

Calibration Integration Setup Guide

1. Download Template Resources

- Use the following link to download all necessary resources:
<https://github.com/PauAmetller/InteractiveSystemsUpdatedTemplate>
- Copy all scripts and plugins from the template and add them to your Unity project.

2. Add the Tracking Object

- Locate the **Tracking** object in the template and turn it into a **prefab**.
- Add this prefab to your project.
- If your project already has a tracking calibration setup, **remove it** to avoid conflicts.

3. Replace the Camera Script

- Replace your current camera management script with the **DoublescreenCameramanager** script from the template.
- Set the **Overlap Save Path** to point to the location of your tracking project's overlap file.
- Alternatively, you can manually enter the overlap value and **uncheck** the **"Use Overlap File"** checkbox.

Note: This script does not support modifying camera movement, focus, blend parameters, or plane (floor) settings during execution/gameplay. If needed, customize it to support these dynamic features.

4. Add the Blending Object

- In the template, the blending object is named **"Blend"** and is located under the parent object **"Planes"**.
- Add the **Blend** object to your project, along with its related assets:
 1. HDRPDefaultResources
 2. Materials > Blending
 3. Textures > Blending texture

Note: For Unity versions 2021 and later, HDRPDefaultResources is incompatible. In that case, you'll need to create a custom Blend object that mimics the one in the template.

5. Set Up the Floor Plane

- Locate the **floor plane** in your scene (this is the surface that will be projected).
- If your scene doesn't already have one, create a new plane and position it accordingly.
- Make the plane invisible if it's only used as a reference and not part of the actual scene.
- Assign a reference to this plane in the **DoublescreenCameramanager** script.

6. Configure the Tracking Manager

- The **TrackingManager** script is located inside the **Tracking Manager** object, which is a child of the **Tracking** object in the hierarchy.
- Open the **TrackingManager** script in the Inspector and configure it as follows:
 - Enable **Tracking** (only when running with SteamVR).
 - Add references to all player objects in the **Players** list.
 - Set the correct **Number of Players** based on the number of trackers being used.
 - Do the same for the **Number of Base Stations**.
 - Set the **Calibration File Path** to match the location of your tracking project's calibration file.
 - Enable **Rotation** and **Y Axis** if your project requires them.

7. Set the Virtual World Size

- Select your floor plane and note its **X** and **Z** scale values and that of its parents.
- In the **TrackingManager** script, set the **Virtual World Space** as:
 - **X** → X world scale × 10
 - **Y** → 1
 - **Z** → Z world scale × 10
- Ensure these values take into account the **world scale**, including any parent object scaling.

8. Add the Player Movement Script

- For each player object in your scene, add the **PlayerMovement** script as a component.