

Sinewave Revision 4.01 Enhancements

The following enhancements apply to all SW series II inverterchargers and the REV 4.01 software.

- **Identifying the software revision:** To find out what revision (REV) of software a SW series inverter/charger is using, go to the 3rd menu heading "**Trace Engineering**" and then to the next menu item down. The display will show "**Revision 4.01**" if it is REV 4.01 software. If no software revision number is shown the inverter includes a revision previous to the REV 3 software.
- **REV 4.01 upgrades and compatibility:** The new REV 4.01 software is fully compatible with all previously manufactured SW series inverters and is available for all output versions (E, J, K, U & W).
- **Revised menu system:** The REV 4.01 software uses a modified version of our previous menu system. The menu system has been separated into two different menus - a **USER** menu and a **SETUP** menu. The user menu is what the customer normally sees. The setup menu has been hidden from the casual user. To access the setup menu, hold down the **RED** and **GREEN** buttons on the control panel at the same time. To leave the setup menu, press the red **ON/OFF MENU** button once. The order of the menu headings has been made more appropriate and the menu headings have been numbered to allow easier navigation and identification.
- **Soft start system:** REV 4.01 includes a new soft start system which "ramps up" the AC output voltage up from approximately one half the normal voltage when started up or after an overcurrent protection system has been tripped. The voltage reaches the normal level after about a one second period. The soft start system improves the starting ability of the inverter for certain types of large AC loads (primarily high inrush loads or capacitive type loads). This reduces the level of current that drawn when too much load or a short circuit occurs, reducing the stress placed on the

inverter. Of course once the soft start has taken place the usual voltage/frequency stability of the SW is present. If sensitive loads are being powered when the inverter reaches its overcurrent protection level due to the starting of a heavy load such as a motor, then the inverter's output voltage will momentarily drop while the motor is being started. This may cause a problem with sensitive loads shutting off, such as computers. With the previous software REVs, the inverter would simply shut off and all loads would have stopped operating.

- **ON/OFF MENU:** The red **ON/OFF MENU** button will now turn the inverter **ON** and **OFF** without requiring the use of the setpoint buttons. Each press of the button moves the cursor one position to the right as indicated by the underlined letter. The **SET POINT** buttons will still move the cursor right or left, also.
- **GEN MENU:** The Green **ON/OFF MENU** button will now turn the generator auto start system **ON** and **OFF** without requiring the use of the setpoint buttons. Each press of the button moves the cursor one position to the right as indicated by the underlined letter. The **SET POINT** buttons will still move the cursor right or left, also.
- **Over temperature protection:** The inverter over temperature protection system has also been improved. These changes will be transparent to most users. However, these changes improve the operation of the inverter in extremely cold or hot climates where it may not have operated before. These changes also eliminates the previous problem of the inverter disconnecting the AC source from the loads if the charger reached the maximum allowed temperature. The charger will simply now turn down its charge rate to reduce its temperature while continuing to allow power to pass power through the inverter to the AC loads.

- **Generator Auto Start System:** The original system has been replaced by a new system providing four auto start voltage settings with different time delay periods for each. The quiet time period overrides the automatic start system unless the voltage reaches the **LOW BATTERY CUT OUT** setting for more than 30 seconds. This allows greater control of what causes the generator starts.
- **Three stage battery charging:** The battery charger now uses an adjustable time period for the absorption stage instead of the previous **BULK DONE AMPS AC** setting. This allows more predictable operation of the battery charger and the automatic generator start system and the

For information on enhancing your current inverter's software contact your Trace Dealer. Suggested list price for the Rev 4.01 chipset is \$125.00

