LCD Display Box



The SBE 46 LCD Display Box is designed for indoor shipboard or laboratory display of up to four parameters obtained from an external instrument, without the need for a dedicated computer. The SBE 46 can interface with many Sea-Bird instruments. The SBE 46:

Receives power from and displays data from —

• SBE 11*plus* V2 Deck Unit (interfacing with SBE 9*plus* CTD)

Provides power to and displays data from the following instruments with an RS-232 interface —

- SBE 37-SM or 37-SMP MicroCAT Conductivity and Temperature (pressure optional) Recorder with optional 4-pin I/O bulkhead connector
- SBE 37-SI or 37-SIP MicroCAT Conductivity and Temperature (pressure optional) Sensor
- SBE 38 Digital Oceanographic Thermometer
- SBE 39 Temperature (pressure optional) Recorder with optional 4-pin I/O bulkhead connector
- SBE 45 MicroTSG (Thermosalinograph)
- SBE 48 Hull Temperature Sensor
- SBE 50 Digital Oceanographic Pressure Sensor



The SBE 46 has a two-line LCD display with twenty, 12.7 mm (0.5 inch) high characters per line. Each line can display up to two parameters with user-programmable labels, providing a maximum of four parameters total.

OPERATION OVERVIEW

Communication between the instrument and the SBE 46 is over an RS-232C link, providing real-time data transmission and display. The SBE 46 can be externally powered (115 / 230 VAC or 6 - 24 VDC) or internally powered with a 9-volt battery. If used to power an SBE 37-SIP or 37-SMP, the SBE 46 requires 115 / 230 VAC or 6 - 15 VDC input.

User-selectable modes include:

- Programming mode While connected to a computer and running a terminal program, setup commands can be sent to the SBE 46. Setup parameters are stored in EEPROM, so the SBE 46 only has to be programmed once for a particular data format.
- **Testing mode** While connected to a computer and running a terminal program, data input to the computer is displayed on the SBE 46.
- **Operating mode** While connected to an instrument that is logging data, the SBE 46 displays the instrument's data. The SBE 46 can be programmed to sound an alarm, acting as a remote depth display with alarm when used with the SBE 11*plus* V2.

SOFTWARE

The SBE 46 is supplied with a powerful Win 2000/XP software package, SEASOFT® V2, which includes SEATERM®, a terminal program for easy communication and setup. SEATERM can send commands to the SBE 46 and/or the connected instrument to provide system setup and testing. Note that SEATERM does not process the data.





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SPECIFICATIONS

Display 2 line display, 20 characters each line, up to two parameters and associated

user-programmable labels per line, character height 12.7 mm (0.5 inch)

InputAC Power 115/230 VAC

Steady State Power Output up to 750 milliamps to power an external instrument

Input DC Power 6 - 24 VDC (external power or internal, 9 volt alkaline or lithium transistor battery);

for powering SBE 37-SIP or 37-SMP, provide 6 - 15 VDC

Operating Current 20 milliamps when not powering an external instrument

Steady State Power Output At 6 - 12 VDC input: up to 500 milliamps to power an external instrument

At 15 VDC input: up to 400 milliamps to power an external instrument At 20 VDC input: up to 150 milliamps to power an external instrument

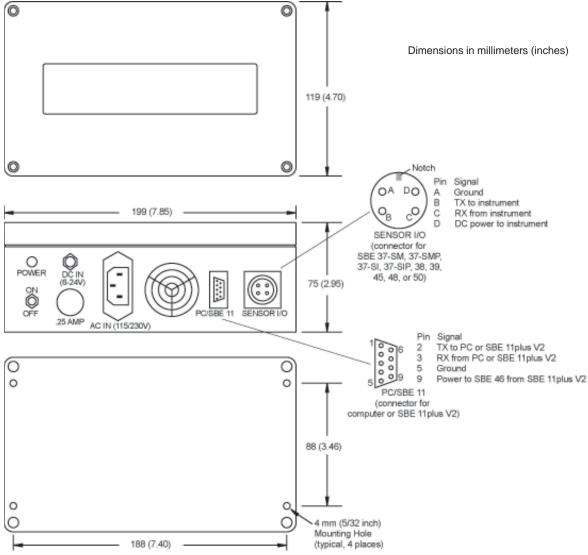
Environmental For indoor use; do not get wet

Materials ABS plastic housing

Weight 0.9 kg (2.0 lbs)

MECHANICAL INSTALLATION

The SBE 46 has four 4 mm (5/32 inch) holes for mounting with customer-supplied hardware.





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