## SYSTEM MANAGEMENT REMOTE MONITOR AND CONTROL

MATE

The OutBack MATE is a complete system controller and display for both the OutBack FX2000 inverter/charger and MX60 MPPT PV charge controller. It provides a display of the operation as well as allows control and adjustment of the setpoints. The OutBack Mate also coordinates the operation of the entire system to maximize performance and to prevent multiple products from conflicting.

A single OutBack MATE is able to connect to multiple FX2000 inverter/charges, MX60 MPPT PV charge controllers and any other OutBack power conversion and control products offered in the future. A maximum of ten OutBack products will be able to be connected to a single MATE via CAT 5 / ethernet type cabling with 8 wire RJ45 modular connectors and the OutBack HUB communication manager.

The OutBack MATE includes a 4 line backlit LCD display with 80 alphanumeric characters. This allows multiple measurements to be displayed at the same time and reduces the amount of abbreviations required, simplifying the operation and reducing confusion. All of the programmed setpoints are stored in permanent memory to eliminate the need to reprogram the system after a shutdown or battery replacement.



The OutBack MATE also includes a built in real time clock and calendar which allows programming of the inverter operation based on the time of day and even day of the week. This can be used to allow the system to work with time-of-day power rates or to limit a generator's run time to a specific time period of the day or week.

The OutBack MATE also includes an opto-isolated RS232 port with a DB9 jack for connection to the serial port of a PC computer.

OutBack is working with several third party developers to offer Windows based software programs for datalogging and graphical display of the system's operation and performance. This PC computer software will be available separately and is expected in September, 2002.

Specifications	The MATE
Interface Display	4 line 80 character backlit LCD - Alphanumeric with graphic symbols
Control Keypad	6 backlit silicone membrane keys- dedicated inverter and AC input keys
Status Indicators	Two LED Status Indicators : Green = Inverter Yellow = AC Input
Communication Protocol	Proprietary OutBack Multi-drop using an OutBack HUB
Interconnection Cabling	Standard CAT 5 network cable with RJ45 modular jack - 50 ft included
PC Computer Interface	RS232 opto-isolated DB9 jack 9600 baud serial communication
Microprocessor	16 MHz low power consumption version
Setpoint and Data Memory	32K non-volatile flash RAM
Clock / Calendar	On-board real time clock with battery backup
Audible Indicator	2 KHz Transducer
Environmental Rating	Indoor Type 1 Optional outdoor Type 3R transparent lockable cover
Dimensions	5.75" W x 4.25" H x 2" D 14.6 cm x 10.8 cm x 5.08 cm
Shipping Weight	1 lb - 454 g
Warranty	Two years parts and labor Optional Extended Warranty

Preliminary - Specifications subject to change without notice