

# Augmented Reality with Vuforia or Gyroscope | Unity AR

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## AR Shadow

### Getting started from scratch

1. Go to Edit > Project Settings > Quality.
2. Choose Default Quality Level for a target platform.
  1. Shadow Projection = Close Fit.
  2. Shadow Distance = 400.
3. Create Plane (ARGround prefab).
  1. Place plane on the marker (a bit higher) if you use marker AR like Vuforia. If you use markerless AR (e.g. [AR Camera GYRO](#)) then place the plane on your origin so you can see the shadows.
  2. Resize plane for all your active area of game action.
  3. Attach ARShadow material with ARShadowSurface shader (AR/ARShadowSurface) to the Plane.
    1. Cutout = 1.
4. Create Direction Light (ARDirectionalLight prefab).
  1. Intensity = 1.5.
  2. Shadow Type = Soft Shadows.
    1. Strength = 0.323.
    2. Bias = 0.13.
    3. Normal Bias = 0.
    4. Near Plane = 0.9.
5. Press Play and see the AR shadows from objects.

## Vuforia

Unity 2017.2 integrates the Vuforia Engine.

You can learn more about new pipeline on [Vuforia Developer Portal](#).

### Why does not Vuforia work?

### License

1. Vuforia Developer Portal > Develop > License Manager > Get Development Key.
2. Go to Window > Vuforia Configuration > App License Key > Paste your Key.
3. File > Save Project.

### Known issues

- [Vuforia runs in all scenes.](#)

## Support

First of all, read the docs. If it didn't help, [get the support](#).