Synergy Controller Remote Start/Stop Feature

Some environmental test chamber and process oven applications require a remote Start button or Stop button (or both) a distance from the test chamber and controller.

The Synergy Controller can implement this functionality easily with the Remote Start/Stop feature introduced in software version 2.9.6 Build 788.

The feature uses one or two digital inputs and one or two Normally Open (NO) push-button switches.

Setup
Connect two Normally Open (NO) push-button switches to any two unused digital inputs and connect the other side of each switch to ground. See example wiring on the following pages for the Synergy Nano and Synergy Micro controllers.

Open the “Remote Start/Stop” folder to configure which Digital Input is the Start Input and which one is the Stop input. See screen shots below.

Operation

When the feature is Enabled, the controller will turn on when the Start button closes as if the ON button was pressed.

The Stop button turns OFF the controller as if the OFF button were pressed.
Dangerous voltages are present in this equipment. Always disconnect electrical service at source and use proper lock out tag out procedures before servicing or replacing components.

Synergy Nano Example Wiring

[Diagram showing wiring connections and labels for X1 and X2, including logic outputs, digital inputs, analog volt I/O, and AC power supply.]
Synergy Micro Example Wiring
About the Synergy Controller Family
Tidal Engineering’s Synergy Controllers including the Synergy Micro 2, Synergy Quattro, and the ¼ DIN Synergy Nano provide state-of-the-art usability and connectivity for environmental test control and data acquisition. They combine the functions of a chamber controller and a data logger and are designed to improve test efficiency by supporting both factory automation and test and measurement protocols and standards.

Synergy Controller feature highlights includes:
- Color touch screen
- Ethernet, RS-232 and GPIB communications
- Built in 100 MB Data logger with USB drive support
- Data Acquisition, up to 64 T-type thermocouples (Optional)
- Built-in Web Server for remote control; WebTouch Remote™
- Compatible with Synergy Manager for PC based control, monitoring and programming.
- Built-in FTP Server for factory automation and test and measurement applications

For more information regarding these controllers please see the Synergy Controller Technical Manual on our website at http://www.tidaleng.com/synergy.htm

About Tidal Engineering
Headquartered in Randolph, NJ, Tidal Engineering Corporation has been designing and building award-winning embedded hardware and software for test and measurement and data acquisition applications since 1992. The company is recognized for technical expertise in such areas as environmental test chamber control, Embedded IEEE 488, and turnkey SCADA (Supervisory Control and Data Acquisition) systems.

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