

## SteamVR Setup Guide

Deployment & Launch Guide: SteamVR and a Built VR Application (.exe) on Windows 10/11

### 0. Prerequisites

- OS: Windows 10/11 (64-bit).
- Permissions: Local administrator rights for installations and driver updates.
- Hardware: VR-capable GPU (NVIDIA/AMD), VR headset (e.g., Valve Index, HTC Vive/Pro, Meta Quest 2/3), controllers, and (if required) base stations.
- Network (wireless PCVR): Wi-Fi 5/6; PC ideally on Ethernet.
- Drivers: Up-to-date GPU drivers (NVIDIA Game Ready / AMD Adrenalin).

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### 1. Install Steam and SteamVR

#### 1. Install Steam

- Download the Windows installer from Valve's official site (<https://store.steampowered.com/>).
- Run the installer, accept the license, select the destination, and complete setup.
- Sign in to Steam (or create an account).

#### 2. Install SteamVR

- In Steam, open Store, search for SteamVR.
- Open the SteamVR product page and select Install.
- After installation, SteamVR appears in your Library.

#### 3. Update GPU Drivers

- Update NVIDIA/AMD drivers to the latest stable release.
- Reboot the PC after driver installation.

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### 2. Prepare the VR Headset

#### 2.1 Valve Index / HTC Vive / Vive Pro

- Connect all cables as per the manufacturer's guide.
- Power base stations (if applicable) and position them correctly.
- Charge and power on controllers.

## 2.2 Meta Quest 2 / Quest 3 as PCVR (SteamVR)

### Option A – Steam Link (recommended, wireless):

- On the headset, install Steam Link from the Meta Store.
- Launch Steam Link and pair with the PC (same local network; prefer Wi-Fi 5/6 for the headset, Ethernet for the PC).

### Option B – Meta Link (USB-C) / Air Link:

- Install the Meta/Oculus PC app.
- For Link (USB-C): connect a high-bandwidth USB-C cable and authorize the connection in the headset.
- For Air Link: ensure both PC and headset are on the same high-quality Wi-Fi 5/6 network.

Important: With Quest, establish the Steam Link / Link / Air Link connection before launching the VR application .exe.

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## 3. Initial SteamVR Configuration

### 1. Start SteamVR

- Open Steam.
- From Library, launch SteamVR.
- Wait until the SteamVR status window shows all devices (HMD, controllers, base stations) as green (detected and ready).

### 2. Room Setup

- In the SteamVR window select Run Room Setup.
- Choose Standing Only or Room-Scale.
- Complete floor and play-area calibration as guided.

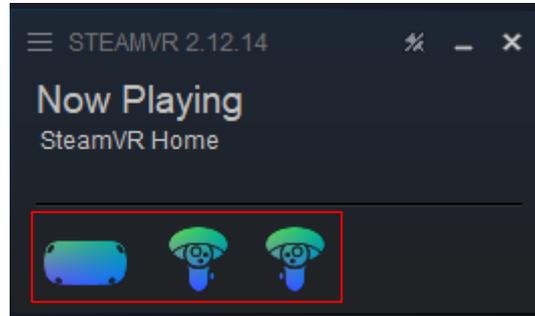
### 3. Set SteamVR as the OpenXR Runtime (if applicable)

- SteamVR → Settings → OpenXR.
- If available, click Set SteamVR as OpenXR Runtime.
- Close settings after confirmation.

#### 4. Launch a VR Application from a Built .exe

Procedure:

1. Ensure SteamVR is running and the headset/controllers are detected. If using Meta Quest - Confirm Steam Link / Link / Air Link is connected and the headset sees the PC.



2. Navigate to the build folder and launch VRApp.exe (the one with BIOMEDIX logo).

Nazwa	Data modyfikacji	Typ	Rozmiar	Rozszerzenie pliku
3DScan_VRapp_Data	23.10.2025 19:25	Folder plików		
D3D12	23.10.2025 19:25	Folder plików		
MonoBleedingEdge	23.10.2025 19:25	Folder plików		
 3DScan_VRapp	23.10.2025 19:25	Aplikacja	657 KB	.exe
UnityCrashHandler64	23.10.2025 19:25	Aplikacja	1 496 KB	.exe
UnityPlayer.dll	23.10.2025 19:25	Rozszerzenie aplik...	32 832 KB	.dll

3. The application should render in the headset, with a mirror window on the monitor.

#### 5. Validation Checklist

- SteamVR window: all devices are visible and green.
- Headset: application renders correctly; head and controller tracking respond.
- Monitor: mirror window is visible.
- Audio: playback is routed to the headset or preferred output device

#### 6. Troubleshooting (Quick Reference)

##### 1. App runs on monitor only (not in HMD)

- Confirm SteamVR is running before launching the .exe.
- Verify SteamVR is set as the OpenXR Runtime (Section 3.3).
- Close other runtimes (e.g., Windows Mixed Reality Portal, Oculus PC app) that may capture the HMD.

##### 2. Black screen / no tracking

- Restart SteamVR.
  - Check DisplayPort/USB/Link connections; try a different USB 3.x port; reboot the PC.
  - Update GPU drivers.
3. No audio in the headset
- SteamVR → Settings → Audio → set output to the HMD or enable “Mirror to HMD”.
  - Windows Sound → select the correct output device.
4. Poor performance (especially Quest over Wi-Fi)
- Use Wi-Fi 5/6; minimize interference; connect PC via Ethernet.
  - Adjust bitrate in Steam Link/Meta Link after confirming a stable connection.
  - Close background apps (especially overlays or GPU/CPU-intensive tools).
5. Firewall/antivirus prompts
- Allow SteamVR and the application for local network communication (needed by Steam Link/Air Link).
  - Add exclusions if your security suite blocks the app.

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## 7. Operational Best Practices

- Always start SteamVR before the application .exe.
- For demonstrations, reboot the PC in advance and verify all connections.
- Close non-essential applications (overlays, recorders, hardware monitoring tools).
- Perform driver/firmware updates ahead of time, not immediately before a session.

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## 8. Daily Quick Checklist

1. Steam running; SteamVR installed and launched.
2. GPU drivers up to date.
3. Headset/controllers/base stations powered; green in SteamVR.
4. (Quest) Steam Link / Link / Air Link connected.
5. Launch ...\.exe.
6. Video and audio confirmed in the headset.