

# RCC\_Camera

## Public Variables

```
public CameraTarget cameraTarget = new CameraTarget(); // Target of the camera, which is our player vehicle with custom class. Can be assigned manually with "SetTarget" method.
```

```
public bool isRendering = true; // Currently rendering?
```

```
public Camera actualCamera; // Camera is not attached to this main gameobject. Camera is parented to pivot gameobject. Therefore, we can apply additional position and rotation changes.
```

```
public GameObject pivot; // Pivot center of the camera. Used for making offsets and collision movements.
```

```
// Camera Modes.
```

```
public CameraMode cameraMode = CameraMode.TPS;
```

```
public bool TPSLockX = true; // Locks X angle to vehicle's X.
```

```
public bool TPSLockY = true; // Locks Y angle to vehicle's Y.
```

```
public bool TPSLockZ = true; // Locks Z angle to vehicle's Z.
```

```
public bool TPSFreeFall = true; // Camera rotation won't track vehicle if it's not grounded.
```

```
public bool TPSDynamic = false; // Use dynamic distance, height, and pitch angle related to vehicle rigidbody velocity.
```

```
public bool useTopCameraMode = false; // Shall we use top camera mode?
```

```
public bool useHoodCameraMode = true; // Shall we use hood camera mode?
```

```
public bool useOrbitInTPSCameraMode = true; // Shall we use orbit control in TPS camera mode?
```

```
public bool useOrbitInHoodCameraMode = true; // Shall we use orbit control in hood camera mode?
```

```
public bool useWheelCameraMode = true; // Shall we use wheel camera mode?
```

```
public bool useFixedCameraMode = true; // Shall we use fixed camera mode?
```

```
public bool useCinematicCameraMode = true; // Shall we use cinematic camera mode?
```

```
public bool useOrthoForTopCamera = false; // Shall we use ortho in top camera mode?
```

```
public bool useOcclusion = true; // Shall we use camera occlusion?
```

```
public LayerMask occlusionLayerMask = -1; // Camera will be occluded by these layers.
```

```
public bool useAutoChangeCamera = false;    // Shall we change camera mode by auto? (For
cinematics)

public Vector3 topCameraAngle = new Vector3(45f, 45f, 0f);    // We will use this Vector3 angle for
top camera mode if it's enabled.

public float topCameraDistance = 100f;    // Top camera height / distance.

public float maximumZDistanceOffset = 10f;    // Distance offset for top camera mode. Related with
vehicle speed. If vehicle speed is higher, camera will move to front of the vehicle.

public float TPSDistance = 6f;    // The distance for TPS camera mode.

public float TPSHeight = 2f;    // The height we want the camera to be above the target for TPS
camera mode.

public float TPSRotationDamping = .7f;    // Rotation movement damper.

public float TPSTiltMaximum = 15f;    // Maximum tilt angle related with rigidbody local velocity.

public float TPSTiltMultiplier = 1.5f;    // Tilt angle multiplier.

public float TPSYaw = 0f;    // Yaw angle.

public float TPSPitch = 10f;    // Pitch angle.

public bool TPSAutoFocus = true;    // Auto focus to player vehicle. Adjusts distance and height
depends on vehicle bounds.

public bool TPSAutoReverse = true;    // Auto reverse when player vehicle is at reverse gear.

public bool TPSCollision = true;    // Collision effect when player vehicle crashes.

public Vector3 TPSOffset = new Vector3(0f, 0f, .2f);    // TPS position offset.

public Vector3 TPSStartRotation = new Vector3(0f, 0f, 0f);    // Rotation of the camera will be this
when game starts.

internal float targetFieldOfView = 60f;    // Camera will adapt its field of view to this target field of
view. All field of views below this line will feed this value.

public float TPSMinimumFOV = 40f;    // Minimum field of view related with vehicle speed.

public float TPSMaximumFOV = 60f;    // Maximum field of view related with vehicle speed.

public float hoodCameraFOV = 60f;    // Hood field of view.

public float wheelCameraFOV = 60f;    // Wheel field of view.

public float minimumOrtSize = 10f;    // Minimum ortho size related with vehicle speed.
```

```

public float maximumOrtSize = 20f;    // Maximum ortho size related with vehicle speed.

internal int cameraSwitchCount = 0;  // Used in switch case for running corresponding camera
mode method.

public float zoomScrollMultiplier = 5f;  // Zoom scroll multiplier.

public float minimumScroll = 0f;    // Minimum distane for the zoom.

public float maximumScroll = 5f;    // Maximum distance for the zoom.

// Minimum and maximum Orbit X, Y degrees.
public float minOrbitY = -15f;
public float maxOrbitY = 70f;

//      Orbit X and Y speeds.
public float orbitXSpeed = 100f;
public float orbitYSpeed = 100f;
public float orbitSmooth = 40f;

//      Resetting orbits.
public bool orbitReset = false;

public bool lookBackNow = false;    // Camera is looking back now?

```

## Public Methods

```

public void ToggleCamera(bool state) {} //      Toggles the camera with on / off state.

public void OnDrag(float x, float y) {} //      Drags the camera orbit with x and y values.

public void ChangeCamera(CameraMode mode) {} //      Changes the camera mode to given
mode.

public void ChangeCamera() {} //      Switches to next camera mode.

public void RemoveTarget() {} //      Removes the camera target. Camera will no longer follow
the target.

public void SetTarget(RCC_CarControllerV3 player) {} //      Sets camera target.

```

## Events

```

// Event when camera spawned.
public delegate void onBCGCameraSpawned(GameObject BCGCamera);
public static event onBCGCameraSpawned OnBCGCameraSpawned;

```