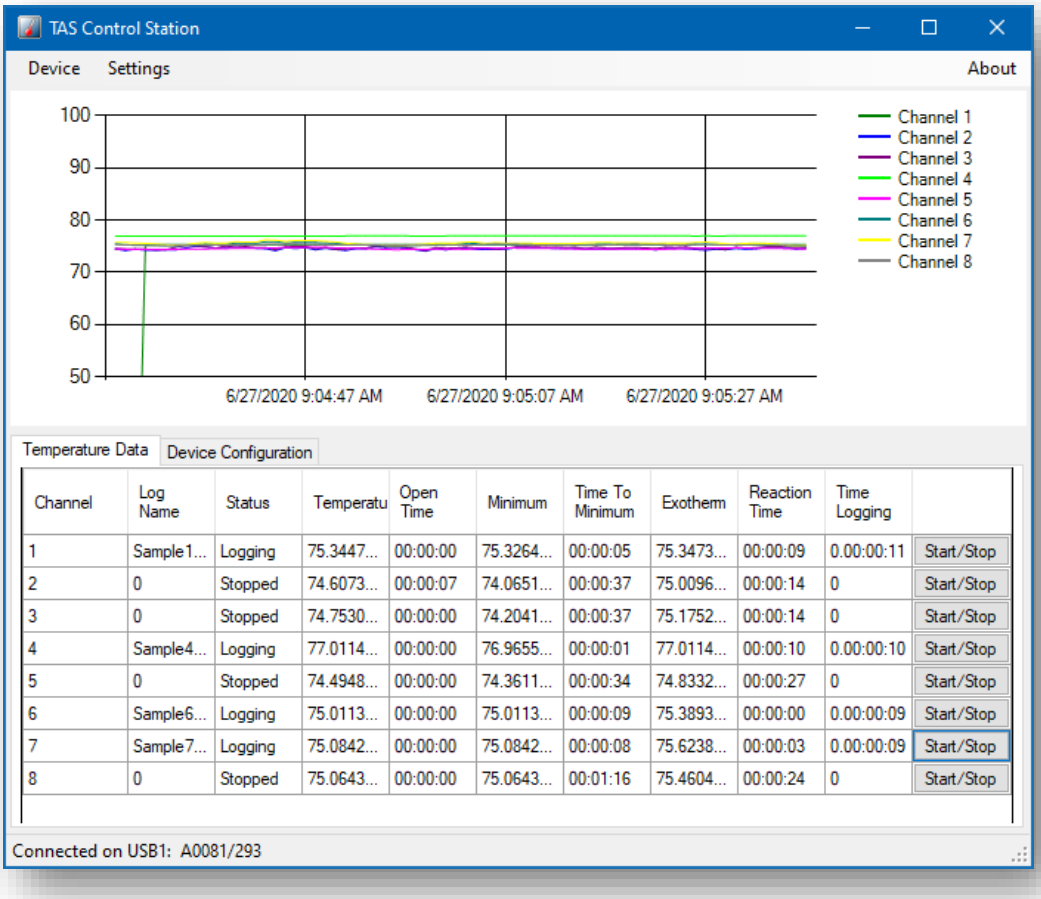
My Own Devices

# TAS-K 601

# User's Manual



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# Getting Started

## Windows 10

Step 1: Setup the software.

1) Insert the TAS Control Station software media or download the TAS Control Station software from the distribution site (https://www.myowndevices.us/downloads.html) and extract it.
2) Run the TAS Setup to install the TAS Control Station software.

Step 2: Setup the TAS.

1) Unpack the USB interface module with the included USB cable.
   *Note: The included USB cable is shielded and designed to provide the best operation for the interface module. Keeping that cable with the USB interface module will result in the best performance of the device.*
2) Plug the USB cable into the USB interface module.
3) Plug the other end of the USB cable into the computer.
4) Windows will detect the device and install the appropriate drivers.

Step 3: Start the software.

1) Launch the TAS Control Station software and begin using it.

## Windows 7

Step 1: Setup the software.

1) Insert the TAS Control Station software media or download the TAS Control Station software from the distribution site (https://www.myowndevices.us/downloads.html) and extract it.
2) Run the TAS Setup to install the TAS Control Station Software.
   a. *TAS Control Station Software depends on Microsoft .NET Framework 4.5.2. If this is not installed on the system, the TAS Setup will display a warning and allow you to download the update. The offline installer for this package is included on the disk (NDP452-KB2901907-x86-x64-AllOS-ENU). After the update installs the system may need to reboot before running the TAS Setup again.*

Step 2: Setup the TAS.

1) Install the USB drivers for the TC-08 devices.
   a. Open the driver's folder located where the TAS Setup was found.
   b. Launch the installer DPInst.
   c. Click to install.

d. When prompted to install the device software select Install (this might happen a few times).
e. Click finish to complete the install.

2) Unpack the USB interface module with the included USB cable.
*Note: The included USB cable is shielded and designed to provide the best operation for the interface module. Keeping that cable with the USB interface module will result in the best performance of the device.*
3) Plug the USB cable into the USB interface module.
4) Plug the other end of the USB cable into the computer.
5) Windows will detect the device and setup the appropriate drivers.

Step 3: Start the software.

1) Launch the TAS Control Station Software.
*Note: Especially the first time when connecting, Windows can take a few seconds to instantiate the device when it is not already in memory. The connection dialog may freeze during this time but will recover once the device is instantiated.*

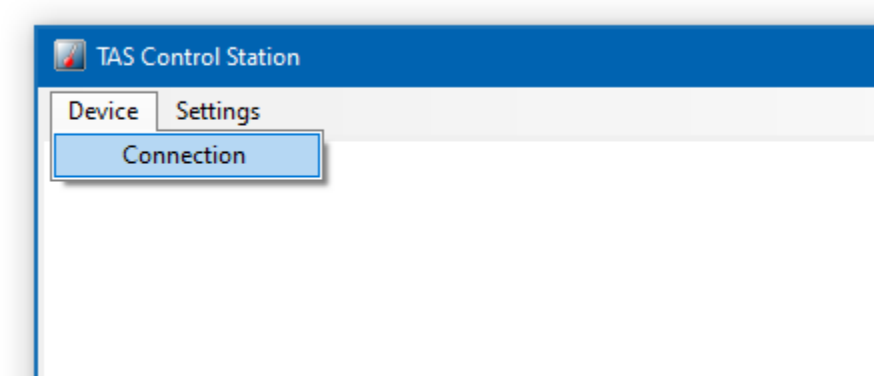
## Upgrading from a previous version of TAS Control Station

Step 1: Setup the software.

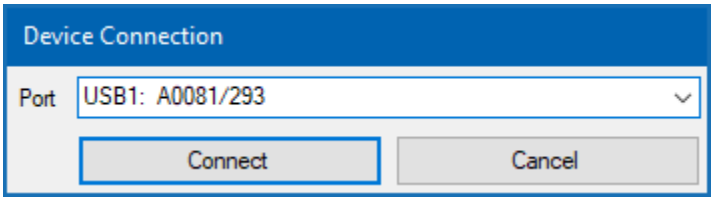
1) Insert the TAS Control Station software media or download the TAS Control Station software from the distribution site (https://www.myowndevices.us/downloads.html) and extract it.
2) Run the TAS Setup to install the TAS Control Station software.
3) Launch the TAS Control Station software and begin using it

## Connecting & Disconnecting

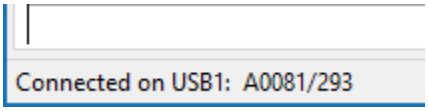
Connections are managed through the Device menu.




**Connecting** - Open the connection dialog and select the appropriate port identified by USB and the device ID/serial number which is located on the back of the interface modules at the bottom of the label. (Note: Windows can take a few seconds to instantiate the device when it is not already in memory so there may be a short delay in populating the port in the connection dialog).

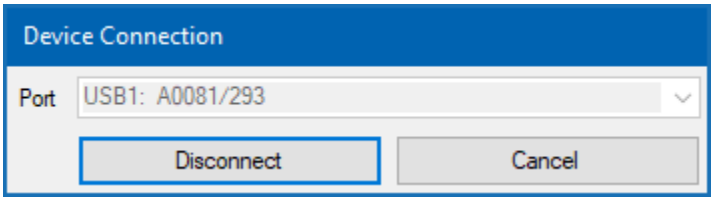



Click Connect and the connection dialog will attempt to connect to the device. If the device can connect the dialog will close and a connected status will be displayed in the status bar at the bottom of the TAS Control Station window. Once connected, the data tables and graph will begin displaying data from the device.

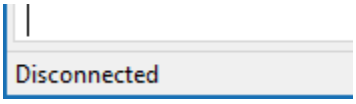



If the connection is not successful, after a few seconds an error message box will appear indicating that a connection was not made. The connection dialog will remain open to allow for selecting another port.

**Disconnecting** – Open the connections dialog. The port selection will be disabled leaving only the buttons to disconnect or cancel. Select Disconnect and the device will be disconnected.



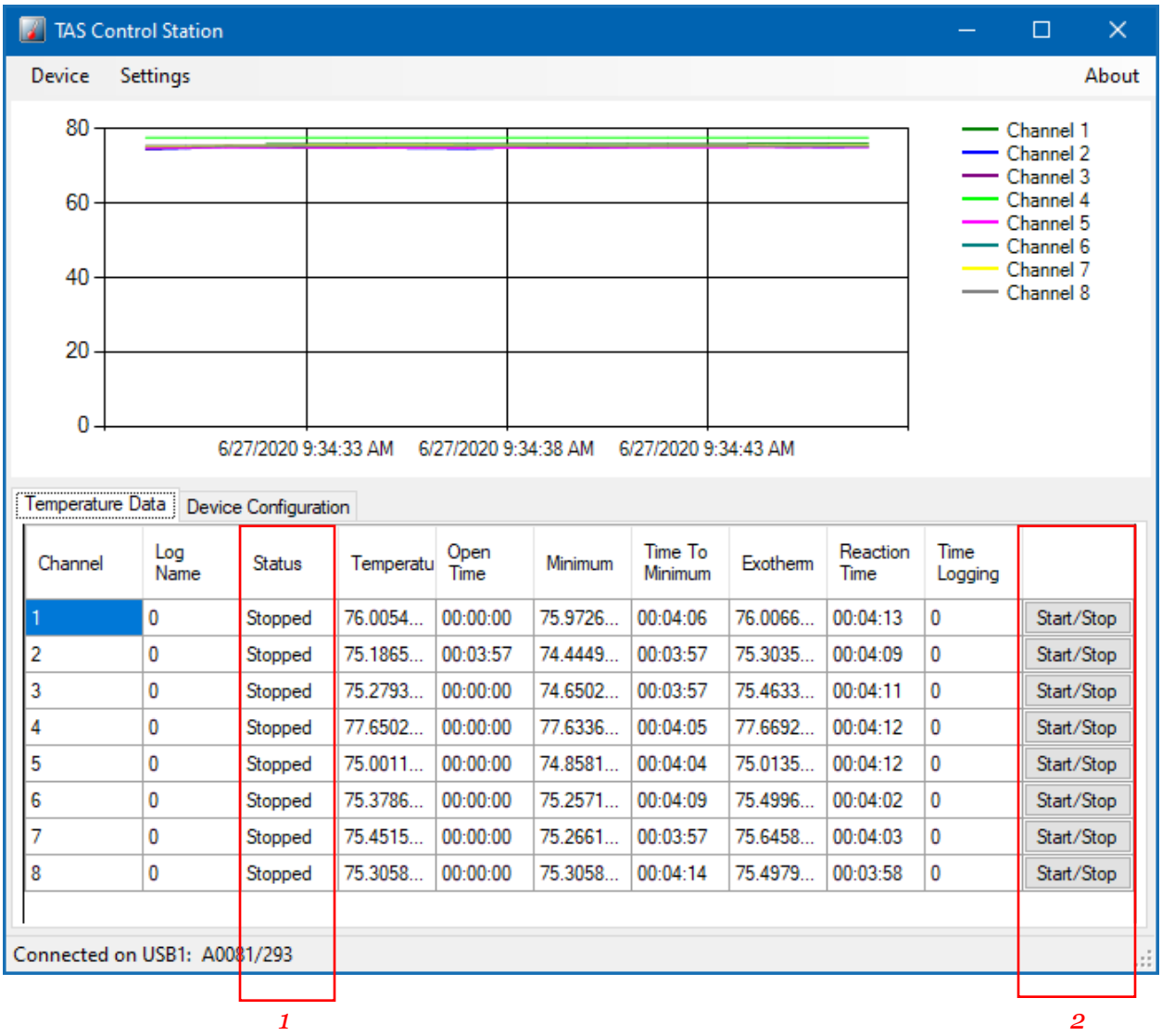

Once disconnected the status bar will be updated to indicate that it is disconnected.



## Sampling

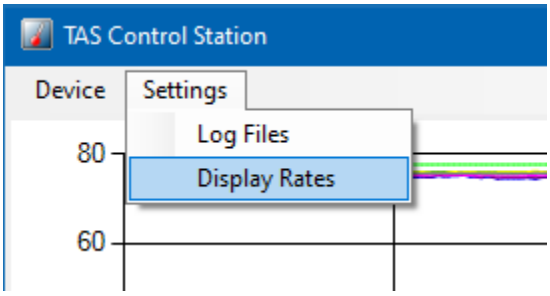
Sampling can be started and stopped via the TAS Control Software.

The Status column[1] of the temperature data display indicates if a channel is logging or if it is stopped. To start or stop sampling via the TAS Control Software click the Start/Stop button[2] located on the right side of the screen. This will create the log file and begin recording the data while also updating the display.

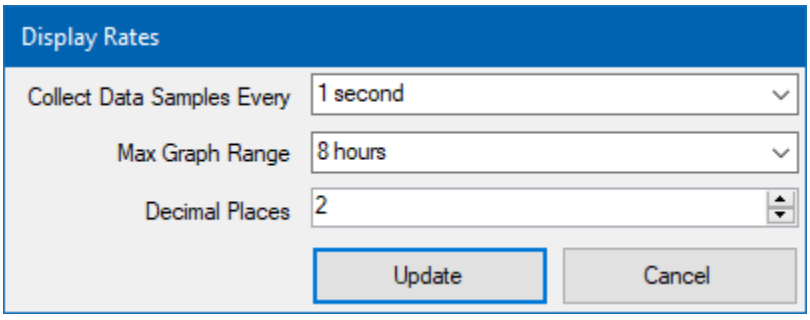


## Sample Rates, Display Rates, and Display Precision

TAS Control Station will sample a device on a regular basis and display a set window of data on the graph. This is setup per software instance (not per device instance) and must be setup before connecting to the device. To access the configuration dialog, select the Display Rates under the Settings menu.




There are two things that can be configured in the Display Rates dialog - the data collection rate and the graph range.




The data collection rate is used to determine how frequently to update the data on the screen and how frequently to log the data in the channel data log file (see log files for more information).

The graph range is a value to indicate the maximum information that should be displayed on the graph. The faster the sample rate and the longer the graph range the more memory utilized by the application to manage the data. The application may not reach the max for the graph if the computer running the software is not able to process that many sample points in a timely manner, such as points 1x a second for 24 hours. The data will still be logged to the channel data log file, but the graph range may be shortened to ensure the system can keep up at the desired logging rate. *(Note: if the machine is running slow or runs out of virtual memory, increase the sample rate, or decrease the graph range.)*

The decimal places represent the precision for the temperature values in the log file and on the displayed table. Numbers can be set to have 0-12 decimals of precision (however type K

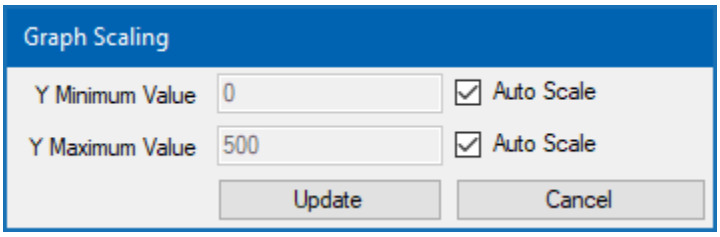
thermocouples typically include some variation based on the materials so 0-2 decimals is likely sufficient).

Once the appropriate display rates are set, click Update to make them the settings used by the program. Settings are retained for future use once they are set.

## Graphs

The X-axis range of the graph is controlled by the display rates (see sampling for more information). By default, the Y-axis is scaled automatically with the data. This can be configured at any time to select different scaling.

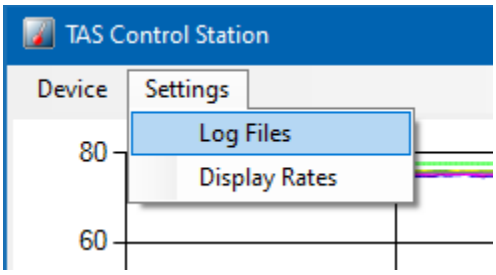
To change the Y-axis scaling on the graph, simply click on the graph and the Graph Scaling dialog will appear.



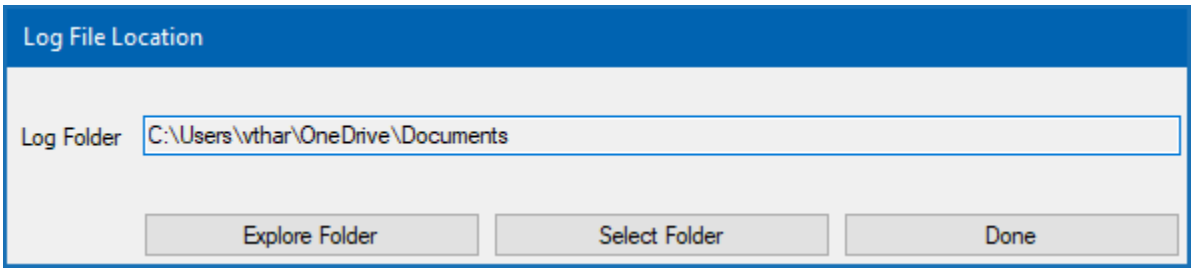

If the Auto Scale box is checked, the values cannot be manually changed, as the software will determine them automatically. Un-checking the Auto Scale will allow for a min or max axis value to be typed in. Once those values are correct, click Update and the graph will now use those axis values for scaling.

## Log Files

TAS Control Station will sample a device at a regular basis and store those samples in a log file for later reference/analysis. This is setup per software instance (not per device instance) and must be setup before connecting to the device. Once a device is connected, the path and link to the folder can be viewed, however, it cannot be changed. To access the configuration dialog, select the Log Files under the Settings menu.




If the dialog is opened while not connected to a TAS device the dialog will have the select folder option available, otherwise the select folder button will be disabled.

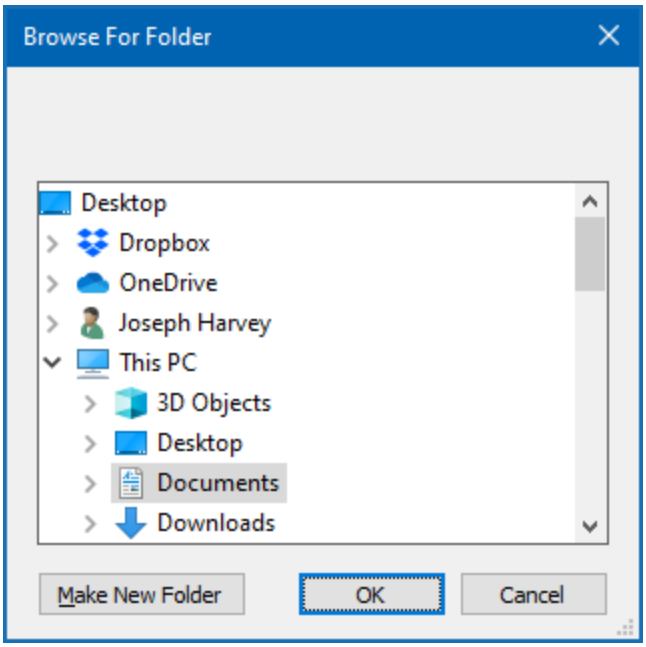



TAS log file names are generated automatically based on the sample name, date, and time. The files are placed in the selected folder. The folder will be used and remembered by the software from use to use, it should be noted that the folder permissions apply and thus one folder may be accessible by a user that another may not be able to access.

Done will update the system folder, if applicable, and close the dialog.

Clicking on Explore Folder will launch the Windows Explorer view of the log folder for quick access.

To change the folder location, click on the select folder button and the folder browser launches.

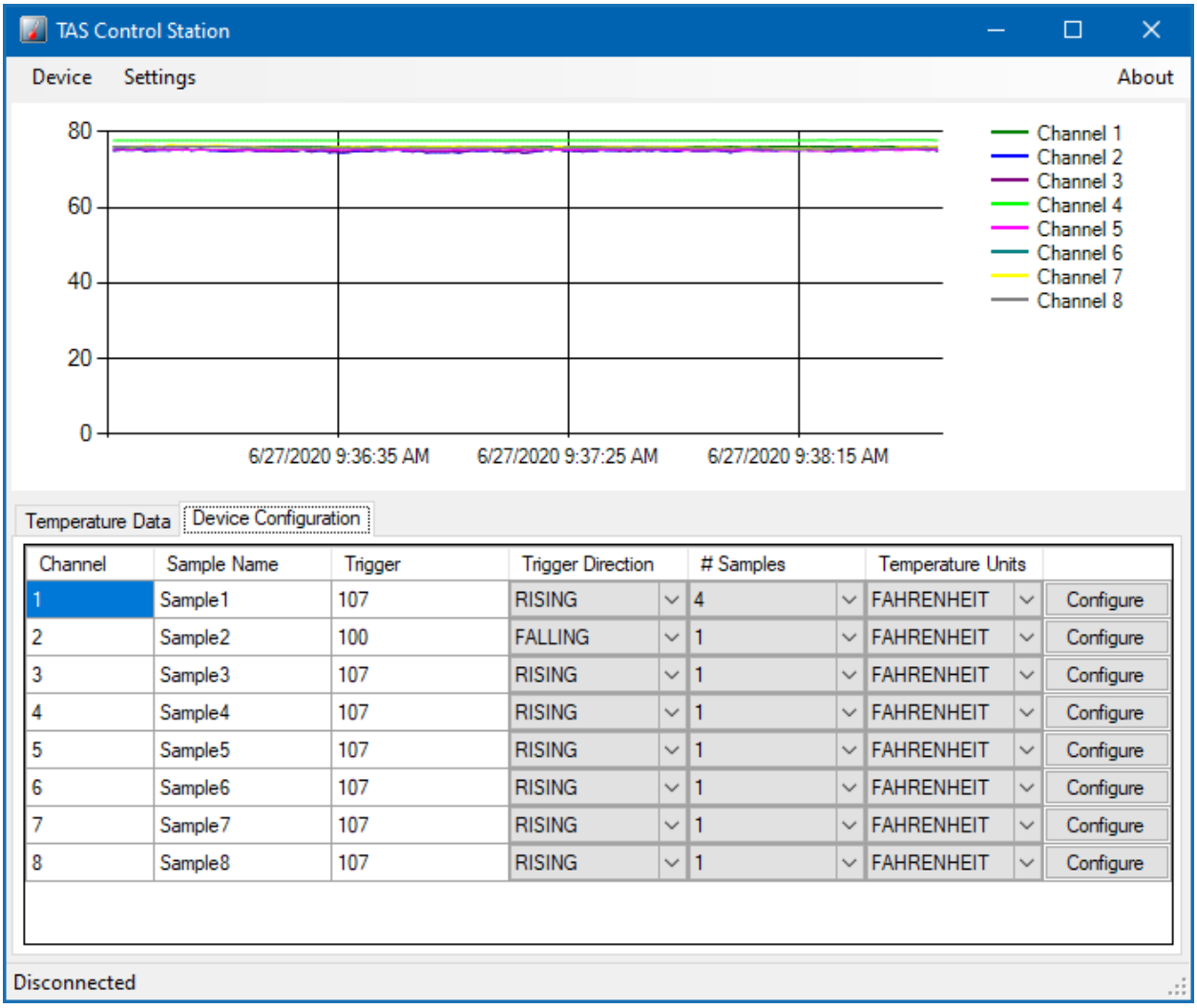



Navigate to the appropriate folder and select OK to select it.

*Application Note: Log files can potentially get large and be numerous, thus disk space may become a concern. Opening the log file folder and deleting log files that are not needed is highly recommended on a regular basis.*

## Device Configuration

The device configuration settings can be accessed via the Device Configuration tab on the main screen. Settings on this screen can be changed but cannot be applied if a channel is actively logging and a warning will be displayed. If this happens either wait to apply the changes later or stop the channel logging and apply the changes.




The sample name is a text description of the sample being tested. Trigger is the temperature at which to trigger based on the units the channel is configured to use. Trigger direction is to indicate if the device should trigger when the temperature rises above or falls below the trigger temperature. # Samples indicates how many samples should be applied to the filter to reduce noise or provide a smoother transition in temperature changes. # Samples is a moving average filter based on the rate of 1 sample per second.

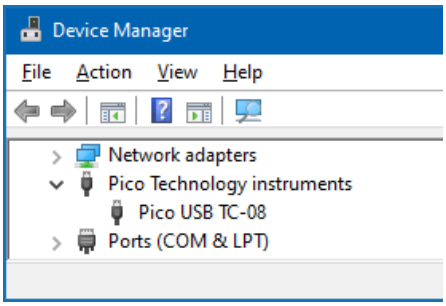
## Troubleshooting

*The connection dialog can hang for a few seconds when it is opened for the first time.*

Windows can take a few seconds to instantiate the device when it is not already in memory so there may be a short delay in populating the port in the connection dialog.

*The device does not show up in the port list.*

Check the Windows Device Manager and verify that the PICO USB TC-08 is connected and the drivers are loaded properly.




*Windows gives me an error that it is running low on virtual memory*

See the section on Sampling and Display Rates. Increasing the sample rate or decreasing the graph range will reduce the memory used by the application.

*The application seems to quit on occasion when running over night*

Windows 10 will wait until after “active hours” and then will apply updates and reboot automatically. The updates can be paused, or the active hours changed to prevent the automatic install of updates. Make sure to check with the local IT team to ensure the changes are made in accordance with the IT policy.

## Technical Support

The technical support information can be obtained from http://www.myowndevices.us/ or by e-mailing “Support@myowndevices.us”