

# VICON NEXUS

## Quick Start Guide for Blue Trident



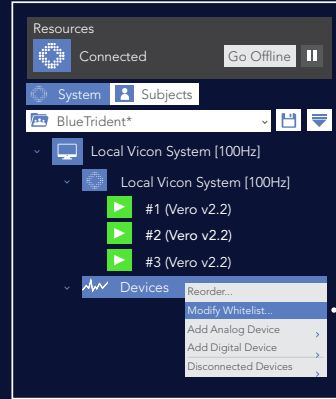
What's in the box?  
Bluetooth® dongle  
USB extender  
IMU alignment clip  
Beacon (optional)

### Prepare your hardware

- 1 Ensure the Bluetooth® dongle is plugged into the PC and drivers are up-to-date.
- 2 Ensure your Vicon IMUs are charged.
- 3 If you need to update IMU firmware, download and install Vicon Capture.U Desktop.



## 1. Connect sensors



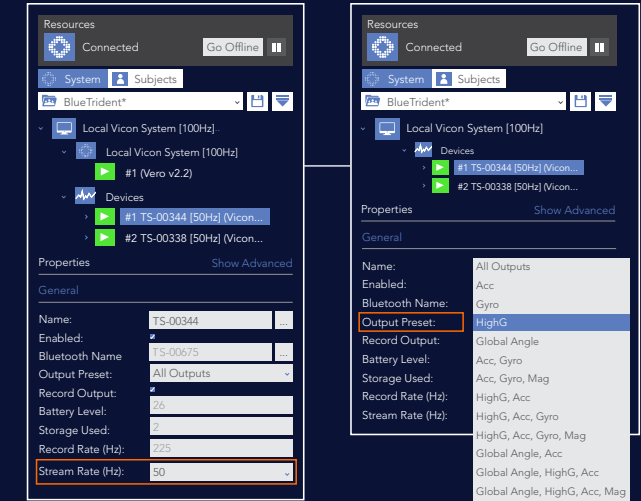
1 Start Nexus.

2 Specify the sensors that are detected by Nexus.

To do this, right-click **Devices** and then click **Modify the Whitelist**. Select the required sensors.

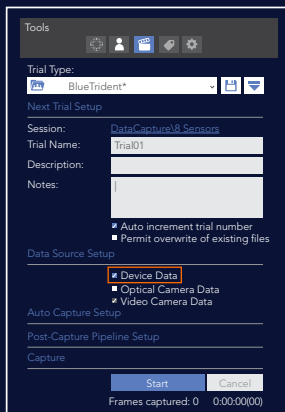
- 3 If needed, update sensor firmware to version 9x or later with with Capture.U Desktop (optional, see Capture.U User Guide <https://docs.vicon.com/display/IMU/>)

## 2. Stream live data



Set the desired **Stream Rate** and/or **Output Preset** (axes).

## 3. Capture Blue Trident data



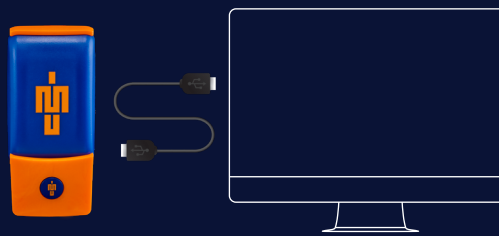
1 Go to the **Capture Tools** pane.

2 Enter the trial details.

3 Select **Device Data**. (in the **Data Source Setup** section)

- 4 To begin capturing click **Start**.
- 5 When finished click **Stop**. Streamed data is recorded and displayed as an .x1d file in **Data Management**.
- 6 To view streamed data load the x1d.

## 4. Connect the sensor(s) to the PC

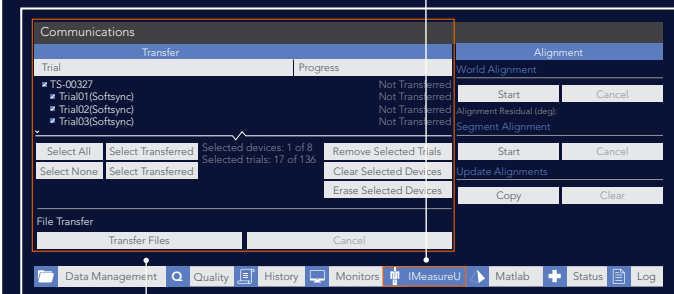


Connect the sensors to USB adapters and then to the PC via micro-USB cables.

## 5. Review trials to download

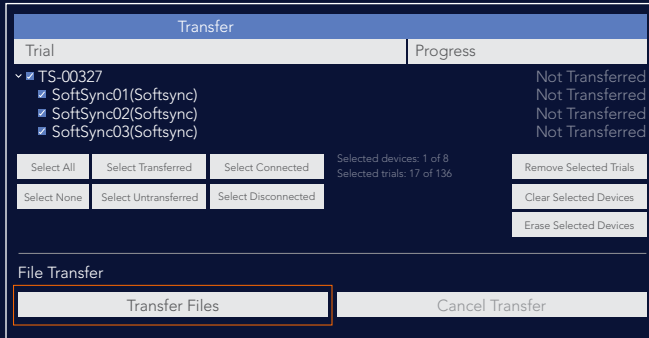
1 Go to the **Communications** pane.

2 Click the **IMeasureU** tab.



The **Transfer** pane displays a list of sensors and trials available to transfer.

## 6. Download Blue Trident data

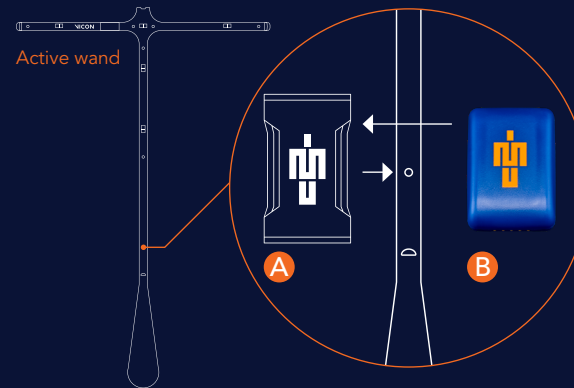


1 In the **Transfer** pane, select the required sensor and trials, and click **Transfer Files**.

2 After download from **Blue Trident** you can delete the data so you can free memory space  
(see Nexus User Guide <https://docs.vicon.com/display/Nexus210>)

## 7. Align Blue Trident and Vicon worlds

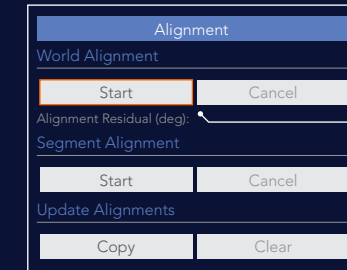
To align sensors to the Vicon world (optional), complete steps 7 to 11.



- 1 **Locate the hole** above the wand handle.
- 2 With the IMU figure upright, **attach the clip<sup>(A)</sup>** to the wand.
- 3 **Slide** the clip down so it sits securely in the hole.
- 4 **Insert** the Blue Trident sensor<sup>(B)</sup> into the clip<sup>(A)</sup>.

## 8. Align Blue Trident and Vicon worlds (continued)

- 1 In the **System tree** expand **Devices** node.
- 2 Select the sensor that is attached to the wand.
- 3 In the **Communications** pane, click the **IMeasureU** tab.



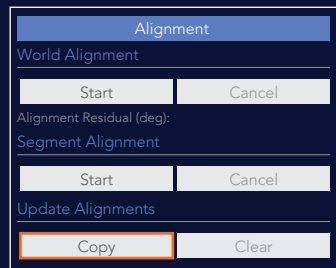
4 In the **Alignment** pane, under **World Alignment**, click **Start**.

- 5 Wave the wand in the capture volume for a few seconds.
- 6 Under **World Alignment** click **Stop**.

## 9. Align Blue Trident and Vicon worlds (continued)

To align any/all other Blue Trident sensors

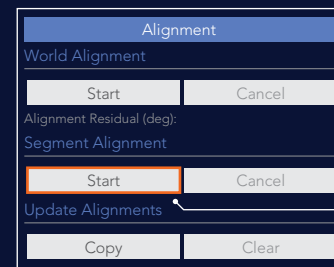
- 1 In the **System tree**, select the sensor that's now aligned with the Vicon world.
- 2 On the **IMeasureU** tab go to the **Alignment** pane.



3 Under **Update Alignments** click **Copy**. You can now attach this sensor to the required segment.

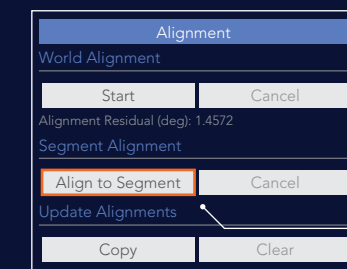
## 10. Align sensors with segments

- 1 In **Subjects Resources**, select the subject segment (e.g. Forearm).
- 2 To align the sensor, go to the **Alignment** pane.



3 In the **Alignment** pane, under **Segment Alignment**, click **Start**.

## 11. Align sensors with segments (continued)



1 Click **Align to Segment**.

- 2 For each sensor that you want to align to a segment, select the sensor, then repeat steps 10 and 11.

For regulatory information and other Blue Trident documentation, see the Vicon IMU documentation (<https://docs.vicon.com/display/IMU/>).  
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