# Hooking up Pixy to a .NET Gadgeteer

You'll need to cut the Arduino cable that comes with Pixy, and the Gadgeteer SPI cable, and connect (preferably solder) them together. Here's the port pinouts and instructions to help you do so, thanks to Pixy user @stuincanada (Twitter).

## Gadgeteer SPI socket

```
(see http://gadgeteer.codeplex.com/wikipage?title=Socket%20Type%20S) (viewed from above)
```

```
| 1 2| (pin 1 cable is red)
| 3 4|
notch |5 6|
| 7 8|
| 9 10|
```

```
pin 1 3.3v, pin 2 5v, pin 10 GND
pin 6 is the chip-select (CS) line
pin 7 is the master-out/slave-in (MOSI) line
pin 8 is the master-in/slave-out (MISO) line
pin 9 is the clock (SCK) line
```

## Pixy SPI socket

#### (viewed from above)

```
| 1 2| (pin 1 cable is red)
| 3 4|
| notch | 5 6|
| 7 8| not connected
| 9 10| not connected
```

```
pin 1: master-in/slave-out (MISO) line
pin 2: 5v
pin 3: clock (SCK) line
pin 4: master-out/slave-in (MOSI) line
pin 6: GND
```

## Connecting the 2 together:

#### WARNING: Be careful, if you get this wiring wrong you may permanently damage your board and/or the Pixycam!

To connect Gadgeteer to Pixy, you will need to cut the supplied Pixy cable, cut the Gadgeteer cable, and connect the wires, or use a breakout module for Gadgeteer.

```
( https://www.ghielectronics.com/catalog/product/405)
The wiring required is:
gadgeteer pin 2 > pixycam pin 2 (5v)
gadgeteer pin 7 > pixycam pin 4 (MOSI)
gadgeteer pin 8 > pixycam pin 1 (MISO)
gadgeteer pin 9 > pixycam pin 3 (SCK)
gadgeteer pin 10> pixycam pin 6 (GND) (or pixy pin 8 or pixy pin 10)
```

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