

ACTIVATION EVENTS

ADD A GRABBABLE REMOTE CONTROL OBJECT:

Up to this point, you have only been able to pick up and put down objects. Now, you will add an object that you can *do* something with - or “activate” - once it’s in your hand.

1. Add a remote control to your scene:

- Go to Course Library > Prefabs > Objects > Electronics,
- Drag the “Remote” prefab object onto a surface in your scene.

2. Allow the object to be picked up:

- Add a Rigidbody component with Collision Detection set to Continuous Dynamic so it doesn’t fall through the floor.
- Add an XR Grab Interactable component.

3. Position the remote correctly in the player’s hand when it is picked up:

- In the Remote object, create a new, empty “Attach” child object.
- Position and orient the Attach object appropriately.
- Assign the Attach object to the Attach Transform property in the XR Grab Interactable component.

You should now be able to pick up the remote in a way that looks natural.

PLAY A SOUND WHEN YOU ACTIVATE THE REMOTE:

Now you will make the remote make a click sound when you are holding it and press the trigger.

1. Allow the remote to emit sound:

- On the Remote object, add an AudioSource component
- In the AudioSource component, slide the Spatial Blend property all the way to full 3D (“1”) to allow for 3D audio.

2. Give the remote the ability to play a sound:

- Add a Play Quick Sound component to the remote.
- For the Sound property, assign an audio clip you want from the Course Library > Audio folder.

3. Locate the remote’s “On Activated” event:

- At the bottom of the remote’s XR Grab Interactable component, expand the Interactable Events fold-out to see all of the event options.
- Locate the On Activated event

4. Play a sound when the remote is activated:

- In the On Activated event, click the + to add a new action.
- Drag and drop the Remote object to the empty Object slot in order to access its components.
- Click the No Function drop-down to select a function, then select Play Quick Sound > Play ().

CHANGE THE REMOTE'S INDICATOR LIGHT'S COLOR WHEN ACTIVATED:

To provide additional feedback that the remote has been pressed, you can also turn the indicator light red when the remote is activated.

1. Add the capability for the indicator light to turn red:

- In the Hierarchy, expand the Remote object and select the Indicator_Light child object.
- Add a Change Material component.
- Assign a Red material to the “Other Material” property.

2. Change the material color to red when the trigger is pressed:

- On the Remote parent object, at the bottom of the XR Grab Interactable component, expand the Interactable Events fold-out to see all of the event options.
- In the On Activated event, click the + to add a new function.
- Assign the Indicator Light child object to the Object property.
- Click the No Function drop-down to select a new function, then click Change Material > SetOtherMaterial () function.

3. Make the material revert when the activate button is released:

- In the On Deactivated event, click the + to add a new action.
- Assign the Indicator_Light object, then select the Change Material > SetOriginalMaterial () function.

When you activate the remote, the indicator light should turn red and then revert to its original color when the activate button is released.

MAKE THE TV PLAY VIDEO:

Before you get the button set up to turn the TV on, you should make sure the TV in the scene can successfully play video.

1. Allow the tv to emit 3D audio:

- **In the Hierarchy, select the Screen child object of the Television.**
- **Add an Audio Source component.**
- **Drag the Spatial Blend property to full 3D (1.0) to enable spatial audio.**

2. Allow the TV to play video:

- **On the Screen child object, add a Video Player component.**
- **Change the Material Property to `_BaseMap` (instead of `_MainTex`) to project the video to its material rather than its texture.**

3. Add additional video control functionality:

- **On the Screen child object, add a Play Video component.**
- **Select the Play At Start check box to play the video automatically.**

4. Select the video to play on the screen:

- **In the Play Video component, expand the Video Clips fold-out.**
- **Set the list Size property to 1 and press Enter to reveal an empty Video Clip slot.**

- **Assign one of the videos from the Course Library > Videos to the Video Clip property.**

CONTROL THE TV WITH REMOTE:

Now that the TV is working, you need to be able to control it with the remote.

1. Stop the video from playing automatically:

- **In the Play Video component, clear the Play At Start check box.**

2. Locate the Remote's Interaction events:

- **Select the Remote GameObject.**
- **In the XR Grab Interactable component, expand the Interactable Events fold-out to see all of the event options.**

3. Trigger the TV when the remote is activated:

- **In the On Activated event, click the + to add a new action.**
- **Assign the Screen object to the empty Object property, since it has the Play Video script.**
- **Click the No Function drop-down and select the PlayVideo > TogglePlayPause () function, or the PlayVideo > TogglePlayStop () function, depending on whether you want it to pause or stop when pressed a second time.**



When you activate the remote, the video on the TV should alternate between playing and pausing or stopping.