

INSTRUCTION MANUAL

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**AUTO CHARGE 12HO-PIM**  
**AUTOMATIC BATTERY CHARGER**

MODEL #091-12HO-PIM

NOTE :  
This charger is designed for  
vehicles with a single  
battery system

INPUT : 115 volt, 50/60 Hz, 4amps

**3 YEAR WARRANTY**

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**KUSSMAUL ELECTRONICS CO., INC.**

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# INTRODUCTION

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The Auto Charge 12HO-PIM is Battery Charger is a compact completely automatic charger designed for installation on vehicles with a single battery system. Remote sensing permits long lines between the charger and the batteries by compensating for the voltage drop in the charging wires. An ammeter provides continuous indication of the charger output.

Construction of the Auto Charge 12HO-PIM is extremely rugged to withstand the shock and vibration normally encountered by vehicle mounted equipment. The unit operates completely automatically and stops charging the batteries when they are fully charged. There is no trickle charge and therefore no danger of overcharging and water boil-off. Any parasitic loads on the battery such as radio, lights, etc., are automatically supplied with current by the charger.

Any 120 volt loads when plugged into the GFI on the Auto-Charge 12HO-PIM will be protected from ground faults. A separate lever operated circuit breaker protects the GFI connected loads. This circuit breaker may also be use to disconnect these loads from the line. The fuse on the Auto-Charge 12HO-PIM protects the charger only.

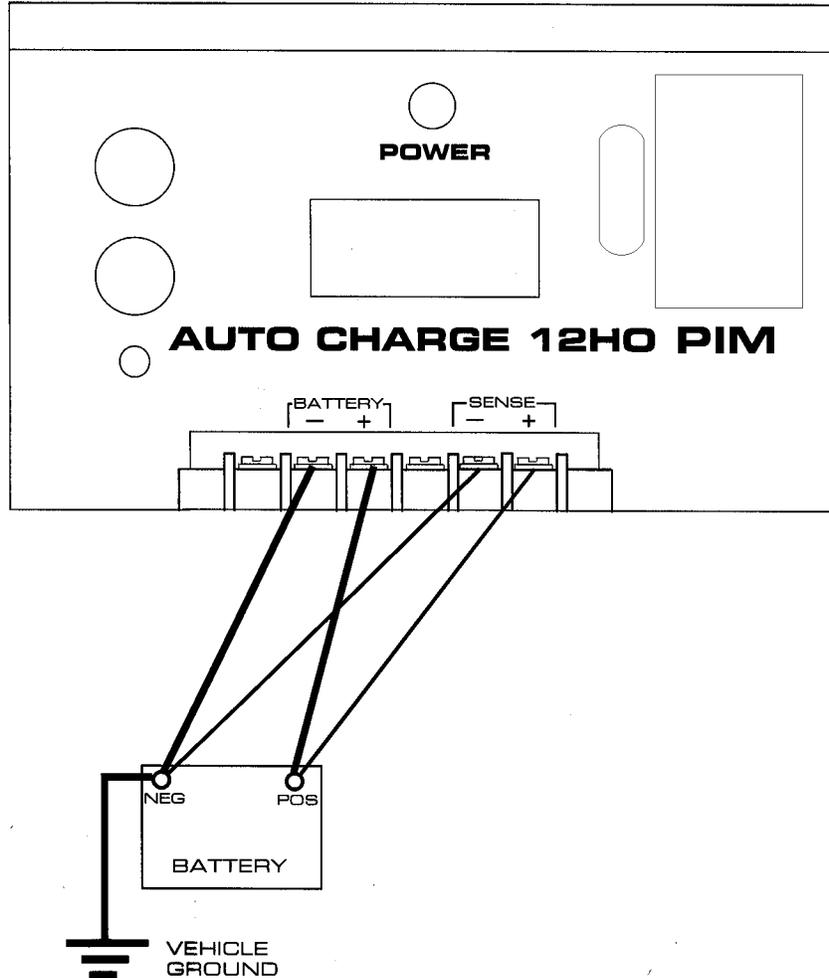
# INSTALLATION

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The Auto Charge 12HO-PIM Automatic Battery Charger should be installed in an area with adequate ventilation. A power cord is supplied for connection to 115 volts 60 Hz.

1. Mount the charger using the four holes provided for this.
2. Connect the wiring from the battery to the Output Terminal Strip. Spade lugs that have been securely crimped, or soldered, should be used.

# INSTALLATION WIRING DIAGRAM



WIRE SIZE CHART			
CONNECTION	ITEM	DEFINITION	WIRE SIZE
<b>BAT-</b>	BATTERY NEGATIVE	NEGATIVE CHARGING LEAD FOR BATTERIES	12 AWG
<b>BAT+</b>	BATTERY POSITIVE	POSITIVE CHARGING LEAD FOR BATTERY # 1	12 AWG
<b>SENSE</b> -	NEGATIVE SENSE	NEGATIVE VOLTAGE SENSE LEAD. DETECTS VOLTAGE	16 AWG
<b>SENSE</b> +	POSITIVE SENSE	POSITIVE VOLTAGE SENSE LEAD. DETECTS VOLTAGE	16 AWG

**IMPORTANT:** 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.

**NOTE:** The sense leads **must** be connected to the battery for the charger to operate.

# SPECIFICATION & OUTLINE

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**SPECIFICATIONS:**

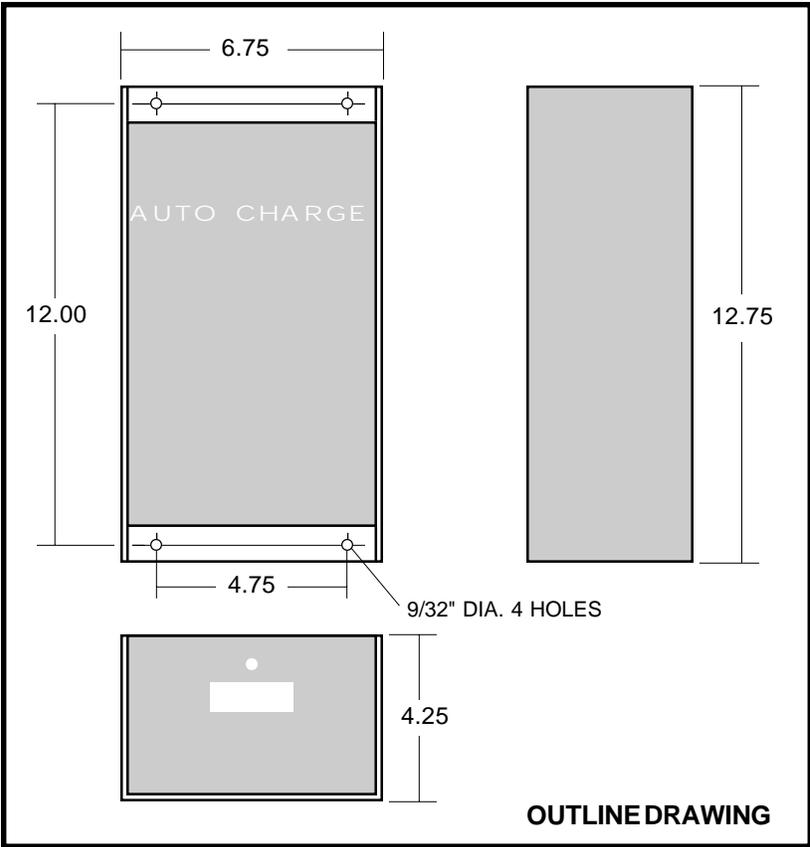
**Input:** 115V 50/60Hz, 4 amps

**Output:** see chart

**Output Current:** see chart

**Charge Indicator:** 0-25 amps 5%

**Weight:** 22 lbs



# INSTALLATION RECORD & WARRANTY

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

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

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

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

## WARRANTY

All product 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.

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