CHECK IF YOU HAVE EVERYTHING

* Product contents may vary according to package type.

PN carrying case

Premium studio organizer bag

Neurons
USB cable × 2
Base glove for replacement
This quick start guide

Hub
Dual pogo-pin cable and prop cable
Reference card and warranty card
Body straps + Gloves
USB INTERFACE

- PERCEPTION NEURON® works in WIFI and USB mode. There are 2 mini USB ports on the Hub.

- For USB mode, use the upper port to link the Hub with your computer for data transmission and power supply. If more than 18 Neurons are used at one time, it is suggested to use the lower port for additional power supply by linking it with a USB power pack.

- For WIFI mode, use the lower USB port ONLY for power supply.
PREPARE YOUR WORKING ENVIRONMENT

- Setup your WIFI router.

• Keep Away From Magnetic sources.

Keep 10-100 cm (depending on the strength of the source) away from magnetic sources.

PERCEPTION NEURON® should not be used in an environment with strong magnetic interference. Using the system in such an environment introduces significant errors to the motion capture results. Exposing Neurons to such an environment for an extended period will cause sensor magnetization.
PUT ON THE GLOVE(S) AND / OR BODY STRAPS

- Plug Neurons into the glove(s) and / or body straps.

- Put on the glove(s) and / or body straps.

- Link the Hub with the glove(s) and / or body straps.
- It is suggested to start with modes with less Neurons.

  - Singe arm mode
    - 9-Neuron
  - Fullbody mode
    - Must have for this mode
    - Optional
    - 18-Neuron
LINK WITH COMPUTER - USB MODE

- Connect the Hub to your computer via the USB data cable.

- Start the AXIS NEURON™ software.

- Connect to the target device.
• Unplug the USB data cable and link your Hub with a USB power pack (5V / 2A). You should hear a long beep in 20 seconds which means the Hub is successfully linked with your computer.

• Connect to the target device.
• Unplug the USB data cable and link your Hub with a USB power pack (5V / 2A). You should hear a long beep in 20 seconds which means the Hub is successfully linked with your computer.

• Connect to the target device.
THE FOUR-STEP CALIBRATION

- Click on the Calibration icon.

- Perform the four-step calibration.

- Check your real-time mocap animation.
THE FOUR-STEP CALIBRATION

• A FOUR-STEP CALIBRATION procedure is needed before the motion capture session.

**Steady pose**
For Steady pose calibration, it is required to keep all sensors as steady as possible (no special requirement to the posture). Try to sit down, put your hands on a table or even take off the whole set of straps / gloves and put it on the ground if you have difficulty to keep steady during this calibration. You only need to do this calibration once until you re-allocated the Neurons on your body straps / gloves as this calibration removes the bias error bring by the connection between Neurons and the socket.

**A pose**
For A pose calibration, it is required to stand straight, make sure your arms are pointing down and your palms are facing to your body. The feet should be parallel to each other.

**T pose**
For T pose calibration, it is required to stand straight, make sure your arms are in the same height and your palms are facing down. The feet should be parallel to each other. If you are using your gloves with finger straps, make sure your thumb and other four fingers are in the right posture as shown in the diagram.

**S pose**
For S pose calibration, crouching down, make sure your legs are not open or close. The feet should be parallel to each other. Make sure your arms are in the same height and the palms are facing down.
# NEURON LED STATUS

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Hz Flashing</td>
<td>Connection between the Neuron and the sensor socket is not good</td>
</tr>
<tr>
<td>Breathing</td>
<td>Standby mode</td>
</tr>
<tr>
<td>20Hz Flashing</td>
<td>Working mode</td>
</tr>
<tr>
<td>0.3 Hz Slow flashing</td>
<td>Firmware update mode</td>
</tr>
<tr>
<td>Other status</td>
<td>Neuron malfunctioned</td>
</tr>
</tbody>
</table>

# HUB LED STATUS

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5Hz Flashing</td>
<td>Connecting to WIFI or server PC</td>
</tr>
<tr>
<td>Breathing</td>
<td>Standby mode</td>
</tr>
<tr>
<td>20Hz Flashing</td>
<td>Working mode</td>
</tr>
<tr>
<td>Quick flash 3 times and off for 3s</td>
<td>Sleeping mode</td>
</tr>
<tr>
<td>0.3 Hz Slow flashing</td>
<td>Firmware update mode</td>
</tr>
<tr>
<td>Other status</td>
<td>Hub malfunctioned</td>
</tr>
</tbody>
</table>
# BUTTON FUNCTION DEFINITION (BETA)

<table>
<thead>
<tr>
<th>Button</th>
<th>WIFI Connection (BETA)</th>
<th>Off-line mocap (BETA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red button</td>
<td>WPS (WIFI Protected Setup) / QSS (Quick Security Setup) pairing with router</td>
<td>Start / Stop recording</td>
</tr>
<tr>
<td>Black button</td>
<td>Pairing with server computer</td>
<td>Calibration</td>
</tr>
</tbody>
</table>