

Using the VIVE Pro 2 Full Kit



We got the [VIVE Pro 2 headset](#) and base stations, controllers (HTC Vive Controllers and VALVE INDEX Controllers), and trackers in the lab.

Setup

For the full official tutorial, please refer to: [VIVE Pro 2 Setup Video](#)

1. Hardware Connections & Power Check

Before powering on your PC: Ensure all devices are powered and connected

- Headset, controllers, Lighthouse base stations, and the Vive link box should all be connected and displaying a solid green light.
- *Link box connections:*

- **DisplayPort cable** → Graphics card port
 - **USB 3.0 cable** → PC USB port
 - **Power adapter** → Mains socket (requires 9V/1.5A or above)
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2. Software Setup

Essential Installations

1. **Steam & SteamVR**
 - Download and install the Steam client.
 - Search for and install **SteamVR** from your Steam library.
 2. **Room Tracking Configuration**
 - Open SteamVR > **Room Setup**
 - Base stations should be mounted at a height of at least 2m, positioned diagonally across the play area.
 - *Controller pairing*: Press and hold the system button until the LED flashes blue → complete pairing via the SteamVR interface.
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3. Unreal Engine 5 Integration

Initial Project Setup

1. **Create a New VR Project**
 - Template: Games > Virtual Reality
 - Select Blueprint and Starter Content (for quick testing)
 - **Tip**: Begin with a simple scene (e.g., an empty template) and gradually increase complexity.
2. **Enable Key Plugins**
 - Go to Edit > Plugins and enable the following:
 - **OpenXR** (recommended for SteamVR compatibility and future-proofing)
 - **OpenXR Hand Tracking**
 - **OpenXR Vive Tracker** (if using external trackers)
 - **SteamVR** (required for the Vive Pro 2)
 - **Oculus VR** (if Oculus headset compatibility is needed)
 - **VR Expansion Plugin** (for advanced interaction features)
 - Restart UE5 to apply changes.
3. **Optimise Project Settings**
 - Open Edit > Project Settings and adjust the following:
 - **Rendering**: Enable Forward Rendering and disable Mobile HDR.
 - **XR Settings**: Tick Start in VR and enable Motion Controller Support.

These settings improve performance and ensure VR input responsiveness.

4. Testing & Troubleshooting

Launching VR Preview

1. Click the dropdown next to the **Play** button (⚙ not the default **Play** mode) and select **VR Preview**.
 2. Put on the headset to test real-time scene rendering.
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☐ Common Issues & Checks

- **Device Not Detected:**
 - Confirm cables are securely connected and devices are powered.
 - Restart SteamVR or the PC if necessary.
- **Tracking Issues:**
 - Ensure base stations are unobstructed and correctly positioned.
 - Check for reflective surfaces or direct sunlight interfering with the sensors.
- **Performance Lag:**
 - Lower rendering resolution or disable unnecessary plugins.
 - Update graphics drivers and Unreal Engine to the latest stable version.

With these steps completed, your HTC Vive Pro 2 should be ready for Unreal Engine 5.2+

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