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-	12/05/2019	-	INITIAL RELEASE
А	12/20/2019	14267	PAGE 8 FW UPDATE INSTRUCTION EDIT
В	02/12/2020	14283	ADDED TIPS & TROUBLESHOOTING SECTION

# "The Standard of the Industry"



### **Document Number**:

#### HD153-INST

### **Description**:

### **INST SHT, FIRMWARE UPDATE/TOOLS**

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## **INSTRUCTIONS FOR USB FLASH DRIVE OPERATION**



### BOOT FROM THE FLASH DRIVE

- Power down the PC, plug in the USB flash drive and then turn the PC back on.
- The computer will now boot a version of Linux (don't press any keys). Select "Try Ubuntu" if it comes up.
- If Linux does not boot and your computer boots normally, Contact Cues Customer Service for instructions on configuring the BIOS to boot from the HD153 USB flash drive.

## CONFIGURE THE NETWORK

1. Choose "settings" from the top right drop down menu:



- 2. Choose "Network" to open the network configuration pane.
- 3. Select the gear icon of the NIC attached to the bridge to open the settings pane which can be named "Wired", "Ethernet", etc...
- 4. Choose the IPv4 tab and switch the method to Manual.
- 5. Set the IP Address to 192.168.0.99 and Netmask to 255.255.0.0 as shown below:

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6. Select Apply.

- 7. After selecting "APPLY" the following window should be shown with the connection on, if not, turn the connection "ON".
- 8. You can now close this window, the network configurations have been set.

Note: If you have problems with this step, there is a troubleshooting section at the end of this document.

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- 9. The network connection is considered to be established once the network icon in the top right changes from **an** to **real**. This may take a moment.
- 10. Open a terminal by pressing Ctrl+Alt+t.
- 11. Ping the camera by typing "ping 192.168.0.126" then pressing "Enter". This will verify communications are being made to and from the camera. A successful ping will return a string similar to "64 bytes from 192.168.0.126: icmp\_seq=1 ttl=64 time=2.57 ms". Press Ctrl+c to stop the ping. Close the terminal window.



# Running the Nuttcp Test

Nuttcp is a network test and troubleshooting software tool that will test the network connection between the computer and the camera.

1. On the Desktop, double click the file "Copy\_Nuttcp\_to\_CAM". This will copy the Nuttcp tool used for testing the network to the camera.



A. A message may appear - "Untrusted application launcher" - Just hit "Trust and Launch".

- 2. Double click the file "Start\_Nuttcp\_Server". This will start the Nuttcp Server tool used for testing the network through the camera.
  - A. A message may appear "Untrusted application launcher" Just hit "Trust and Launch".



- 3. Double click the file "Start\_Nuttcp\_Client". This will start the Nuttcp Client tool used for testing the network through the camera.
  - A. A message may appear "Untrusted application launcher" Just hit "Trust and Launch".



- A Terminal Screen will display messages from the Nuttcp tool.
- Note the %loss field and verify there are no readings exceeding 0%.



## Verify the Computer is able to receive the stream

- 1. Open a new browser window and type the IP address of the camera, 192.168.0.126, into the address bar.
- 2. Click "Start the Video Stream".

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- 3. On the desktop, double click the file "Start\_FFplay".
- 4. A new window will open and after a few seconds another window with a live view of the stream will open.



• Note: this live view has a longer than normal delay, around 8-10 seconds. This is only for testing.



# UPDATING THE HD380 FIRMWARE

- 1. On the desktop, double click the file "Update\_Firmware".
  - A. A message may appear "Untrusted application launcher" Just hit "Trust and Launch".



• A "Terminal" window will open and the firmware transfer will begin. Firmware transfer has been completed when the terminal reads "EXIT vrm-update-fw". Once the firmware transfer is complete, the firmware update begins automatically. This is a process that occurs in the background environment and should not be interrupted. This process typically takes about 5 minutes.



## Validate the firmware has been updated

- 1. To verify if the new Firmware is running on the VRMagic, open a terminal (CTRL + ALT + t).
- 2. Then "ping" the IP address of camera by typing "ping 192.168.0.126" then hitting enter. Verify there is a response from the camera. If the terminal returns "Destination Host Unreachable", it is likely that the firmware is still being updated. Use CTRL + C to terminate the process once the camera has been pinged successfully. Close the terminal.



- 3. Lastly, open a new browser window and type the IP address of the camera, 192.168.0.126, into the address bar.
- 4. Click "Start the Video Stream",
- 5. Then click "Read" under version information. Make sure it matches the current firmware version located on the USB stick or in the Cues S:/Manufact/Firmware/DUC\_HD380/Firmware.

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Power PC Down and Reboot in Windows

1. Select power off



2. Remove USB media Drive, then press Enter



3. Restart PC

## Tips & Troubleshooting

• If there is only one NIC present and that connection cannot be turned on, check your Ethernet cables to verify you're connected to the correct Network Interface Card (NIC); you may need to swap from one NIC to another for it to be recognized.



•If you have multiple NIC cards installed and do not know which is connected to the bridge, you can configure the first to the static IP 192.168.0.99 and netmask 255.255.0.0 and test by pinging the camera's IP 192.168.0.126 as instructed in the section "Configure Network". If the ping fails, reconfigure the first NIC back to Automatic (DHCP) and repeat for the second NIC. If you know which cable is connected to the bridge but don't know which NIC is which, you can unplug the Ethernet cable, wait a few min, and see which reads cable unplugged.

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