Four Banger Shopping List

This controller will use an Arduino UNO with the Atmel AT328p processor. Configuration options and sequence data will be stored using the AT328p's onboard 1k eeprom. The controller will be programmable using either manual a button board (button banging), or via a custom PC-based programming application. We suggest using the Arduino Uno if you are new to this.

Shopping List (note that these prices fluctuate on Ebay):

- **Arduino UNO AT328p**   **$3.39**

- **4 Relay Module**   **$3.20**

- **PIR Sensor**   **$1.11**

- **Serial MP3 Module by Catalex**   **$4.49**

- **1gb SD Micro Card**   **$3.19**

- **5v/12v Power Adapter**   **$2.18**

      TOTAL-------------------------------------- About 20 bucks. Shop around and watch for good deals. You can also save a few bucks if you buy parts in multiples.

If you are an Arduino newbie, you should probably stick with an UNO.

NEW UNO R3 ATmega328P CH340 Mini USB Board for Compatible-Arduino

$3.39   From China
Was: $5.65
Buy It Now
Free shipping

These relay modules are very convenient- buy more than you think you need! The original version of this document suggested the 5v type. I have built tons of controllers using this one successfully:

5V Four 4 Channel Relay Module w/ optocoupler for PIC AVR DSP ARM Arduino 8051

$2.33   From China
Was: $2.45
Buy It Now
Free shipping

5% off
See more like this

   Some folks are suggesting 12v relay modules. If you do get a 12v version, make sure that it may be toggled using TTL level signals (5v). The 12v rating is for the relay coils themselves. This can offer benefits by easing the power load on the Arduino's 5v regulator and it can offer some isolation too. I have seen people get talked into the 12v modules only to have no idea how to wire it, or they bought an incompatible one etc... If you are building one of these for the first time and want to start simple, the 5v vesion pictured above along with an Arduino Uno will work for probaby 90% of typical props.

NewAdjust IR Pyroelectric Infrared IR PIR Motion Sensor Detector Module HC-SR501

$1.11   From China
Trending at $1.51
Buy It Now
Free shipping

1707 sold

1GB Micro SD Memory Card Mixed Brands Used Free Shipping

$3.19   FAST 'N FREE
Was: $3.99   Get it on or before **Tue, Mar. 31**
Buy It Now   Top Rated Plus
Free shipping

20% off

YX5300 UART Control Serial MP3 Music Player Module For Arduino/AVR/ARM/PIC GM

$4.49   From China
Buy It Now
Free shipping

84 sold

The power adapter you use may vary based on your needs, but this is a typical example.

LE 24W Power Supply Adapter 12V 2A 3528/5050 LED 100-240VAC to 12VDC Transformer

$0.94 to *$3.52*   From Hong Kong
Buy It Now
Free shipping

33+ sold

These little jumper cables are great for connecting modules to an Arduino. Buy a bunch to keep on hand- you can never have too many of these! Also, get some of the ones that have a male pin on on one end.

1 Set 40PCS Dupont Wire Color Jumper Cable 2.54mm 1P-1P Female to Female 20cm MN

$1.15   From Hong Kong

Buy It Now

Free shipping

784 sold

ONE New Plastic Electronic Project Box Enclosure Instrument case DIY 121x94x34mm

HAMMOND MANUFACTURING 1591GFLBK W/ HARDWARE

$5.99

Buy It Now

+$2.49 shipping

Keep an eye out on Ebay for nice enclosures such as this:

Here are a few pics of the first prototype installed in a Hammond enclosure.