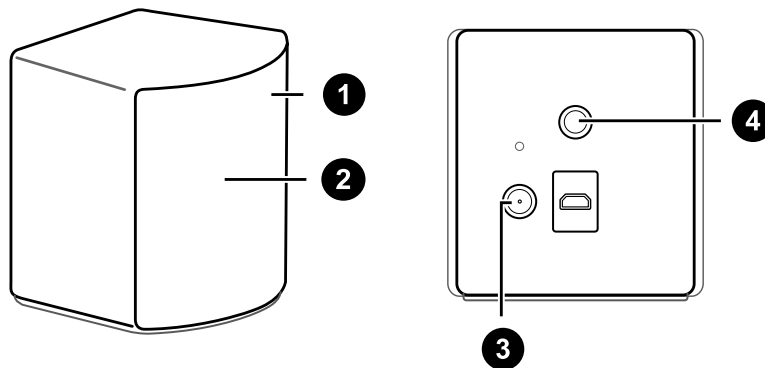# Base stations

About SteamVR Base Station 2.0

To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

- The base stations beam signals to the headset and controllers. Do not cover the front panel with any material.
- When the base stations are turned on, they may affect some nearby infrared sensors, such as those used by an IR TV remote control.

1	Status light
2	Front panel
3	Power port
4	Threaded mounting hole

- Do not attempt to pry open the base stations as doing so could injure you or damage the product.
- If the front panel is cracked or damaged, stop using the base stations and contact HTC Support.

Installing SteamVR Base Station 2.0

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Before installing the base stations, decide first whether you want to set up a room-scale or seated/standing-only play area. See Planning your play area on page 58.

> - Make sure that the base stations are installed outside the play area and securely set up from being accidentally struck, dropped, or bumped to avoid damage or compromised performance.
> - Remember to peel off the protective film from the front panel after you've mounted the base stations.

1. Mount the base stations diagonally at opposite corners of your space and near power outlets.

   For details on how to use the mounting kit, see Using the mounting kit on page 46.

   You can also use tripods, light stands, or cargo poles when mounting the base stations, or even place it on stable book cases. Just avoid using unstable mounting solutions or surfaces that are prone to vibration.

2. Adjust the base stations so that the front panels are facing toward the center of the play area.

3. Attach the power cables to the base stations, and then plug each of the adapter into a power outlet to turn them on.

> Use only the power cables and adapters that came with your base stations.
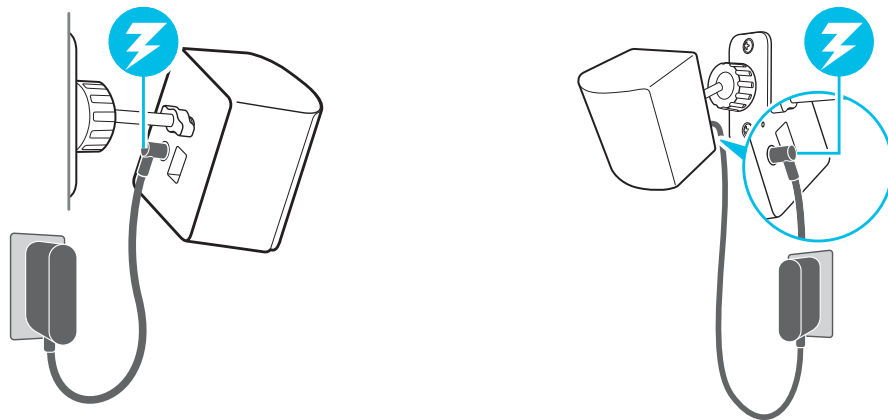
Depending on the variant of your hardware, the status lights should be white or green.

Once turned on, do not move or adjust the angles of the base stations as it could disrupt the tracking process. Otherwise, you will need to set up the play area again.

Tips for setting up SteamVR Base Station 2.0

✏️ To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

You may set up the base stations in a way that's suitable for your place. For best results, you may follow these recommendations:

- Mount your base stations diagonally, at opposite corners of your space.

- Each base station has a 150-degree horizontal field of view and a 110-degree vertical field of view. To maximize your play area, set up at above head height (ideally more than 2 m or 6.5 ft from the floor), with the angle of each base station adjusted between 25 and 35 degrees.
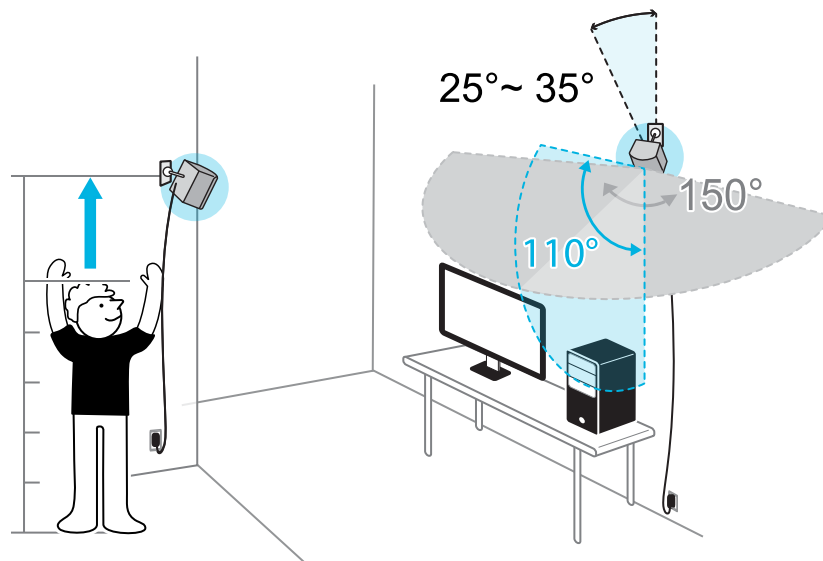
If your space doesn't allow for this kind of setup, you can also mount the base stations on tripods and light stands, or place them on stable surfaces such as a table.

For proper tracking, set each base station at a lowest height of 0.5 m (1.6 ft). Depending on how high you set them up, you need to adjust the angle of the base stations upward or downward to fully cover the play area.

- Secure the base stations in a location where they can't be easily jostled or moved.

- For best performance, trackable objects should be at least 0.5 m (1.6 ft) away from a base station.

- Avoid setting up in an area with bright light, which may negatively affect the performance of the base stations.

# How many SteamVR Base Stations 2.0 can I use in a single setup?

You can use up to four base stations in a single room covering 10 m x 10 m (32 ft 10 in x 32 ft 10 in).

What things should I consider when installing more than two SteamVR Base Stations 2.0?

You can use up to four base stations in a single room covering 10 m x 10 m (32 ft 10 in x 32 ft 10 in).

- Each base station in the same play area will need to be set to a different channel. This will be handled by the SteamVR software automatically.

- Each base station has a 150-degree horizontal field of view. Rotate the angle of the base stations left or right to fine tune and fully cover the play area.
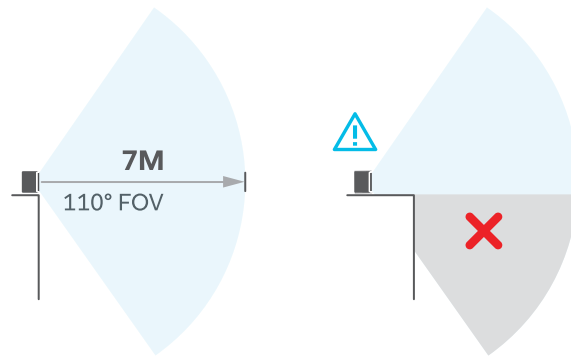
Single user setup
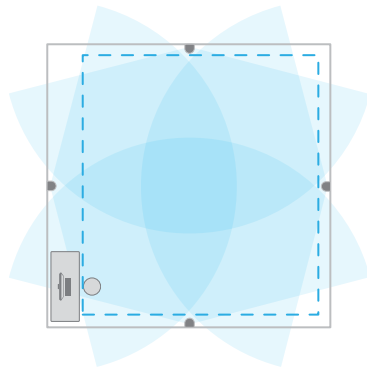
Multi-user setup
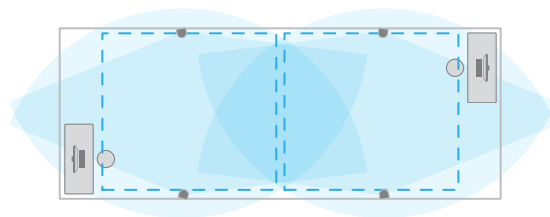
- For proper tracking, make sure that the distance between any base station and the headset and controllers are within a range of 7 m (23 ft). Make sure that there are no physical barriers (such as protruding shelves) where you place the base stations, so that it can fully cover its field of view and its signals won't be obstructed.

Setting up additional base stations

You can add more SteamVR Base Stations 2.0 to the standard setup. Follow these procedures in the order below to complete the process:

- Installing SteamVR Base Station 2.0 on page 39.

- Configuring the base station channels on page 44.

- Resetting the play area on page 61.

What are the minimum and maximum play area when using more than two SteamVR Base Stations 2.0?

The minimum play area remains to be at 2 m x 1.5 m (6 ft 6 in x 5 ft) , and could support sitting/standing setup with four base stations in a row. The maximum area with four base stations is up to 10 m x 10 m (32 ft 10 in x 32 ft 10 in).

My available space has an irregular shape. Can I still set up more than two SteamVR Base Stations 2.0?

Yes, there are nearly unlimited ways to setup multiple base stations to cover most asymmetric and irregular spaces within the range of SteamVR Base Station 2.0.

Here are some examples:
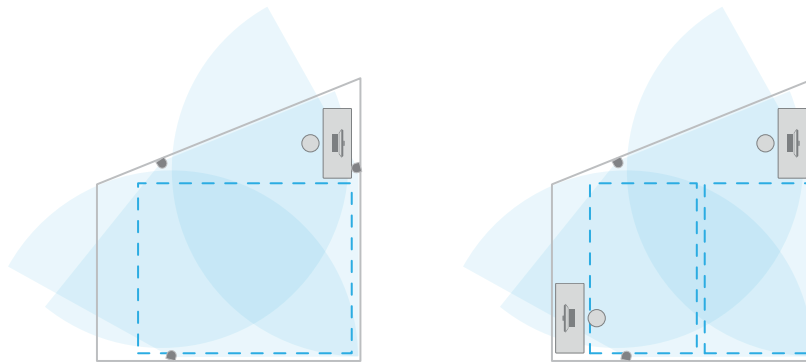
Can I use an odd number of SteamVR Base Stations 2.0?

Yes. Each base station works independently of the others, and there is no pairing requirement between them.

Configuring the base station channels

If you're using more than two SteamVR Base Stations 2.0 in your play area, you can change the channel of the additional base stations.

In the SteamVR app, make sure **Enable Bluetooth** in ☰ > **Devices** > **Bluetooth Settings** is selected.

1. From your computer, open the SteamVR app.
2. Click ☰, and then select **Devices** > **Base Station Settings**.

3. Under Base Station 2.0, click **Configure Base Station Channels**. SteamVR will scan for base stations in the play area. Once complete, you'll see a list of base stations. If you have base stations that have not been detected, click **Scan For More**.

4. To change its channel, click on a base station link. Select an unused channel, and then click **Apply**.

> You can also click **Automatic Configuration** to let SteamVR set the channels.

   If you're prompted that there is a channel conflict, click **Continue** to resolve the error.

5. When you're finished making the changes, click **Done**.

How can I check which base stations are currently in use?

SteamVR automatically detects the base stations in your play area. If you have more than 2 SteamVR Base Stations 2.0, you can check which of these are used in your VIVE VR system.

1.   From your computer, open the SteamVR app.

2.   Do one of the following:

- Click ☰, and then select **Developer** > **Developer Settings** > **View Room Overview**.

    In the window that opens, the base stations that are tracked by the headset are displayed.

- Click ☰, and then select **Create System Report**.

    From the log, you'll see the device names of the base stations that are currently used.

Using the mounting kit

For best results, install SteamVR Base Station 2.0 using a mounting kit, which is provided as an in-box item in VIVE Pro full kit. If you bought more SteamVR Base Station 2.0 units, you can separately purchase a similar mounting kit from a third-party supplier.

- You will need a screwdriver or drill to install the mounts. Ask a professional for help when using power tools.

- Remember to peel off the protective film from the front panel after you've mounted the base stations.

1.   Mark where you want to install each of the mounts on your wall, and then screw the mounts in.

    When mounting on concrete or drywall, first drill ¼ inch holes and insert anchors before screwing mounts in.

2.   Rotate the base station to screw it onto the threaded ball joint. Do not screw the base station all the way in, only enough to be stable and oriented correctly.

3.   Tighten the wingnut to the base station to secure it in place.
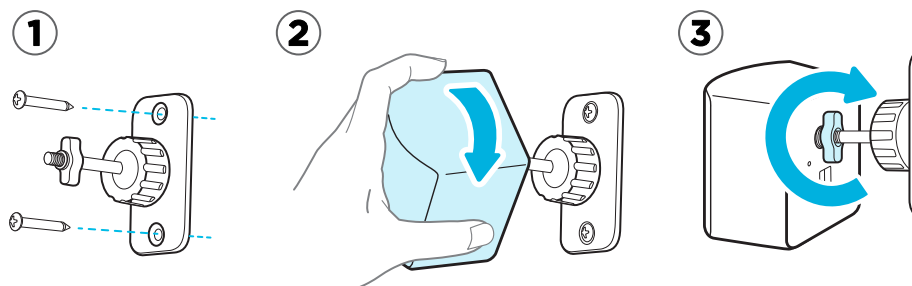
4. To adjust the angle of the base station, loosen the clamping ring while carefully holding the base station to prevent it from falling.

5. Tilt the base station toward the play area. To fix the angle of the base station, tighten the clamping ring back in.

6. Attach the power cable to each base station.
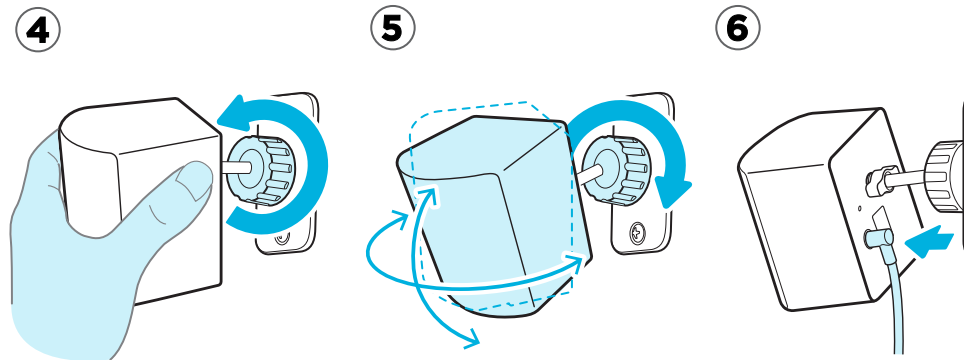
Cleaning the base stations

To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

Always keep the base stations and its power adapters dry and away from liquids to avoid shock hazard.

1. Unplug and unmount the base stations.

2. Use a lightly moistened non-abrasive cloth to clean the base stations. Do not use cleaning chemicals.

3. While cleaning the base stations, do not scratch the front panel nor disassemble any of its parts.

Updating base station firmware via Bluetooth

To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

1. From your computer, open the SteamVR app.

2. Click ☰ > **Devices** > **Bluetooth Settings** > **Enable Bluetooth** .

If the Bluetooth driver for the link box needs to be updated, click **Update Bluetooth Driver**. After installing the Bluetooth driver, restart the computer and relaunch the SteamVR app.

3. Do one of the following:

- Click ☰ > **Devices** > **Update Device**, and then select the base stations.
- If you see the 📡 icon, mouse over it to check if the firmware is out of date. If so, click **Update Device**.

4. Follow the onscreen instructions to complete the process.

> **!** Do not unplug the power cable before the firmware update is complete. Doing so may result in a firmware error.

What does the status light on the base stations mean?

> To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

The status light shows:

- Depending on the variant of your hardware, white or green when the base station is in normal mode.

- Blue or blinking blue when the base station is waiting to stabilize. If it remains in this state, check if it is mounted securely or on a surface that's not prone to vibration.

- Blinking red when there is an error.

What should I do if any of the base stations is not detected?

> To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

Try the following methods to troubleshoot the issue:

- Turn the base station off and on again.

- Make sure that you've installed your base stations correctly. For details, see Installing SteamVR Base Station 2.0 on page 39.

- Restart the SteamVR app. If you still get an error, reboot your computer and reopen the SteamVR app.

For more information, you may refer to the SteamVR Troubleshooting page.

Can I use the older version of the base stations together with SteamVR Base Station 2.0?

> To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

No, they are not compatible. SteamVR Base Station 2.0 has a different method of syncing. Use only the same versions of the base stations in your play area so that your setup will work correctly.

Which VIVE hardware is compatible with my base stations?

Use only the same version of base stations together. Different base station versions are not interchangeable.

Check the table below to see which VIVE hardware you can use with your base stations:

Base station version	Compatible VIVE hardware
1.0	▪ VIVE headset ▪ VIVE Pro headset ▪ VIVE Pro Eye headset ▪ VIVE controllers ▪ VIVE controllers (2018) ▪ VIVE Tracker (2018) ▪ VIVE Cosmos with VIVE Cosmos External Tracking Faceplate ▪ VIVE Cosmos Elite headset
2.0	▪ VIVE Pro headset ▪ VIVE Pro Eye headset ▪ VIVE controllers (2018) ▪ VIVE Tracker (2018) ▪ VIVE Cosmos with VIVE Cosmos External Tracking Faceplate ▪ VIVE Cosmos Elite headset

Are the base stations covered by warranty if accidentally damaged?

To purchase additional or replacement hardware, click the Accessories tab on www.vive.com/product/. Product availability may vary; please contact customer care for concerns.

Please follow the recommended setup instructions for the base stations carefully, since product warranty does not cover accidental damage.

Stop using the base stations if they are damaged, especially if its front panels are cracked.