

# LetterBoxer

Preserve your 2D game's aspect ratio with no effort

Works with any orthographic camera

Works on mobile devices

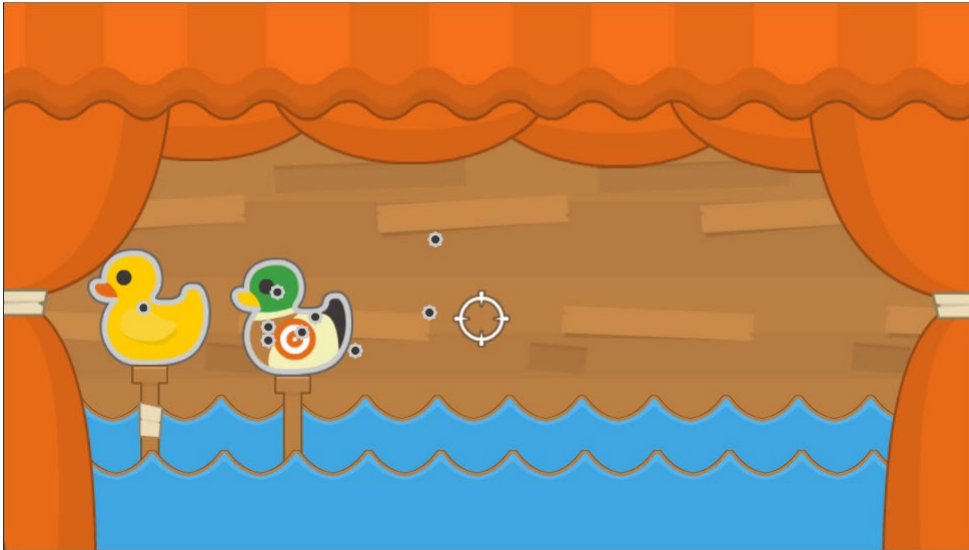
Works with Unity UI Canvas

Includes "Shooting Gallery" mini-game example



# Preserves your game's aspect ratio

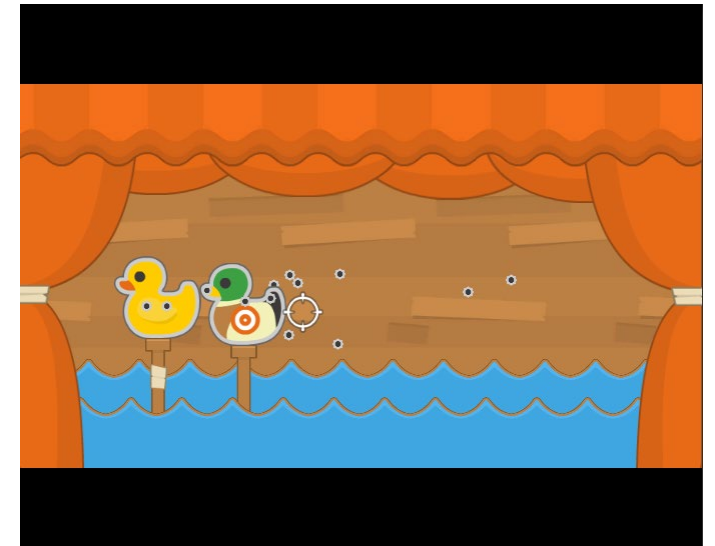
Game designed for 16:9 aspect ratio



On 5:4 screen  
without LetterBoxer  
sides of game play  
area are lost



On 5:4 screen with  
LetterBoxer  
sides of game play  
area are made visible  
by adding mattes to  
the top and bottom  
of the screen

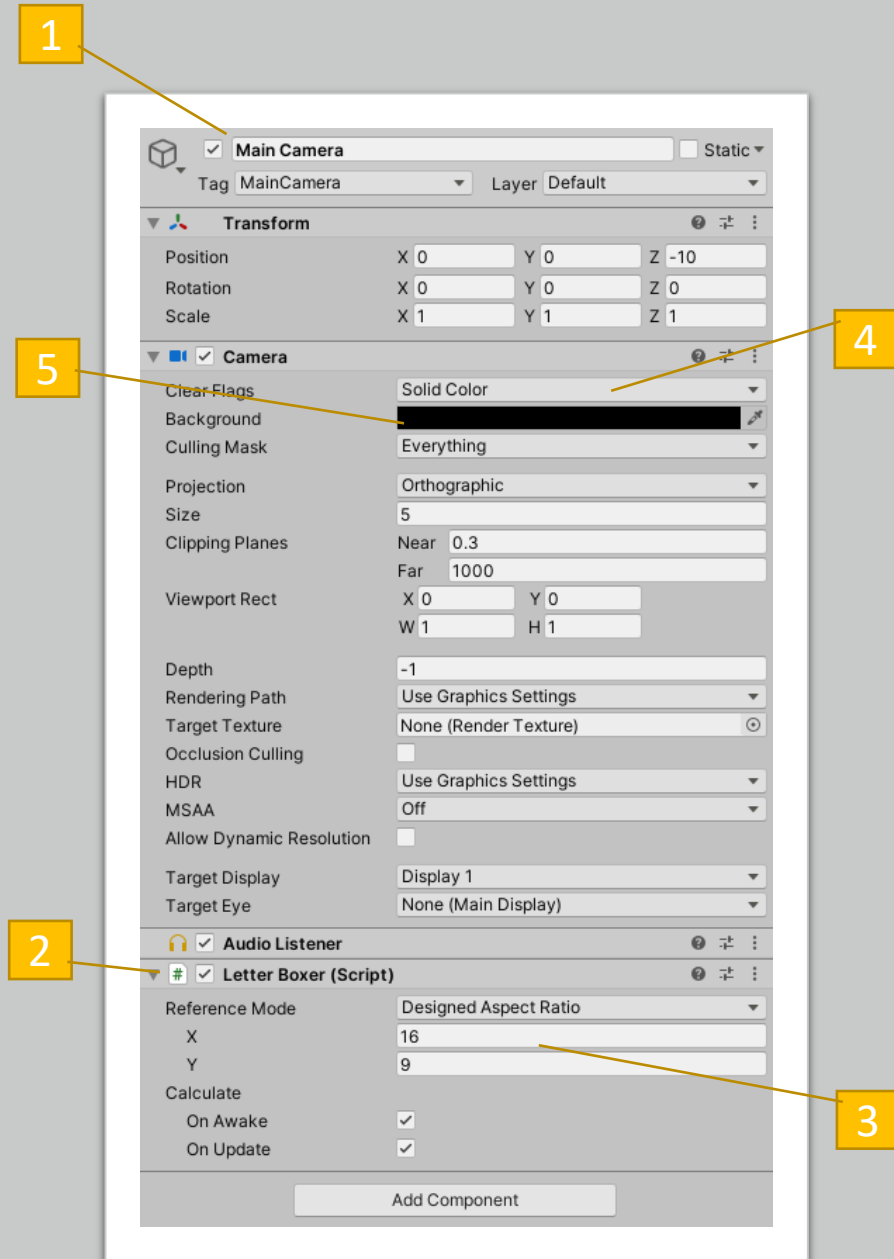


# Setup the Component

1. On your *Main Camera* game object
2. Add the *Letter Boxer* script by clicking on the Add Component button
3. Specify the X and Y of your target aspect ratio
4. Set *Clear Flags* to *Solid Color*
5. Set *Background* to the color that you want your letterbox or pillarbox bars to be

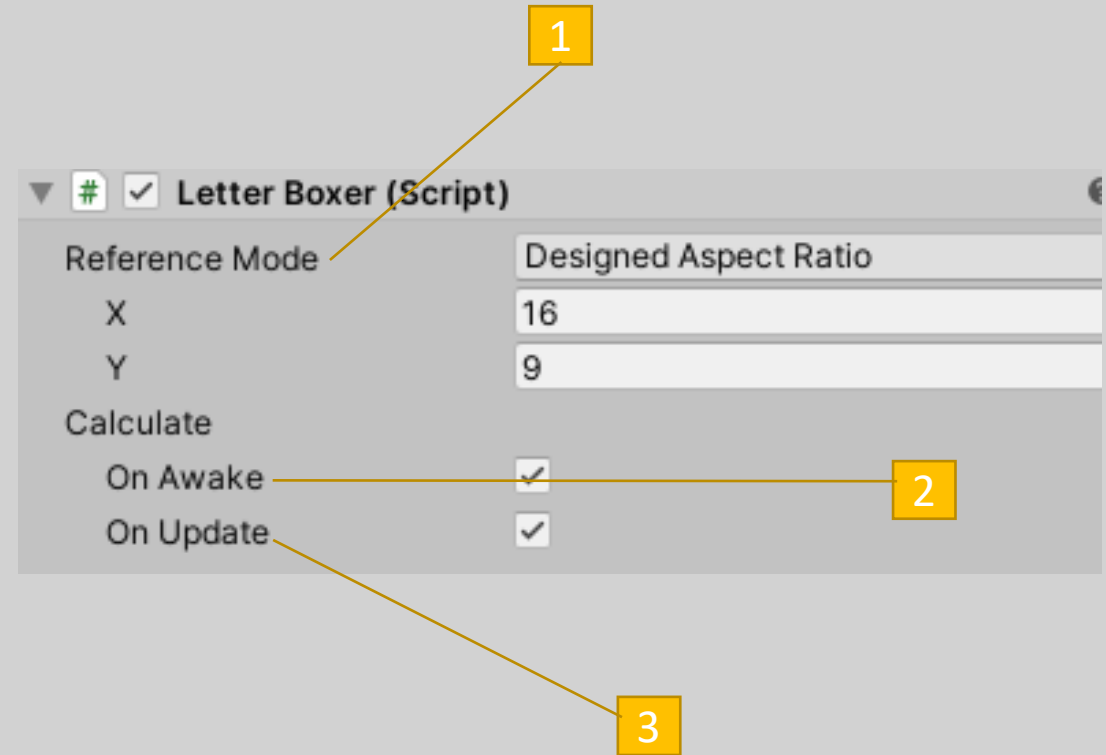


This asset ONLY works for cameras with *Projection* set to *Orthographic*



# Advanced Configuration

1. **Reference Mode** – Used to toggle how the target aspect ratio is calculated.
  - *Designed Aspect Ratio* – Lets you specify an aspect ratio using X and Y values. For example 16 by 9
  - *Original Resolution* – Lets you specify an aspect ratio by specifying the width and height, in pixels, of the screen your game as originally designed to fit
2. **Calculate On Awake** – The component will calculate the aspect ratio and letterbox the screen during OnAwake() of the main camera
3. **Calculate On Update** – The component will calculate the aspect ratio and letterbox the screen during OnUpdate() of the main camera. This means every frame so will have some performance impact.



# Unity UI

To have your UI scale with the letterboxed screen:

1. Set *Render Mode* to *Screen Space - Camera*
2. Set *Render Camera* to your camera that has the *Letter Boxer* script attached to it
3. Set *Order in Layer* to a high number so that your UI appears on top of any other sprites

