

# MightyOhm

Join the resistance.

---

[Ads by Google](#)

[PCB Assembly](#)

[PCB Design](#)

[PCB Boards](#)

[PCB Circuit](#)

## Assembly Instructions

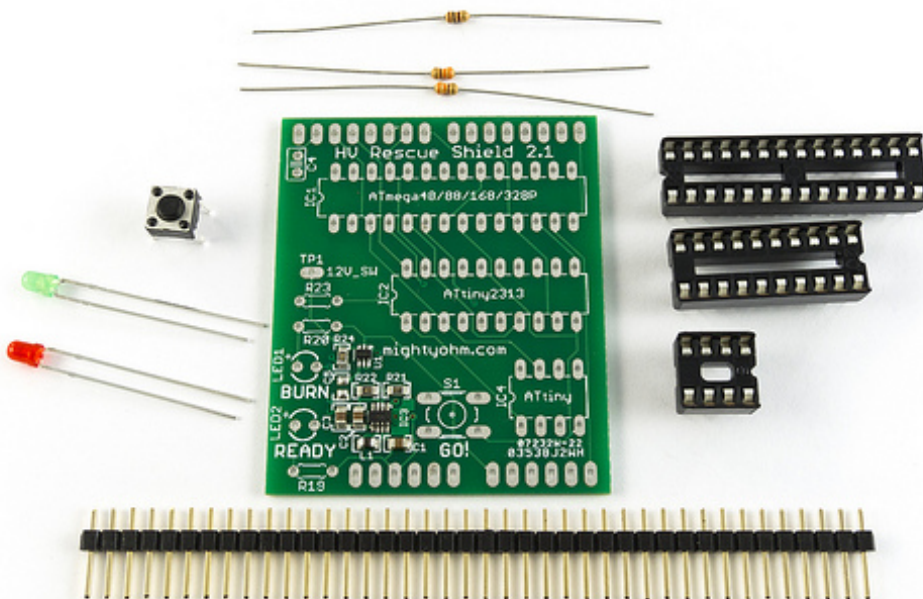
### Step 1:

Start by arranging all of the parts of the kit as shown. Make sure you have all of the parts listed.

Note: Some parts in the bill of materials come pre-installed on the PCB, as shown.

### Parts list:

- (1) Rescue Shield 2 PCB with DC-DC step up converter pre-assembled, as shown
- (1) 1×40 pin breakaway male header
- (1) 28 pin socket
- (1) 20 pin socket
- (1) 8 pin socket
- (1) microswitch pushbutton
- (1) 3mm red LED
- (1) 3mm green LED
- (1) 100 Ohm resistor (brown-black-brown-gold)
- (2) 330 Ohm resistors (orange-orange-brown-gold)

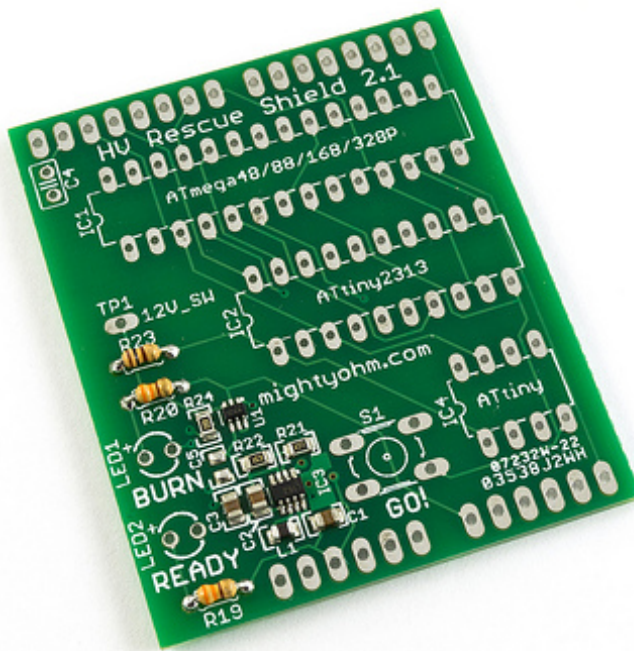


### Step 2:

Examine the PCB. The PCB should have some parts already soldered near the lower left corner – this is the surface mount DC-DC converter. This is shown in the photo above.

### Step 3:

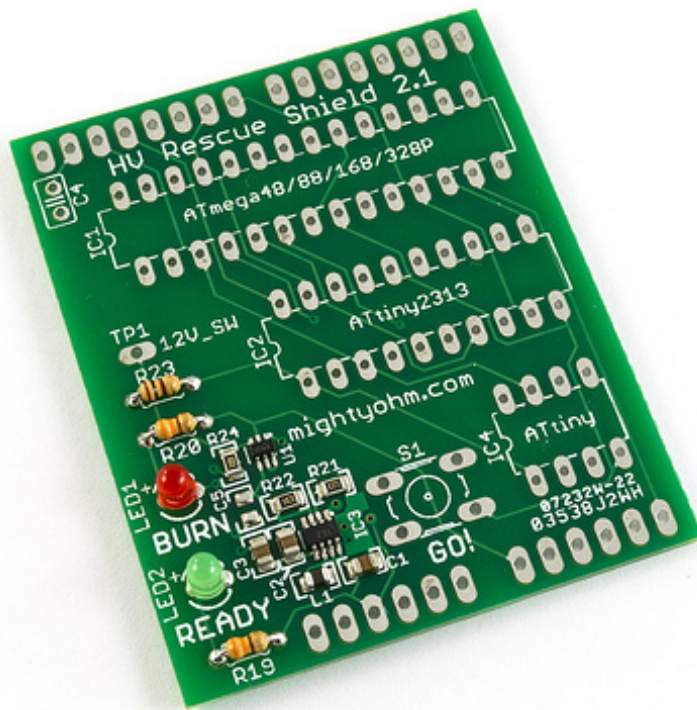
Install resistors R19, R20, and R23. Resistor R19 and R20 are 330 ohms (marked orange-orange-brown-gold). R23 is 100 Ohms (marked brown-black-brown-gold).



### Step 4:

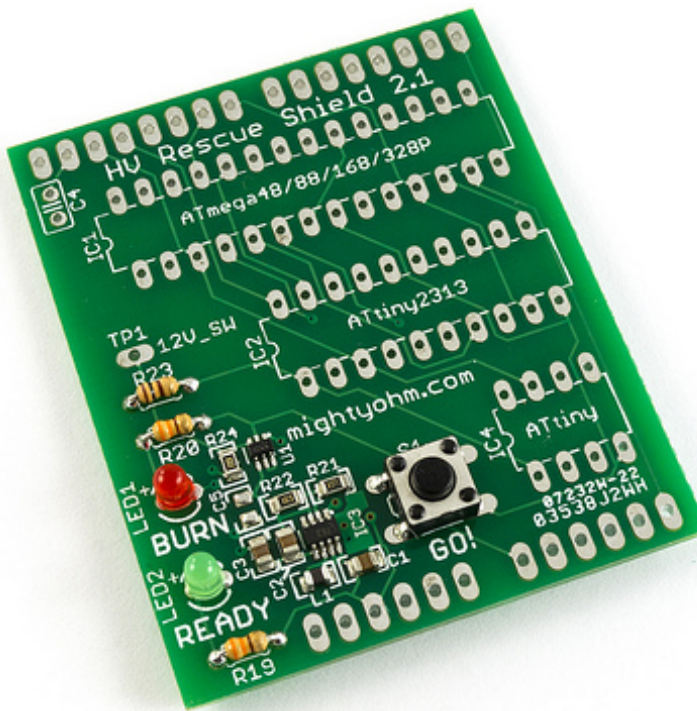
Install the LEDs. LED1 is the red BURN LED while LED2 is the green READY LED.

The LEDs have two leads. One is longer, this is the positive lead. Install the LED so the long lead goes into the hole on the left, near the small + symbol.



### Step 5:

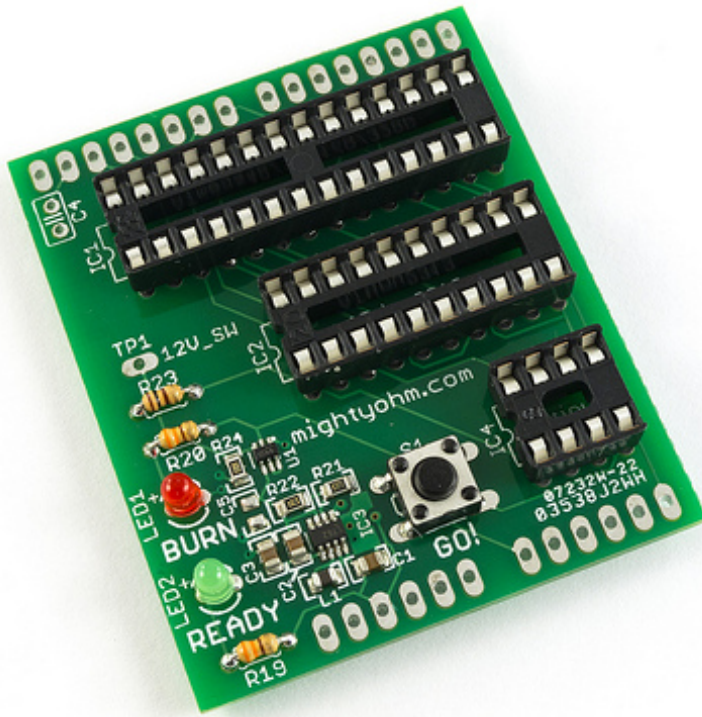
Install the pushbutton, S1.



### Step 6:

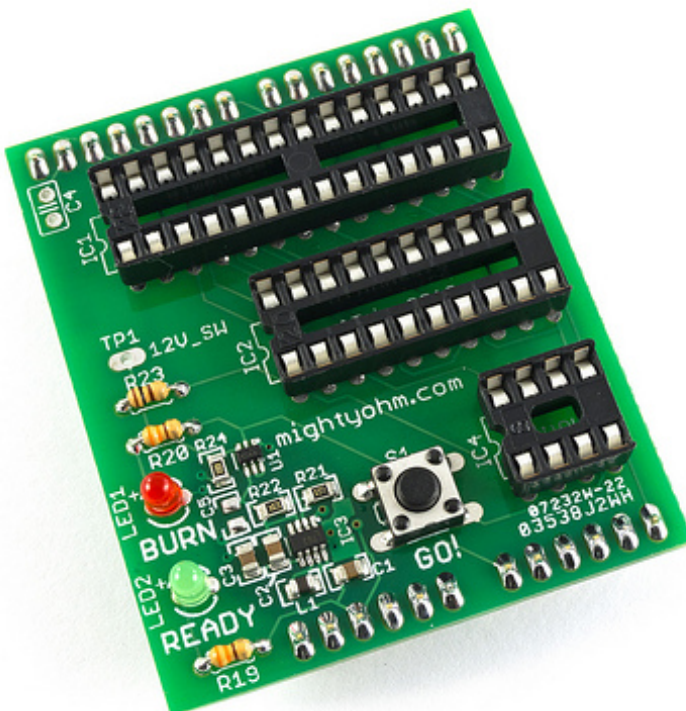
Install the three IC sockets, marked IC1 and IC2, and IC4. (IC3 is the DC-DC converter, which is already soldered!) The notch in one end of each socket should be oriented such that it matches the notch shown in the PCB silkscreen.



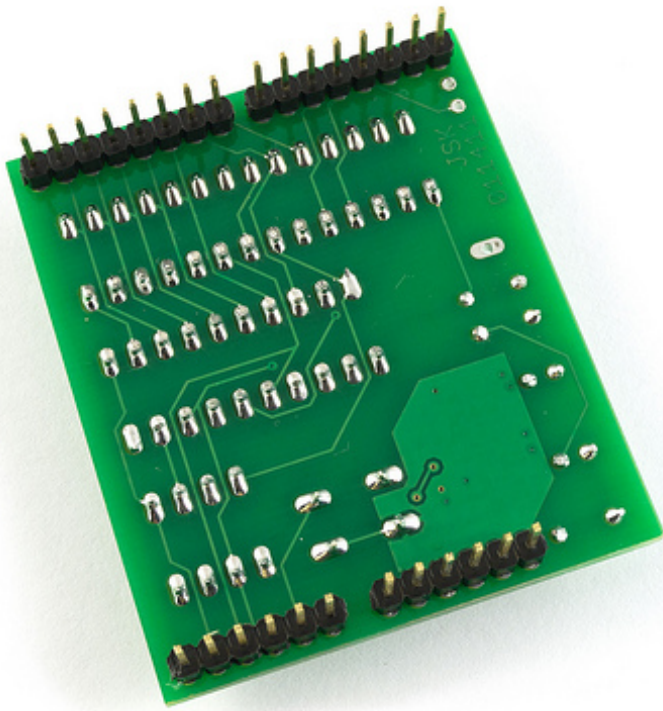


### Step 7:

Break the 0.1" header into two sections of 6 pins and two sections of 8 pins. Install the header strips into the board from the bottom side, so the shorter pins stick up through the board, as shown. Make sure the headers sit roughly 90 degrees from the PCB so that they point straight down. I find it helpful to solder one or two pins and check the alignment of each header before soldering the rest of the pins. Another trick is to stick the header pins into your Arduino, and then set the shield on top. This will hold the pins in place while you solder them!



Here is a bottom view of the completed PCB.



That's it, you're done!

This entry was posted on Monday, December 13th, 2010 at 2:14 pm. You can follow any responses to this entry through the [RSS 2.0](#) feed. Both comments and pings are currently closed.

Comments are closed.

Learn More



[www.nordsonefd.com](http://www.nordsonefd.com)

Ads by Google

[www.flickr.com](http://www.flickr.com)





More of  
mightyohm

- Search for:

Search



- [Creative Commons Attribution-Share Alike 3.0 United States License.](#)

## • Pages

- [Home](#)
- [About](#)
- [Archives](#)
- [Contact](#)
- [My Book](#)
- [Products](#)
  - [AVR HV Rescue Shield \(Obsolete\)](#)
  - [Geiger Counter](#)
  - [HV Rescue Shield 2](#)
    - [Assembly Instructions](#)
    - [Design Files](#)
    - [Source Code](#)
    - [Support](#)
    - [Usage Instructions](#)
  - [ICSP OV](#)
- [Support](#)
- [Tutorials](#)

## • Jeff says...

Have you seen the [forum](#)?

Have you seen the [forums](#)?

## • Categories

- [Amateur Radio](#)
- [Announcements](#)
- [Books and Resources](#)
- [DIY](#)
- [Electronics](#)
- [Embedded Linux](#)
- [Events](#)
- [Microcontrollers](#)
- [Uncategorized](#)

## • Recent Posts

- [Jootmine On Imelihtne \(Soldering is Easy: Estonian Translation\)](#)
- [And we're back!](#)
- [Thinking about buying a Geiger Kit? Order now or wait 2 weeks!](#)
- [Geiger Counter Kits are \(finally\) in stock!](#)
- [See you at the Open Hardware Summit & NY Maker Faire!](#)

## • Recent Comments

- [Alexander Shabarshin](#) on [DIY Integrated Circuit Design with MOSIS](#)
- Rafi on [I was not prepared for this.](#)
- [Jeff](#) on [Geiger Kit Demo](#)
- Nick on [Geiger Kit Demo](#)
- Kevin Groce on [Video: Staver Electromechanical Vane Display](#)

## • [Recent Forum Topics](#)

- [Atmega 168 only?](#) *petr farnik*
- [Re: Looking for feedback...](#) *jox*
- [Re: alternatives to the WL-520gU](#) *gerben*
- [Re: Serial processing code? Patchube?](#) *peterloron*
- [Re: Why the preference of the SBM-20?](#) *mightyohm*

## • Electronics Blogs

- [Adafruit Industries](#)
- [Chris Gammell's Analog Life](#)
- [Circuits@Home](#)
- [DadHacker](#)
- [EEVblog](#)
- [EEWeb](#)
- [etotheipiplusone](#)
- [Evil Mad Scientist Labs](#)
- [Hack a Day](#)
- [Interactive Matter](#)
- [Ic8 Labs](#)



- [jeelabs](#)
- [Keith's Electronics Blog](#)
- [Make:](#)
- [My 2μF](#)
- [The Amp Hour](#)
- [The Smell of Molten Projects in the Morning](#)
- [Tinkerlog](#)

## • Project Index

- [Arduino-based AVR High Voltage Programmer](#)
- [Bluetooth Handset](#)
- [DIY Light Tent](#)
- [DIY PID Controlled Soldering Hotplate](#)
- [PIC RGB Video Generation](#)
- [PID Controlled Solder Paste Fridge](#)
- [Wifi Radio Project](#)

## • The MightyOhm Universe

- [Discussion Forums](#)
- [Facebook](#)
- [Flickr Photostream](#)
- [MightyOhm Wiki](#)
- [PCB Flickr Pool](#)
- [Twitter](#)

## • Vendors

- [Mouser Electronics](#)
- [Sovtube.com](#)



- I support the [Open Source Hardware Definition v1.0](#)

## • [@mightyohm's Tweets](#)

- Sporting my new Solder:Time watch kit from SpikenzieLabs: <http://t.co/C8CA63xM> 2 hours ago
- Pic. <http://t.co/C3xS32bP> 2 hours ago
- So, what is this green stretchy fabric thing I got from @seedstudio at @ohsummit supposed to be? A laptop cozy? [2 hours ago](#)
- Argh, stupid TweetDeck! Anyway, my mini ITX Atom server is still going strong. Pics of the build last year: <http://t.co/DUO01Ebe> 3 hours ago
- I can't believe it's been a year since I built my mini-ITX Intel Atom server, it's still the perfect machin... (cont) <http://t.co/bl0yzpTf> 3 hours ago

## • Meta

- [Log in](#)
- [Entries RSS](#)
- [Comments RSS](#)
- [WordPress.org](#)

---

[Get \\$75 Free Advertising](#) Try Google AdWords. Claim Your \$75 Coupon Now! [www.Google.com/AdWords](http://www.Google.com/AdWords)

[BGA Rework and Inspection](#) Quick Turn, Quality and Value BGA, CCGA, QFP, uBGA, Interposers [www.etch-web.com](http://www.etch-web.com)

[Circuit board assembly](#) Burn-in board, design and assembly PCB Design, Fabrication & Assembly [www.altestcorp.com](http://www.altestcorp.com)

AdChoices 

© 2008-2011 [Jeff Keyzer / MightyOhm Engineering](#)  
[Entries \(RSS\)](#) and [Comments \(RSS\)](#).

Ⓜ