

QUESTION: How do I connect my video camera to my Apple ///?

ANSWER: We got a good laugh out of this question at the last ATUNC meeting. But I read something later in the week that stopped my laughter cold - the Apple /// can be connected to a video camera, and charts and graphics can be recorded on videotape and replayed at will! That opens up tremendous possibilities for business presentations!

I found the information in Appendix I of the Draw On /// manual:

"The NTSC signal that comes out of the Apple /// is the same type used by video cassette recorders (VCR). In fact, you can directly record the video output of the Apple /// to a VCR. If you are short on cash [to buy a color monitor], but have a VCR, you may connect the Apple /// to the video-input jack on the VCR, and use your standard TV set. If you go this route, the picture quality may be somewhat poorer than using a high-quality monitor directly...

Connecting an NTSC monitor to your Apple /// is a rather simple procedure. Buried in Appendix C, pages 132-135, of the Apple /// Owner's Guide is most of the information you need. The rest of this section will show you how to do this.

To connect an NTSC monitor, the general idea is to add a socket similar to the one which you use to hook up your B/W monitor to the ///. On the back of your Apple /// is a 15 pin D-type connector (socket) which is the video port.

You will need to find a 15 pin D connector (plug). At your local electronics supply store you should also be able to find a 1 foot long coax audio extension cable. This is the same type of plug found on the back of stereo receivers, cassette decks, etc. Find one with a female socket on one end and a male socket on the other end.

Use a wire stripper to cut off the male (pronged) plug out of the cable and throw the plug away. Now, carefully strip about one inch off the outermost insulation from the plugless end. Unbraid (a tack or pin is helpful in separating the wires) the braided shielding wires from the inner insulation as far as possible. Now, gently twist them into a rope like bundle. Strip the insulation from the inner wire for about 1/9 of an inch and solder the center wire to pin 12 of the 15 pin D plug.

Soldering will be easier if you gently clamp the plug in a vice, prong side down, and melt a tiny bit of solder into the hole of each pin that you are going to connect a wire to. Then take the wire in one hand, reheat the pin with the other, and insert the wire, holding it steady until the solder cools. Solder the tip of the twisted shielding wires to pin 13, being careful to not let the inner wire and shielding short out anywhere. A bit of heat shrinkable insulation on the braided wires prior to installation is a good idea.

You can get heat shrink insulation at most electronic supply stores. Use the side of your soldering iron, a match, hair dryer, etc. to shrink the insulation tubing over the exposed wire. You should use a low temperature soldering iron with a fine tip. Never use a soldering gun or you will melt or damage everything in sight when working with electronic components. Put the plastic shields onto the plug (if you purchased them), and gently lock down the strain relief (if there is one) onto the coax cable where it exits from the shield. Test the resistance between pins 12 and 13, and all the

other pins with a multitester (if you have one) to verify that there are no electrical shorts. Plug the 15-pin D connector into the color video port on the back of the Apple ///.

You may now hook up most any NTSC monitor, VCR or TV using the same kind of male-male coax cable that you are using to connect your Monitor /// to the B/W video socket. Simply plug it into the female plug coming out of the 15 pin D connector which you have just built."

- Zhava Glaser