

Quick start guide

**Everything you
need to know
about:**

GPS Configuration

This guide explains how to get started with GPS CONFIGURATION from Voyager Worldwide.

This guide includes a summary of the service, how it works, answers to questions you may have and other useful information.

Getting more help and support

For help and support, please email customerservices@voyagerww.com. Or you can contact your preferred Voyager Worldwide office from the options listed on the right. We will be pleased to help - 24/7.

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Introduction to GPS CONFIGURATION

Voyager GPS enables you to view your vessel's position in real time, overlaid on ENC's in Voyager PLANNING STATION.

To get started you need:

- Voyager PLANNING STATION version 7 or above installed on your PC.
- Voyager CONFIG application installed on your PC.
- GPS USB input – from a compatible NMEA USB device or USB GPS receiver. Please note: This must be purchased separately.

If you haven't already got Voyager PLANNING STATION installed, you'll need to do that first. Put the yellow Voyager PLANNING STATION Installation USB into the USB drive of your Voyager PC and follow the on-screen instructions. Further instructions can be found in your Voyager PLANNING STATION user guide.

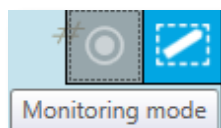
If you have got Voyager PLANNING STATION installed, but need to upgrade, then you can do so by contacting customerservices@voyagerww.com.

To get started with Voyager GPS you need to ensure your Voyager software has access to a GPS feed. You do this using the GPS CONFIGURATION application. The GPS CONFIGURATION application enables you to configure a GPS data input connected via a NMEA 0183 USB serial device or a compatible USB GPS receiver.

Once installed and a GPS input connected to your Voyager PLANNING STATION PC, the ship's position, heading, course and speed vector will be displayed and available in Voyager PLANNING STATION for back of bridge monitoring mode.

Voyager PLANNING STATION Monitoring mode:

This is an ON/OFF toggle control. When clicked, the map will centre and scale to the vessel position and will automatically follow and centre the vessel to keep it within view. If you move the map to a different location whilst this feature is toggled ON, the map will automatically centre and scale to the vessel position every 20 seconds until you toggle OFF.



Supported NMEA sentences are as follows.

Type	Definition	NMEA Sentences	Source Device
POS	Latitude/Longitude Position	GGA / GLL / GNS / RMC	GPS
COG	Course Over Ground	RMC / VTG	GPS
SOG	Speed Over Ground	RMC / VTG / VBW	GPS
ZDA	UTC Date & Time	ZDA	GPS
HDG	Heading Degrees	HDG	Compass
HDT	Heading Degrees True	HDT / VHW	Compass
HDM	Heading Degrees Magnetic	VHW	Compass
STW	Speed Through Water	VBW / VHW	Speed Log

Installing GPS CONFIGURATION

PLEASE NOTE: Voyager GPS CONFIGURATION must be installed on the same computer as Voyager PLANNING STATION.

Installing GPS CONFIGURATION is easy, but please note you will require Administrator rights on your PC/laptop for this installation to be successful. You may need to contact your IT team to arrange this. To find out how to check if you have admin rights see page 6.

If you have received the Voyager PLANNING STATION software on USB, simply follow the installation instructions in the box and click to install GPS CONFIGURATION from the menu options.

If you have downloaded the installer, you will see a file GPS Configuration_Setup.exe. Click on this to initiate the installation process.

Tick 'I agree to the Licence Terms' and click 'INSTALL'.

The installation should take less than a minute.

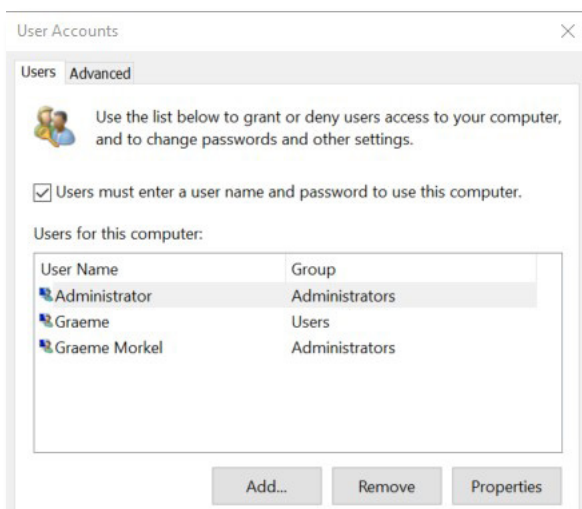
Press the blue **LAUNCH** button when it completes.

The installation process will add a new icon to your Windows desktop. Click this to run GPS CONFIGURATION at any time.

Administrator rights

To check if you have administrator rights on your computer, press WinKey+R, Type Netplwiz and press Enter.

In Windows, press WinKey+R, type Control Userpasswords2 and press Enter.



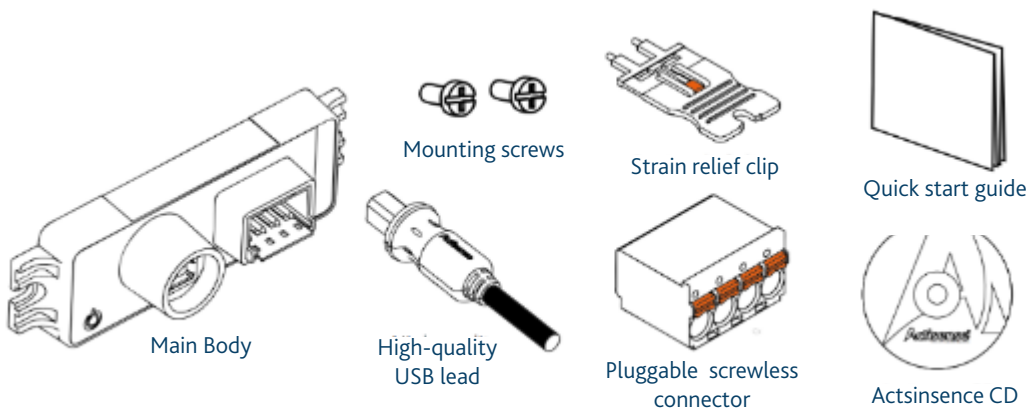
If "Administrators" is displayed in the Group column of your User Name, you have Administrator rights.

If "Administrators" is not displayed, you will need to contact the system administrator or IT department to grant you Administrator rights to complete the installation.

Getting started with the USG-2 USB to Serial Gateway

If you received the supported USG-2 USB to Serial Gateway device, then please refer to the following instructions. Alternatively, if you received a different device then please refer to the user manual supplied with your device.

In the USG-2 Box



Simple connection to a computer with no serial port

Laptop and desktop computers no longer come equipped with RS232 type serial ports. The USG-2 creates a fully isolated marine standard NMEA 0183 port from any computer USB port. This COM port appears on the computer system as a Virtual COM port, and so can be used with all standard marine navigation and display software such as Voyager PLANNING STATION.

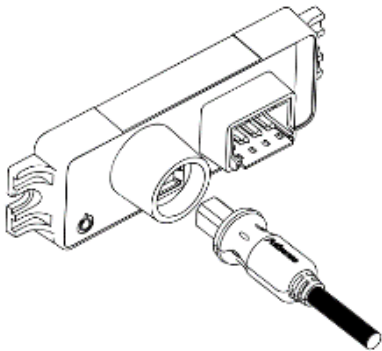
Installing USG-2 USB Device

Before getting started

The wire colours used in this user guide are in accordance with the NMEA 0183 specification (v.4.10, June 2012) and are for illustration purposes only.

Power Supply

The USG-2 is powered by the USB connection. Simply connect the USG-2 USB cable to the USG-2 device as shown below. Then connect to a USB port on the Computer where Voyager PLANNING STATION is installed.



Install USG-2 Device Drivers Automatically

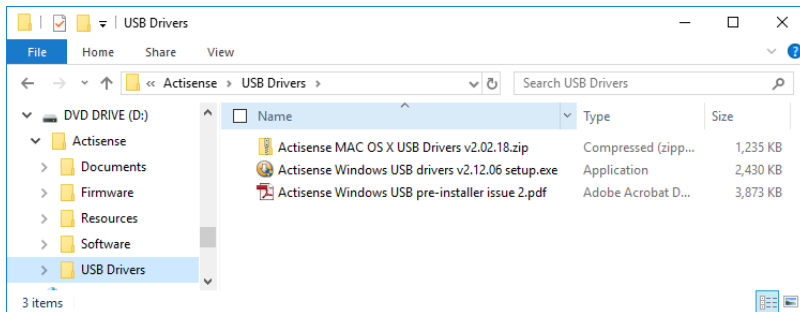
If an internet connection is present when the USG-2 USB device is first plugged in, the USB drivers will be downloaded and installed automatically.

Install USG-2 Device Drivers Manually

If no internet connection is present the first time your USG-2 USB device is plugged in, or if Windows doesn't automatically install the USB drivers, the drivers can be installed manually from the USG-2 CD provided.

NOTE: Ensure the USG-2 USB device is NOT plugged in before continuing.

1. Insert the USG-2 CD into the CD drive of the Computer that the USG-2 USB device needs to connect with.
2. Click 'Autorun' if the option is available.
3. If 'Autorun' doesn't appear, locate the USG-2 CD in Windows Explorer.
4. Browse to the DVD Drive:\Actisense\USB Drivers

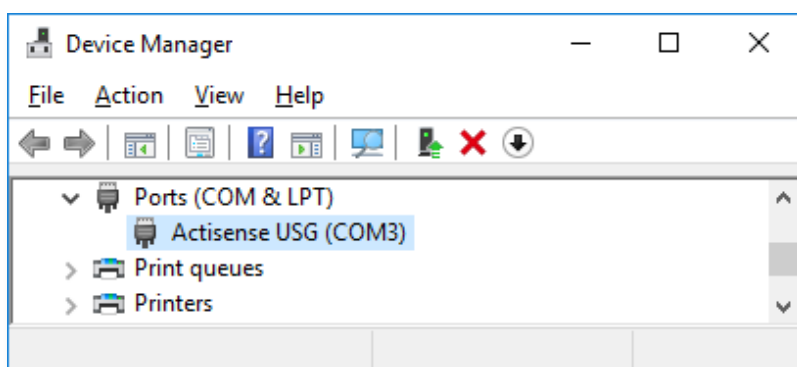


5. Double-click the latest available Windows USB Driver and follow the on screen instructions when prompted.
6. Once complete, plug in the USG-2 USB device to the computers USB port.

Check Device Manager for the allocated COM port number

To find out which COM port the device has been allocated, open Windows Device Manager by searching in the 'Start' menu or Press Windows+R on the keyboard, type devmgmt.msc and press Enter or click OK.

Expand the 'Ports (COM & LPT)' list. The Actisense USB device will be displayed with '(COM X)' (X refers to the COM Port number) next to it. Please make a note of this when configuring the GPS Configuration App.

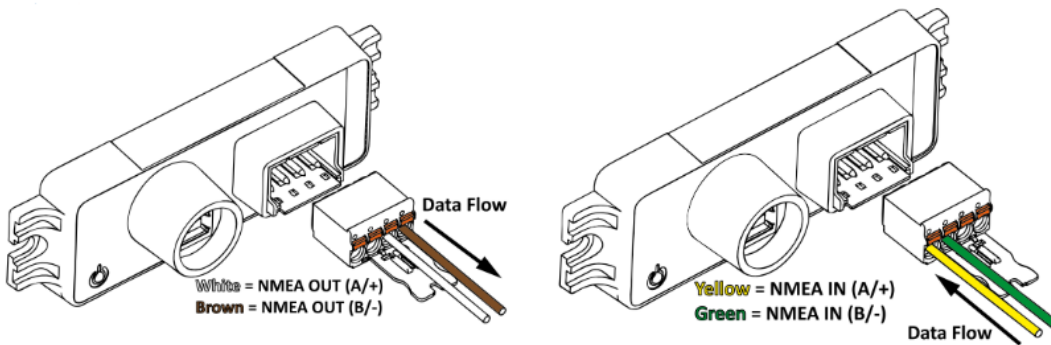


Connecting to GPS NMEA 0183 Devices

Identify the GPS NMEA output location. This will either be directly from the GPS device or from a NMEA multiplex distribution box located on the bridge. Run 2 or 4 core shielded signal cable from the GPS NMEA output to the USG-2 USB device.

Strands of wire must not be twisted before inserting in to the screwless connector, this will ensure a much more secure termination than if the

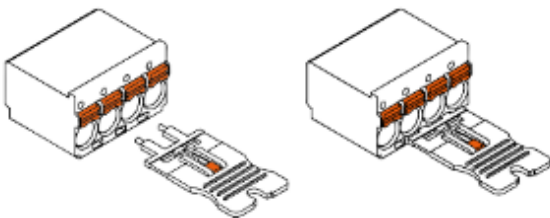
wires are twisted. A small flat headed screwdriver (2-3mm) is needed to press down on the orange buttons and open the terminal for the wires to be inserted or removed.



USG-2 Label:	Conects to:
Talker A/+	NMEA D183 Listener 'RX A+' or 'NMEA IN A/+'
Talker B/-	NMEA D183 Listener 'RX B -' or 'NMEA IN B/+'
Listener A/+	NMEA D183 Talker 'TX A+' or 'NMEA OUT A/+'
Listener B/-	NMEA D183 Talker 'TX B -' or 'NMEA OUT B/-'

Inserting the strain relief clip

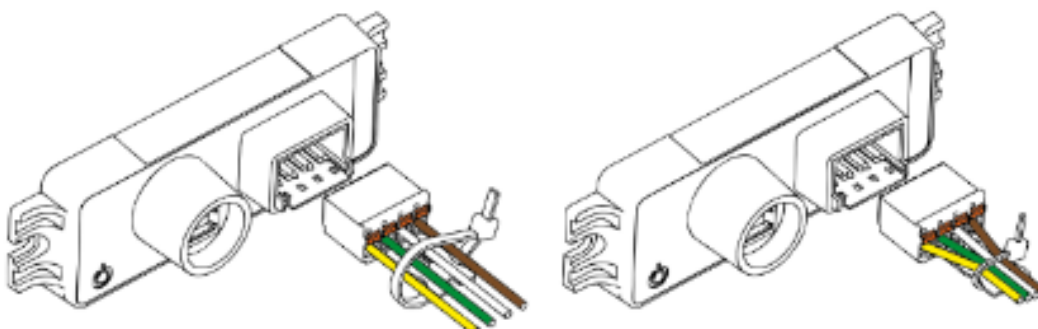
Once the strain relief clip is inserted it cannot be removed. Insert the strain relief clip on the left hand 'Listener' side.



NOTE: Use of the strain relief clip is optional, however, it is required to remove the screwless header from the screwless connector.

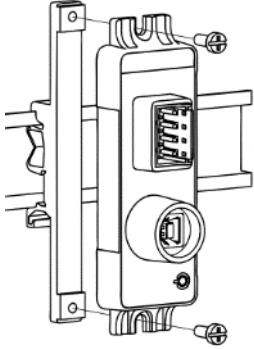
Securing data wires

To protect against vibration, wrap the supplied cable tie around the terminated wires and in-line with the groove on the strain relief clip. Pull the cable tie tight enough that it secures the data wires to the strain relief clip, but not too tight that it begins to crush the wire.

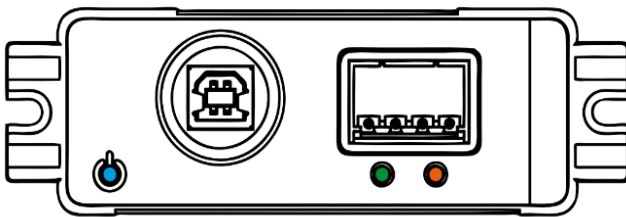


Mounting the USG-2

The USG-2 should be installed in a suitable protected location (e.g. below deck but close enough to connect to the Voyager PLANNING STATION PC) and where it will not come in to direct contact with water. The USG-2 can be mounted with or without a DIN rail. DIN rail mounts are sold separately.



LED Behaviour

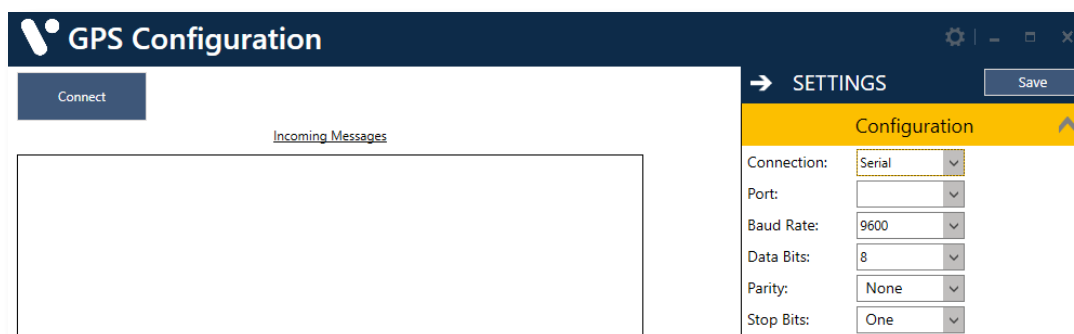


Type	Blue	Green	Orange
Name	Power indicator	Receive LED	Transmit LED
Function	Illuminates solid blue when USB driver has successfully loaded and USB port powered	Flashes to indicate data is being received on the USG-2 input	Flashes to indicate data is being transmitted on the USG-2 output

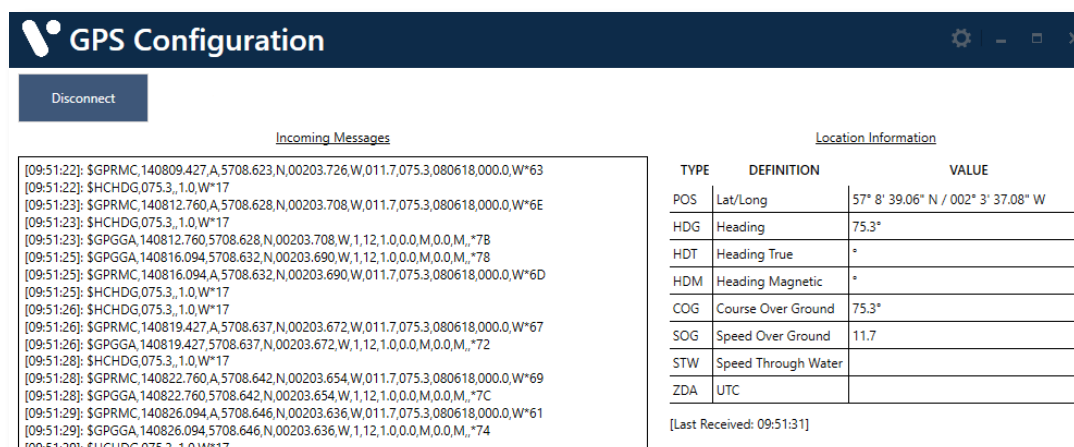
Setting up GPS CONFIGURATION

Once you have installed the USG-2 USB device, you will need to setup the GPS CONFIGURATION app to connect to your GPS Device.

1. Launch the GPS CONFIGURATION app and select the settings menu icon.
2. Select 'Configuration' and select the allocated COM Port number noted from Device Manager in the last section of this user guide.
3. Set the Baud rate of your GPS output configuration. The Baud rate is usually 9600 for GPS units but some units can use 38400.
4. Click 'Save' then click the Connect button.



5. You should now see the NMEA sentence data as per the following
6. If the NMEA sentence data looks to be valid and the location information is displaying correctly then you have now configured the GPS CONFIGURATION successfully.

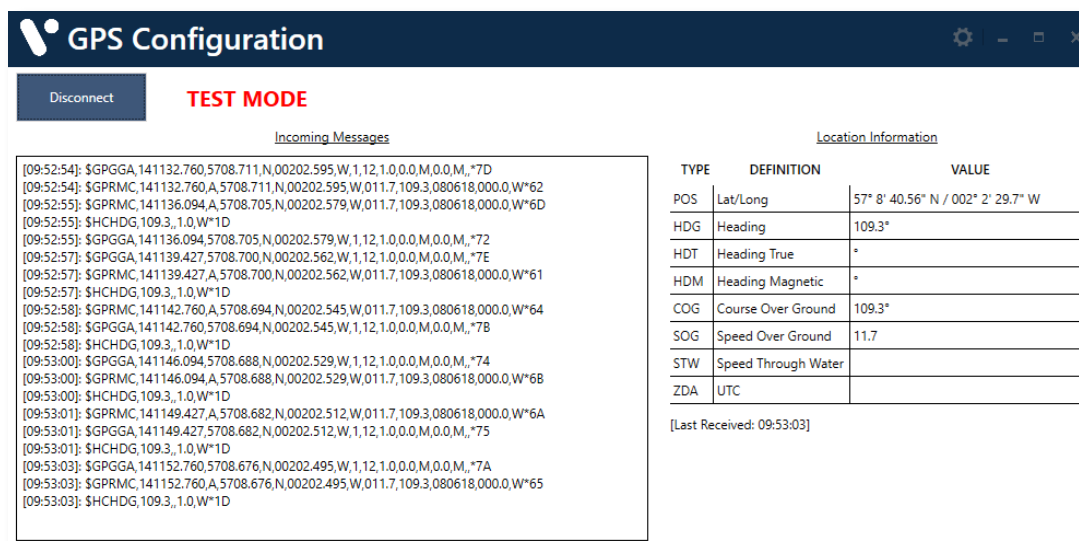


7. Now you can open Voyager PLANNING STATION to monitor your vessels position.
8. If there is no data feed, then please check the wiring and USG-2 device LED status.

GPS CONFIGURATION Test Mode

The GPS CONFIGURATION app has a Test Mode function to test the connectivity with Voyager PLANNING STATION.

1. Launch the GPS CONFIGURATION app and select the settings menu icon.
2. Select Configuration and click 'Enable Test Mode'.
3. This will run the application in TEST MODE.
4. Closing the application will disable Test Mode automatically.



The screenshot shows the GPS Configuration app interface. At the top, there is a 'Disconnect' button and a 'TEST MODE' indicator. Below this, the 'Incoming Messages' section displays a list of NMEA sentences. The 'Location Information' section displays a table of current GPS data.

TYPE	DEFINITION	VALUE
POS	Lat/Long	57° 8' 40.56" N / 002° 2' 29.7" W
HDG	Heading	109.3°
HDT	Heading True	*
HDM	Heading Magnetic	*
COG	Course Over Ground	109.3°
SOG	Speed Over Ground	11.7
STW	Speed Through Water	
ZDA	UTC	

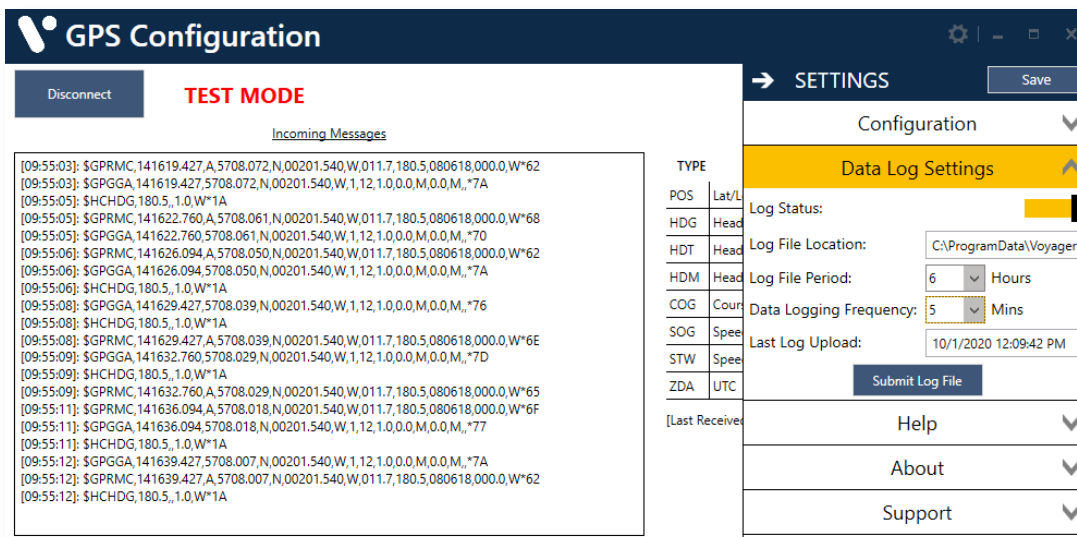
[Last Received: 09:53:03]

Enable Data Logging

The GPS CONFIGURATION app has the functionality to submit your GPS log file to the Voyager web server. **Voyager PLANNING STATION must be installed for this functionality as Voyager PLANNING STATION manages the data file upload.**

1. Launch the GPS Configuration app and select the settings menu icon.
2. Select Configuration and click 'Enable Test Mode'.
3. This will run the application in test mode.

Closing the application will disable Test Mode automatically.



NOTE: Data logging does not work in Test Mode.

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