

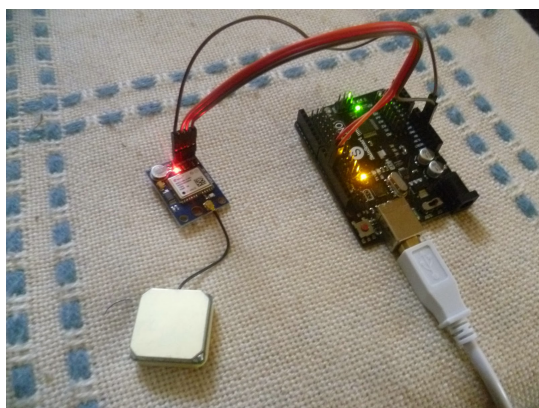
Arduino Your Home & Environment

Learn to monitor and control your home & environment with self contained, inter-communicating microprocessors. Applications include ham radio, robotics, weather stations, model railroading, toys and more. - KK4HFJ

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Saturday, February 22, 2014

Arduino & uBlox Neo 6M GPS



A buddy of mine sent me a **uBlox Neo 6M GPS** module and said "figure it out". Cool, I love projects like this.

There are 4 connections, TX, RX, VCC and Gnd. I connected TX of the module to pin 10 on the Arduino, Rx to Pin 11, VCC to 5v, and Gnd to Gnd.

I started with a simple SoftwareSerial demo to make sure I could read the module:

```
#include "SoftwareSerial.h"
```

```
SoftwareSerial mySerial(10, 11); // RX, TX
```

```
void setup()
```

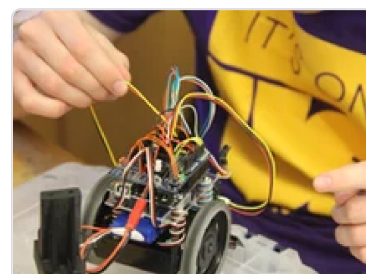
```
{
```

```
  // Open serial communications and wait for port to open:
  Serial.begin(9600);
```

```
  Serial.println("uBlox Neo 6M");
```

```
  // set the data rate for the SoftwareSerial port
```

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```

mySerial.begin(9600);

}

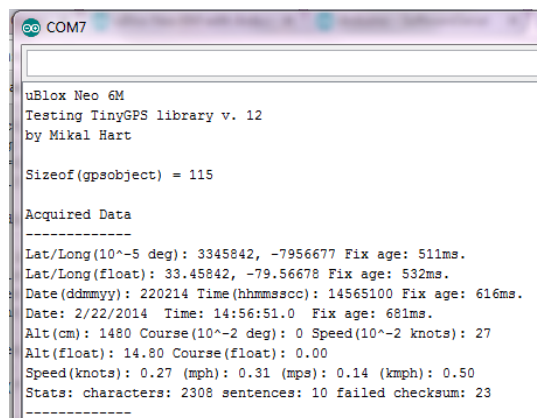
void loop() // run over and over
{
  if (mySerial.available())
    Serial.write(mySerial.read());
}

```

Then I added [Mikal Hart's TinyGPS Library](#) and sample code. This converts all those NMEA messages into a readable format by stuffing the character sequences into variables.

After a bit of massaging, here is the final result:

<http://tny.cz/d19906cc> (code)



```

COM7

uBlox Neo 6M
Testing TinyGPS library v. 12
by Mikal Hart

Sizeof(gpsobject) = 115

Acquired Data
-----
Lat/Long(10^-5 deg): 3345842, -7956677 Fix age: 511ms.
Lat/Long(float): 33.45842, -79.56678 Fix age: 532ms.
Date(ddmmyy): 220214 Time(hhmmsscc): 14565100 Fix age: 616ms.
Date: 2/22/2014 Time: 14:56:51.0 Fix age: 681ms.
Alt(cm): 1480 Course(10^-2 deg): 0 Speed(10^-2 knots): 27
Alt(float): 14.80 Course(float): 0.00
Speed(knots): 0.27 (mph): 0.31 (mps): 0.14 (kmph): 0.50
Stats: characters: 2308 sentences: 10 failed checksum: 23
-----

```

I still have more work to do, like displaying selected data on a LCD, but now that the data is in variables, that's easy. Stay tuned.

Posted by Steve Spence at **10:21 AM** 

 +47 Suosittele tätä Googlella

31 comments



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Steve Spence 1 year ago - Shared publicly

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Sait yllätyksen numero 7

Tarkasta
saamasi
yllätys tästä!

The Arduino Store



Alien SKP 10 months ago (edited) - Shared publicly
damn I can't make it work with my Mega 2650 ! Goddamit !!!
Where should I connect it to the Arduino Mega ?

+7 1 · Reply

View all 4 replies



Ran Shmulevitch
9 months ago
does it work? if not specify what is going on and i may be able to help. good luck



Alien SKP 9 months ago
Yes it works, thanks !



Nugroho Assidqi 1 year ago - Shared publicly
Excuse me, for the code <http://tny.cz/d19906cc> , there is a problem with the code, and the error is :
sketch_apr15a:6: error: 'TinyGPS' does not name a type
sketch_apr15a:8: error: variable or field 'gpsdump' declared void
Read more (16 lines)

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Tyler Holloway
4 months ago
did you ever find a fix?



Nugroho Assidqi
4 months ago
ups sorry for long time did'nt answer.., I'm sorry i try to create my code alone..., and forget to save at where..., if i found it , i'll share it...



Steve Spence 1 year ago - [Arduino \(Discussion\)](#)
stuffing gps data into variables -
<http://arduinoontronics.blogspot.com/2014/02/arduino-ublox-neo-6m-gps.html>

+2 1



Steve Spence 1 year ago - [Xtreme Arduino \(Discussion\)](#)
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Steve Spence 1 year ago - [Arduino Land \(Discussion\)](#)
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Steve Spence
1 year ago - [Makers, hackers, artists & engineers \(→ Arduino\)](#)
stuffing gps data into variables -

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This data logger monitors a solar or wind off -grid power system. A current shunt and voltage divider monitors the voltage and current of the system....

[Arduino LM35 Temperature Sensor](#)

One of the least expensive and simplest ways to measure temperature is with a LM35. This is another component found in our SainSmart kit. This...

[Arduino Relay Control](#)

Previously I have blogged about using relays with an Arduino, and SainSmart relays specifically. A while back I received a 4 relay, and a 8 relay...

[Adafruit RGB I2C LCD Keypad Shield](#)

This project is a bit more complicated than some we

<http://arduinoontronics.blogspot.com/2014/02/arduino-ublox-neo-6m-gps.html>

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Steve Spence 1 year ago - [STEM on Google+](#) (→ [Citizen science](#))

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Steve Spence

1 year ago - [Open Home Automation Community \(Discussion\)](#)

stuffing gps data into variables

- <http://arduinoontronics.blogspot.com/2014/02/arduino-ublox-neo-6m-gps.html>

1



Oscar Carreira 2 months ago - Shared publicly

Hi Steve! lot of thanks for your help! At last i can see my Ublox GPS working! Regards from Galiza, in the northwest of the iberian peninsula!

1 · Reply



Jayvin Babajee 3 months ago - Shared publicly

I have used your code exactly as it is, and yet it doesn't seem to work.

It only prints

[Read more](#)

1 · Reply



tan weiting 3 months ago

hi, do you have any fix for it? i facing the same problem.



Jayvin Babajee

3 months ago

I've got mine working with the tinyGPS++ library, it has some nice examples which you could try. works like a charm.



Shubhadeep C 4 months ago - Shared publicly

Hi. Many a thanx to you for your awesome code.

But when I wrote some code in IDE 1.5.8 for my DUE I got that

have done recently. Adafruit makes a very nice LCD Keypad Shield, that unlike most of the...

[Adafruit RTC / SD Data Logger](#)

Many of our projects require logging the sensor data to a sd card, and some of those projects require a time / date stamp. We used to use discrete...

[Will the Real Arduino. Please Stand Up?](#)

For years we have been receiving these wonderful blue Arduino boards with Arduino.cc printed on the back. Imagine my surprise, when this time,...

[Proto Screw Shields - Continued](#)

Last week I built a Proto Screw Shield from Sparkfun. Although it's a very nice piece, and easily assembled, I received one from Adafruit today...

[Arduino IDE Improvements](#)

Big things are happening! Sceptical? Download the latest Arduino IDE, and go to Sketch - Include Library - Manage Libraries The new IDE is much...

[Wind & Solar Datalogger](#)

We are rolling out our newest Wind & Solar Power Datalogger. A shunt between the battery and the power sources (wind turbines, solar panels,...

[Sparkfun Proto Screw Shield](#)

Today I got a package from Sparkfun that included a Raspberry Pi 2, a couple of MOSFETS, some right angled breakaway headers, and a Proto Screw...

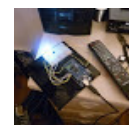
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[Gas Sensor Tutorial](#)

We just received a bunch of MQ Series Gas Sensors. These inexpensive sensors include: MQ2 - Flammable Gas & Smoke MQ3 - Alcohol MQ4...



[Arduino IR Receiver - Part 2](#)

I have been successful in programming my Arduino to identify sets of digits transmitted from my Samsung

but when I try to compile in in IDE 1.5.8 for my DUE, I get that error- 'class SoftwareSerial' has no member named 'available'. I do have sofwtserial.h, newsoftserial.h and altsoftserial.h

Read more

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Mike Mackley

1 year ago - [Makers, hackers, artists & engineers \(→ Arduino\)](#)



Steve Spence originally shared this

Arduino & uBlox Neo 6M GPS

A buddy of mine sent me a uBlox Neo 6M GPS module and said "figure it out". Cool, I love projects like this. There are 4 connections, TX, RX, VCC and Gnd. I connected TX of the module to pin 10 on the Arduino, Rx to Pin 11, VCC to 5v, and Gnd to Gnd. I star...

+4 1



Randolph Garrison

1 year ago +1
well done!



Marijn Bent 6 months ago - Shared publicly

Link is broken at the moment, can you provide us with a new url?

1 · Reply



Alana Wudianarma 7 months ago - Shared publicly

what is the difference using skm 53 ?

What is more accurate to use the data using skm or u bloc ?

1 · Reply



Noah Johnson 10 months ago - Shared publicly

I have the same model gps module, and I am FINALLY getting something out of it thanks to your code, but its still scrambled for me. Does this look like a baud rate problem? I would greatly appreciate any input.

Read more (28 lines)

1



Jaganathan Gnanavelu 11 months ago - Shared publicly

I am using above code in Arduino MEGA 2650 with NEO-6M GPS Module.

I connected GPS pin to Arduino : VCC → 5V, RX → TX2(pin 16) TX → RX2(pin 17) and GND → GND.

Read more

+1 1 · Reply



edualvaya 10 months ago

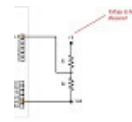
i have the same problem , what happens?



Ozi Uzoma 11 months ago - Shared publicly

i'm using the same gps module im receiving the nmea sentences but when i uploaded your code,nothing shows on the serial port

remote. I used the excellent library...



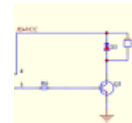
Monitoring voltage of a dc battery supply

Since we are involved in off grid solar power systems, we have a need to monitor battery voltage. The Arduino can do this easily with a simp...



Two DS18B20 Temp Sensors on LCD Display!

We are finally posting our multi DS18B20 Temp Sensor LCD project. Right now we are monitoring two sensors on one data pin, but could add man...



Working with the SainSmart 5v Relay Board

Today we are working with our SainSmart 5v Relay Board . This is a simple and inexpensive 4 port SPDT relay board (there are boards with mo...



DS1307 Real Time Clock Working

With a bunch of help from John Boxall of Tronixstuff.com , we finally got the Time / Date functions working on our Arduino, with the DS1307 ...



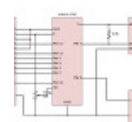
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A buddy of mine sent me a uBlox Neo 6M GPS module and said "figure it out". Cool, I love projects like this. There are 4 conn...



Our Temperature / Humidity Monitor is working!

We received our SHT21 Temperature / Humidity Sensor today from Misenso. No documentation came with it, so a bit of googling found parts of t...



The Arduino Thermostat

I've talked about this before, but since I just built another one last week, I thought I'd reshare this project, as it has a sligh...



AC Voltmeter and Temperature Monitor

I was asked to build a test jig for testing Honeywell Aquastats, and the two parameters that needed

monitor.not at all..pls help

1 · Reply

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monitoring were voltage (12-16 vac), and...

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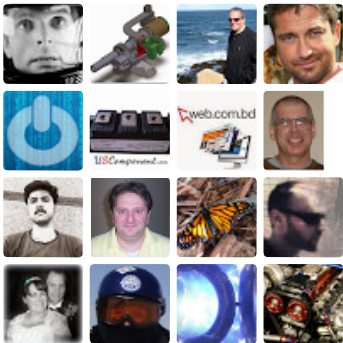
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