

USB200 Series

High-Resolution USB Output Devices

Sensor Solutions Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

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TG1000-E

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Important Tips

Be sure that you have the latest version of SENSIT installed. Download it at <http://www.futek.com/sensit/download.aspx>

SENSIT release notes can be found on the SENSIT download page. See link above.

Have FUTEK USB device plugged into computer before starting SENSIT.

The 14-day free trial provides the Full Version of SENSIT for a period of 14 days. If a purchase code is entered, the Full Version will remain permanently.

Sensors with Teflon cables are more prone to wiggling out of their Hirose connections due to the stiffness of the cable. Practice caution when placing and moving these sensors.

LED indicators function as follows:

LED INDICATORS

Blinking blue (10 Hz)	Module Auto-Calibration
Blinking blue (1 Hz)	Module Normal Operation
Green	USB Power
Red	USB Data Link

Frequently-Asked Questions (FAQs)

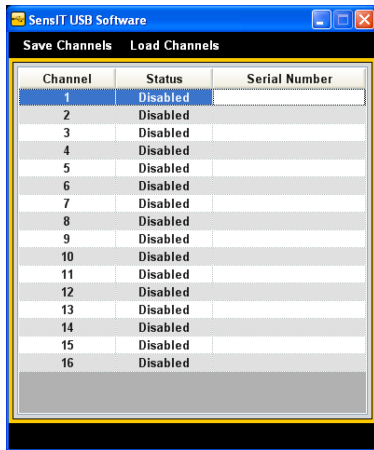


Figure 1

1. WHY IS THERE NO SERIAL NUMBER DISPLAYED?

If there is no serial number in the pull down menu when starting the software, check the following points below to troubleshoot the USB kit. (See figure 1.)

a. Was the software opened before the blue LED blinked slowly?

The calibration/initialization process occurs when the blue LED blinks rapidly during initial plug in of the USB kit. The serial number will not be displayed in the start up screen if the software is opened during this time. It can only be opened when the blue LED starts to blink slowly. This signifies that the calibration/initialization process has been completed.

b. Are all three LED's lit when plugging in the USB?

The green LED signifies that the USB kit is properly powered through the USB port. The red LED signifies that there is a USB connection between the USB kit and the computer. If the red LED is not lit, check Windows Device Manager to see if your computer has installed the proper device drivers for "USB Serial Converter". You may need to download the latest DLL from FTDI Chip: <http://www.ftdichip.com/Drivers/D2XX.htm>

The 1 Hz blinking blue LED signifies that the microprocessor is operating properly. Make sure the USB kit is plugged securely in the USB port. If all three LED's are not lit when plugging in the USB then the software will not initialize properly.

2. EVERYTHING INSTALLED CORRECTLY. WHAT ELSE COULD BE WRONG?

If the software has been installed correctly following the [Software Installation Guide](#) and the USB kit still is not being recognized, all it may take is a computer restart.

3. WHY DOESN'T ASCII OUTPUT WORK?

If the USB kit has been previously used with the SENSIT USB Software, it may be in "Command mode". Re-inserting the USB will perform a reset, disabling the command mode and activating the automatic ASCII output mode.

4. MY USB DEVICE WILL NOT RESPOND TO COMMANDS AFTER I CLOSE THE PROGRAM.

If any software communicating with USB closes unexpectedly, a reset will be needed for the USB device as it may be stuck in an unknown state. Unplug and re-plug the device to perform a reset.

5. WHY IS MY SOFTWARE "NOT RESPONDING" WHEN I PERFORM A DATA LOGGING TEST?

When the SENSIT USB software is in Data Logging Mode all of the computer resources are being used to take readings from the USB device. As a result, the software screen does not get updated, and will appear as if it is "Not Responding" (see Figure 2), which is normal. The data logging test will continue to run in the background for the time originally specified, and will display the results in the USB software at the end of the specified time.

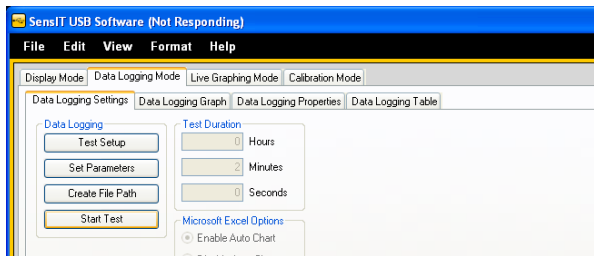


Figure 2

LabVIEW Tips

Be sure to have the DLL bit match that of your LabVIEW program. (i.e. 32-bit DLL for 32-bit LabVIEW)

In LabVIEW 2015, the FUTEK DLL must be in the same directory as LabView.exe.

You can get drivers from FTDIchip here:

<http://www.ftdichip.com/Drivers/D2XX.htm>

Potential Error Messages

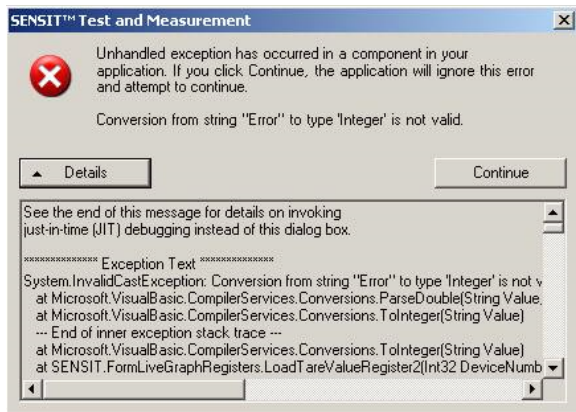


Figure 3

"Conversion from string "Error" to type 'Integer' is not valid."

If the USB instrument is unable to generate an ADC number from the sensor's incoming signal, the word, "Error," will instead be sent. SENSIT will generate this error when it receives the string word, "Error," instead of an integer number.

Possible causes would be if the internal USB instrument calibration was incorrect, and the instrument could not generate an ADC number, or if there was an issue with the signal from the sensor, such as noise or disconnection.

Potential Error Messages

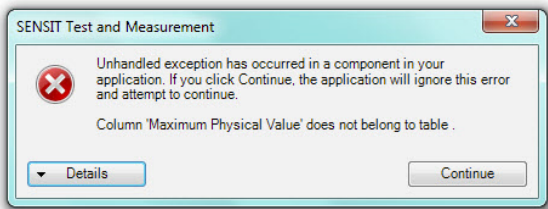


Figure 4

“Column ‘Maximum Physical Value’ does not belong to table.”

In a prior version of SENNIT, there was an issue with support for TEDS.

The issue has been solved and the latest version of SENSIT should be downloaded and installed.

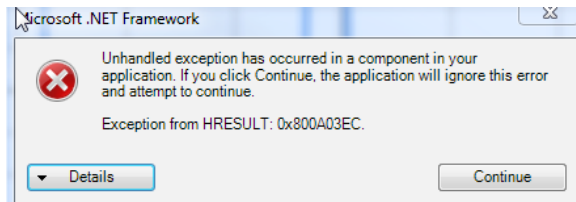


Figure 5

“Exception from HRESULT: 0x800A03EC”

This error message can come up during a test in SENSIT when SENSIT wants to export the information to Excel. There could be an issue if Excel is not installed, a limited version, or a click-to-run version downloaded from Microsoft. If your version of Excel is a click-to-run, an internet search of this version of Excel can provide more information.

Issue can be solved by saving the test results in .CSV or .TXT format, or downloading full version of Excel for click-to-run related errors.

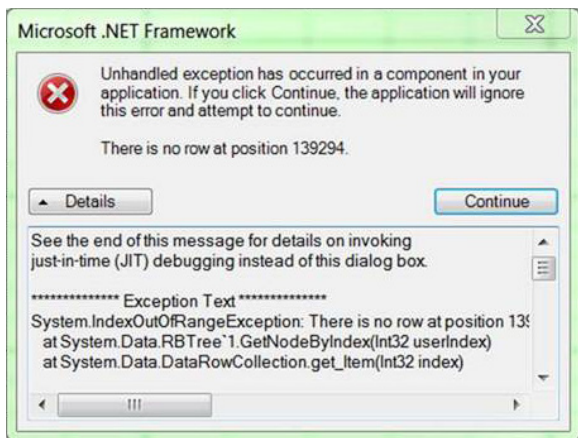


Figure 6

“There is no row at position XXXXXX”

This is caused by a threading issue during Live Graphing.

This issue has been resolved in later updates of SENSIT. The latest version should be downloaded and installed.

Technical Support

If you need to contact FUTEK Technical Support regarding your SENSIT Software issue, please have the following information available:

1. Version of the USB software you are using, and either full or limited version. (i.e. USB Software 2.0.0.0 Full Version.)
2. Microsoft operating system version, Microsoft Excel version, and operating language. (i.e. Windows 7 64-bit with Microsoft Excel 2010. English language.)
3. Description of what you were trying to perform in the SENSIT Software and when you received the error. (i.e. Live graph, beginning of test)
4. The parameters of any test you were trying to perform.

Also, please have the following if possible:

- A full copy of any error messages you are receiving.
- A full copy of the USB device parameters from ADDITIONAL INFORMATION in the HELP menu (see Figure 7 on next page). Both can be sent by email.

Additional Information

File

Additional Information

Sensor Properties Unit Conversions

Property Type	Property Name	Property Value
Software	Channel Number	1
Software	Display Mode	Tracking
Software	Tare Value	0
Software	Decimal Format	0.000
Software	Conversion Units	mV/V
Software	Linearization Mode	False
Software	Global Mode	False

Firmware	Sensor Identification Number	343690
Firmware	Type of Board	USB210
Firmware	Hardware Version	001
Firmware	Firmware Version	003
Firmware	Firmware Year	2010
Firmware	Firmware Month	April
Firmware	Number of Loading Points	1
Firmware	Unit Code	mV/V
Firmware	Decimal Point	0
Firmware	Direction 1	Compression
Firmware	Offset Load	0 mV/V
Firmware	FullScale Load	2 mV/V
Firmware	Offset Value	-21
Firmware	FullScale Value	33527
Firmware	ADC PGA Setting	Gain = 1
Firmware	ADC Sampling Rate Setting	1000 Samples Per Second
Firmware	Average Mode	Disable Average
Firmware	Average Setting	N/A

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Figure 7

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