RightHand Engineering LLC

SWMA Memory Adapter Installation Manual



The SWMA Memory Adapter is designed to provide memory backup power for the Xantrex Trace[™] SW and PS Series inverters. Without the SWMA, if both AC and DC (main battery) power is removed from the inverter the setup-menu memory is erased. With the SWMA the memory may be retained for up to two weeks. This allows the inverter system to be serviced without the need to reprogram the inverter's setupmenu parameters.

The *SWMA* consists of two units; the memory battery pack and the voltage converter. The memory battery pack holds 4 "D" cells. Alkaline cells are highly recommended for the longest longevity. The voltage converter plugs in series with the

inverter's "remote control" 25-pin port. It converts the battery pack voltage to the voltage needed by the inverter's circuitry. It also monitors the memory battery pack voltage and turns on the red warning LED when the battery pack shows signs of discharge. Wire connects the battery pack to the voltage converter so that the battery pack can be mounted on either side of the inverter.

INSTALLATION

1. Remove any SWRC (remote control) or SWCA (communications adapter) that may be plugged into the inverter's REMOTE CONTROL 25-pin jack. Plug the *SWMA* into the REMOTE CONTROL jack. Secure the *SWMA* to the inverter by using a small, flat-bladed screwdriver on the two screws on either side of the jack.

NOTE There are two 25-pin jacks adjacent to each other on the side of the inverter. One is for SERIES STACKING, the other is for REMOTE CONTROL. The SWMA must <u>only</u> plug into the REMOTE CONTROL jack.

- 2. Reconnect the removed SWRC or SWCA by plugging it into the jack on the rear of the SWMA voltage converter.
- 3. Open the SWMA memory battery pack by removing the four #4 pan head screws that secure the base to the cover. Install 4 "D" cells (not included) in the battery holder observing the polarity markings on the bottom of the holder. Alkaline "D" cells are recommended as they will provide the best backup time for your inverter. Reassemble the battery pack housing. If the base plate has spacers, these must face towards the cover in order to prevent the base plate from coming into contact with the installed battery bodies which may result in shorting the batteries.
- 4. Locate a suitable mounting location near the inverter. Temporarily place the battery pack housing in the chosen location to ensure that there is sufficient wire length. To prevent foreign materials from falling into the battery pack, mount the housing with the wire exiting the bottom. If the mounting surface is wood, secure the battery pack to the surface using the 4 #6 x ³/₄" wood screws included with the *SWMA*. If the surface is dry-wall you may want to use dry-wall anchors instead (not included). If the surface is metal you may wish to use metal screws or double-back adhesive pads (not included).

OPERATION

Normally the inverter supplies power for its internal memory either from the AC grid/generator, or from the main DC battery bank. However, in the event of disconnection of both the AC and DC power (such as during service of the system), the *SWMA* will provide power for the inverter's memory.

The *SWMA* also provides power for inverter's control panel, the SWRC (remote control) and SWCA (communications adapter). As the memory battery pack discharges it begins to affect the operation first of the SWCA, then of the SWRC (or the built-in control panel), and last of all, the inverter's memory. When the battery pack voltage drops to the point of affecting the SWCA the red LED on the *SWMA* illuminates. As the battery pack continues to discharge the LED brightness decreases. The inverter memory is typically retained until the LED is nearly extinguished.

The memory batteries are only used when all inverter power is disconnected. However, the batteries will self-discharge over time. Unless the inverter looses power the batteries should only need replacing every few months depending on the type of battery used and the temperature.

NOTE

Replace the batteries when the red LED comes on, but only replace them while AC or DC power is supplied to the inverter, otherwise the inverter's memory will be erased.

NOTE

There are no user-serviceable parts inside the voltage converter (the portion that plugs into the inverter). Disassembly of the voltage converter voids the product warrantee.