

DEVICE PAIRING

Before using any CGX system, you must install the drivers for the wireless interface. Our data acquisition systems use one of two methods to establish a link to a computer. Mobile Series headsets use a proprietary USB dongle that requires the installation of a special driver.

All other systems use a standard Bluetooth connection which must be discovered by Windows and "paired" before usage.

MOBILE SERIES DONGLE

The Mobile-72 and Mobile-128 systems utilize a custom implementation of Bluetooth that bypasses the standard Windows drivers. The receiver dongle presents a USB-serial bridge using the FTDI chipset. Plug the dongle into your computer and Windows should automatically attempt to install the correct drivers. Verify the driver installation by checking the Device Manager for problems, marked by an yellow exclamation mark.

Manually Installing the FTDI Drivers

- 1. Download the FTDI driver here. Select the appropriate package for your platform (e.g., Windows 32-bit or Windows 64-bit).
- 2. Unzip the package in a temporary location.
- 3. Go to the Windows Device Manager and right click on the icon representing the Dongle.
- 4. Select "Update Driver Software."
- 5. Follow the instructions provided by the Wizard.
- 6. Use "Browse my computer for driver software."
- 7. Go to the temporary location where you previously unzipped the driver files.
- 8. Windows should now automatically complete the installation process.

For additional details, please refer to the guide published by FTDI <u>HERE</u>.

Usage

Because each system is permanently paired to a receiver dongle, the two will automatically discover and initiate a connection as long as both are powered on. Simply start the acquisition software, connect, and data should begin to stream momentarily. If, for any reason, the connection is lost (e.g., out of range, removed battery), the two will automatically re-connect when both are back in range.

Advanced Users - Optimize Data Transfer

If you are using CGX software to view and record data, you do not need to adjust any settings. For users of third party applications or developers that need to access the virtual USB-serial port directly, additional parameters need to be tuned to ensure proper data transfer.

We recommend setting the FTDI timer latency to 4 ms and the buffer sizes to 512 bytes to prevent data loss and/or lag.

STANDARD BLUETOOTH RECEIVER

QUICK SERIES, DEV KIT, AIM PHYSIOLOGICAL MONITOR

Many computers, especially laptops, come with a Bluetooth module built-in. If your computer does **not** have one, your system should have been supplied with a miniature USB adapter. If so, simply inserting the adapter into your computer's USB port will automatically install the correct drivers as they are built into Windows. Establishing a pair to your CGX system is similar to pairing with other Bluetooth products such as a wireless handsfree or keyboard/mouse:

- 1. Power on your device to make it discoverable.
- 2. Right-click on the Bluetooth icon in your system tray and click "Add a Device".
- 3. After a few moments, the name of your device will appear in the list. If you do not see it, make sure the device is turned on and repeat the procedure.
- 4. Hit "Next" and on most systems. Windows will automatically create a code and complete the process.
- 5. If the process does not automatically complete, click "Enter the device's pairing code." Enter the code '1234' and hit "Next" to complete the process.
- 6. The drivers for the Bluetooth Serial Port will automatically install. Note: you may also receive a warning that some drivers were not properly installed. This can be safely ignored since it is for the audio features of the Bluetooth module which is not used in our products.
- 7. Sometimes it takes two tries for Windows to successfully complete the pairing process.

For further details about using the Windows Bluetooth stack, please refer to HERE