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# HOW TO MAKE AN ENDZONE REMOTE CONTROL FOR SONY VIDEO CAMERAS WITH MULTI-TERMINAL PORTS

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Sony Cameras provide quality video and are very affordable. The new video cameras (see the list below) have the new Sony Multi-Terminal Port. For the sideline, this is great because you can simply purchase the Sony VCT-VPR1 Compact Remote Control Tripod and you have a remote that plugs into the Multi-Terminal Port and allows you to power on/off, zoom in/out and record video. The Sony VCT-VPR1 is less than $100 and simply the best remote/tripod combination we have tested.

So now for the bad news: If your end-zone camera is a Sony and has this new Sony Multi-Terminal Port connector, there simply is no place we can find to purchase an extension cable for this remote and use it on your end-zone camera (note: the remote can come off the VCT-VPR1 tripod and attach to your end-zone tripod). Sony recommends using an iPad to wirelessly control the camera (yes, most have wifi) but this is simply not the best solution.

Well, we figured out what we think is the best method – purchase the Sony VCT-VPR1, remove the remote, extend the Multi-Terminal Cable to 25’, and use it on your end-zone camera.

This guide will take you step by step through this process… hopefully you know how to solder wires together.

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Step 1: Purchase the Sony VCT-VPR1 tripod with remote. We got ours at Amazon.com for $95.80 with free shipping. Go to their website and search Sony VCT-VPR1.

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**Step 2:** Purchase the Bescor 20’ Extension Cable (for the motorized pan head). Note: they have a 50’ cord so you can get that one if you want to go longer – we have not tested the 50’ but it should work. Search Bescor 20’ Extension Cable on Amazon – they are less than $15.

**Why did you purchase the Bescor Extension Cable?** Because it has the exact number of conductor wires inside as the Multi-Terminal Cable and they colored the same too. Very convenient and they are stranded so they are meant to be rolled up and unrolled without breaking.

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**Let's get started.**

1. Parts list:
2. Multi Terminal Cable (from remote).
3. Bescor Extension Cable
4. Soldering Iron (or Gun).
5. Solder
6. Heat Shrink tubing (multiple sizes). I got a box of them off amazon for a few bucks. Search Amazon.com for part number: B00RCFQSSY
7. A blow drier or heat gun to use on the heat shrink tubing (to seal the cable and connections).
8. Note: helping hand clips (as seen in the pictures) really helps hold the wires together.

**Instructions:**

Unplug the Multi-Terminal Cable from the remote.

Cut (yep, sever it) the Multi Terminal Cable in the middle. Strip back 1 ½ inches off each cut end of the Multi-Terminal Cable and then cut off the shield foil– this will expose the 7 cables and the ground shield. Strip about ¼ inch off each of the wire conductors – careful, they are fragile but you can do this with a small pair of wire cutters and some skill (my wire stripper could not work on such a small wire).

Cut the ends off the Bescor Extension cable. Strip back 1 ½ inches of the rubber cable cover and then cut off the shield foil. This will expose the 7 cables and the ground shield. Strip about ¼" off each wire conductor.

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Slide some heat shrink tubing over the main cable (we will use it later to cover all the wires… has to be put on before you solder the cables together.

Now if you have the helping hands, you can use them to hold the wires close together. Put a small piece of heat shrink next over the each Bescor wire conductor so after you join and solder them, you can slide it over the soldered wires (see pictures) and heat shrink it (not too much heat – you do not want to melt the solder again).

For each conductor wire, match them to each other via color, wrap them around each other, and then solder. Then slide the heat shrink sleeve over the soldered connection and heat it up so it shrinks. This part takes time but make sure the connection is good and insulated. Make sure you also solder the ground (shields) together from each cable.

When you are done with each side, slide the larger heat shrink sleeves over all the wires and heat them so they shrink. Note that I used 4 on each side so I have a strong join…

Then plug the cable to the remote and one to the camera and test your functions… it should all work fine if you did it right.

Tip: You can remove the tripod handle that the remote attaches to and attach it to your endzone camera (figure it out – weld, zip tie, etc.) and this way you have a quick attach / release for the remote to the end-zone tri-pod.

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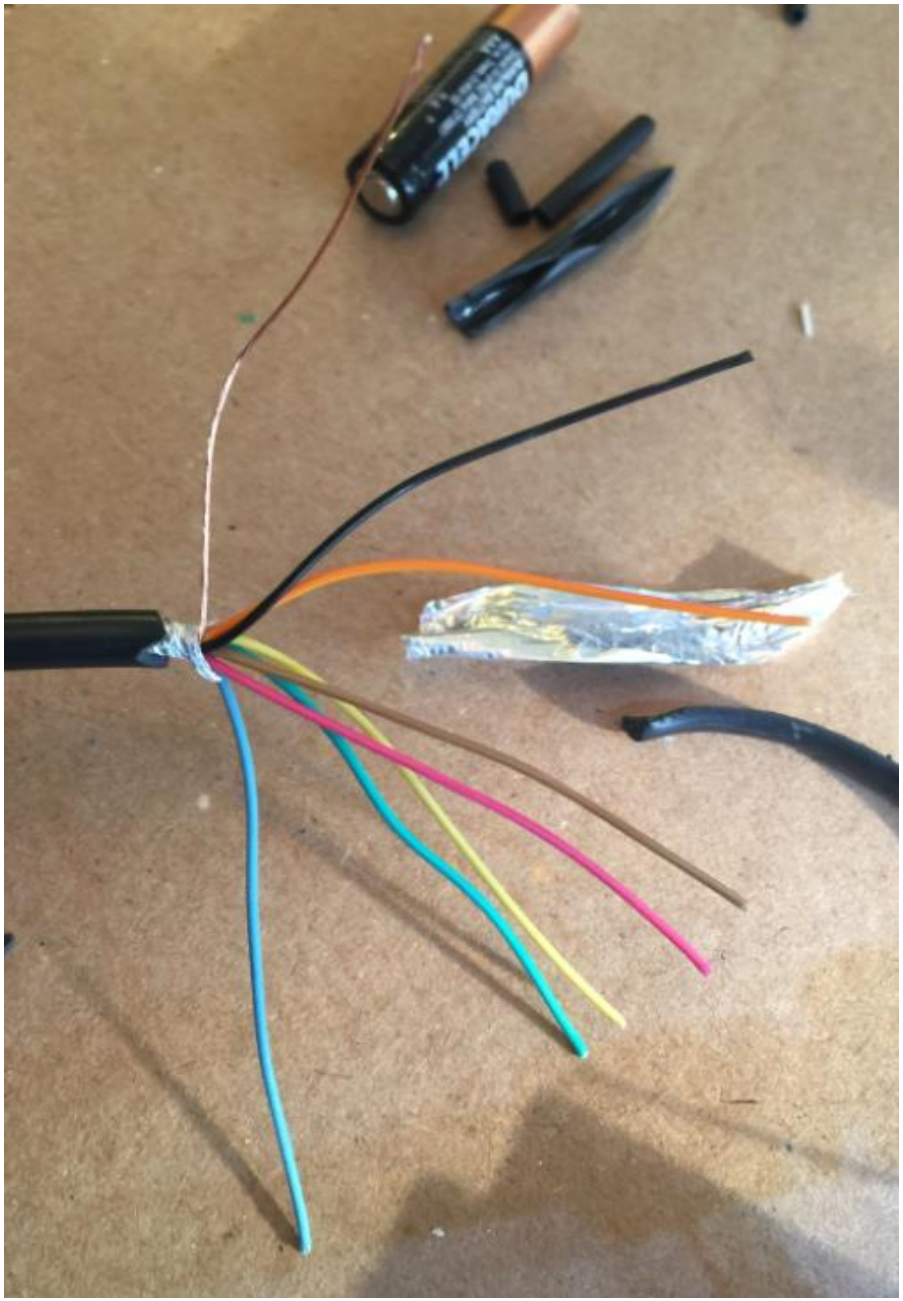

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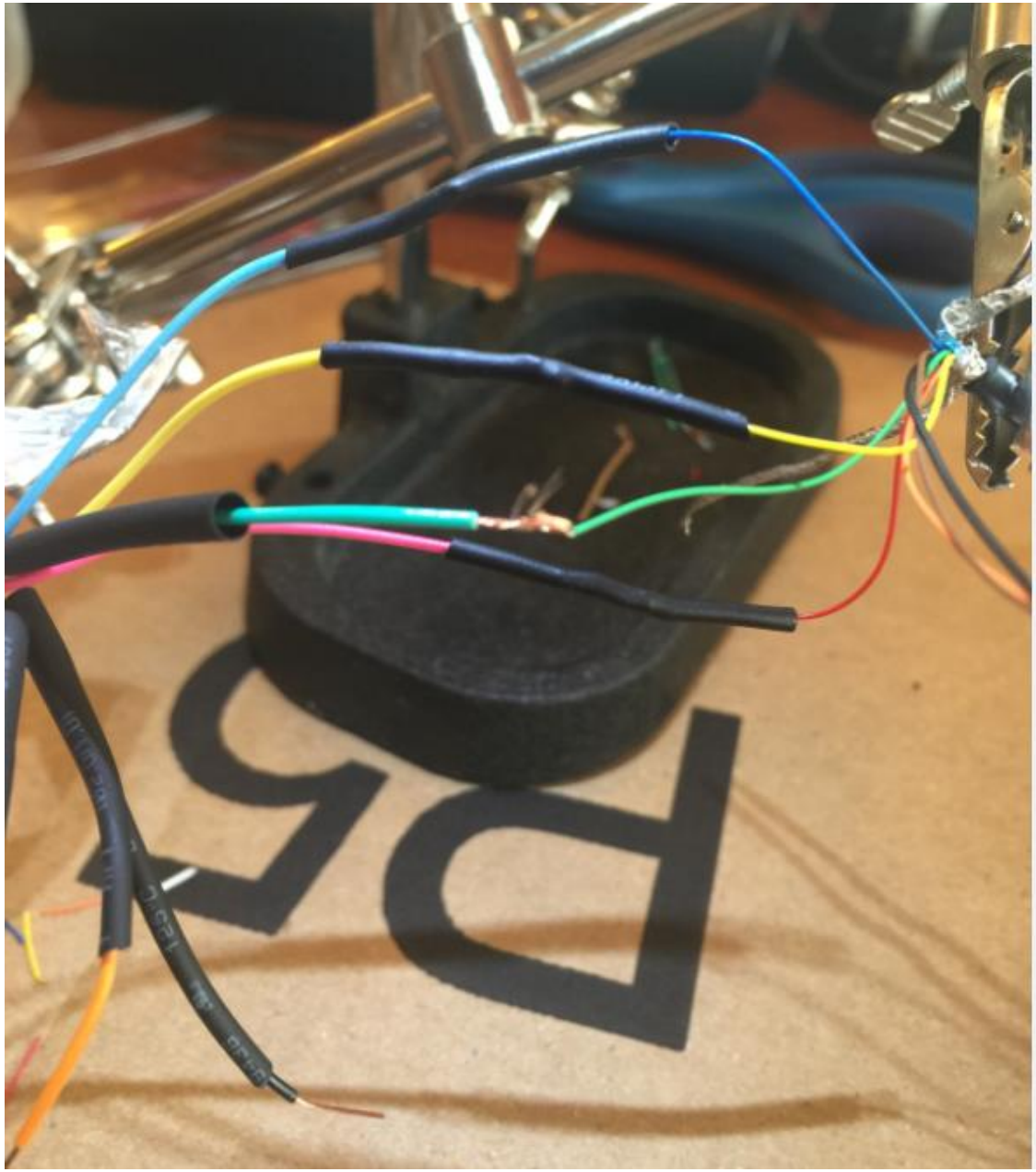

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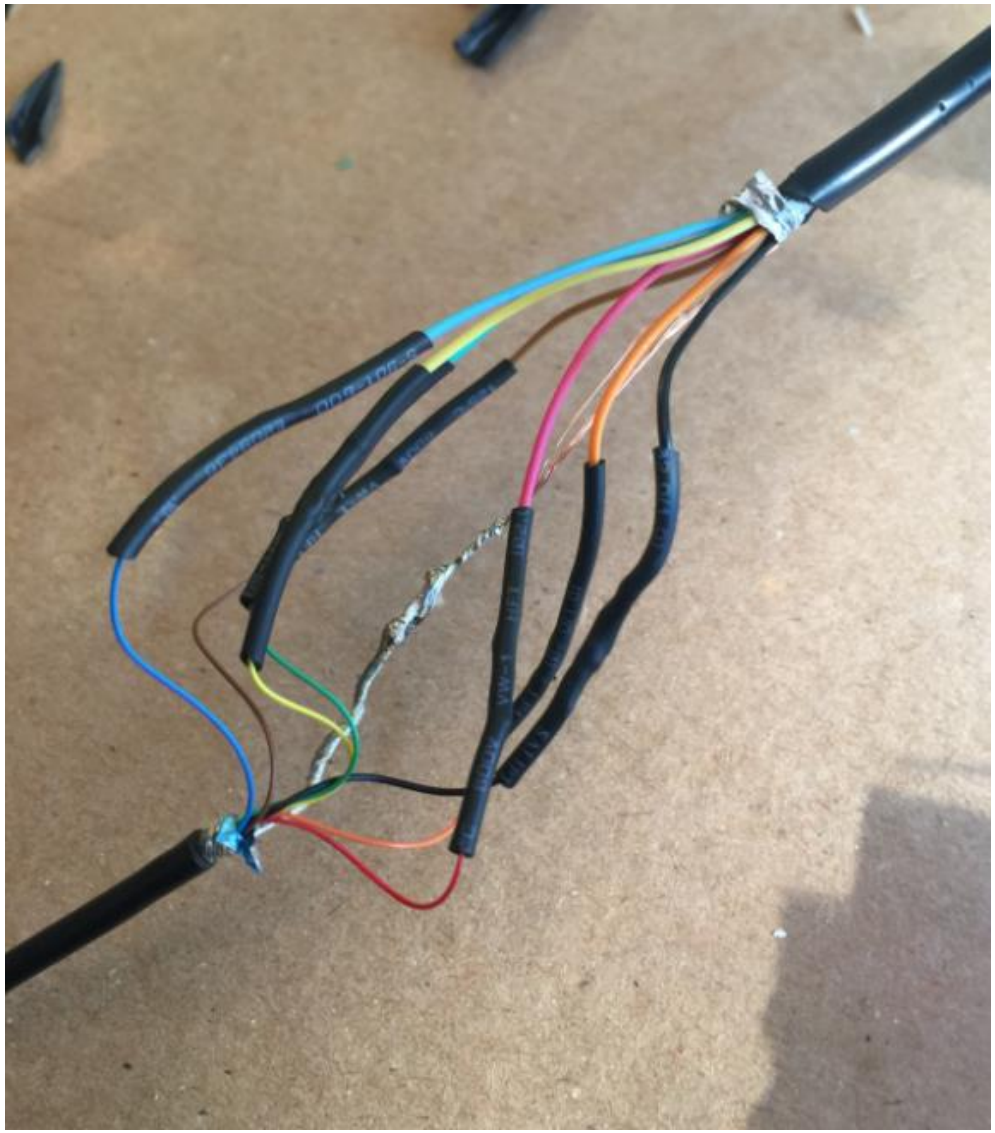

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