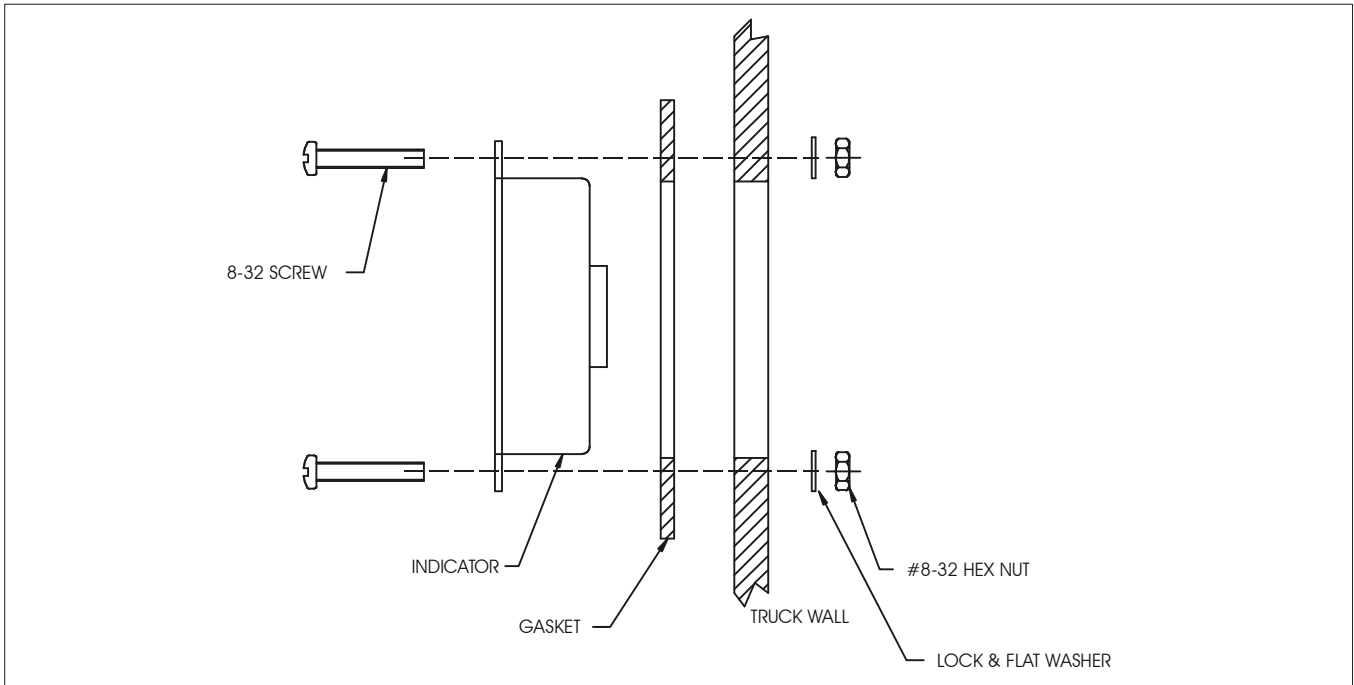
**Weight:** 12 lbs

Model Number	Input Voltage	Input Current	Input Fuse	Output Voltage	Output Current	Output Fuse
091-90-12	115 / 230 Vac, 50/60 Hz	1.3 / 2.6 Amps	5 Amps	12	12	24 Amps
091-90-24	115 / 230 Vac, 50/60 Hz	1.3 / 2.6 Amps	2.5 Amps	24	6	12 Amps



## INDICATOR INSTALLATION

1. Locate Indicator in a convenient place on the vehicle.
2. Place the template in position and center punch in 4 places.
3. Drill holes as shown.
4. Cut out square hole.
5. Connect wiring to charger in accordance with the instructions in the charger installation instructions.
6. Install as shown.
7. Insert (4) #8-32 screws supplied and tighten. (**CAUTION: Do not over tighten because you will bend the plastic bezel and break the watertight seal).**



Hole Template may not be to Scale, please check dimensions before using.

# **INSTALLATION RECORD & WARRANTY**

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**Date Installed** \_\_\_\_\_

**Installed By** \_\_\_\_\_

**Vehicle Identification** \_\_\_\_\_

**Vehicle Owner** \_\_\_\_\_

## **WARRANTY**

All products of Kussmaul Electronics Company Inc. are warranted to be free of defects of material or workmanship. Liability is limited to repairing or replacing at our factory, without charge, any material or defects which become apparent in normal use within 3 years from the date the equipment was shipped. Equipment is to be returned, shipping charges prepaid and will be returned, after repair, shipping charges paid.

Kussmaul Electronics Company, Inc. shall have no liability for damages of any kind to associated equipment arising from the installation and /or use of the Kussmaul Electronics Company, Inc. products. The purchaser, by the acceptance of the equipment, assumes all liability for any damages which may result from its installation, use or misuse, by the purchaser, his or its employees or others.