

# Control Switch

# DT110/111



The Control Switch can be connected to the Nova5000, MultiLogPRO or TriLink data loggers.

The Control Switch connects to the same data logger input/output channel as the sensor and opens or closes an electrical circuit when the sensor passes certain predefined values.

- The black cords and plugs identify the Normally Closed (NC) Control Switch.
- The red cords and plugs identify the Normally Opened (NO) Control Switch.

## Typical Uses

- To process a heat source (as a simple thermostat)
- To open or close a light source according to the environmental light intensity
- To mark the turning point in titration, by opening a lamp upon passing this point

## Sensor Specification

<b>Maximum Switch Load:</b>	240 V and 3 A
<b>Data Logger Input Type:</b>	Digital
<b>Recommended Sensor Usage:</b>	Operate while the AC/DC adapter powers the data logger

## Technical Notes

- As this sensor is current consuming, it is highly recommended to operate it while the AC/DC adapter powers the data logger.
- The data logger must be in *8-inputs* mode when using the Control Switch sensor.



- The Control Switch sensor must always be used with the Splitter cable DT011 and an additional sensor.
- The Control Switch sensor must connect to the data logger's digital inputs only. These are the first or second inputs on the MultiLogPRO or TriLink and all inputs on the Nova5000.

## Using the Control Switch Sensor with the Nova5000 and MultiLab Software

1. Launch the MultiLab CE software.
2. Connect a Splitter cable to the Nova5000's sensor input (starting from I/O-1).
3. Connect your sensor (the additional sensor) to the Splitter cable output marked  $\updownarrow$ .
4. Connect the Control Switch sensor to the second splitter cable output, marked **S**.
5. Click **Setup** on the main toolbar.
6. Uncheck the **Auto Detect Sensors** checkbox.
7. Select the additional sensor from the relevant sensor input drop-down menu.
8. Program the data logger's sample rate from the **Rate** tab.
9. Program the number of samples from the **Samples** tab.
10. Click **Triggering** (on the **Samples** tab) to open the Triggering dialog:
  - a. Select the triggering sensor in the **Based on sensor** drop-down menu.
  - b. Select the triggering type: Select the **Control level** option.
  - c. Select the trigger level in the **Level** drop-down menu.
  - d. Click **OK**.
11. Click **Run** on the main toolbar to start the measurement.

## Using the Control Switch Sensor with the MultiLogPRO or TriLink and MultiLab Software

By default, MultiLab displays the velocity measurement.

1. Set the MultiLogPRO to be in *8-inputs* mode.
2. Launch the MultiLab software.
3. Connect a Splitter cable to the MultiLogPRO or TriLink sensor input (starting from I/O-1).
4. Connect your sensor (the additional sensor) to the Splitter cable output marked  $\updownarrow$ .



5. Connect the Control Switch sensor to the second Splitter cable output, marked **S**.
6. Click **Setup Wizard** on the main toolbar.
7. Select the additional sensor from the relevant sensor input drop-down menu.
8. Program the data logger's sample rate and number of samples.
9. Click **Triggering** in step 3 of the Setup Wizard to open the triggering dialog:
  - a. Select the triggering sensor in the **Based on sensor** drop-down menu.
  - b. Select the triggering type: Select the **Control level** option.
  - c. Select the trigger level in the **Level** drop-down menu.
  - d. Click **OK**.
10. Click **Run** on the main toolbar to start the measurement.

### **Technical Support**

Please contact Fourier technical support as follows:

Web: [http://www.fourier-sys.com/support\\_support.html](http://www.fourier-sys.com/support_support.html)

Email: [support@fourier-sys.com](mailto:support@fourier-sys.com)

Consult the FAQs before contacting technical support:

[http://www.fourier-sys.com/support\\_faq.html](http://www.fourier-sys.com/support_faq.html)

### **Copyright and Warranty**

All standard Fourier Systems sensors carry a one-year warranty, which states that for a period of twelve months after the date of delivery to you, it will be substantially free from significant defects in materials and workmanship.

This Warranty does not cover breakage of the product caused by misuse or abuse.

This Warranty does not cover Fourier Systems consumables such as electrodes, batteries, EKG stickers, cuvettes and storage solutions or buffers.