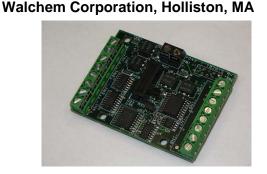
Walchem Webmaster 4-20ma Input Wiring Guide

CJ 6/14/07

- 1. The (-) Minus terminal is the signal input. The 4-20ma signal goes here.
- 2. The (+) Plus terminal is a +24vdc power supply for the transmitters.
- 3. The GND terminal is the return for completing the circuits, both signal and power.
- 4. The +24 terminal at the top, middle of the board is the same supply as the (+) Plus terminal.

A. Two-Wire Loop-Powered Transmitter

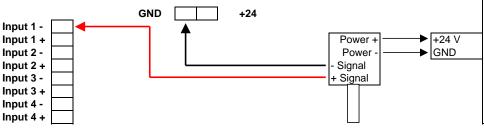




Notes

The - Signal wire is the actual 4-20ma signal and is also the GND return wire to complete the circuit. Input - is internally connected to GND via 25 ohm resistor

B. Two-Wire Externally-Powered Transmitter

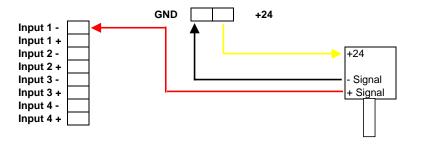


Notes -

This transmitter gets it's power from it's own dedicated

Connecting a powered transmitter to the Input + terminal of the WebMaster will permanently damage the input!

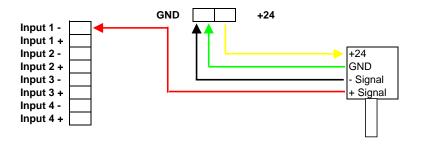
C. Three-Wire Transmitter



Notes -

The Red and Black wires are the 4-20ma signal. The Yellow and Black wires are the +24vdc power supply wires.

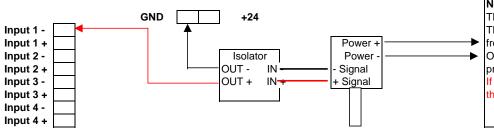
D. Four-Wire Transmitter



Notes -

The Red and Black wires are the 4-20ma signal. The Yellow and Green wires are the +24vdc power supply wires.

E. Non-Isolated Two-Wire Externally-Powered Transmitter

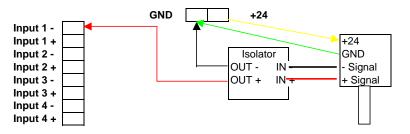


The analog inputs share their negative terminals. They are all isolated from earth ground but not isolated from each other.

One non-isolated device may be connected without

If more than one non-isolated transmitter is connected they must be installed with an isolator.

F. Non-Isolated Four-Wire Externally-Powered Transmitter



Notes -

The analog inputs share their negative terminals.

They are all isolated from earth ground but not isolated from each other.

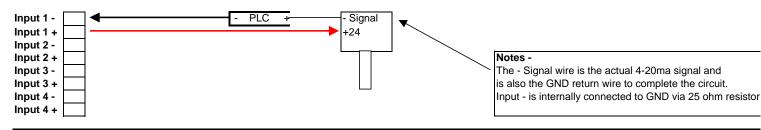
One non-isolated device may be connected without problems.

If more than one non-isolated transmitter is connected they must be installed with an isolator.

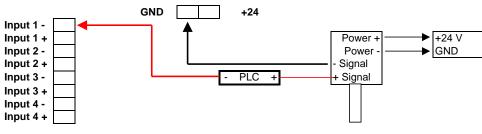
ADDING AN ISOLATED RECEIVER TO THE LOOP (PLC, Chart Recorder, etc.)

The WebMaster GND must always be at the bottom of the loop Maximum total loop resistance 1000 ohms

A. Two-Wire Loop-Powered Transmitter



B. Two-Wire Externally-Powered Transmitter

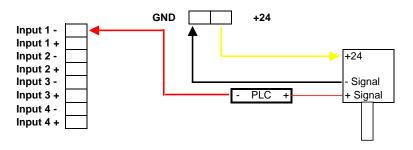


Notes -

This transmitter gets it's power from it's own dedicated power supply.

Connecting a powered transmitter to the Input + terminal of the WebMaster will permanently damage the input!

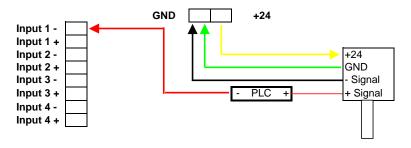
C. Three-Wire Transmitter



Notes -

The Red and Black wires are the 4-20ma signal. The Yellow and Black wires are the +24vdc power supply wires.

D. Four-Wire Transmitter



Notes -

The Red and Black wires are the 4-20ma signal. The Yellow and Green wires are the +24vdc power supply wires.