WET Labs

Technical Note: WQM Testing and Troubleshooting Commands

Please contact WET Labs before using the commands below. Changing any settings at this level may compromise the performance or stability of the meter.

The testing or troubleshooting functions of the WQM can only be used while the WQM is in Standby Mode.

Use the Stop command ('!!!!!') to place the WQM into Standby.

!!!!!	Stop WQM data sampling and enter Standby
$INT	Sample interval
$PKT	Sample time
$FSH	Enter flush time
$RUN	Restart WQM data sampling
$MDE m	Switch operating modes: m = 0 Switch to Autonomous m = 1 Switch to External

CTD Test and Troubleshooting Commands

$DCC	Display CTD and ECO Calibration Coefficients
$SPT	Set DO stabilization time
$RCP x	Run the CTD pump, with x: 0 = Off, 1 = Fast for 2 seconds then Slow, 2 = Fast
$RPO	Reset the Pressure Offset. This takes ~ 2 minutes.
$TCS	Take One CTD Sample

Direct to CTD:
1. Provide power and direct serial communications to the CTD
2. Press any key to wake the CTD.

$CTD   Use TS to take one non-pumped CTD sample
        Use PTS to take one pumped CTD sample
        Use PUMPON to run the CTD pump
        Use PUMPOFF to stop the CTD pump
        Use RESUMEPROFILE to start constant, pumped CTD operations
        Use STOPPROFILE to stop CTD sampling
        Use DS to display the CTD setup
        Use DCC to display the CTD Calibration Coefficients

3. Use !!!!!!!!!!! to shut off the CTD and to exit back to Standby.

FLNTU Test and Troubleshooting Commands

$DCC	Display CTD and ECO Calibration Coefficients
$TES	Take One ECO Sample

1. Provide power and direct serial communications to the FLNTU.
2. Use $MNU to retrieve the FLNTU setup.

WET🌎Labs

$ECO Use $RUN to take one ECO sample
     Use $MVS 0 to close the ECO shutter
     Use $MVS 1 to open the ECO shutter

3. Use !!!!!!!!!! to shut off the FLNTU and to exit back to Standby

Miscellaneous Troubleshooting Commands
$VER v Verbose – Display process tracking information
     v=0, Set Verbose Off
     v=1, Set Verbose On

BLIS Commands

The WQM can be programmed to run the BLIS:
1. after "h" number of hours has elapsed or
2. after "c" number of sample cycles has occurred. The values for "h" or "c" may be set from 0 to 48.
- If both "h" and "c" are set to 0, the BLIS will not function during normal sampling operations.
- The settings for "h" and "c" are mutually exclusive. Setting one will clear the other.

In addition to running the BLIS after "h" hours or "c" cycles, the number of BLIS pump squirts is programmable. The volume delivered, "s" is the second parameter on both the `BLIS Hours` and `BLIS Cycles` commands shown below. The valid range for "s" is 1 to 100 squirts. The volume of bleach pumped during each BLIS operation is ~7 µl/squirt.

$BLS	Run the BLIS pump immediately for 1 squirt
$BLS s	Run the BLIS pump immediately for "s" squirts
$BLC	Clear the BLIS Cycles setting
$BLC c s	Set the BLIS Cycles count to "c" cycles and "s" squirts
$BLH	Clear the BLIS Hours setting
$BLH h s	Set the BLIS Hours setting to "h" hours and "s" squirts
$BLV	Display the Total BLIS pumped volume in ml (Based on 7 µl/squirt)
$BLV 1	Reset the Total BLIS pumped volume counter to 0.
$BLD	Display the Current BLIS settings.

Default: The default BLIS operation is to inject 4 squirts (~28 µl) of bleach into the CTDO manifold at the end of the first sample interval, after the start of each hour. With a full reservoir of fresh household bleach, this will provide anti-fouling for over 200 days.