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Instructions

Model 8025-2

Micro-800 Datalogger
AVW200

Quick Start Guide

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Model 8025-2

MICRO-800 Datalogger Operation Notes

Overview

The Micro-800 Datalogger system is design to read Geokon vibrating wire sensors connected to the internal 16/32 channel multiplexer. The vibrating wire gages are excited and read through the AVW200 interface.

System

The Micro-800 Datalogger is pre-wired and includes the necessary cable for serial communication with a computer and an external power supply for the charging of the internal battery.

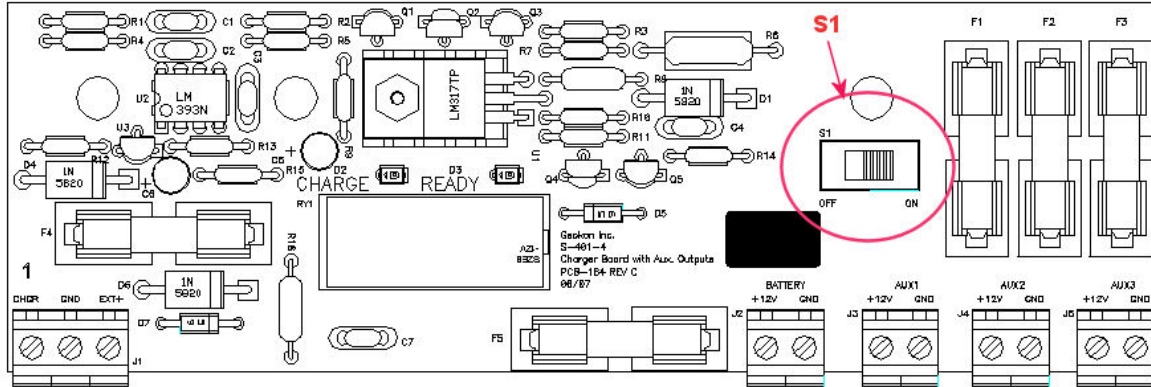
The vibrating wire sensors are connected to the internal multiplexer through the 16 weather tight strain relief fittings mounted to the enclosure; with the final connection made to the terminal blocks mounted on the multiplexer. Each terminal block consists of five clamp connections, where the connections are as follows:

- #H1 = VW+ (usually the Red wire)
- #L1 = VW- (usually the Black wire)
- #H2 = TH+ (usually the Green or White wire)
- #L2 = TH- (usually the White or Green wire)
- S1 = Cable Shield (usually the Bare wire)

Power

NOTE: When the Datalogger is shipped from the factory, the internal battery is disconnected from the system through a switch to prevent the battery from being discharged prior to use. The S1 switch on the internal charging board must be in the ON position for the Datalogger to operate properly.

-Internal Charging Board



Whenever achievable, the external AC power supply should be connected to the Datalogger to maintain the proper charge of the internal lead-acid battery. This is accomplished by attaching the power supply to the 3-pin connector on the outside of the Datalogger enclosure.

External Battery

An external battery may be used to power the Datalogger via the supplied external battery cable.

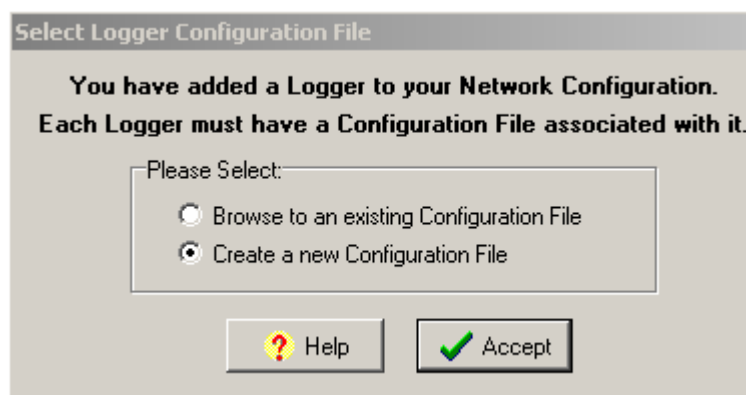
The internal charging board has an external battery sense circuit that will disable the internal battery.

MultiLogger Software Configuration

The 'Device Type' attached to the COM Port or Modem is a CR800 Datalogger

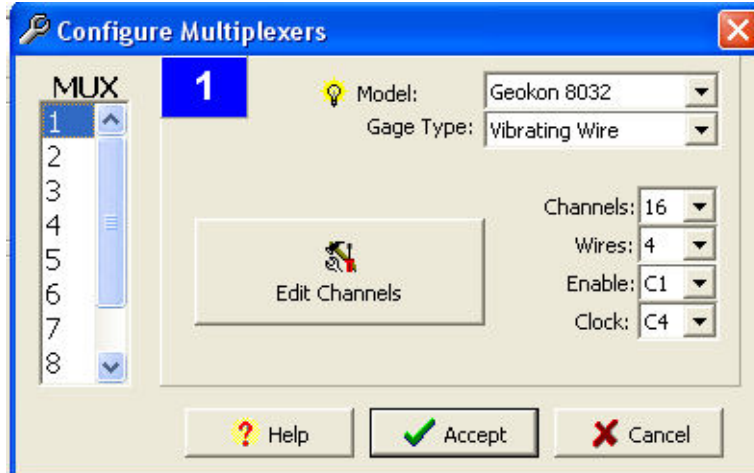


When adding/saving the CR800 Datalogger to the Network Configuration The user will be prompted for a Logger Configuration File; Select Create a new Configuration File.

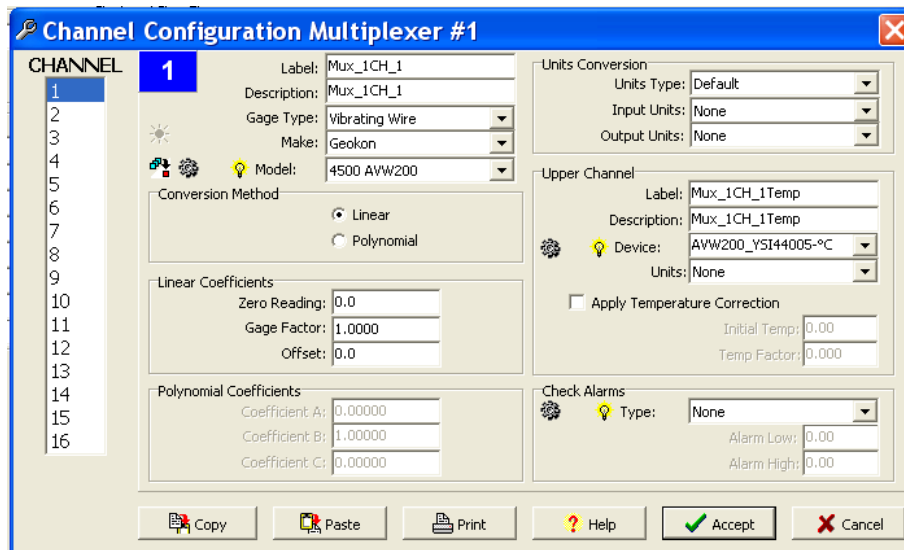


After pressing the *Accept* button above, the Logger Configuration form will display. This form allows the user to set-up the various parameters for the datalogger operation, including the scan interval, collection options, graphing, and the gage parameters for each multiplexer channel.

When configuring the Multiplexer the user must use the settings as shown below; note that the *Clock* must be set to C4:



Use the Edit Channels button to configure each channel of the Multiplexer. The Model will be the Geokon Gage Model and AVW200. The Upper Channel (Thermistor) will be AVW200-YSI44005-°C for an output of Celsius or AVW200-YSI44005-°F for an output of Fahrenheit.



Please see the MultiLogger instruction manual for more specific details regarding the complete programming of a Datalogger and the associated configuration files.

-CR800 Wiring

CR800 Connections	MUX Interface Cable	AVW200 SDI-12 Interface Cable	CR800 Power Cable	Description
AG	Green	NC	NC	Analog Ground
12V	Blue	NC	NC	12 VDC Output
G	Violet/ Black	Blue's Black	NC	Ground
C1	Gray	NC	NC	Digital I/O Port 1 / RESET
C3	NC	Blue	NC	Digital I/O Port 3 / SDI-12 Communication
C4	White	NC	NC	Digital I/O Port 1 / Clock
PWR In +12V	NC	NC	Red	+12VDC Power
PWR in G	NC	NC	Black	Power Ground

-AVW200 Wiring

AVW200 Connections	Color	MUX Interface Ribbon Cable	CR800 Datalogger	Description
1V +	Brown	Conductor 1	NC	Vibrating Wire +
1V -	Red	Conductor 2	NC	Vibrating Wire -
1T+	Orange	Conductor 3	NC	Thermistor +
1T-	Yellow	Conductor 4	NC	Thermistor -
SCI12	Blue	NC	C3	SDI-12 Communications
G	Blue's Black	NC	G	Ground