

EZ COM MEGA



/*
This software was made to demonstrate how to quickly get your Atlas Scientific product running on the Arduino platform.

An Arduino MEGA 2560 board was used to test this code.

This code was written in the Arudino 1.0 IDE

Modify the code to fit your system.

****Type in a command in the serial monitor and the Atlas Scientific product will respond.****

****The data from the Atlas Scientific product will come out on the serial monitor.****

Code efficacy was NOT considered, this is a demo only.

The TX3 line goes to the RX pin of your product.

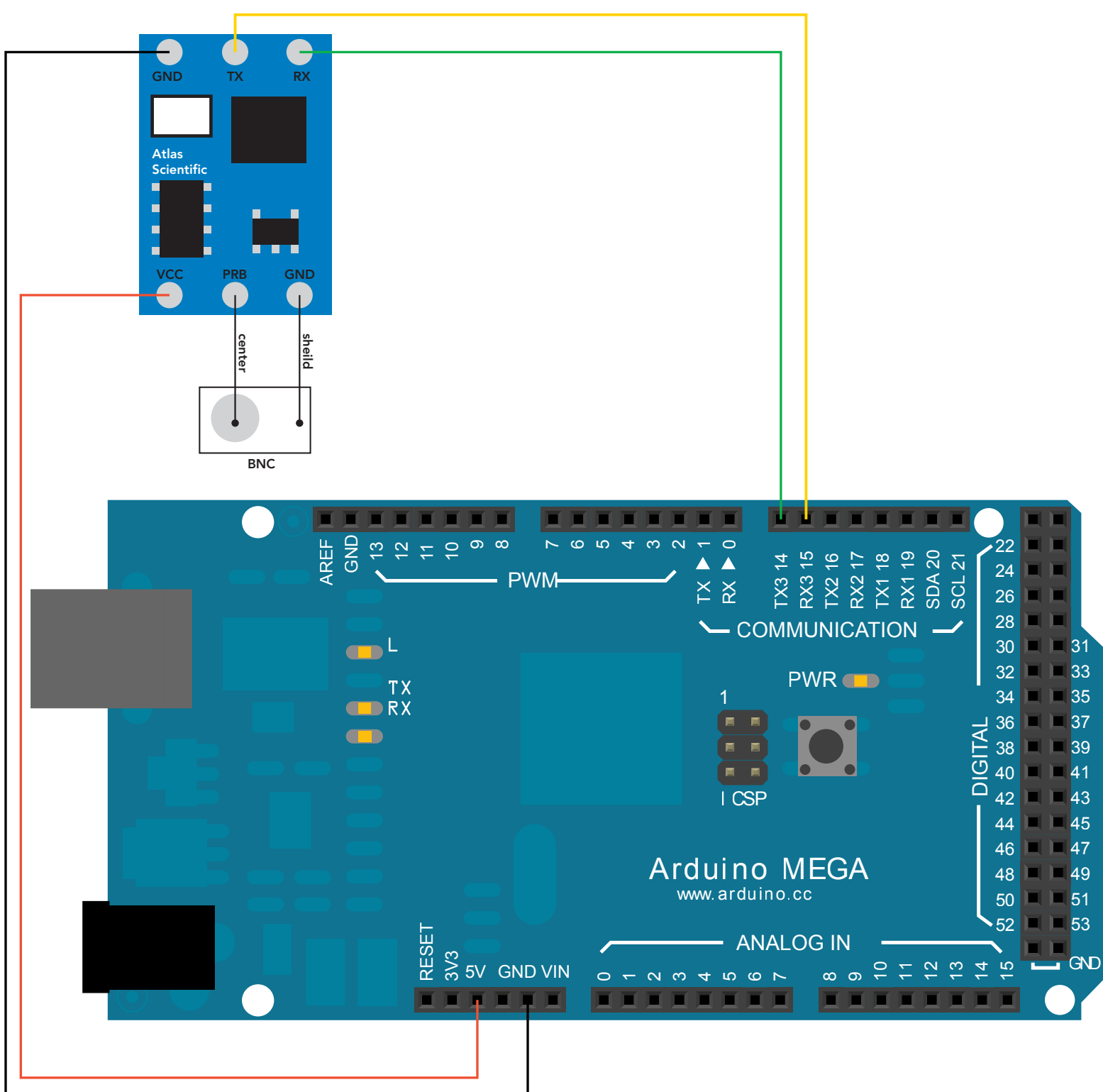
The RX3 line goes to the TX pin of your product.

Make sure you also connect to power and GND pins to power and a common ground.

Open TOOLS > serial monitor, set the serial monitor to the correct serial port and set the baud rate to 38400.

Remember, select carriage return from the drop down menu next to the baud rate selection; not "both NL & CR".

*/



```
String inputstring = "";
String sensorstring = "";
boolean input_stringcomplete = false;
boolean sensor_stringcomplete = false;
```

//a string to hold incoming data from the PC
//a string to hold the data from the Atlas Scientific product
//have we received all the data from the PC
//have we received all the data from the Atlas Scientific product

```
void setup(){
  Serial.begin(38400);
  Serial3.begin(38400);
  inputstring.reserve(5);
  sensorstring.reserve(30);
}
```

//set up the hardware
//set baud rate for the hardware serial port_0 to 38400
//set baud rate for software serial port_3 to 38400
//set aside some bytes for receiving data from the PC
//set aside some bytes for receiving data from Atlas Scientific product

```
void serialEvent() {
  char inchar = (char)Serial.read();
  inputstring += inchar;
  if(inchar == '\r') {input_stringcomplete = true;}
}
```

//if the hardware serial port_0 receives
//a char
//get the char we just received
//add it to the inputString
//if the incoming character is a <CR>,
//set the flag

```
void serialEvent3(){
  char inchar = (char)Serial3.read();
  sensorstring += inchar;
  if(inchar == '\r') {sensor_stringcomplete = true;}
}
```

//if the hardware serial port_3 receives
//a char
//get the char we just received
//add it to the inputString
//if the incoming character is a <CR>,
//set the flag

```
void loop(){

  if (input_stringcomplete){
    Serial3.print(inputstring);
    inputstring = "";
    input_stringcomplete = false;
  }
```

//here we go...
//if a string from the PC has been received in its entierty
//send that string to the Atlas Scientific product
//clear the string:
//reset the flag used to tell if we have received a completed string from the PC

```
if (sensor_stringcomplete){
  Serial.println(sensorstring);
  sensorstring = "";
  sensor_stringcomplete = false;
}
```

//if a string from the Atlas Scientific product has been received in its entierty
//send that string to to the PC's serial monitor
//clear the string:
//reset the flag used to tell if we have received a completed string from the Atlas Scientific product

[Click here to download the *.ino file](#)