

## Synergy Controller Frequently Used Commands



### Introduction

Tidal Engineering's Synergy Controllers, including the Synergy Micro 2, Synergy Quattro, and the 1/4 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. They are designed to improve test efficiency by supporting both factory automation and test and measurement protocols and standards. Offering the flexibility of multiple communication ports including Ethernet, GPIB, and RS-232 make these controllers perfect for today's changing testing environments.

The list below is a table of frequently used Synergy Controller commands:

<b>Setpoints and Process Variable Commands</b>	<b>Syntax</b>	<b>Example</b>	<b>Response</b>
Query Channel Process Variable	? Cn where n is the channel	? C1	25.0
Query Temperature (Chan.1)	? C1	? C1	25.0
Query Humidity (Chan.2)	? C2	? C2	50.0
Set Temperature Setpoint (Chan.1)	= SP1 n	= SP1 25.0	OK
Query Temperature Setpoint (Chan.1)	? SP1	? SP1	25.0
Set Humidity Setpoint (Chan. Chan.2)	= SP2 n	= SP2 50.0	OK
Query Humidity Setpoint (Channel 2)	? SP2	? SP2	50.0
<b>On/Off Commands</b>	<b>Syntax</b>	<b>Example</b>	<b>Response</b>
Turn Chamber ON	= ON	= ON	OK
Query Chamber ON state	? ON	? ON	0 or 1
Turn Chamber OFF	= OFF	= OFF	OK
<b>Event Output Commands</b>	<b>Syntax</b>	<b>Example</b>	<b>Response</b>
Set Event Output n ON	= EVENTS n, 1	= EVENTS 1, 1	OK
Set Event Output n OFF	= EVENTS n, 0	= EVENTS 1, 0	OK
Query State of Event Outputs	? EVENTS	? EVENTS	00FF0003
<b>Program Commands</b>	<b>Syntax</b>	<b>Example</b>	<b>Response</b>
Query Program State	? RUN PROFILE_STATE		
Load a Program	= FILEOPEN 1 "program-name"	= FILEOPEN 1 "Product1"	OK
Start a Program	= RUN	= RUN	OK
Start a Program at a specific line	= RUNFROM n	= RUNFROM 2	OK
Query Program state	? RUN 1= Run, 2 = Pause, 3 = Steady State	? RUN	1
<b>Alarm Commands</b>	<b>Syntax</b>	<b>Example</b>	<b>Response</b>
Check Status of Alarms	? ALM	? ALM	1,0,00000800
Acknowledge Alarms	= ACKALM	= ACKALM	OK

For a complete list of controller commands, download a technical manual from the following page on our website: [www.tidaleng.com/synergy.htm](http://www.tidaleng.com/synergy.htm)



## About the Synergy Family

Tidal Engineering's Synergy Controllers, the ¼ DIN Synergy Nano, Synergy Micro 2 and the Synergy Quattro 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 full 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 Embedded IEEE 488, and turnkey SCADA (Supervisory Control and Data Acquisition) systems.

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