



Setting up the board

Go to **Tools->Board** and select **Arduino Nano**.

Next go to **Tools->Port** and select the correct **COM** port.

Finding the correct COM port

Click the Windows **Start** button and type in the search window the following...

mmc devmgmt.msc

This will start the **Device Manager**.

From within this window you can click on the **Ports** arrow to expand the list.

For this particular board the menu item will be named...

USB-SERIAL CH340(COMXX)

Where **XX** is the port number that has been assigned to the device.

This is the COM port we select when setting the port from **Tools->Port** menu.

Back in the Arduino IDE the current port that will be used for programming is displayed in the bottom right hand corner.

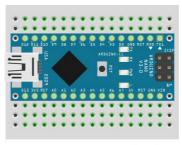
In the supplied folder there are a number of examples to load and try

Examples

- 1 LED on Board
- 2 External LED
- 3 Multiple external LED
- 4 Single smart LED
- 5 Multi smart LED
- 6 Graphic display
- 7 Digital input, switch
- 8 Analogue input, pot
- 9 Joystick
- 10 Servo single
- 11 Ultrasound

Explanation 1 LED on Board

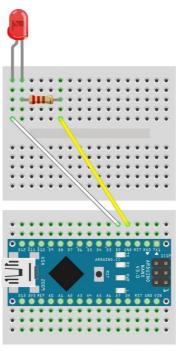
LED flashes at a particular rate **Exercise:** Try to make LED flash at a different rate.



fritzing

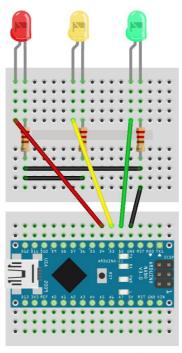
2 External LED

LED flashes at a particular rate **Exercise:** Move the LED to new pin.



fritzing

3 Multiple external LEDTurn on and off LED's in a sequence.

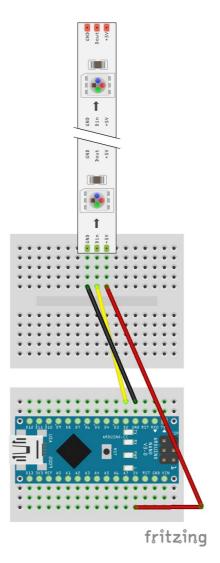


fritzing

4 Single smart LED

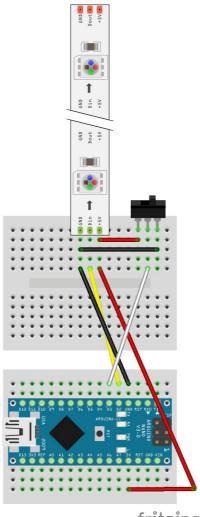
Turn on each smart LED in a row.

Exercise: Change the color of the LED's



5 Multi smart LED

Each time the switch is flicked change the color cycle pattern **Exercise:** Make a red cyclone light chaser.

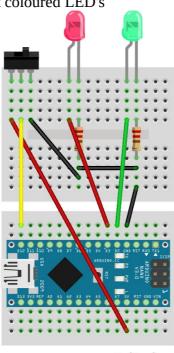


fritzing

6 Graphic display

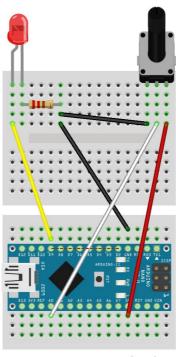
Hook up SCL to A5 and SDA to A4. Also hook up the power lines VCC to +5V and GND.

7 Digital input, switchUse a switch to turn on two different coloured LED's



fritzing

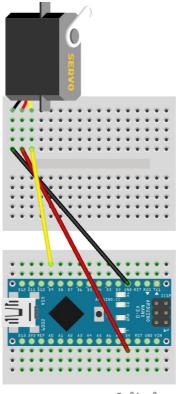
8 Analogue input, potUse a variable resistor to control the brightness of a LED.



fritzing

9 JoystickUse the example code to figure out which pins to connect up

10 Servo single



fritzing

11 Ultrasound

