

Turner Designs C6

Multi-Sensor
Platform

Sensor Interface Manual



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Overview

The Turner Designs C6 multi-sensor platform was designed to integrate up to six Cyclops-7 sensors and log data for extended or short-term deployments. The platform is capable of individual sensor gain control and calibration, and functions similar to other water quality multi-probes.

Parameter options for the C6 include:

- Chlorophyll a
- Blue Green Algae (marine & freshwater)
- Rhodamine WT Dye
- Fluorescein Dye
- Turbidity
- CDOM
- Optical Brighteners
- Crude Oil
- Refined Fuels

C-Soft is a Windows software program that provides a graphical user interface for sensor calibration, data logging setup and file downloading capabilities.



Figure 1: Turner Designs C6 Multi-Sensor Platform

Installation

Follow the manufacturer's recommendation for setting up and configuring Cyclops-7 sensors with the C6 multi-sensor platform.

The C6 can be installed in 4 inch or larger deployment pipes. The units can also easily be mooring deployed under NexSens data buoys.

Connecting to an iSIC Data Logger

To wire the sensor into the iSIC, route the cable and wires through a gland fitting installed in the enclosure, and then unplug the green terminal strip from the data logger before securing individual wires according to the wiring diagram below. Avoid clamping on wire insulation.



Figure 2: Unplug the green terminal strip from the data logger before wiring the sensor

CONNECTING TO AN ISIC DATA LOGGER

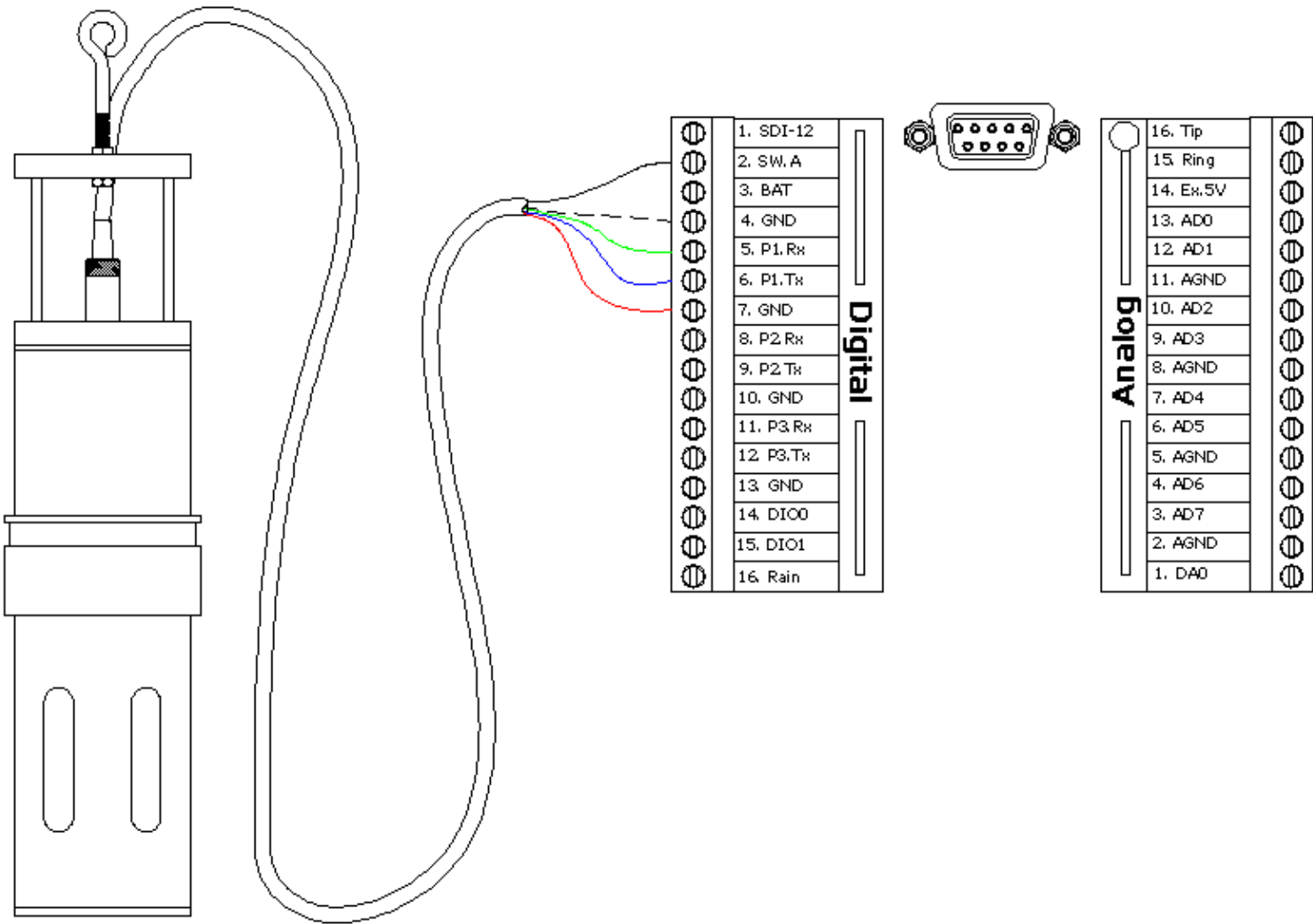


Figure 3: Physical wiring of a Turner Designs C6 mult-sensor platform to an iSIC data logger

Table 1: Table for wiring a Turner Designs C6 multi-sensor platform to an iSIC data logger

Digital		Analog	
1. SDI-12	-	16. Tip	-
2. SW.A	Black (PWR)	15. Ring	-
3. BAT	-	14. Ex.5V	-
4. GND	White (GND)	13. AD0	-
5. P1.Rx	Green (RS-232 Rx)	12. AD1	-
6. P1.Tx	Blue (RS-232 Tx)	11. AGND	-
7. GND	Red (GND)	10. AD2	-
8. P2.Rx	-	9. AD3	-
9. P2.Tx	-	8. AGND	-
10. GND	-	7. AD4	-
11. P3.Rx	-	6. AD5	-
12. P3.Tx	-	5. AGND	-
13. GND	-	4. AD6	-
14. DIO0	-	3. AD7	-
15. DIO1	-	2. AGND	-
16. Rain	-	1. DA0	-

Notes:

- The C6 should be wired with switched power because it draws a significant amount of current while running idle.
- P2. Rx and P2.Tx must be used in place of P1.Rx and P1.Tx when wiring two sensors to the iSIC terminal strip.

Computer Interface

iChart software is used to set up the iSIC data logger, as well as to acquire and process data. Launch the software and select **File | New Project**. Follow the Setup Device Wizard to create a project file. Additional information is available in the iChart manual.



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