Tundra Tracker User Manual

Table of Contents

II Dongle

1 Quickstart Guide

- 1.0.1 How to set up Tundra Tracker

- 1.0.2 How to set up Super Wireless Dongle

I. Tracker

2 Tundra Tracker Driver installation

The latest driver of Tundra Tracker is distributed via SteamVR. Please make sure you use the latest beta version of SteamVR to update the firmware of Tundra Tracker.

2.1 Step1. Download SteamVR from Steam

You can find and install SteamVR here: https://store.steampowered.com/app/250820/SteamVR/

2.2 Step 2. (Optional) Choose "Beta" version of SteamVR

If you want to try the latest features, pleas select "beta" mode on SteamVR.

- Right click "SteamVR" on your Steam Library
- Click "Properties", go to the "Beta" tab, then select "opt in for beta" in the pulldown

2.3 Step 3. Update the firmware of Tundra Tracker

After pairing your Tundra Tracker with SteamVR, "i" mark will be shown on the icon of Tundra Tracker if a new firmware is available. Please choose "Update device" on SteamVR and follow the instructions.
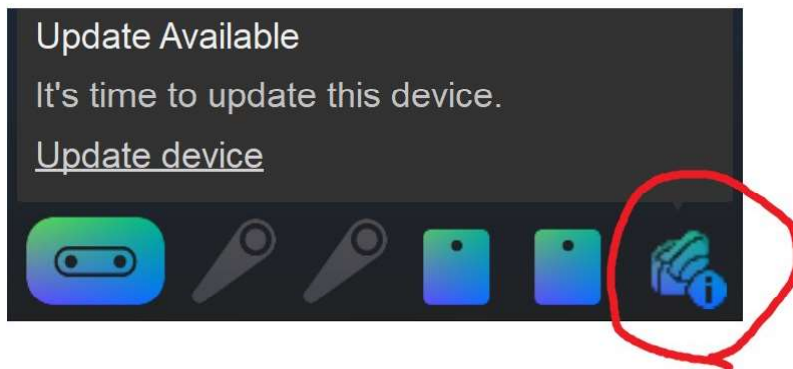
3 Wireless Pairing

3.1 Step 1. Charge the tracker with a USB cable

Charge your Tundra Tracker until its LED color gets green.

3.2 Step 2. Connect a dongle to your PC

A Tundra Tracker can be paired with one dongle connected to your PC.

3.3 Step 3. Turn the tracker on

Press the power button on top of the tracker until its LED turns blue.
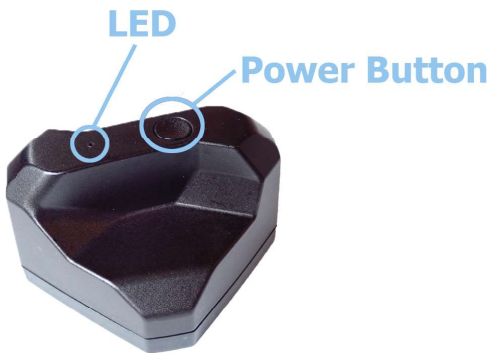
3.4 Step 4. Set SteamVR into pairing mode

On your PC, start SteamVR and select "Devices" -> "Pair Controller" -> "HTC VIVE Tracker" on its menu.

- "Devices" -> "Pair Controller"
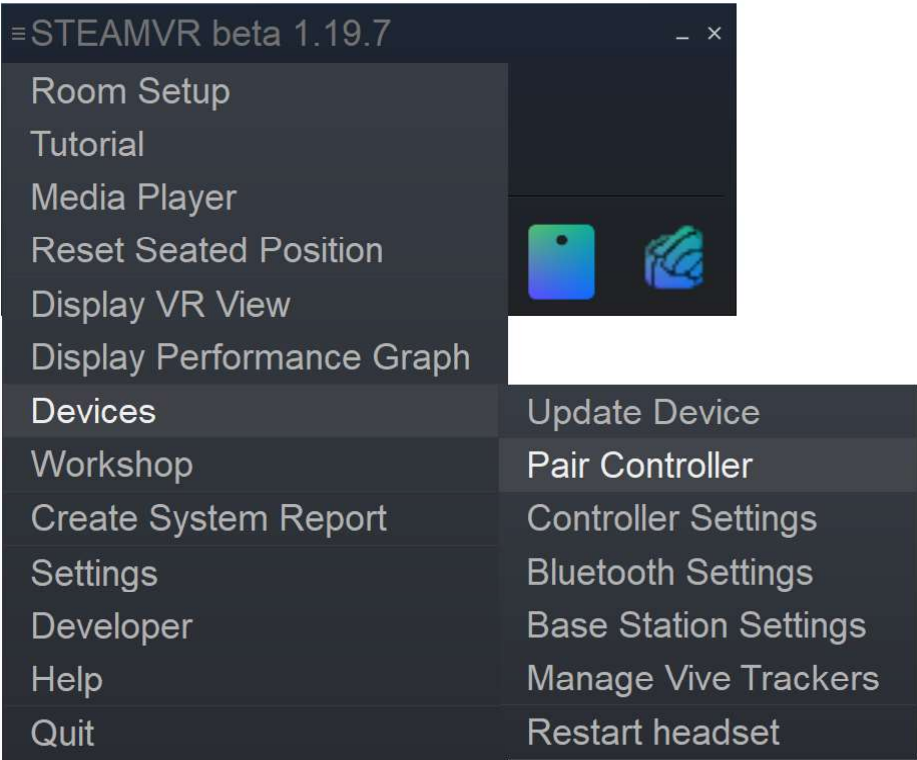
- "HTC VIVE Tracker"
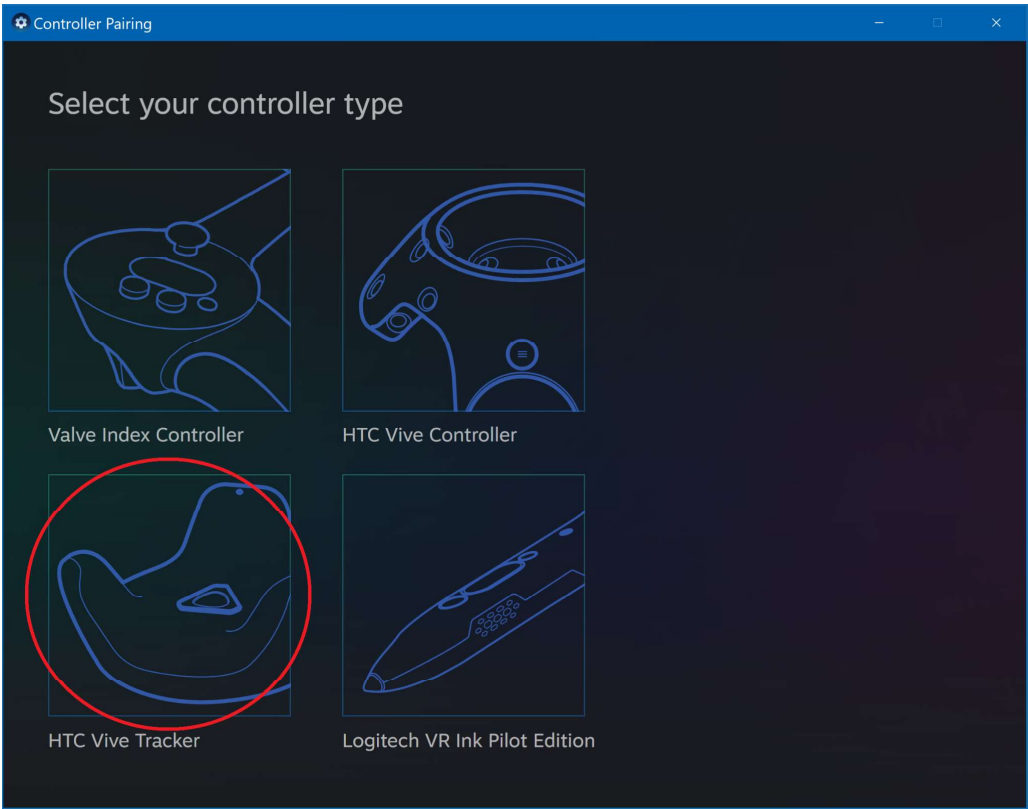
- Pairing Mode
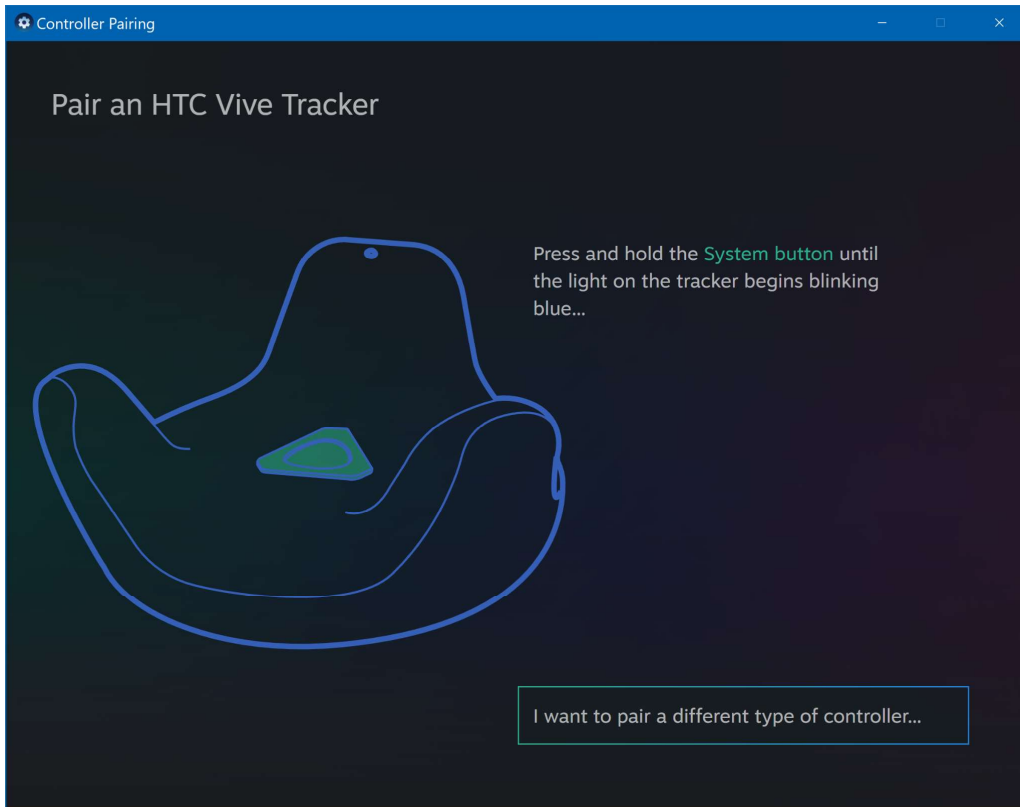
3.5 Step 5. Press and hold the power button of the tracker to pair

LED starts blinking in blue when it enters pairing mode. It turns green when it's paired with a dongle and Tundra Tracker's icon appears on SteamVR window.
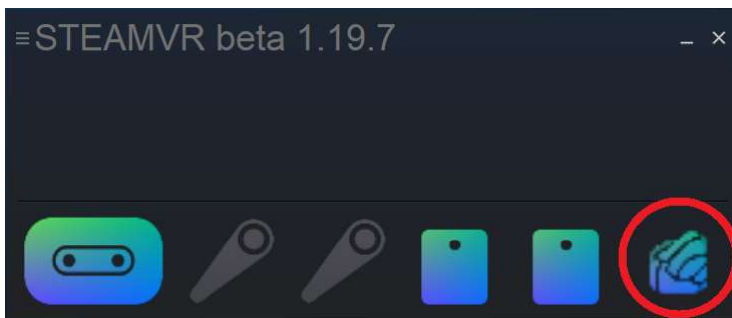
4 Connecting Tundra Tracker with USB

4.1 Step 1. Connect a Tracker to your PC by USB cable

With a USB A to USB C cable, plug a tracker into your PC. SteamVR will automatically recognize and start tracking the tracker.
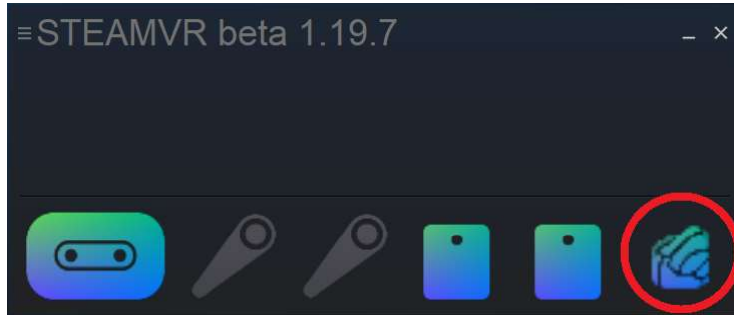
5 Tracker Hardware Specifications

5.1 Sensors

Tundra Tracker has 18 sensors as shown in the picture. Please avoid covering any of the sensors during use.
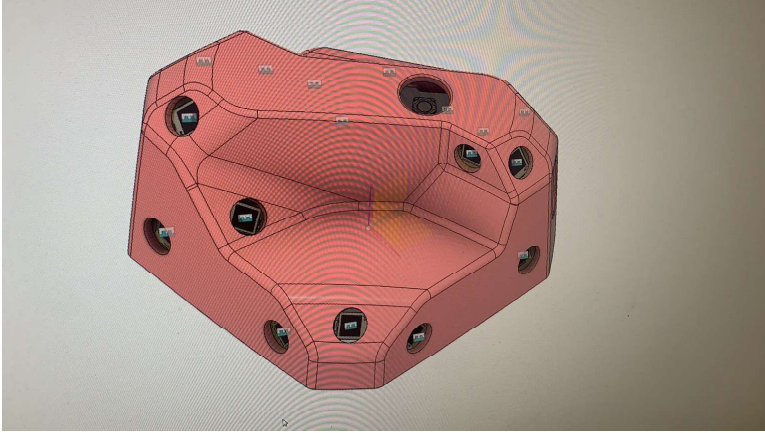
5.2 Where to place your label or sticker

If you want to affix your label or sticker on a tracker, please use the blue area in the picture, avoiding sensors inside.
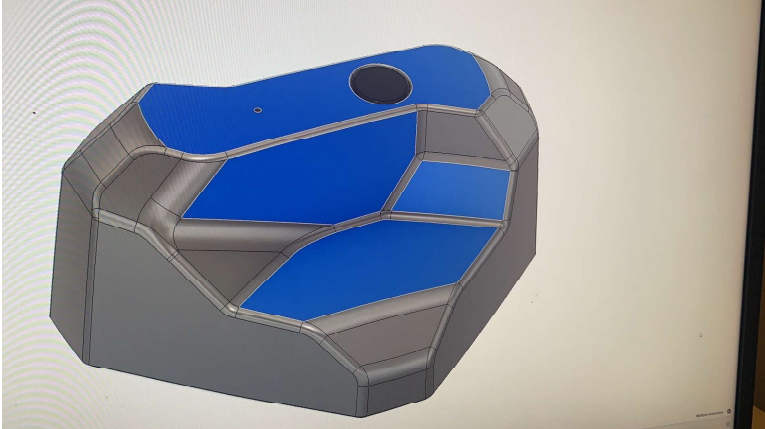
5.3 Base Plates

Tundra Tracker has two types of base plates.

- Base plate with ¼ inch female screw for camera mount and a hole for stabilizing pin:

- Base plate with strap loop (less than 1inch width):
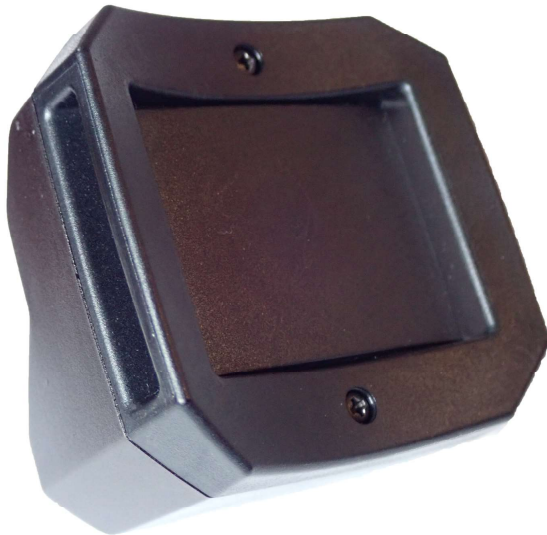
5.4 How to charge a tracker

Please connect a USB-C cable to a tracker, and the other side to your PC or USB wall charger.

5.5 LED status

- Blue: Power on, but not paired
- Blue (blinking): Pairing mode
- Green: Paired / Fully Charged
- Yellow/Orange: Charging

- Red: Battery is less than 5%

5.6 Battery Life

Tundra Tracker's battery will last for 9 hours on average.

5.7 Supported Dongles

- Super Wireless Dongle (SW3/SW5/SW7) by Tundra Labs

- Dongle for VIVE Tracker, VIVE Tracker (2018) and VIVE Tracker 3.0

- Dongle inside headset of HTC VIVE series and Valve Index

5.8 Supported BaseStation

- BaseStaion1.0 by HTC

- BaseStaion2.0 by Valve

6 Tundra Tracker Frequently Asked Questions

6.1 How can I update the firmware of Tundra Tracker?

The latest firmware will be distributed via SteamVR.

6.2 How many Tundra Trackers can be used at the same time?

Depends on how many other SteamVR devices you use and the network environment. You will find some useful tips here: https://forum.vive.com/topic/7613-maximum-number-of-vive-trackers-2019-with-a-single-pc/

6.3 Can Tundra Trackers be used along other brands of SteamVR Trackers?

As Tundra Trackers are SteamVR devices, you can use mixed trackers.

6.4 How long does it take to charge Tundra Tracker?

TBD

6.5 How long does a Tundra Tracker's battery last if it's fully charged?

At least 9 hours on average.

6.6 Does the temperature of Tundra Tracker get high after using it for hours?

No, we don't see any temperature increase on the surface of its base plate. Please do not cover the top of Tundra Tracker to keep tracking accuracy.

6.7 Where can I download the 3D model of Tundra Tracker?

TBD

6.8 Can I use a magnetic charging cable for Tundra Tracker?

Yes. Please use a USB Type C connector.

6.9 Can I use a silicone skin for Tundra Tracker?

No, we do not recommend using a silicon skin as it will cover chips for tracking inside Tundra Tracker.

6.10 Where shall I contact if my tracker is dead or broken?

TBD

6.11 List of software supporting Tundra Tracker

- VRChat (3 trackers supported as of September 2021)
- NeosVR (up to 11 tracking points)
- Virtual Motion Capture
- Virtual Cast

... and more!

6.12 Can tundra Tracker be used with Oculus Quest or Oculus Quest 2?

TBD

7 Tundra Tracker Compliance Information

Tundra Tracker has compliance certification for the following regions: Australia, New Zealand, European Union (CE), United Kingdom, United States (FCC), Canada (ICED), Japan (TELEC), South Korea

Country / Region	Model: Tundra Tracker
Canada	IC: 27820-TT1
Japan	TBD
South Korea	TBD
United States of America	FCC ID: 2ASXT-TT1
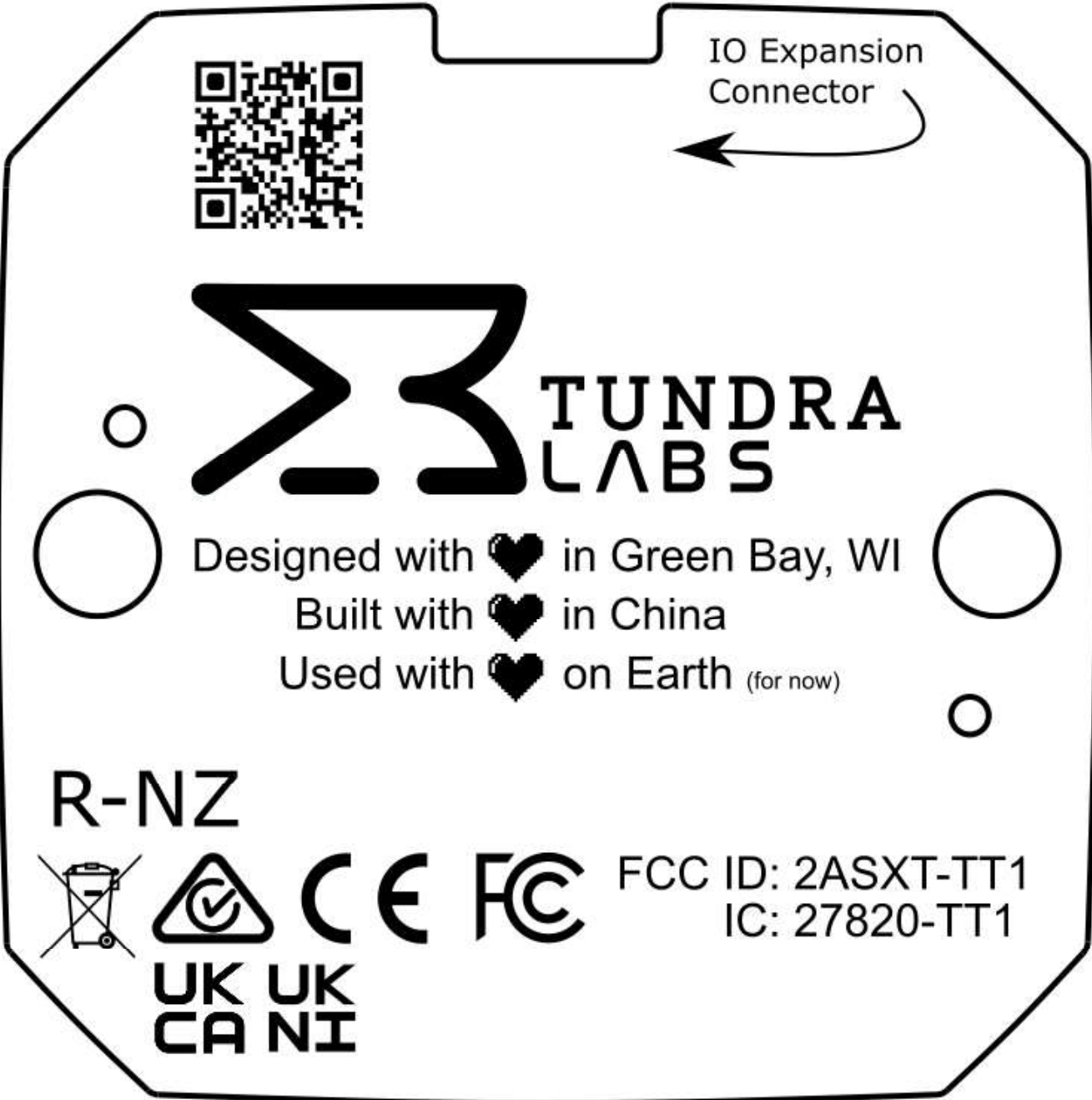
Description	Value
Operating frequency range of the antenna:	2400MHz-2500MHz
Operating frequency band:	2400MHz-2483.5MHz
Operating frequency range of your product:	2402MHz-2480MHz

7.1 **FCC - Regulatory Notices**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

7.1.1 Permitted Antenna

This radio transmitter has been approved by the FCC to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Frequency Range	Type	Max Gain
2400MHz to 2500MHz	PCB Patch Antenna	2.5dBi

7.1.2 Class B device notice

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

7.2 ISED - Regulatory Notices

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with ISED license-exempt RSS(s).

Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

7.2.1 Permitted Antenna

This radio transmitter has been approved by the ISED to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Frequency Range	Type	Max Gain
2400MHz to 2500MHz	PCB Patch Antenna	2.5dBi

7.2.1.1 Distance

There is no limitation as to which distance can be used from the human body.

7.2.2 CAN ICES-003 (B)

This Class B digital apparatus complies with Canadian ICES-003.

II. Dongle

8 Dongle Quickstart

8.1 Step 1: Connect a dongle to your PC.

Plug in your dongle to the USB port of your Windwos PC.

9 Dongle Hardware Specifications

9.1 LED status

- TBD

9.2 Supported Trackers and Controllers

- Tundra Tracker

- VIVE Tracker, VIVE Tracker (2018) and VIVE Tracker 3.0

- VIVE Controllers and Valve Index Controllers

- Other controllers for SteamVR

9.3 Supported BaseStation

- BaseStaion1.0 by HTC

- BaseStaion2.0 by Valve

10 Dongle Frequently Asked Questions

10.1 How can I update the firmware of Super Wireless Dongle?

The latest firmware will be distributed via SteamVR.

10.2 Where is the best placement for the dongle?

The dongle is sensitive to interference, so ideally place it "in view" of your Trackers (Not at the back of your computer), a top or front USB port is recommended. If you are using a Valve Index, the Headset "frunk" is a great spot for your dongle.

10.3 How many Trackers and Controllers can be paired at the same time?

3 devices can be paired with SW3, 5 devices can be paired with SW5 and 7 devices can be paired with SW7.

10.4 Can I place my SW dongle inside the Frunk of Valve Index?

SW3 and SW5 - yes. As for SW7, we do NOT recommend users to place it inside the Frunk as it may get overheated.

10.5 Where shall I contact if my Dongle is dead or broken?

TBD

11 Super Wireless Dongle Compliance Information

Country / Region	**Model: Dongle McDongleface
Canada	IC: 8017A-MDBT50Q
Japan	R 018-180280
Taiwan	NCC CCAM18LP0820T7
South Korea	R-C-ryt MDBT50Q
United States of America	FCC ID: SH6-MDBT50Q