

```
1 using System.Collections.Generic;
2 using UnityEngine;
3
4 /// <summary>
5 /// Logical representation of an OR gate.
6 /// </summary>
7 public class OrGate : Circuit
8 {
9     public OrGate() : this(Vector2.zero) { }
10
11     public OrGate(Vector2 startingPos) : base("OR", 2, 1, startingPos) { }
12
13     /// <summary>
14     /// Returns an output to update if the output has changed due to alterations in input power statuses.
15     /// </summary>
16     /// <returns>The list of outputs that should have their connections called.</returns>
17     protected override List<Output> UpdateOutputs()
18     {
19         bool outputStatus = Outputs[0].Powered;
20         List<Output> outputs = new List<Output>();
21
22         // OR gate representation
23         Outputs[0].Powered = Inputs[0].Powered || Inputs[1].Powered;
24
25         if (outputStatus != Outputs[0].Powered || MaterialNotMatching())
26             outputs.Add(Outputs[0]);
27
28         return outputs;
29     }
30
31     /// <summary>
32     /// Checks all outputs to determine if the output node material is not matching its power status.<br/><br/>
33     /// This is utilized within custom circuits to force update calls that would normally not occur due to the nature of UpdateOutputs().
34     /// </summary>
35     /// <returns>Whether any output material does not match its power status.</returns>
36     private bool MaterialNotMatching()
37     {
38         if (Outputs[0].StatusRenderer == null) return false;
39
40         return (Outputs[0].Powered && Outputs[0].StatusRenderer.sharedMaterial != CircuitVisualizer.Instance.PowerOnMaterial) ||
41             (!Outputs[0].Powered && Outputs[0].StatusRenderer.sharedMaterial !=
```

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41         }  
42     }  
    CircuitVisualizer.Instance.PowerOffMaterial);
```