



FEZ Reflective Sensor Component



This sensor emits an invisible infrared light and then tries to measure it back to see if the light is "reflected". This can be used to detect a black line on a white sheet of paper to help guide a robot. This component simply outputs different voltage levels according to the returned reflection density. Connected through standard JST3AA cable (included). It works with any **analog pin** on FEZ Mini starter-kit/robot and FEZ Domino Component shield.



This is the same one included with FEZ Robot Kit.

Provided Driver Example Code:

Add **FEZ_Components_ReflectiveSensor.cs** to Visual C# project to use the example below. **FEZ tutorial Document** shows how to create projects and add components drivers. (All files are available on www.tinyclr.com)

Code snippet:

```
using System;
using Microsoft.SPOT;
using System.Threading;
using GHIElectronics.NETMF.FEZ;
public class Program
{
    public static void Main()
    {
        // Create ReflectiveSensor object assigned to the Reflective Sensor Component connected to An6
        // Reflection detection trigger is on 20% or more.
        FEZ_Components.ReflectiveSensor myReflectiveSensor = new FEZ_Components.ReflectiveSensor(FEZ_Pin.AnalogIn.An6,20);
        while (true)
        {
            if (myReflectiveSensor.GetState() == FEZ_Components.ReflectiveSensor.DetectingState.ReflectionDetected)
            {
                Debug.Print("My sensor is detecting the reflection!");
            }
            else
            {
                Debug.Print("My sensor is not detecting the reflection. maybe it hit a black surface or table edge!");
            }
            Thread.Sleep(100);
        }
    }
}
```

