Pulse Rifle Counter/Sound Board Hyperdyne Labs, © 2001

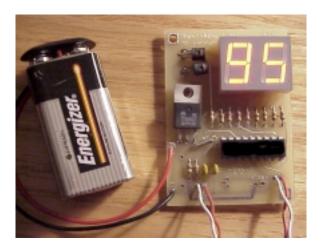
http://www.hyperdynelabs.com

Overview

The pulse rifle counter simulates the decreasing ammo count for the M41A pulse rifle. When power is applied to the circuit, the counter starts at 99 then counts down to 95 rapidly.

When the trigger wires make contact, the counter begins to count down based on the firing rate seen in the movies. When the counter reaches 00, the counter stops.

Here is a pic of the counter unit:

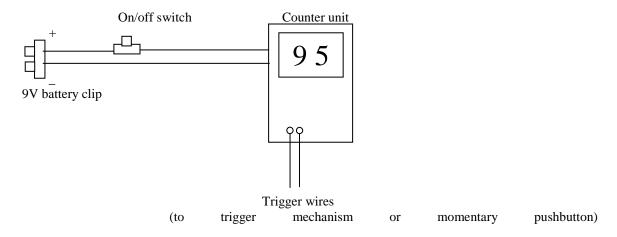


The trigger wires are the 2 wires hanging off the lower part of the counter board. The trigger wires can be connected to a real trigger mechanism or a simple momentary pushbutton switch. The counter unit will run off a 9V battery or any other battery source that is between the range 6-18V.

Powering the counter with a switch

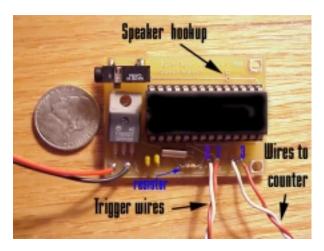
Most PR replica manufacturers connect the power supply differently. Some cut the battery leads, keeping the battery in the clip away from the counter unit. They use contact pads so when the clip is inserted, contacts are hit which supply power to the counter. Others may hide the battery in the clip shroud area, splicing a switch into the + battery lead. For this reason, it is up to the installer to splice in the proper switch mechanism to turn the counter on and off.

If you are using a simple on/off SPST switch, the simplest method is to cut the positive lead coming off the battery snap and insert a switch, like this:



Sound board connections

The PR counter also can be connected to our pulse rifle sound board, which will coordinate PR blast sounds with the decreasing ammo count. The counter will also tell the sound board when the ammo count has reached 00 so an empty gun clack sound is played. You can find out more about the PR sound board from http://www.hyperdynelabs.com. Below if a picture of the sound board.



If the sound board was included with your package, it will be prewired to the counter. Both boards run off the same battery, and you can turn them both on using the master toggle switch or other mechanism. The switch and 9V snap connector may be connected to the sound board instead of the counter. The trigger wires still reside on the counter, and they are also run to the sound board to generate sounds when the trigger is pulled. Connect the trigger wires to your trigger mechanism.

You can use a direct speaker hookup or even a stereo 1/8" jack (for an external speaker or FM transmitter) to play out the sound effects. A volume control cable can also be used with a jack to control the output volume.

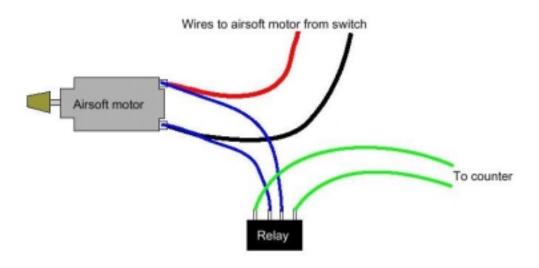
Airsoft Connections:

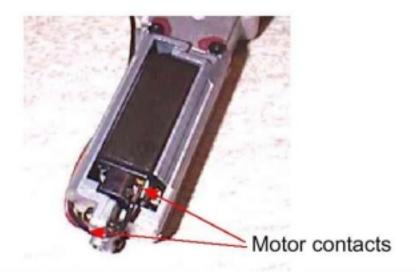
If you are installing the counter to use with an airsoft, you can use the airsoft trigger to activate the counter. You will have to use a relay that is connected up to the counter board trigger wires. These are available through us.

The connections to the airsoft can be made right to the airsoft motor assembly. Make sure to connect up the red (positive) wire (connected to relay pin 2) to the positive side of the airsoft battery trigger, and the negative wire (connected to relay pin 3) to the negative side of the airsoft battery/switch. The relay will only work in one configuration, so test it out before attaching the wires up. If it is connected the wrong way, the counter will not count down, and you can destroy the relay if it is connected up incorrectly for too long (since it has a protection diode internal to the relay).

Here is a pic of the airsoft relay connections that go to the PR board.

Correct wiring (parallel)





Here is a pic of our PR counter in a finished rifle:



Good luck and enjoy!