



# FEZ 38kHz Infrared Receiver (IRM)



This component is used to detect infrared signals of 38kHz carrier frequency.

This sensor output is logical High when it detects 38kHz frequency otherwise the output is Low.

It can be used to detect the signal sent by the ER-4 Easy Remote (not included, available on [www.tinyclr.com](http://www.tinyclr.com)) or any other remote control.



Works with any **digital pin** (all pins!) on FEZ Mini starter-kit/robot and FEZ Domino Component shield.

Provided Driver Example Code:

The example code uses The Easy Remote (not included, available on [www.tinyclr.com](http://www.tinyclr.com)).

User should add **FEZ\_Components\_EasyRemote.cs** to Visual C# project to use the example below. **FEZ tutorial Document** shows how to create projects and add components drivers. (Both files are available on [www.tinyclr.com](http://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 EasyRemote object assigned to Infrared Receiver Component connected at Interrupt port An1:
        FEZ_Components.EasyRemote myRemote = new FEZ_Components.EasyRemote(FEZ_Pin.Interrupt.An1);
        myRemote.ButtonPressEvent += new FEZ_Components.EasyRemote.ButtonPressEventHandler(myRemote_ButtonPressEvent);
        Debug.Print("FEZ has nothing to do but waiting to receive the Easy Remote IR signal on the IRM Component");
        Thread.Sleep(Timeout.Infinite);
    }
    static void myRemote_ButtonPressEvent(FEZ_Components.EasyRemote.Button btn, bool new_press)
    {
        if (new_press== true) // we want to ensure that the button is newly pressed (not a continuous pressing on the button).
        {
            switch (btn)
            {
                case FEZ_Components.EasyRemote.Button.A:
                    Debug.Print("Button A is pressed");
                    break;
                case FEZ_Components.EasyRemote.Button.B:
                    Debug.Print("Button B is pressed");
                    break;
                case FEZ_Components.EasyRemote.Button.C:
                    Debug.Print("Button C is pressed");
                    break;
                case FEZ_Components.EasyRemote.Button.D:
                    Debug.Print("Button D is pressed");
                    break;
            }
        }
        else
        {
            // in this example we ignore the continuous pressing
            //Debug.Print("continuous pressing on btn");
        }
    }
}
```

