

WQM Command Summary for F/W v1.23

This document contains a command summary for WET Labs' WQM firmware version 1.23.

With the exception of the STOP command (which is: !!!!!), all WQM commands are preceded with '\$' and are terminated with a CR LF (0x0d0a).

In this document, the commands are grouped according to the following functions:

BLIS (BLeach Injection System) Commands

Control and Sample Commands

CTD Commands

ECO Commands

External Data Port Commands

File Handling Commands

Miscellaneous Commands

Output Commands

Status and Message Commands

While the WQM must be in Standby before it will execute most commands, the following commands will execute while the WQM is sampling:

\$BLD	\$CLK	\$DAT	\$GEDP	\$GLSO
\$GLXS	\$RUN	!!!!	\$MNU	\$DEBUG
\$VER	\$SIL	\$UPS		

If the WQM is sampling, and the command sent to the WQM is not in the list above, the WQM will ignore the command or will reply with an unable to comply message.

If the WQM is not sampling, the WQM will immediately execute the command.

BLIS (BLEach Injection System) Commands

\$BLD		Display BLIS Setup
\$BLH H S		Programs static / non-pumped BLIS operation where, H = Number of Hours between BLIS operations S = Number of static, non-pumped BLIS squirts
\$BLS X		Cycle the BLIS pump X times.
\$BLV 9999		Reset BLIS Volume
\$PUR X		At power up, purge the BLIS with X squirts
\$RPB speed	squirts delay	Run Pumped BLIS immediately
\$SPB speed	squirts delay	Set Programmed Pumped BLIS operation
		Where: speed=1 for slow CTD pump speed speed=2 for fast CTD pump speed squirts ≥ 1 delay ≥ 0 ms

Control and Sample Commands

!!!!		Stop sampling and enter Standby
\$INT HHMMSS		Set the sample interval to HHMMSS, where HHMMSS must be ≥ 2 minutes (same function as \$SSI)
\$MDE 0		Set the sample mode / control to autonomous operations
\$MDE 1		Set the sample mode / control to externally controlled operations
\$PKT X		Set the sample packet size to X, where $X \geq 10$ seconds
\$SSD X		Set Sample Delay: When the WQM is externally controlled, delay for X seconds before starting the sample sequence.
\$SPT X		Set DO stability prep time for external control, $X \geq 15$ seconds
\$SSI X		Set the sample interval to X, where $X \geq 120$ seconds (Same function as \$INT)

\$PAR SN Im a0 a1 Set External Data Port for ECO-PARS input where,
 SN = PARS SN
 Im=Immersion Coefficient
 Im=1 → Not Immersed
 Im>1 → Immersed in water
 a0, a1 → calibration coefficients

File Handling Commands

\$DIR Display the WQM raw data file directory

\$EFN fn1 fn2 Erase File Number fn1 which must equal fn2.

\$EMC 8888 Erase Memory Card using a fast disk format
 \$EMC 9999 Erase Memory Card using a complete disk format

\$GET fn Get file number fn

\$GRF Get the most recent raw data file

\$IRN Increment Run Number

\$REC 0 Internal Recording / Logging Off
 \$REC 1 Internal Recording / Logging On

Miscellaneous Commands

\$BAU X Temporarily set the host baud rate to X, where X=1200, 2400, 4800, 9600, 19200, 38400, 57600, or 115200

\$HLP Display Help Menu

\$TBR BR S Test the WQM host port at Baud Rate BR where:
 BR: Baud Rate, up to 230K
 S: $1 < S \leq 60$

\$UPS 9999 Clear the recent UPS history counter

\$XIT Exit the WQM firmware and access PICODOS

Output Commands

\$GLSO	Get the Last Sample Output
\$GLXS X	Get the Last X Samples
\$SSDO OFF	Set Data Output off
\$SSDO ON	Set Data Output on at a 1 Hz rate insitu, 0.1 Hz in air
\$SSDO AVE	Output a single record of averaged data at the end of the sample
\$SSDO LAST	Output just the last data record at the end of the sample
\$SOB XXXXXXXX	Set Output Bits – See Appendix.

Status and Message Commands

\$CLK	Get the WQM Time
\$CLK HHMMSS	Set the WQM time to HH:MM:SS
\$DAT	Get WQM Date
\$DAT MMDDYY	Set WQM Date to MM-DD-YY
\$DEBUG 0	Turn off debugging messages
\$DEBUG 1	Turn on debugging messages
\$MNU	Request a single status / menu record
\$MNU 0	Turn off automatic status output.
\$MNU 1	Turn on automatic status output.
\$SIL OFF	Turn Silent Off – Allow status records
\$SIL ON	Turn off all status records
\$VER 0	Turn off verbose messages
\$VER 1	Turn on verbose messages