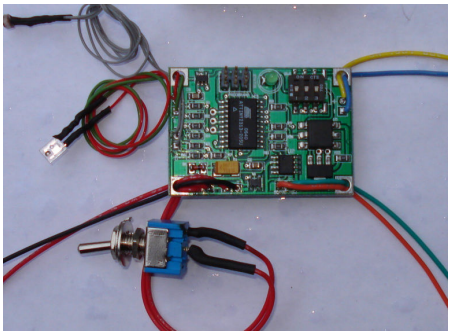
BFoutdoors Slavemaster

REV 1 11/23/2007



For advanced builders and those with good electronics skills.

WARNING: Connection of this device to a camera Flash may involve hazardous voltages, and should be only attempted by those qualified.

These modifications are not recommended or condoned by Vivitar or any other manufacturer, and will void the warranty on the flash unit if made.

While I do not know that a shock from the flash capacitor could be lethal, I don't know that is can't be. It can certainly cause one to hurt oneself. Any attempt to duplicate the modifications described herein is strictly at the risk of the party attempting the modifications.

Next what is crucial to understand is the SLAVEMASTER board is a low power board and anything over 5 volts connected or shorted to it has a chance of destroying the board and the components on it? Also the slave itself has both High voltage and Low voltage circuits and connecting or shorting these can also destroy the board or its components.
One thing I feel is crucial to completing a successful mod and build is that the capacitors on the Slave be drained of there dangerous high voltage.

Let's think of a charged slave as a loaded gun and if we unload it or drain it off we now are assured it can't hurt us. We still need to treat it with respect and as if it were loaded and not take unnecessary chances with it but for the most part we are assured that the dangerous voltages that will destroy components and or hurt/shock us are gone. Do this every time we work or handle it and we and the components are safe.
So before you begin please read the

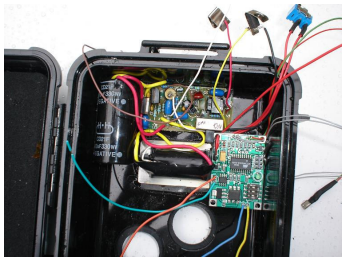
Draining a charged flash Capacitor. PDF file

I also suggest you test the modified slave to be sure that it is still functioning This can be done by connecting the positive and negative wires to a battery source and letting the capacitor charge Then shorting or touching the trigger wires together should cause the flash to fire
You will again need to drain the capacitor even after a trigger as it could still have hundreds of volts in it.

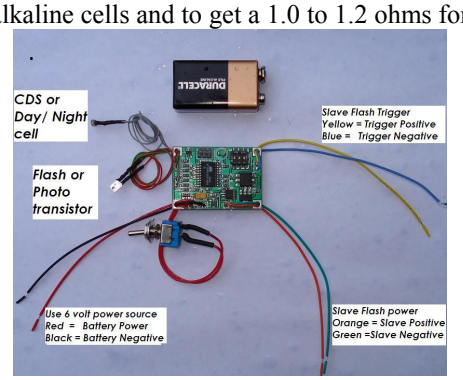
So now we have a Slavemaster board and also the modified slave ready to be mounted in or build then connected together.

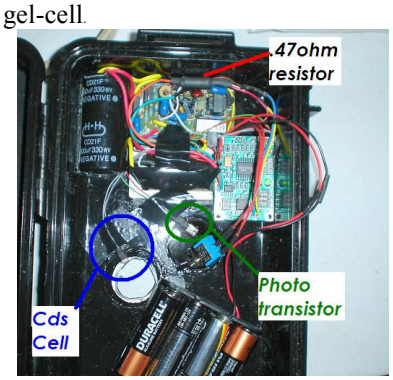
One thing that we need to determine is the positive wire for the slave trigger I do this with a meter before I disconnect the wires from the hot shoe block.

I first prepare my case by laying out the components and making sure that they will all fit in a way that is neat and functional.

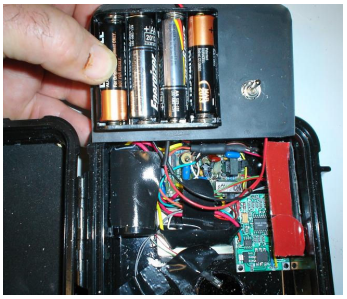



Now we can begin to connect the wires together. Good solder joints are a must as is covering the joints with electrical tape or Heat shrink tubing. Also I recommended using the 0.47 ohms resistor for four NiMH or alkaline cells and to get a 1.0 to 1.2 ohms for a 6-volt gel-cell.





Now we are left to mount the Switch and the battery holder I use a piece of PVC board and attach it to the flash capacitor on the left side with pt1100 tape and on the right side I attach a piece of small plastic angle stock to the case then attach the board to it with PT1100 Tape also. In doing my builds this way I feel it makes a very neat finish with no holes drilled in the case other than the flash hole.




TIPS

In my testing I have found by simply changing the angle of the cds cell can change when the slave will see dark by as much as an hour experiment in how you want it placed so it will be active when you would like it to be.

The photo transistor is very sensitive when the black dot on it is facing directly to the flash this is especially important in remote slaves and even more so in an ir remote builds.

Good luck with your build. Please look for the Slavemaster Operation PDF file