

1. OBJECTIVE

Details the installation of a 4-20mA current loop isolator for use with Aquatrac's 'Flex' & 'AS' series controllers.

Isolators prevent ground loops, allowing a single 4-20mA current loop to be connected to more than one monitoring device.

AN010-22 details the use of a loop powered OMEGA part CCT-100.

2. Parts List

Source: www.omega.com 800.826.6342

Description	OMEGA Part #	Nominal Cost
Loop Powered Galvanic Isolation Module	CCT-100	\$130.00

3. Installation

The isolator is usually located at the 4-20mA signal source or optionally any point on the cabling from the source to the controller.

Typically, current loops are wires/d single pair AWG22, shielded or unshielded.

The following table assumes the current loop is connected to controller input 'G'.

Any unused controller 'G' to 'N' may be used.

Ensure that the loop terminating resistor 'LG', located immediately inboard on the 'G' controller terminal is installed. This jumper is installed as the factory default and terminates the current loop with 50 ohms.

Current Loop Source	CCT 100 Terminal No.	Controller Terminal	CCT 100 Terminal No.
Loop '+'	No.1	G+	No.4
Loop '-'	No.3	G-	No.5

4. Controller Set-up

Enable input 'G' using Trackster.

Use Trackster terminal to issue the 'PAG,,1' & **Enter** command.

Return the Trackster and do a 4-20mA calibration by defining both 4mA & 20mA levels in user units.