instruNet Outputs after Power On or Reset

Application Note #115, 10/4/2002

The i2x0/i100 analog/digital output states upon instruNet reset or power on are described as follows. For information on how to deal with unexpected power outages and computer crashes, please see AN #212.

1) i200 Controller Digital Inputs

These start as inputs upon Reset. They are pulled high via a 10K internal resistor.

2) i200 Controller Digital Outputs

These are driven by the CONTROLLER DIGITAL IN upon Reset, which are pulled high via a 10K. So if nothing is tied to the corresponding CONTROLLER DIGITAL IN, these will start as 1's. If you want these to power-up as 0's, send the CONTROLLER DIGITAL OUT through an inverter (e.g. 74LS04).

3) i100 Digital I/O

These are set to inputs upon power-up or reset, and are pulled high via a 10K resistor. If they are wired as outputs, then they will appear as 1's upon power-up or reset. If you want these to be outputs that power-up as 0's, send the CONTROLLER DIGITAL OUT through an inverter (e.g. 74LS04).

4) i100 Analog Outputs

When the i100 powers off, these drop to 0V. Upon i100 power on, they stay at 0V, yet when the i100 is auto-calibrated or reset by the host computer, they flicker to various levels for approximately 1sec and then settle at 0V.