

Recommended Equipment for
Online Roving Ranger Video Production
Tom Cawley – April 16, 2008

My video experience is limited to a handful of cameras, microphones, headsets, lighting systems, etc. so I cannot say that the list below is the best equipment available but I can say that it is the equipment that I have used successfully and can recommend highly.

All of the cameras below offer the following features that are critical to high quality video production. If you decide to buy a different camera, be sure it has these capabilities:

- External microphone or audio input
- Headphone jack
- Audio meters
- Zebra bars (for exposure control)

Canon XL2 MiniDV, Digital Video Camera (\$3400)

http://www.bhphotovideo.com/c/product/339002-REG/Canon_9549A001_XL_2_1_3_Inch_3_CCD_Widescreen.html

I've been using the Canon XL2 lately and would recommend it highly. You should buy extra batteries, a haze or UV filter to protect the lens, and a soft case. If you can afford it, a polarizing filter is a very nice thing to have. You could easily spend another several hundred dollars on these accessories.

Canon XH-A1 3CCE HDV Mini DV Camcorder (\$3300)

http://www.bhphotovideo.com/c/product/447098-REG/Canon_1191B001_XH_A1_3CCD_HDV_Camcorder.html

This is a high definition (HD) camera. Editing in HD requires a lot more computer processing power and HD is not at all necessary for web videos. If I owned this camera I would still shoot in standard definitions with it. The single biggest drawback to this camera is that it does not have interchangeable lenses.

Sony HDR-HC9 HDV MiniDV Camcorder (\$999)

http://www.bhphotovideo.com/c/product/537980-REG/Sony_HDR_HC9_HDR_HC9_HDV_Camcorder.html

This camera only has a 10X optical zoom. When comparing zoom capabilities look only at the optical zoom numbers. You should never use the digital zoom function on video cameras as it leads to significantly reduced image quality. While this camera is capable of shooting HD, I would stick with standard def for web productions.

JVC SR-DVM600US MiniDV Digital Tape Deck (\$850)

http://www.bhphotovideo.com/c/product/469345-REG/JVC_SRDVM600US_JVC_SRDVM600US_Video_Recorder.html

Our JVC tape deck is very similar to this one but a somewhat older model. It usually works very well but it occasionally chews up a tape. Depending what is on the tape, that can be very troubling. (This item is not truly necessary. You can capture video to your computer directly from your camera. Most people just don't like to put the extra wear and tear on their camera since

it is a more expensive item than a low end tape deck like this.) If you buy the least expensive camera listed above, this item is really not necessary as would cost nearly as much to replace as the camera would. You may as well just use the camera for video capture in that case.

Sennheiser G2 100 series wireless lavalier UHF microphone. (\$500)

http://www.bhphotovideo.com/c/product/324245-REG/Sennheiser_EW112PG2_C_Evolution_G2_100_Series.html

This is what we have been using and have had very good luck with it. We also tried three different less expensive wireless mics and were disappointed in the quality.

Vinten PRO-6-DC Protouch Lightweight Tripod System (\$1000)

http://www.bhphotovideo.com/c/product/310954-REG/Vinten_PRO6DC_PRO_6_DC_Protouch_Lightweight_Tripod.html

Most of you are probably thinking “We already own a tripod.” If it is not a tripod intended for video use, it will not be the best tripod for video use. Buy this tripod in order to get quality video results. This is the low-end of the video tripod market. See alternatives below.

Tripod Alternative – If you own a decent still photography tripod, you could get by with adding a decent video head to it. Leveling is not as easy but with a little extra set-up time at each location, a video tripod head can turn your still camera tripod into an effective video tripod.

Cheap Alternative – Manfrotto RC2 (\$82)

http://www.bhphotovideo.com/c/product/272630-REG/Bogen_Manfrotto_700RC2_700RC2_Mini_Video_Fluid.html

This cheap alternative is not recommended but mentioned as a last resort.

High-Quality Alternative – Manfrotto 503 HDV (\$338)

http://www.bhphotovideo.com/c/product/492158-REG/Bogen_Manfrotto_503HDV_503HDV_Fluid_Head.html

This is really a fine alternative to buying a dedicated video tripod.

42" Strobframe Circular Reflector - Silver and Gold (\$42)

http://www.bhphotovideo.com/c/product/189981-REG/Strobframe_350_423_42_Silver_Gold_Reflector.html

A circular reflector is needed to throw light up under the ranger’s flat hat. Without it, their face will almost always be too dark.

Sony MDR 7506 Headphones (\$100)

http://www.bhphotovideo.com/c/product/49510-REG/Sony_MDR_7506_MDR_7506_Headphone.html

Good Circumaural Headset - This is a headphone that goes all the way around the ears. Whoever

is monitoring sound in the field will need one of these. Earbuds and other types of headsets do not isolate the sound guy well enough to distinguish undesirable sounds like wind on the mic. We don't use this identical model but something very similar.

Software:

Adobe Premiere Pro CS3 (\$800)

<http://www.pcmall.com/pcmall/shop/detail.asp?dpno=7228227&Redir=1&description=Adobe-Premiere%20Pro%20CS3%20-%20Windows-Graphics%20&%20Development%20Software>

This recommendation is a LOT harder to make than the hardware recommendations. I've used FinalCut Pro on a Mac for quite a while now. Since most NPS units can't get support for Macs, I just started using Adobe Premiere Pro in order to be able to better help advise NPS video producers. Unfortunately, I haven't used it long enough to be a good advisor yet. I do believe that Adobe Premiere Pro (latest version is CS3) will be able to do a fine job of editing Online Roving Ranger videos.

Adobe Premiere Elements 3.0 bundled with Adobe Photoshop Elements 5.0 (\$150)

<http://www.pcmall.com/pcmall/shop/detail.asp?dpno=7115234&Redir=1&description=Adobe-Photoshop%20Elements%205.0%20plus%20Premiere%20Elements%203.0-Graphics%20&%20Development%20Software>

What I can't tell you yet is how well Adobe Premiere Elements will fill the needs of an NPS online video producer. I will be doing some experiments so I can provide those answers sometime this fall. Adobe Photoshop Elements 5.0 can handle many if not all of your photo-editing needs.

Adobe After Effects 7.0 (\$770)

<http://www.pcmall.com/pcmall/shop/detail.asp?dpno=7001832&Redir=1&description=Adobe-After%20Effects%207.0%20Standard%20for%20Windows-Graphics%20&%20Development%20Software>

This is needed only to do more high-end special effects. It is not necessary for the beginning video editor.

Adobe Production Studio Premium Bundle - UPGRADE (\$1250)

<http://www.pcmall.com/pcmall/shop/detail.asp?dpno=7001840&Redir=1&description=Adobe-Production%20Studio%20Premium%20Upgrade%20From%20Premiere/After%20Effects/Photo%20shop%20Win-Graphics%20&%20Development%20Software>

If you already own a copy of Adobe Photoshop, or Adobe After Effects, or Adobe Premiere you can get a full set of production tools for only \$1250. This bundle includes full versions of Premiere, After Effects, Photoshop, and Illustrator as well as a couple of lesser used products. Look at your bundle options before buying if you need to buy more than one Adobe product.

I just bought Adobe's Master Collection CS3 for \$2500. It includes all the Adobe/Macromedia products I've ever used. If your total software expense begins to approach \$2500, I would give this product bundle careful consideration.

<http://www.pcmall.com/pcmall/shop/detail.asp?dpno=7228230&Redir=1&description=Adobe-Creative%20Suite%203%20CS3%20Master%20Collection%20-%20Windows-Graphics%20&%20Development%20Software>

So what should you do about buying an editing program if you need to buy it right now. I recommend buying Adobe Premiere Pro CS3 or a bundle that includes Premiere Pro. Even if Premiere Elements can cover our basic needs, I am quite certain that Premiere Pro will provide us with very valuable additional tools.

NOTICE TO MAC USERS: I believe Final Cut Pro is superior to Adobe Premiere Pro as a video editing program. I have used both extensively. Since most NPS computer support offices do NOT support Mac computers, I recommend that you avoid Final Cut Pro unless you are a long time Mac user who can support their own system. In that case, using Final Cut Pro would be preferable.