



# **INSTRUCTION MANUAL**

## **POWER SUPPLY AND CHARGING REGULATOR**

### **Model RTS-127**

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This product should be installed and operated only by qualified personnel. Its misuse is potentially dangerous. The Company makes no warranty as to the information furnished in this manual and assumes no liability for damages resulting from the installation or use of this product. The information herein is subject to change without notification.

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## 1 GENERAL

The RTS-127 is a charging regulator used with a SENSLOG battery pack lead acid 12 Volts or with a user-supplied battery. The RTS-127 is a 12-volt power supply that includes a charging regulator and a battery. Charging power is typically supplied by an AC Transformer (120 Vac or 230 Vac) or by a solar panel.

## 2 SPECIFICATIONS

<b>Input Voltage (CHG terminals):</b>	15 to 28 VDC or 18 VAC RMS
<b>Battery Connections:</b>	
-Charging output voltage:	Temperature compensated float charge for 12V battery
-Temperature compensation range:	-40°C to +60°C
-Charging current limit:	260 mA typical
<b>Power Out (+12 terminals):</b>	
-Voltage:	Unregulated 12V from battery
-Current limited w/3A thermal fuse:	>3A @ < 20°C 3A @ 20°C 2.1A @ 50°C 1.8A @ 60°C
<b>Battery Packs:</b>	
-Operating temperature range:	-40°C to +60°C
-Model:	Lead acid 12 Volts
-Capacity:	7 Amp hour
<b>AC Transformer-Model 120 Vac or 240 Vac:</b>	
-Input voltage:	120 Vac
-Output voltage:	25 Vdc
-Output current (max):	1.8 A
-Input voltage:	240 Vac
-Output voltage:	18 Vdc
-Output current (max):	680 mA
-Protection (automatic reset):	85°C thermal reset breaker

## 3 WIRING

An internal or external battery is connected to the charger by means of BAT+, BAT- connectors, as shown in Figure 1. The red lead connects to the positive battery terminal and the black lead connects to the negative terminal.

**WARNING: REVERSAL OF POLARITY TO EXTERNAL BATTERY WILL DAMAGE THE RTS-127.**

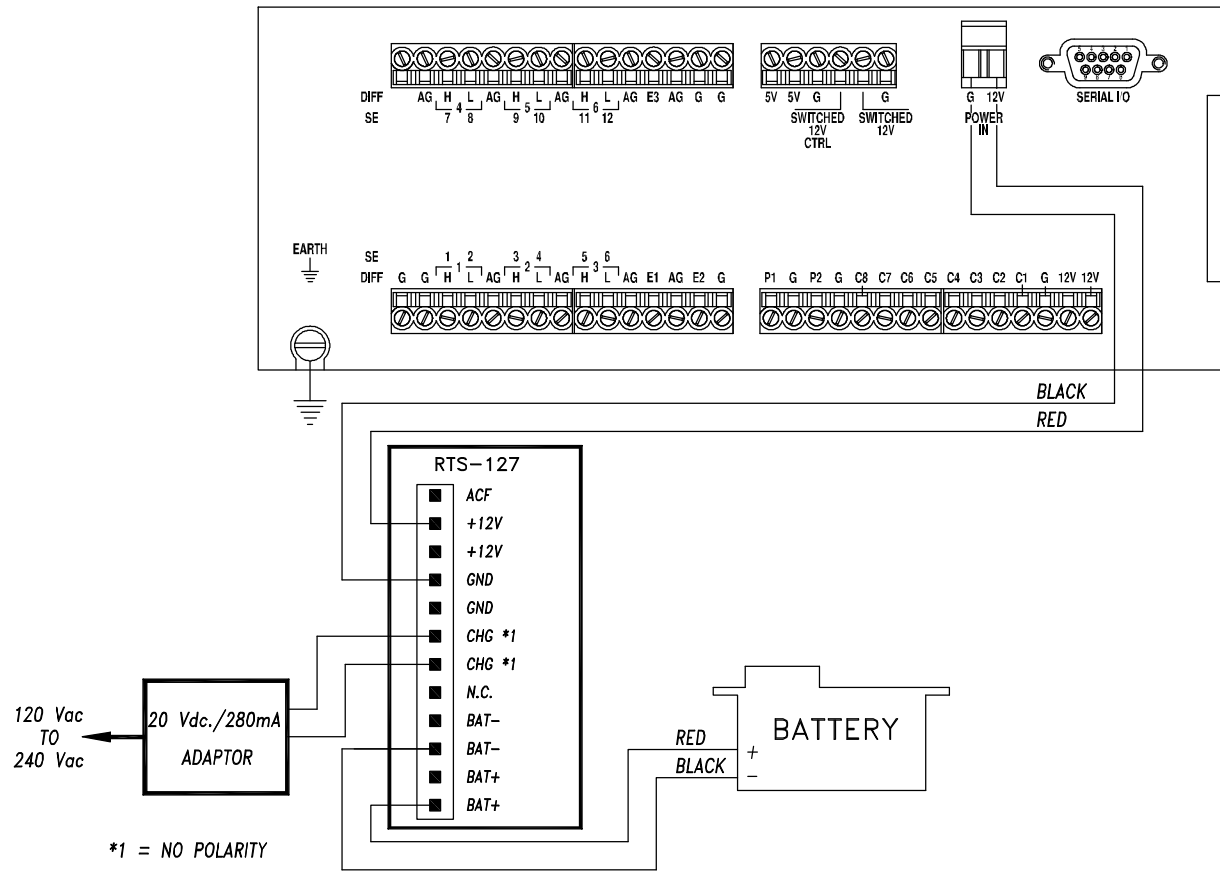
It is possible to leave two batteries connected. The battery connections are diode isolated; however, if one of the battery fails, it could draw all the charging current and the other battery will be discharged.

**CAUTION: IN ORDER FOR THE CHARGER TO CORRECTLY FUNCTION AS A POWER SUPPLY, A BATTERY MUST BE ATTACHED TO IT.**

The leads from the transformer or solar panel are connected to the CHG terminals. Polarity does not matter; either leads may be connected to any terminals.

Wires that connect power to the datalogger are connected to the +12 and ground terminals.

**RTS-127 WIRING DIAGRAM**



**FIGURE 1: RTS-127 Wiring Diagram**