

# SBE 18S

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## Command Set

|                  |   |                      |                                            |
|------------------|---|----------------------|--------------------------------------------|
| setoutputformat= | 0 | *±vvvvv.vv\r\n       | pH probe voltage in mV, MBARI style output |
|                  | 1 | ±vvvv.vv\r\n         | pH probe voltage in mV                     |
|                  | 2 | v.vvvv\r\n           | pH probe voltage in SBE 18 volts           |
|                  |   |                      | $V_{out} = V_{pH} + 2.5V$                  |
|                  | 3 | ppppppppp tttttt\r\n | pH probe in counts, temperature ratio      |
|                  | 4 | tttttt\r\n           | temperature ratio                          |
|                  | 5 | pp.ppp               | calculated pH                              |

note: output formats 3, 4 and 5 require seawater temperature measurement

|             |                         |                                                                            |
|-------------|-------------------------|----------------------------------------------------------------------------|
| ts<br>\$1RD | <see format for output> | returns a measurement in one of the above formats. Commands are equivalent |
|-------------|-------------------------|----------------------------------------------------------------------------|

|     |                         |                                                                                                                                                                                     |
|-----|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| tsc | <see format for output> | continuously samples and returns the measurement in one of the above formats. The update rate is 1Hz which is an average of 16 samples. Return to interactive mode via the ESC key. |
|-----|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|             |   |                                                                                               |
|-------------|---|-----------------------------------------------------------------------------------------------|
| setautorun= | 0 | enter interactive mode on powerup                                                             |
|             | 1 | enters tsc on powerup. If tsc is stopped via ESC the instrument re-enters tsc on power cycle. |

|                                           |          |  |
|-------------------------------------------|----------|--|
| gethd<br>getcd<br>getec<br>getsd<br>getcc | standard |  |
|-------------------------------------------|----------|--|

|              |   |                           |
|--------------|---|---------------------------|
| setexecuted= | 0 | suppress <Executed/> tags |
|              | 1 | do not                    |

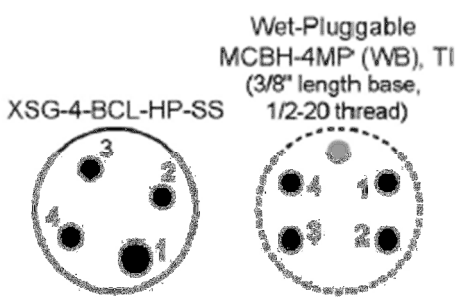
|          |   |                            |
|----------|---|----------------------------|
| setecho= | 0 | suppress echoed characters |
|          | 1 | do not                     |

|            |   |               |
|------------|---|---------------|
| setprompt= | 0 | suppress 'S>' |
|            | 1 | do not        |

|          |        |                                      |
|----------|--------|--------------------------------------|
| setbaud= | 9600   | updates the serial console baud rate |
|          | 38400  |                                      |
|          | 115200 |                                      |

|                  |   |                                                                                                     |
|------------------|---|-----------------------------------------------------------------------------------------------------|
| setsampleperiod= | n | seconds between scans when running continuously. Each sample is comprised of an average of 8 scans. |
|------------------|---|-----------------------------------------------------------------------------------------------------|

## Electrical Characteristics

|                     |                                                                                                                                                                                                                                                                                             |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage input       | 11VDC – 18VDC                                                                                                                                                                                                                                                                               |
| Current consumption | 82mA at 12VDC                                                                                                                                                                                                                                                                               |
| Pin out             | <p>  </p> <p>Pin   Signal</p> <ul style="list-style-type: none"> <li>1       Common</li> <li>2       RS-232 data receive</li> <li>3       RS-232 data transmit</li> <li>4       11VDC – 18VDC</li> </ul> |