

Eureka Manta + Multiprobe Quick Start Guide

The Eureka Manta+ Series of multi-probes is compatible with the Nexsens X2 data logger using RS-232 output.

Parameter Setup

Prior to establishing the 1st time connection to the X2, connect the Manta to Eureka's Control Software and select **Manta2|Sensors and Parameters List**.

Manta 2 Control Software

PC Manta2

Manta2 Logging is OFF

Circulator is OFF

Wipe One Cycle Now

Clear Screen

Capture One Line of Data to PC with Annotation

Capture One Line of Data to PC without Annotation

List Bluetooth Mantas

Restart

DATE	TIME	Temp deg C	pH units	ORP mV	SpCond uS/cm	Turb FNU	Chl ug/l	bg ppb	HDO %Sat	HDO mg/l	pH mV	Int Batt V
11/01/19	09:46:21	20.58	6.94	197.5	0.6	0.15	0.12	0.55	93.1	8.04	-1.8	0.05
11/01/19	09:46:19	20.58	6.97	196.3	0.6	0.15	0.13	0.50	93.1	8.04	-3.5	0.05
11/01/19	09:46:17	20.58	7.01	199.7	0.6	0.18	0.13	0.56	93.1	8.04	-5.2	0.00
11/01/19	09:46:15	20.57	6.96	197.8	0.6	0.18	0.12	0.62	93.1	8.04	-2.8	0.03
11/01/19	09:46:13	20.57	6.99	197.4	0.6	0.18	0.12	0.64	93.1	8.04	-4.1	0.00
11/01/19	09:46:11	20.57	7.01	199.8	0.6	0.19	0.12	0.58	93.1	8.04	-5.4	0.05
11/01/19	09:46:09	20.57	6.96	197.6	0.6	0.19	0.12	0.71	93.2	8.04	-2.9	0.03
11/01/19	09:46:07	20.56	6.98	197.3	0.6	0.17	0.13	0.68	93.2	8.04	-3.7	0.00

Connected on COM37 | Snapshot: C:\Users\thomasr\Documents\snapshot.csv | Log Interval: 15 min | Log File: 3819L1

Verify the enabled parameter list contains all desired measurements. This list will control what the X2 reads from the Manta and reports to WQData LIVE.

Sensor and Parameter List

Click to select a parameter (logged, calibrated, and displayed)

Parameter	Sensor	SRF	FW Ver.	Port No.	Serial #
<input checked="" type="checkbox"/> Temp deg C	none				
<input checked="" type="checkbox"/> pH units	PH	95.32	VER:V5.22	02:0	06193819
<input checked="" type="checkbox"/> ORP mV	ORP	100.00	VER:V5.22	02:1	06193819
<input checked="" type="checkbox"/> SpCond uS/...	COND	109.13	VER:V5.22	02:3	06193819
<input checked="" type="checkbox"/> Turb FNU	TURB	82.78	VER:V5.22	05	06193819
<input checked="" type="checkbox"/> Chl ug/l	CHL	100.00	VER:V5.00	04	06193819
<input checked="" type="checkbox"/> bg ppb	BG	100.00	VER:V5.00	07	06193819
<input checked="" type="checkbox"/> HDO %Sat	HDO	0.00	VER:V5.22	02:4	06193819
<input checked="" type="checkbox"/> HDO mg/l	HDO	0.00	VER:V5.22	02:4	06193819
<input checked="" type="checkbox"/> pH mV	PH	95.32	VER:V5.22	02:0	06193819
<input checked="" type="checkbox"/> Int Batt V	none				
<input type="checkbox"/> eTemp deg C	TEMP	0.00	VER:V8.00	08	00000011
<input type="checkbox"/> Depth m	DPTH	0.00	VER:V5.22	02:2	00000000

Change Display Order

OK Cancel

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Wiring

It is recommended that the Manta's external communication/power cable be fitted with a factory-installed UW-connector (required for buoy applications).

To connect the Manta to a land-based X2, reference the following diagram for signal connections to a NexSens UW-FLx plug to flying lead cable assembly.



UW-FLx to Manta DB9/Flying Lead cable wiring. All unlisted signals are not-utilized and should not be wired to the X2.

UW-FLx Plug Pin	UW-FLx Wire Color	*Manta + MCIL Connector Pin #	*Manta+ DB9 Connector Pin #	*Manta Wire Color	Communication Signal
1	Orange	6	3	Yellow	RS232-Tx
2	Black	2	5	Black	GND
3	Yellow	5	2	Orange	RS232-Rx
5	Red	3	9	Red	+12V

**Confirm that the Manta cable DB9 and flying lead pinout is consistent with those listed above before proceeding with wiring. Alterations to manufacturer cable design may occur.*

Deployment Notes

The X2 will turn on power to the Manta only for the required duration of each prescribed log interval, turning it off at the conclusion of each reading to conserve system power.

As a result of this scheduling of external cable power, **Do Not Install Internal C-Cell alkaline batteries inside the Manta.** Communication disturbances may surface as the internal batteries deplete.