



## How to hardwire the Samsung A402 Digital Camera

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This document covers in detail how to modify the Samsung A402 Digital Camera for remote shutter control from the PixController LE board with LE II camera controller chip. Please see <http://www.pixcontroller.com> or email [support@pixcontroller.com](mailto:support@pixcontroller.com) for more information.

**Please note that if you make this modification to your Samsung camera that you will void your camera's warranty. This modification can also result in damage to your digital camera if you do not follow the instructions properly.**

### Tools/Parts Needed

1. 2.4 mm #0 Philips Screwdriver & Small Flat Blade Screwdriver.
2. Fine tipped soldering iron with heat control.
3. 30 Gauge wire. Wire Wrap type wire can be purchased from your local Radio Shack store. Find one of the 3 part numbers: 278-501, 278-502, 278-503. They come in a spool of 50 feet of wire for \$2.99
4. Small tweezers.
5. Flat blade screw driver or knife.
6. 4-wire servo cable from PixController, Inc. or purchase the PixController LE Samsung A402 digital camera kit which will include the 4-wire servo cable. Note, you do not have to use the 4-wire servo cable and you can just solder 4 wires from the internal camera contacts to the PixController LE board.
7. PixController LE board with LE II PIC camera controller chip & PixController Opto Board.

### Remove batteries and media card

Before starting your project be sure to remove the 2 AA internal batteries and the Media Card.



Remove the 2 AA batteries and Media Card

### Remove the camera case screws

Remove all 7 screws from the camera case. Be sure to place the screws in a safe place while modifying the camera.



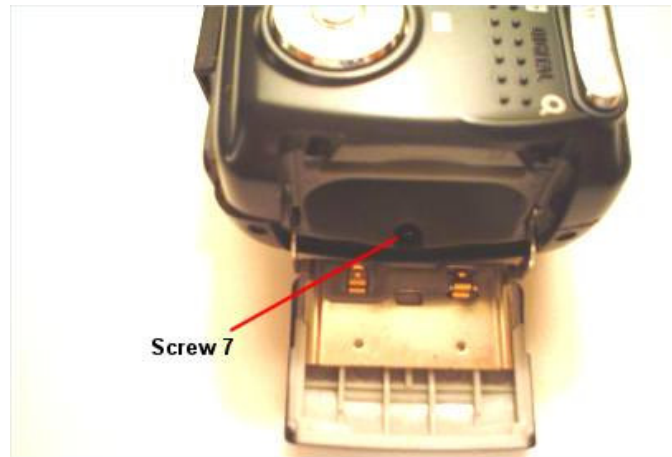
Remove screws 1,2, and 3 from the bottom of the camera case.



Remove screw 4 from the right side of the case.



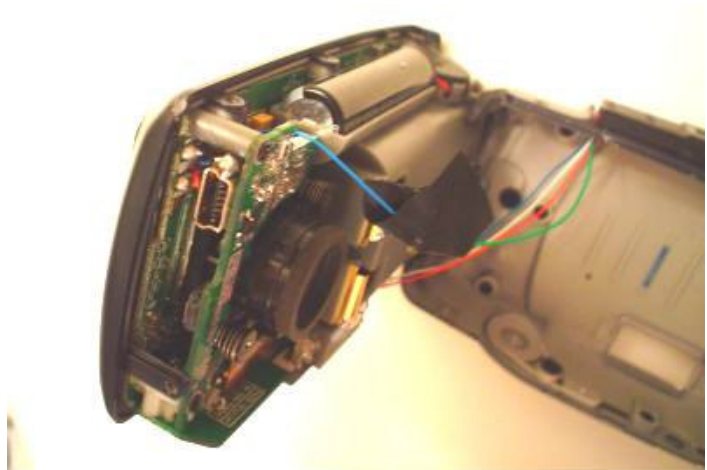
Remove screw 5 & 6 from the left side of the camera case.



Open the battery door and remove screw 7.

### **Remove the case**

Carefully remove the front of the camera case from the camera exposing the interior electronics.



## Wire the Power and Shutter contacts

**Note:** Before soldering follow the step below if using the 4-wire servo cable.

Next you want to attach your power, power common, shutter and shutter common wires to the locations shown here.

Attach the wires from the 4-wire servo female end cable or small gauge wires.

If using the 4-wire servo cable wire the following colors:

**Green – Power Common**  
**Red – Power**  
**White – Shutter**  
**Blue – Shutter Common**

**Note:** There are 2 locations you can solder the “Power Common”. If you feel comfortable soldering to the small solder pads shown in Figure 1 you can solder the Green “Power Common” wire there, however, if you need a larger solder contact area use the USB Hood shown in Figure 2.

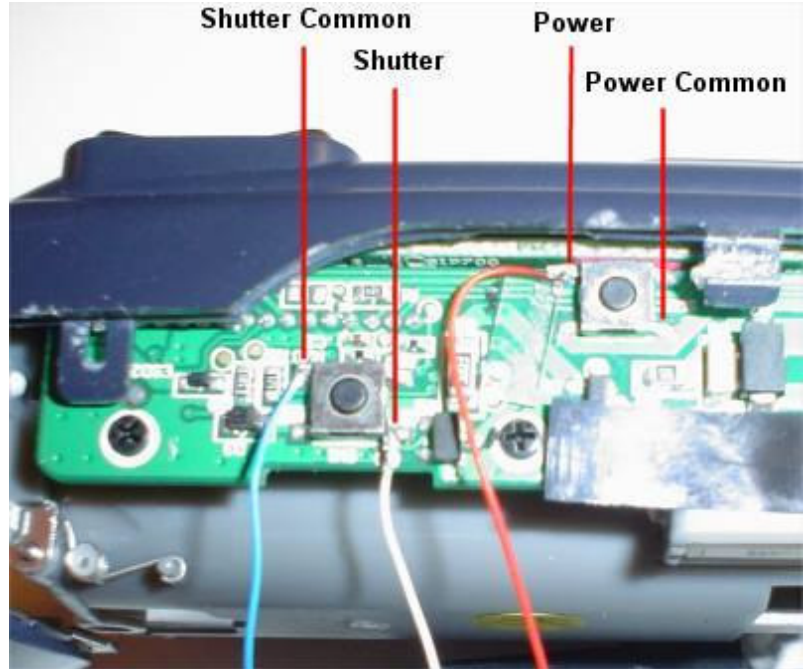


Figure 1

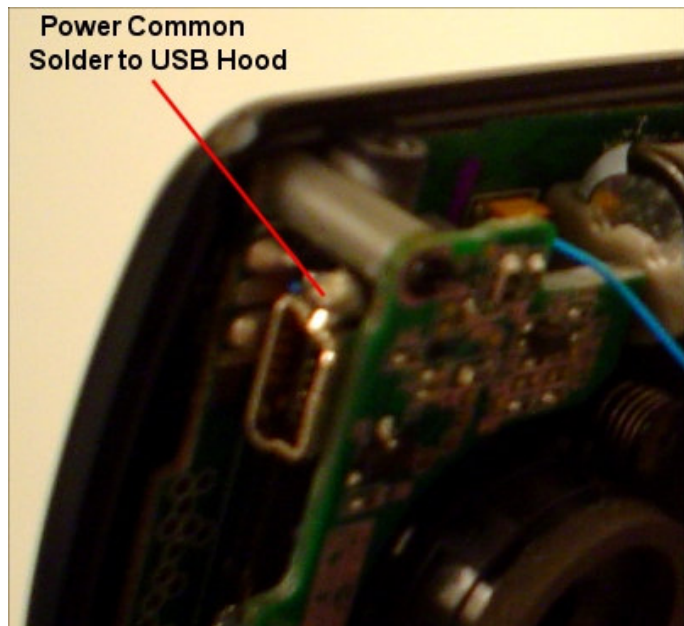
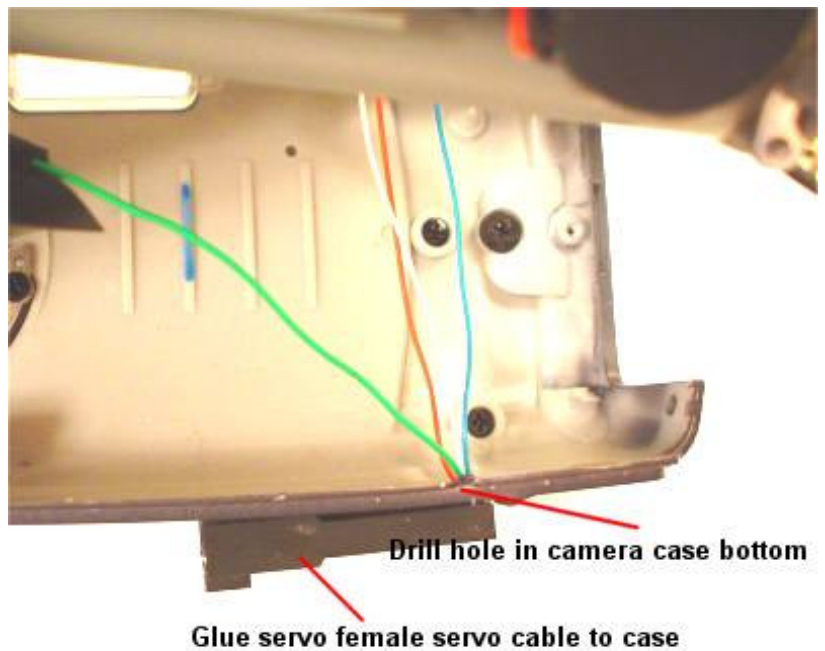


Figure 2

### Attach servo cable to camera case

Once the wiring is completed drill a small hole in the bottom of the case, run the female 4-wire servo cable wires through (**before soldering to contacts**), and glue the servo cable connector to the case as shown.



### Re-attach case and replace the screws

Once you are complete with this process place the camera case back together and replace the camera case screws.



### Wire to the PixController Opto & LE board

Before starting cut a small area out of 2 of the LE board kit mounting spacers and install the PixController Opto board between the spacers as shown to the right. (Figure 1)

Next wire the 4-wire male connector to the PixController Opto board as shown in (Figure 2).

If using the 4-wire servo cable wire the following colors to the PixController Opto board.

- Green – J2, Pin 1
- Red – J2, Pin 2
- White – J2, Pin 4
- Blue – J2, Pin 3

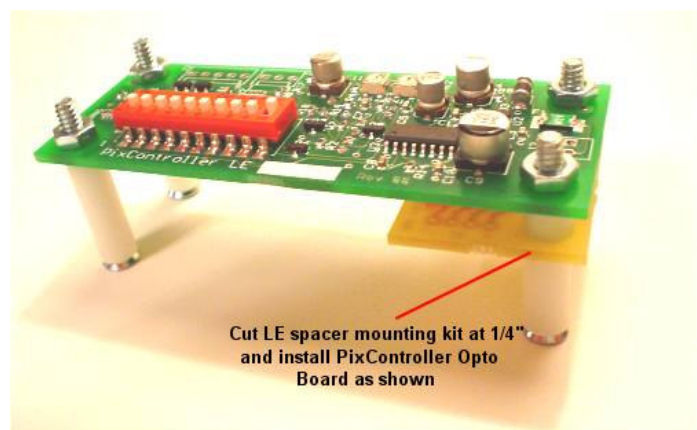


Figure 1

Next wire the PixController Opto board to the LE board:

- LE Shutter – Opto J1 pin 3, Green
- LE Ground – Opto J1 pin 2, Black
- LE Rec/RFSH – Opto j1 pin 1, Red

Last, remove the R17 resistor from the LE board, see: [http://www.pixcontroller.com/PixLE/PixLE\\_ResistorRemoval.htm](http://www.pixcontroller.com/PixLE/PixLE_ResistorRemoval.htm)

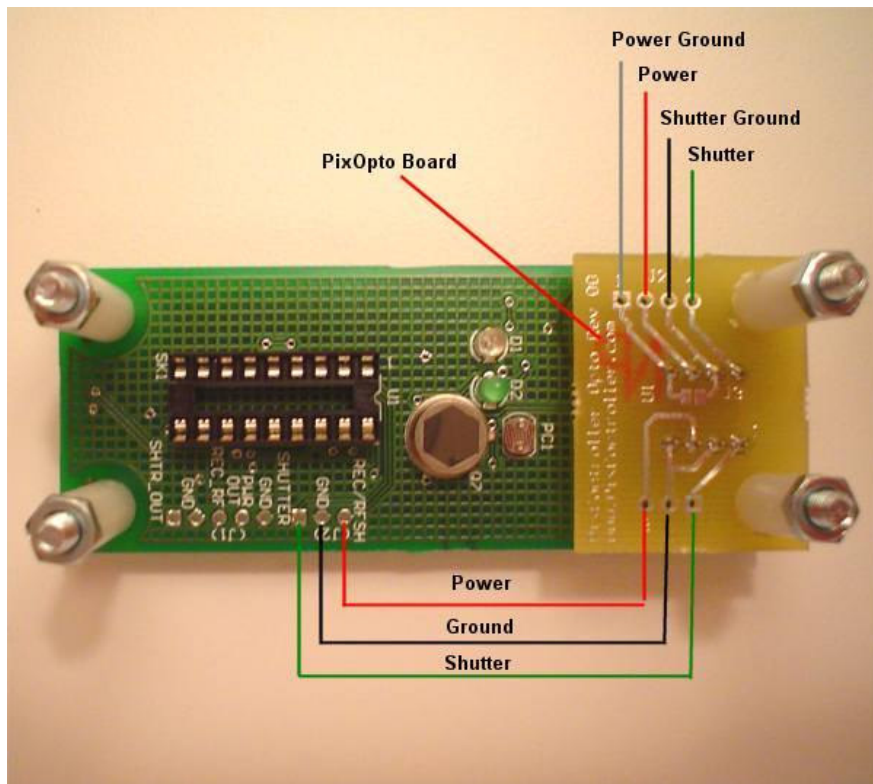
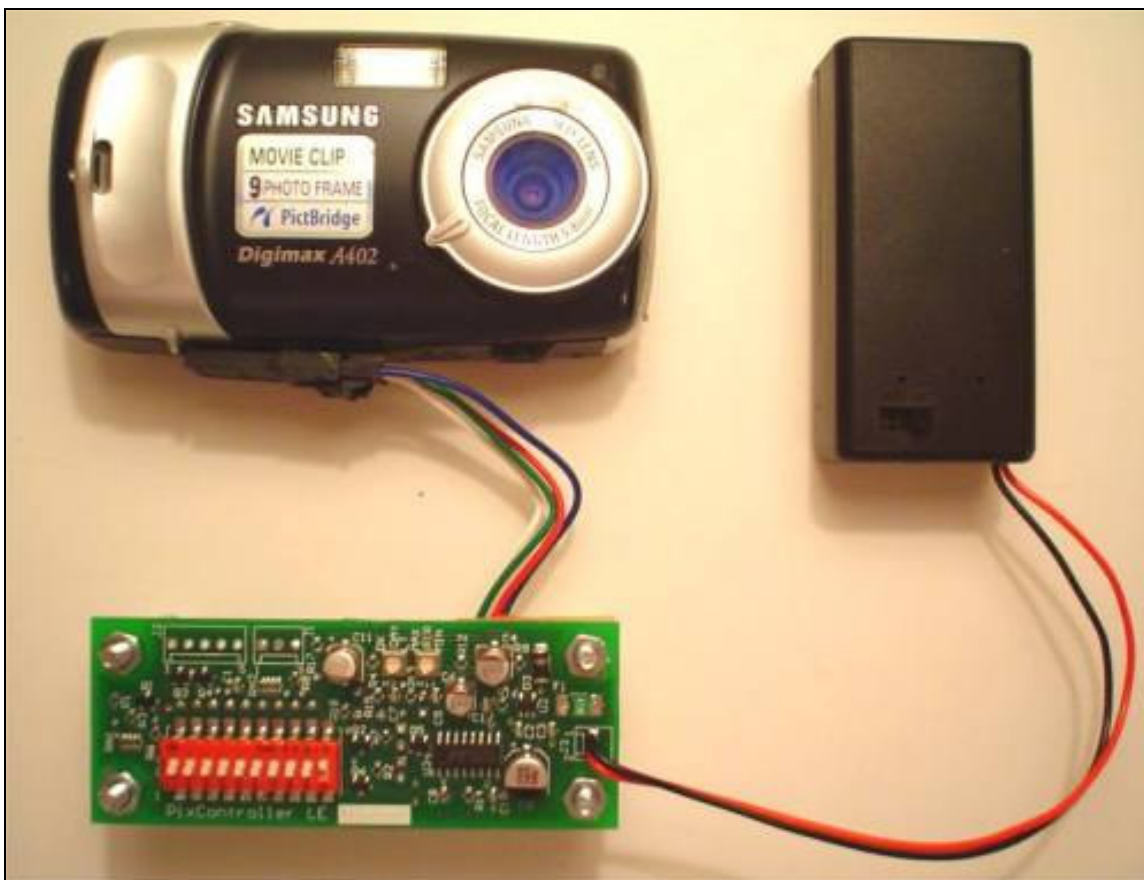


Figure 2



Completed Modification

This camera was wired using the 4-wire servo cable for the PixController LE and Opto boards.