

# Carousel Deck Unit

## SBE 33

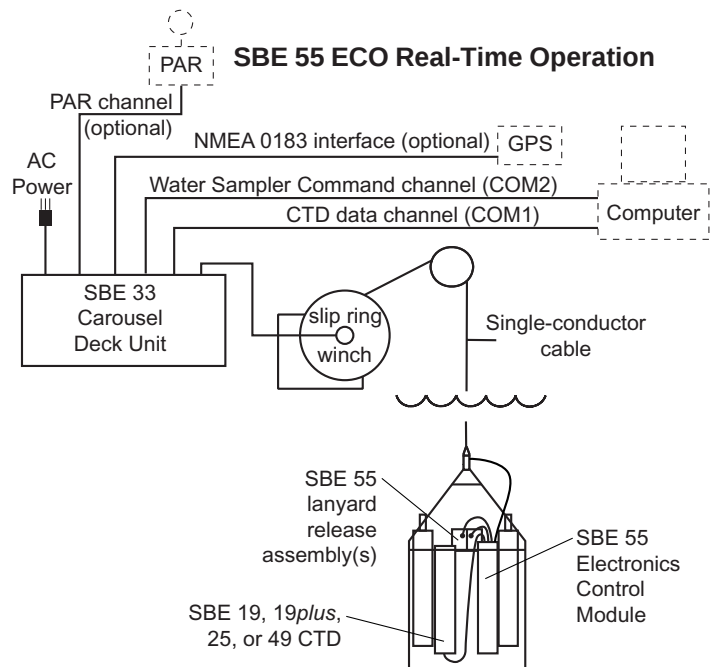
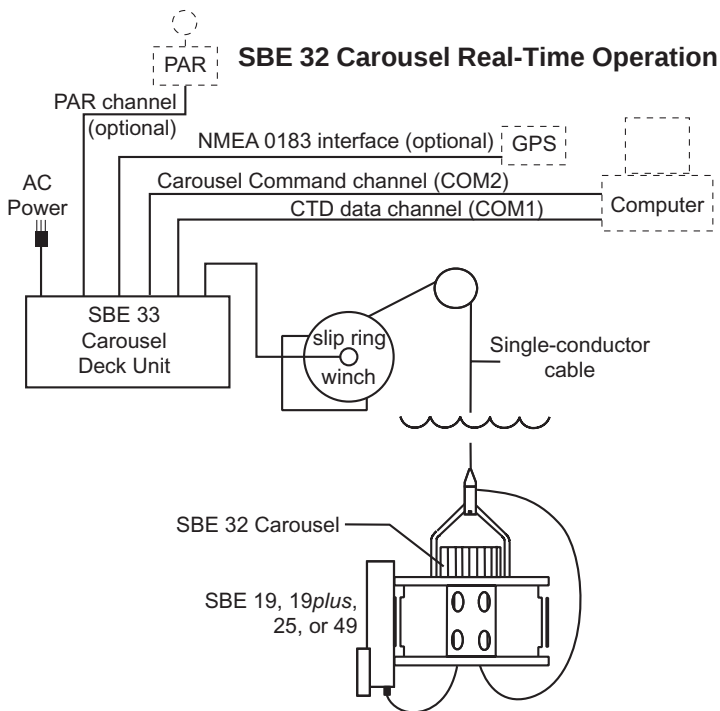


The rack-mountable SBE 33 provides power and real-time data acquisition and control for an **SBE 32 Carousel Water Sampler** that has the SBE 33 interface option installed in its pylon. The SBE 33 is compatible with all Carousel sizes — standard, compact, and sub-compact. When powered and controlled by the SBE 33, the Carousel can be used:

- without a CTD,
- with an SBE 19, 19*plus*, 25, or 49 CTD, or
- with a Neil Brown Mk III CTD (requires optional interface for both SBE 32 and 33).



The SBE 33 can also be used to provide power and real-time data acquisition and control for an **SBE 55 ECO Water Sampler** used with an SBE 19, 19*plus*, 25, or 49 CTD, or no CTD.



The SBE 33 / Water Sampler system provides real-time data telemetry and surface power for the CTD, and permits Water Sampler control with the SBE 33 front panel buttons or via our SEASAVE software. Bottles can be fired sequentially or in any order; the front-panel LED display indicates which bottles have been fired.

As an option, the SBE 33 includes a **NMEA Interface** that merges position and date/time data with CTD data, decoding messages that are output from navigation devices supporting NMEA 0183 protocol. Decoded navigation data is appended to the CTD data stream in the SBE 33, and passed to the computer for storage and/or display with the CTD data. If the NMEA Interface is included, the SBE 33 may also include an optional **A/D converter for a Surface PAR sensor**; the SBE 33 supplies 12 volts to power the sensor.

## SOFTWARE

The SBE 33 is supplied with a powerful Windows 2000/XP software package, SEASOFT®, which includes:

- **SEATERM®**, terminal program for easy communication and data retrieval.
- **SEASAVE®**, program for real-time data acquisition and water sampler bottle firing control.
- **SBE Data Processing®**, which includes modules for calculation, display, and plotting of temperature, conductivity, pressure, auxiliary sensor data, and derived variables such as salinity and sound velocity.



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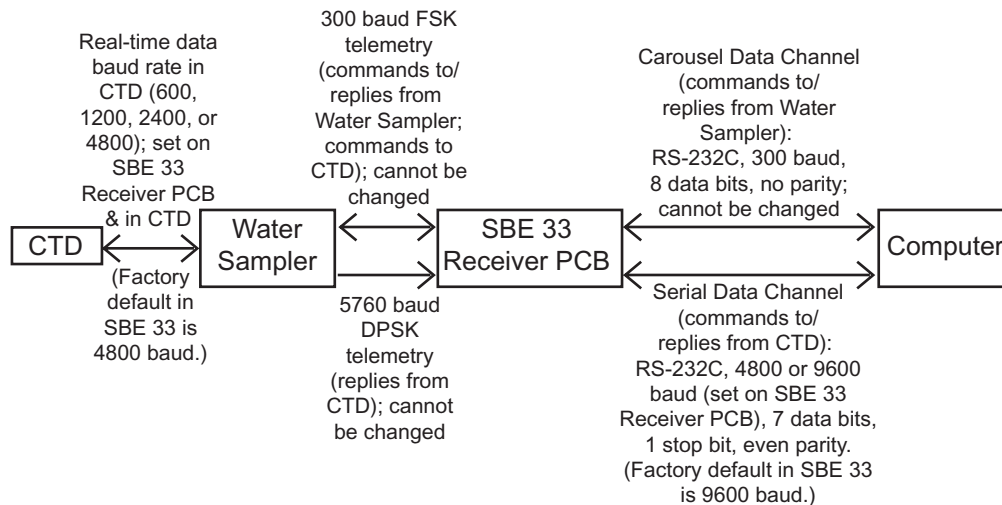
## SPECIFICATIONS

|                             |                                                                                                                                                                                                                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power requirement:</b>   | 120 or 240 VAC (user-selectable) 50/60 Hz                                                                                                                                                                                                                                                               |
| <b>Cable compatibility:</b> | Single / multi-core armored cable up to 10,000 m (32,800 ft) long with inner core resistance < 350 ohms and armor used as return                                                                                                                                                                        |
| <b>Dimensions:</b>          | 89 mm (3.5 in.) high cabinet with standard 48 mm (1.9 in.) electronics rack mounting brackets.<br><i>Detailed information:</i><br>89 mm high x 432 mm wide x 381 mm deep (3.5 inches x 17 inches x 15 inches);<br>Feet add 13 mm (0.5 inches) to height; Rack mount ears add 51 mm (2 inches) to depth. |
| <b>Weight:</b>              | 9.0 kg (20 lbs)                                                                                                                                                                                                                                                                                         |

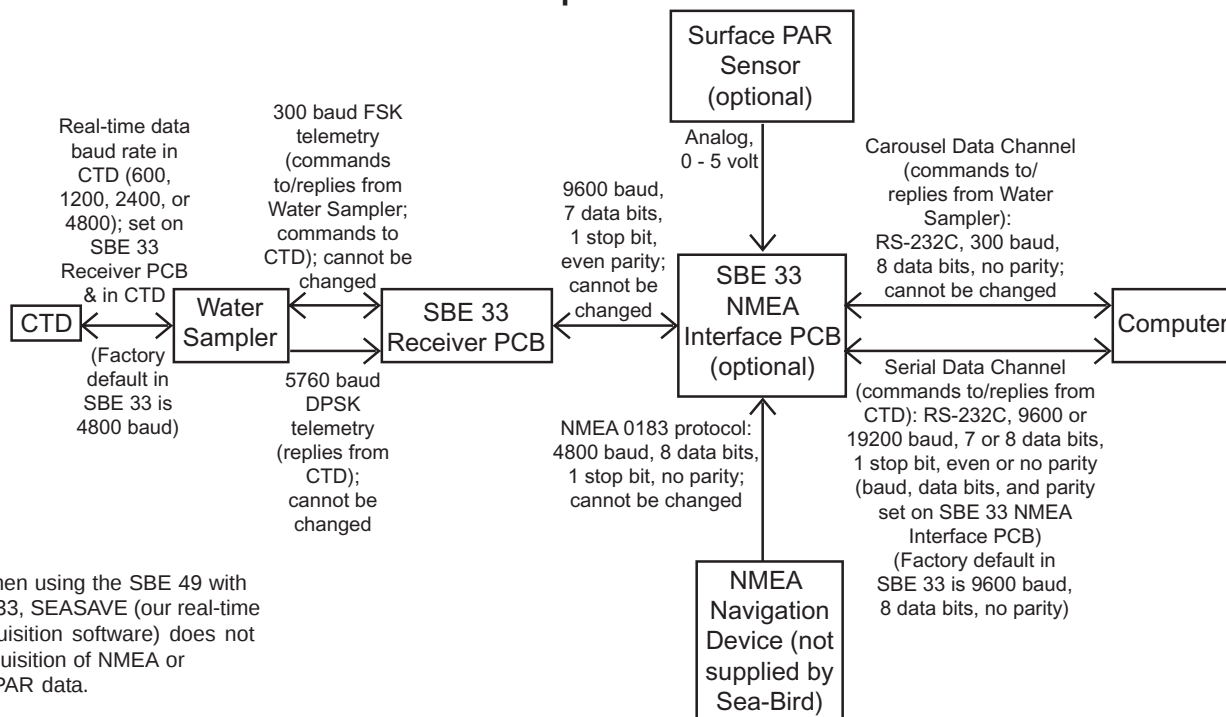
## DATA TELEMETRY

DPSK = differential phase shift keyed,  
FSK = frequency shift keyed

### SBE 33 without optional NMEA Interface



### SBE 33 with optional NMEA Interface



**Note:** When using the SBE 49 with the SBE 33, SEASAVE (our real-time data acquisition software) does not allow acquisition of NMEA or Surface PAR data.

04/07