

# Rethinking Woodturning Demonstrations: Using Live Video

AAW 2016 Symposium Special Interest Night Session

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## Resource list

### Note:

A simple demonstrator setup involves a laptop computer (with a built in camera), two webcams (for a total of 3 cameras), and a microphone.

Keep in mind that I demonstrated a wide variety of equipment, well beyond what a demonstrator would have in his/her own shop... because I wanted to show a range of possible configurations.

My demonstration showed two computers, one tablet, a total of 8 cameras (webcams, camcorder, etc), two mobile phones, a wireless pan/tilt platform, and various accessories to control and tweak the output.

This list provides information about the *type* of equipment I used in my demonstration and in my shop. The links provided should give you easy access to learn about the equipment, but does not necessarily indicate where I purchased my equipment or the exact make/models. I tend to buy from Amazon, eBay, B&H Photo and various other sources (including Craigslist), so please use the links for research purposes only, and not as any form of endorsement.

I hope you find this useful

Alan Z.

### Computers

- Toshiba laptop (perched above the lathe) – i7 quad core processor, 8GB ram, 1TB drive, 3-USB3 ports, HDMI out
- Asus laptop (a few years old) – Pentium processor, 8GB ram, 500GB drive, 1-USB2 and 1-USB3 port, HDMI out, VGA out
- Winbook TW100 tablet – 1.33GHz quad processor, 32GB flash drive, 1-USB2 and 1-USB3 port, HDMI out

### Cameras

- Logitech c920 webcams (75 degree angle of view), using Logitech drivers
  - <https://www.amazon.com/Logitech-Webcam-Widescreen-Calling-Recording/dp/B006JH8T3S>
- Logitech c930e webcam (90 degree angle of view), using Windows UVM drivers

- (note that I generally recommend one of each of the above, and do not recommend using two c920 cameras as the driver gets confused)
- <https://www.amazon.com/Logitech-C930e-960-000971-Video-Webcam/dp/B00CRJWW2G>
- Webcams built into the lids of the computers
- Canon HFG10 camcorder whose hdmi output was connected to a Magewell HDMI-to-USB3 adapter
  - Magewell adapter <https://www.amazon.com/gp/product/B00116VQOY>
- Iphone 5 mounted on a Zifon (or YT-260) remote control pan/tilt adaptor, connected via NDICam app
  - <https://www.amazon.com/gp/product/B01ACSGA3K>
- Iphone 6 handheld or mounted on a monopod, connected via NDICam app
  - <http://www.sienna-tv.com/ndi/ndicam.html>

#### Audio

- Plantronics W440-M DECT wireless headset
  - <https://www.amazon.com/Plantronics-W440-M-Convertible-Multimedia-Compatible/dp/B004J0VNTQ>
- Any good USB headset with a band that goes behind the neck instead of over the head
  - <https://smile.amazon.com/gp/product/B005VAORJO/> (USB)
  - <https://smile.amazon.com/gp/product/B0000AHOVO> (analog)
    - With usb adapter <https://smile.amazon.com/Cable-Matters-2-Pack-Adapter-Windows/dp/B012E4CUPC>

#### Network

- TP-Link AC-1900 wireless router
  - <https://www.amazon.com/TP-LINK-Wireless-Gigabit-Touch-P5/dp/B014PY9K5M>
  - Computers were connected via Ethernet cables
  - iPhones connected via wireless

#### Mounts / Misc hardware

- Zifon Remote Control Automatic Motorized Rotating Stabilizer Head Mount Pan Tilt
  - <https://www.amazon.com/gp/product/B01ACSGA3K>
- Manfrotto Magic Arms (21")
  - <https://www.amazon.com/Manfrotto-244-Variable-Friction-Bracket/dp/B000J4FONU>
- No-name 11" magic arm clones (Amazon/eBay)
  - <https://www.amazon.com/Neewer-Adjustable-Friction-Articulating-Monitor/dp/B017NHZ2IC> (with clamp)
  - <https://www.amazon.com/IMORDEN-Articulating-Friction-Mounts-Camera/dp/B00QTIVL82>
- Microphone stands
  - <https://www.amazon.com/Pyle-Pro-PMKS5-Compact-Black-Microphone/dp/B002PAW6AU/>
  - <https://www.amazon.com/Ultimate-Support-Pro-Sb-Stackable-Stand/dp/B0064RNCZI>

- <https://www.amazon.com/Samson-MK-10-Microphone-Boom-Stand/dp/B003CLIPHO>
- Microphone boom arm
  - <https://www.amazon.com/Stage-MSA7040TB-Mount-Telescoping-Black/dp/B0002T67K6>
- Microphone 19" gooseneck
  - <https://www.amazon.com/Stage-Microphone-19-inch-Gooseneck-Black/dp/B00080KNG8>
- Microphone stand thread to 3/8" or to 1/4" adapter
  - <https://www.amazon.com/gp/product/B0144W3I26>
- Clones of Manfrotto RC2 (aka 323) quick releases (Amazon/eBay)
  - <https://www.amazon.com/gp/product/B00Y0K2NAG>
- Mini-ball heads (mount between quick release plate and microphone boom or gooseneck)
  - <https://www.amazon.com/gp/product/B000L47AHG>
  - <https://www.amazon.com/gp/product/B000UOMGU8>
- Rode microphone boom arm supporting the Camcorder
  - <https://www.amazon.com/RODE-Swivel-Mount-Studio-Microphone/dp/B001D7UYBO>
- USB extension cable (5 meter and 25 foot versions)
  - <https://smile.amazon.com/gp/product/B00FFKIUJS>
  - <https://smile.amazon.com/gp/product/B0009JCVJU>

## Software

- Vmix (camera mixer/switcher) – Windows only
  - <http://www.vmix.com/>
- Not demonstrated, but mentioned
  - Manycam <https://manycam.com/>
  - Vidblaster <http://www.vidblaster.com/>
  - WireCast <http://www.wirecast.com>
  - OBS <https://obsproject.com/>
  - XSplit <https://www.xsplit.com/>
  - SparkoCam <http://sparkosoft.com/sparkocam>
- NDICam app for iPhone
  - <http://www.sienna-tv.com/ndi/ndicam.html>

## Accessories

- Rii Mini 2.4ghz Wireless keyboard
  - <https://smile.amazon.com/gp/product/B00GI69A9C>
- Korg nanoKontrol2 MIDI controller
  - <https://smile.amazon.com/Korg-nanoKONTROL2-Slim-Line-Control-Surface/dp/B004M8UZS8>
- External USB trackpad

- <https://smile.amazon.com/Adesso-Browser-Button-Touchpad-ATP-400UB/dp/B000SDW7K0>
- USB3 4 port powered hubs attached to each USB3 port
  - <https://smile.amazon.com/AmazonBasics-Port-2-5A-power-adapter/dp/B00DQFGH80>