

Rev	Date	ECN	Description
-	12/05/2019	-	INITIAL RELEASE
A	12/20/2019	14267	PAGE 8 FW UPDATE INSTRUCTION EDIT
B	02/12/2020	14283	ADDED TIPS & TROUBLESHOOTING SECTION
C	10/06/2021	14640	UPDATE FOR ADDED FUNCTIONALITY



Document Number:

HD153-INST

Description:

INST SHT, INSTALL FIRMWARE, HD380

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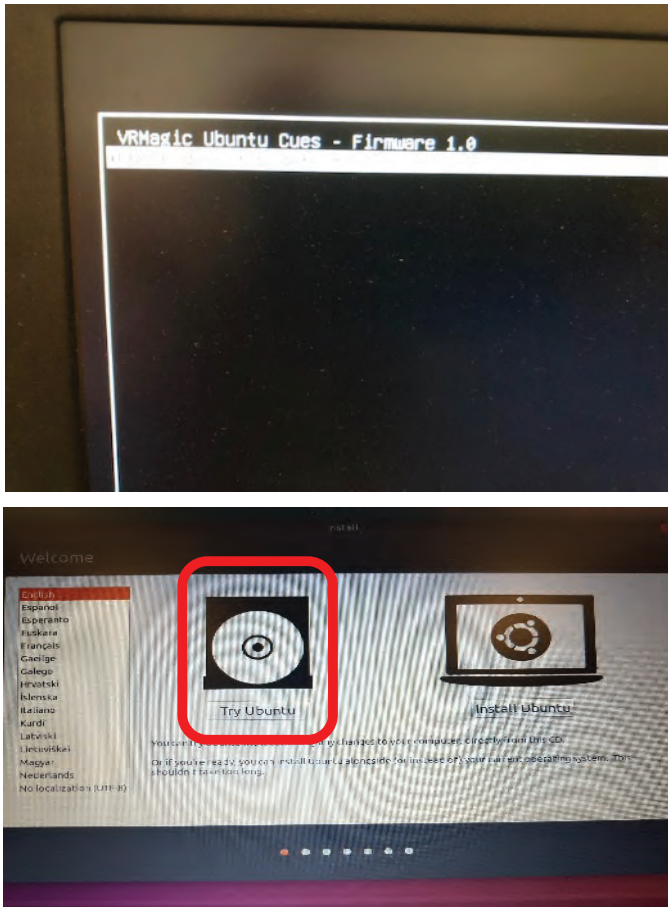
Signature MFG: Markus Montanez

RELEASE NOTES

This version of this document is only relevant to HD153 firmware version R006 or later. If you have an HD153 with version R005 or earlier, it needs to be updated. This can be done by navigating to the CUES website and following the instructions provided under DUC Firmware and Software Resources.



INSTRUCTIONS FOR USB FLASH DRIVE OPERATION

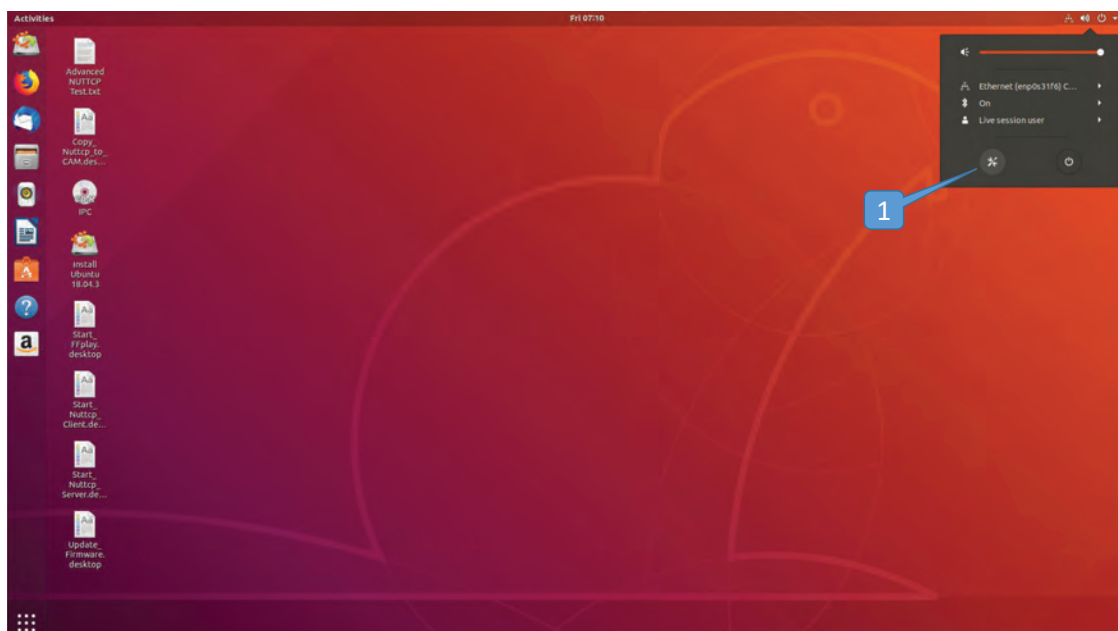


BOOT FROM THE FLASH DRIVE

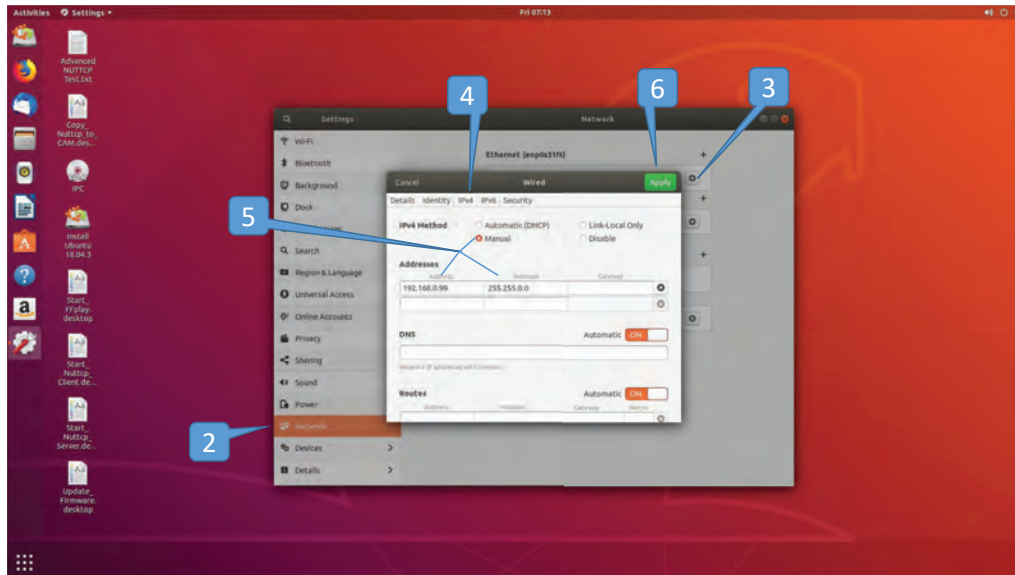
- Power down the PC, plug in the USB flash drive and then turn the PC back on.
- The computer will now boot a version of Linux (don't press any keys). Select "Try Ubuntu" if it comes up.
- If Linux does not boot and your computer boots normally, Contact Cues Customer Service for instructions on configuring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

CONFIGURING THE NETWORK

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

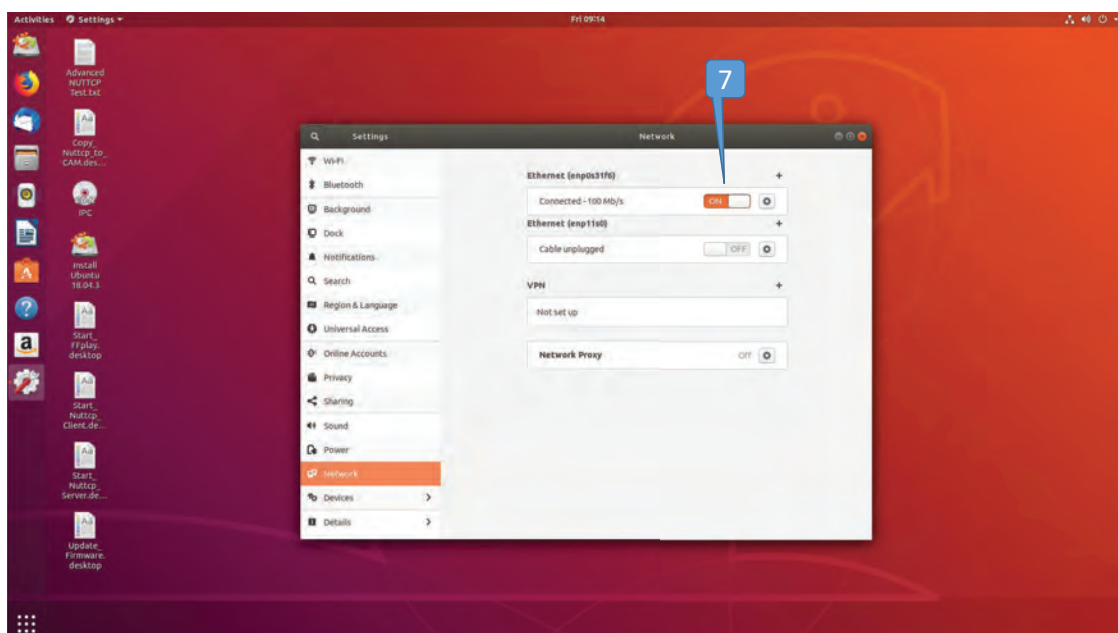




2. Choose "Network" to open the network configuration pane.
3. Select the gear icon of the Network Interface Card (NIC) attached to the bridge to open the settings pane which can be named "Wired", "Ethernet", etc.
4. Choose the IPv4 tab and switch the method to Manual.
5. Set the IP Address to 192.168.0.99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

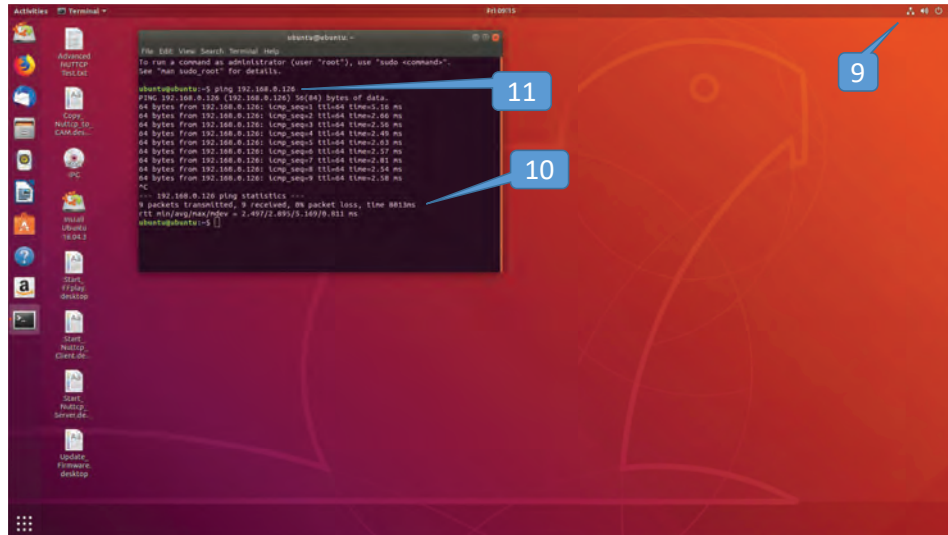


7. After selecting "APPLY" the following window should be shown with the connection on, if not, turn the connection "ON".
8. The network configuration has been set. You can now close this window.

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



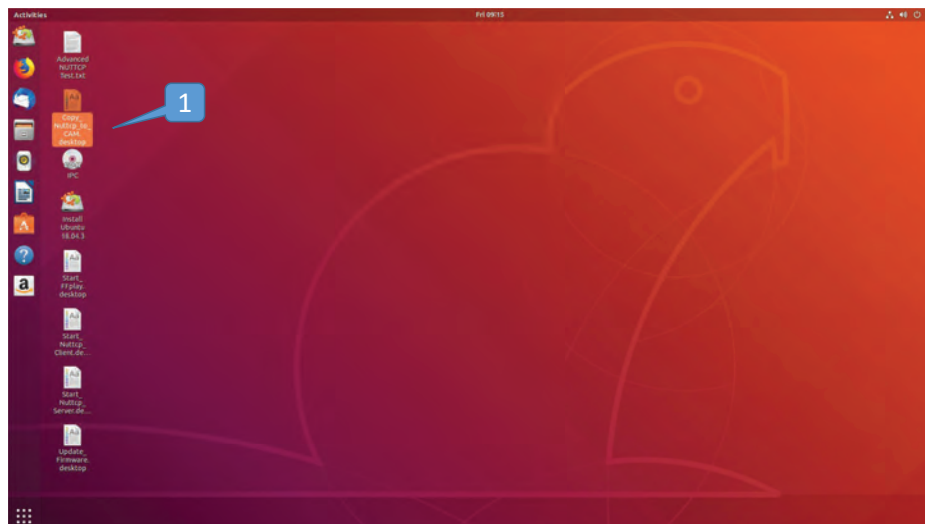
9. The network connection is considered to be established once the network icon in the top right changes from  to . This may take a moment.
10. Open a terminal by pressing “Ctrl+Alt+t”.
11. Ping the camera by typing "ping 192.168.0.126" then pressing “Enter”. This will verify communications are being 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.



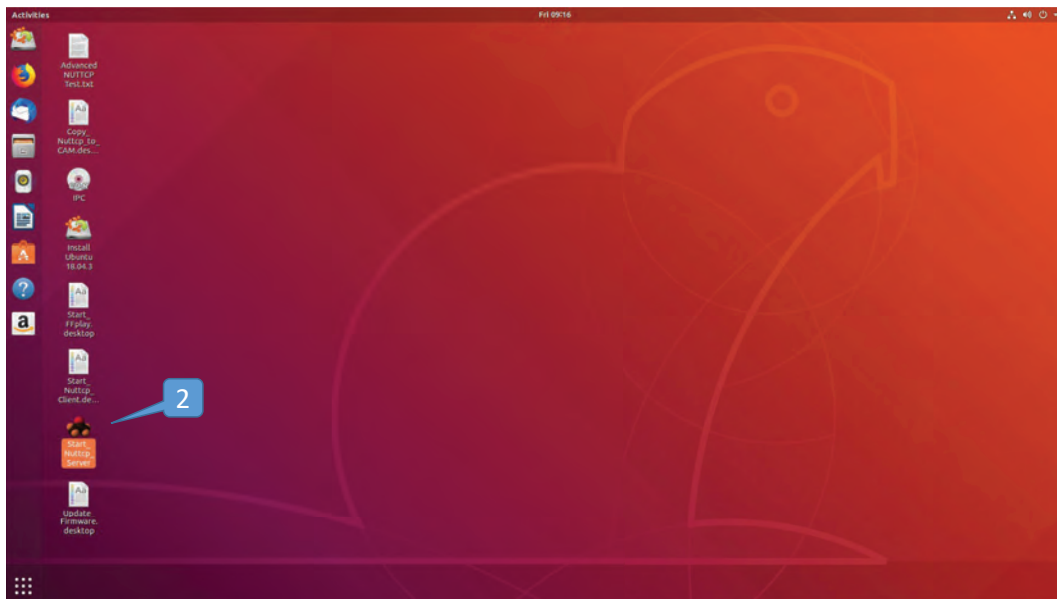
RUNNING THE NUTTCP TEST

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

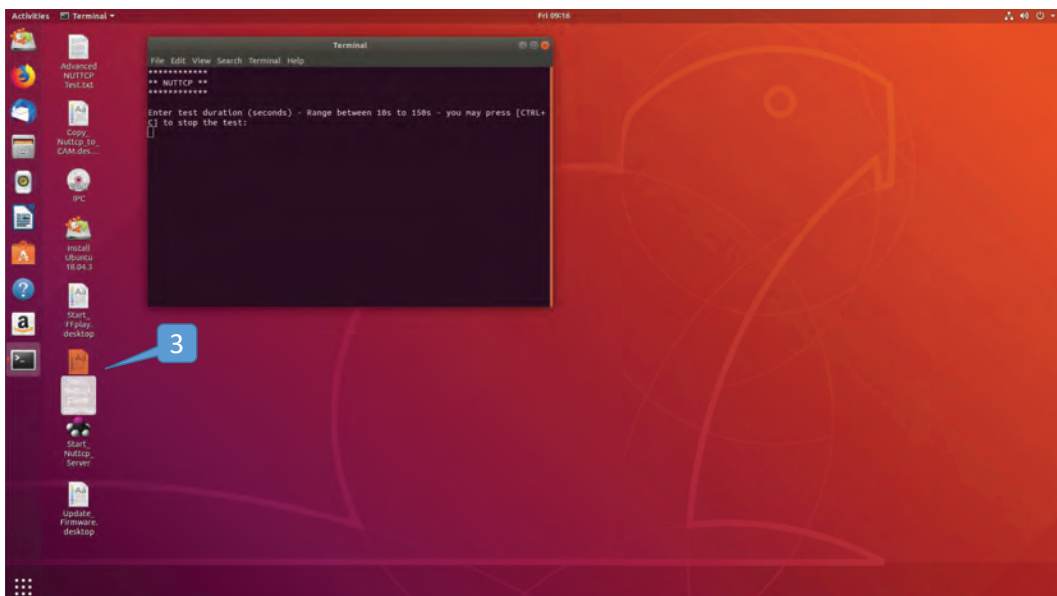
1. On the Desktop, double click the file “Copy_Nuttcp_to_CAM”. This will copy the Nuttcp tool used for testing the network to the camera.
 - A. A message may appear - "Untrusted application launcher" – If so, click "Trust and Launch".



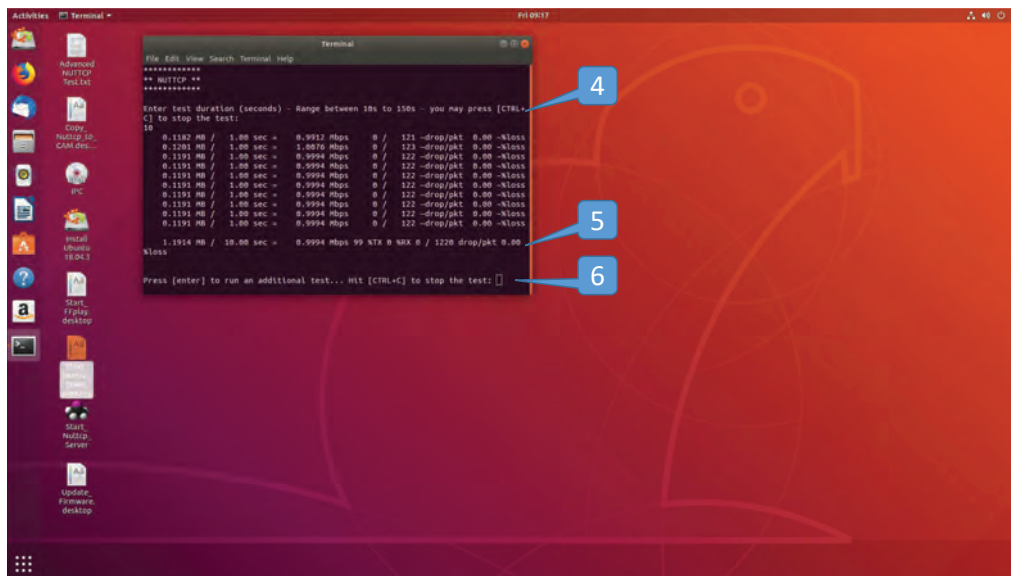
2. Double click the file “Start_Nuttcp_Server”. This will start the Nuttcp Server tool used for testing the network through the camera.
 - A. A message may appear - "Untrusted application launcher" – If so, click "Trust and Launch".



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" – If so, click "Trust and Launch".

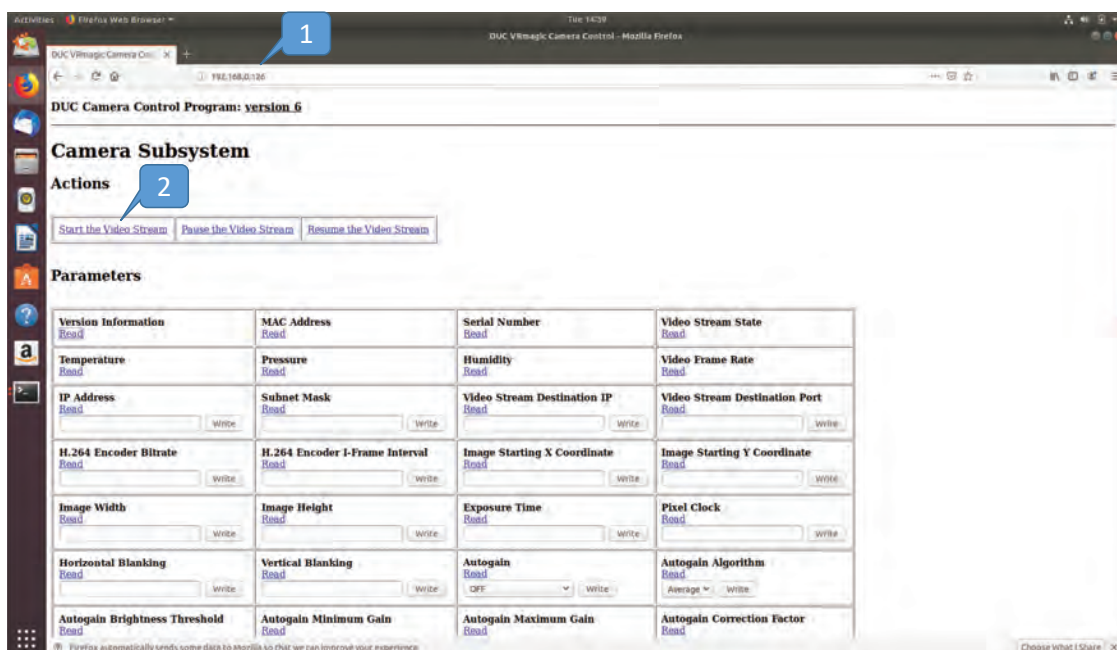


- Follow the prompt in the terminal window.
- A test summary will be provided once the test has finished running. This summary shows packets sent, packets dropped, percent loss, etc.
- Follow the prompt to either run the test again or exit the test and close the window.

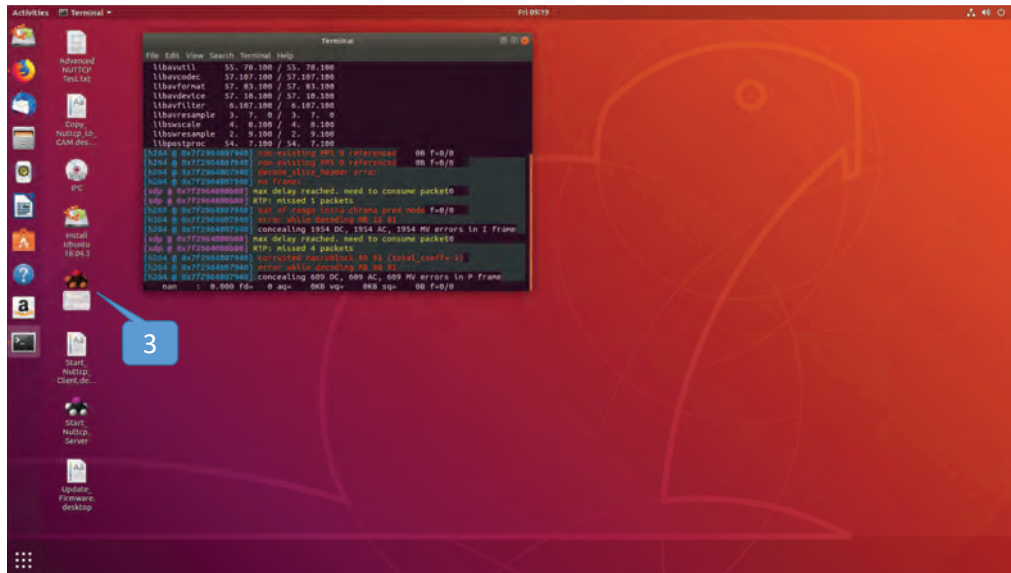


VERIFYING THE COMPUTER IS ABLE TO RECEIVE THE STREAM

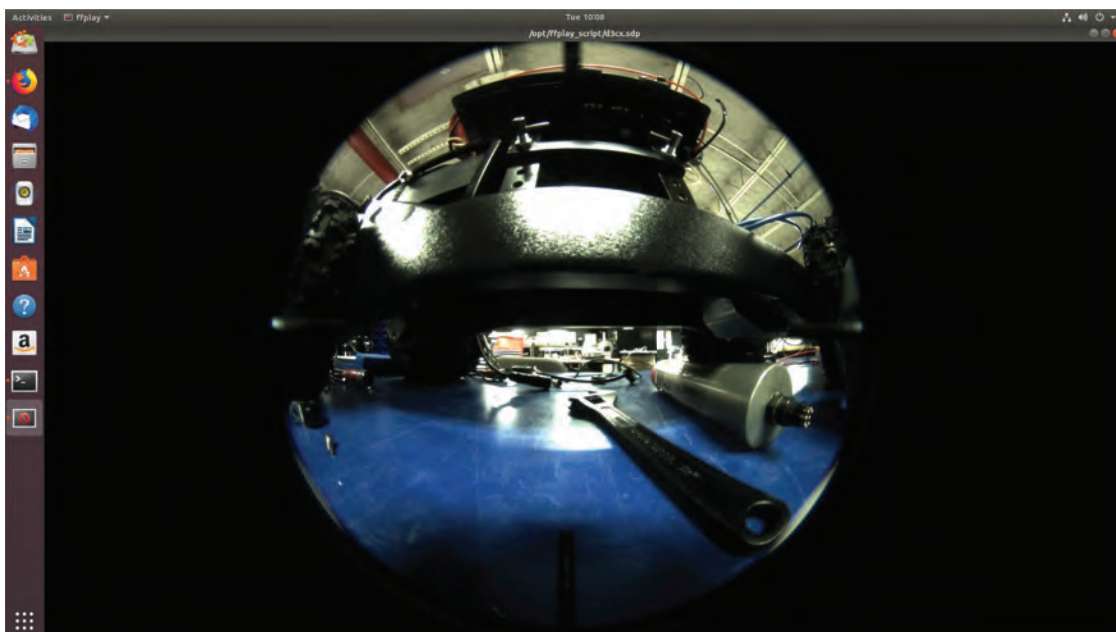
- Open a new web browser window and type the IP address of the camera, 192.168.0.126, into the address bar. Press “Enter”.
- Click “Start the Video Stream”.



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.



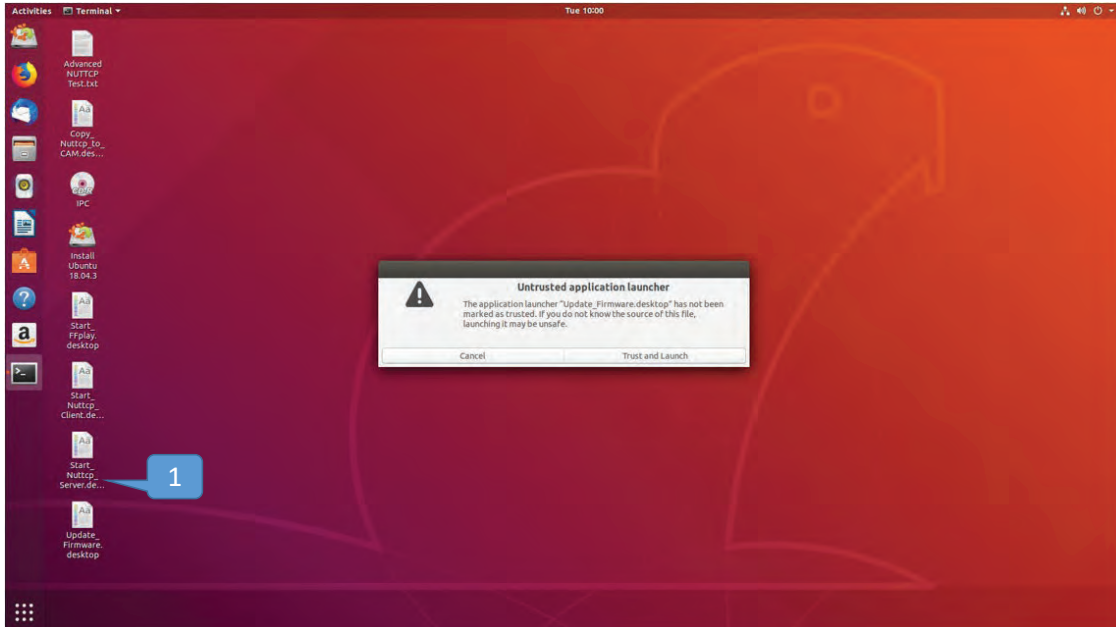
Note: This live view has an 8-10 second delay. This is longer than normal and is to be expected this is only for testing purposes.



UPDATING THE HD380 FIRMWARE

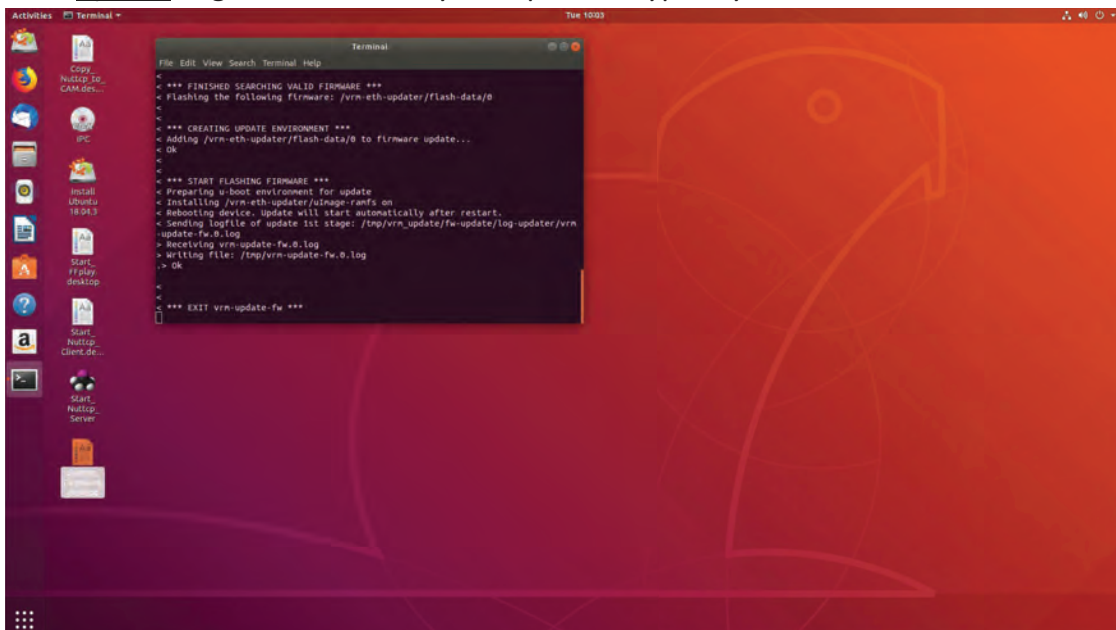
NOTE: Close all terminal windows, live view windows, and end all NUTTCP tests before updating the camera firmware.

1. On the desktop, double click the file "Update_Firmware".
 - A. A message may appear - "Untrusted application launcher" - If so, click "Trust and Launch".

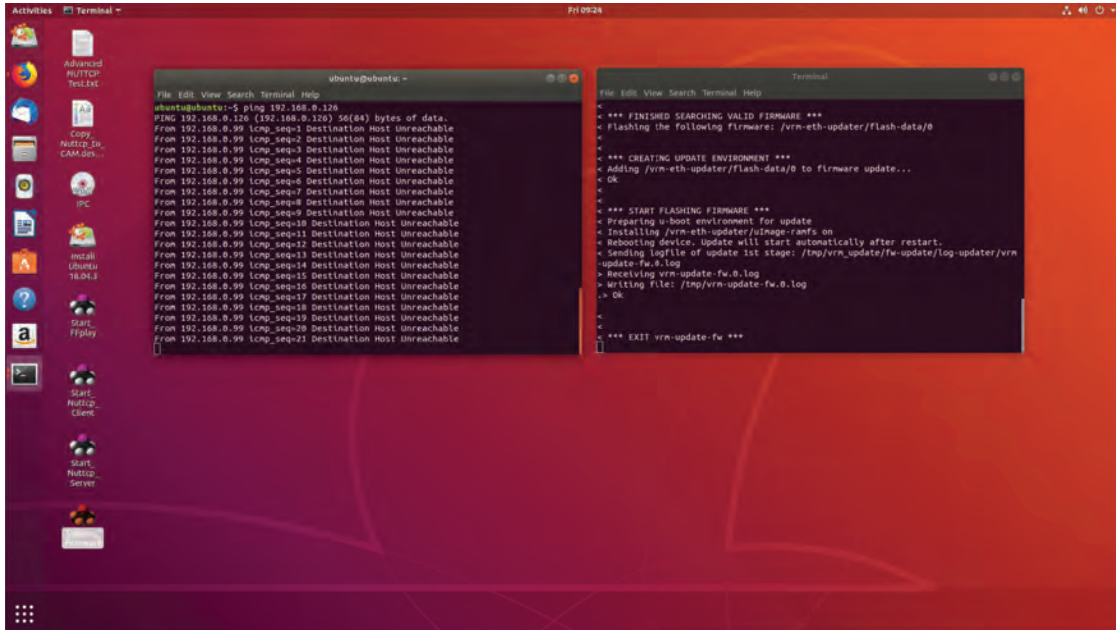


NOTE: The firmware update is a process that occurs in the background environment and should not be interrupted! Doing so **WILL** cause your camera to need repair!

2. Firmware Transfer - A "Terminal" window will open and the firmware transfer will begin. Firmware transfer has been completed when the terminal reads "EXIT vrm-update-fw".
3. Firmware Update - Once the firmware transfer is complete, the firmware update begins automatically. This process typically takes about 5 minutes.



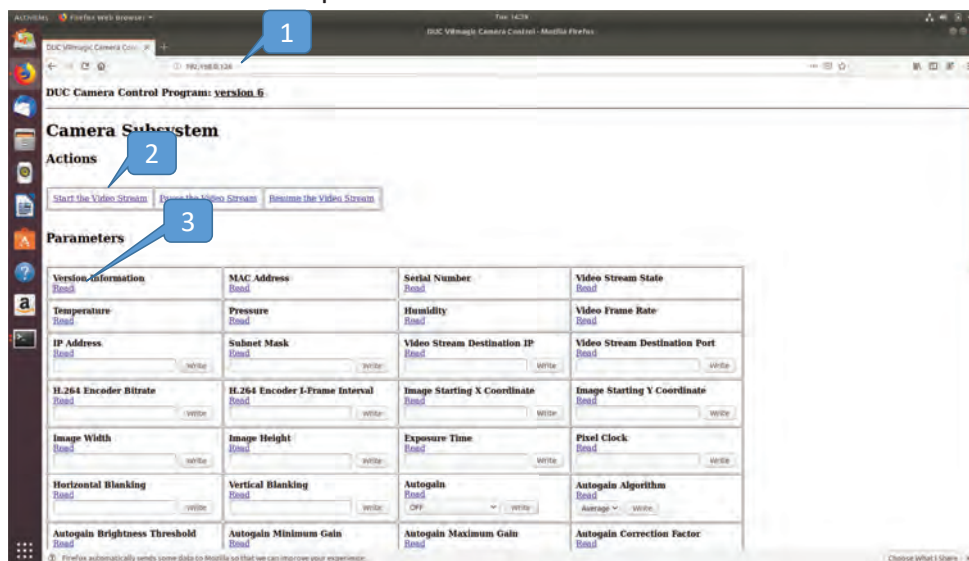
4. Ping the camera by following steps 10 and 11 from the “Configuring the Network” section of this document.
5. Let this ping run until a successful ping is received. This may take a few minutes. A successful ping is indication that the camera firmware has been successfully written and the camera module has restarted.
6. Once a successful ping has been received, close the two terminal windows.



FIRMWARE UPDATE VERIFICATION

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”,
3. Then under “Version Information”, click “Read”. Make sure it matches the current firmware version labeled on the USB stick.

Note: If the version has been updated via the resources on the CUES website, the label on the USB should be updated as well.

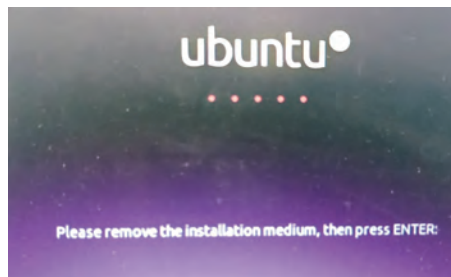


REBOOTING IN WINDOWS

1. Select power off



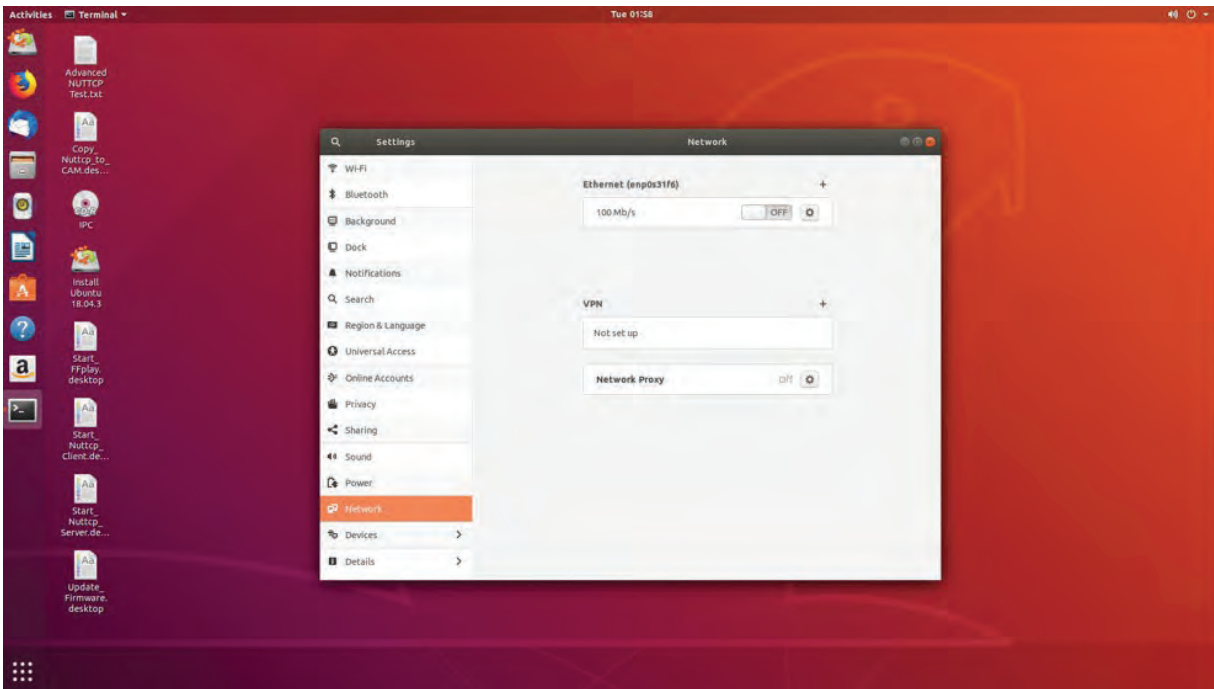
2. Remove USB media Drive, then press Enter



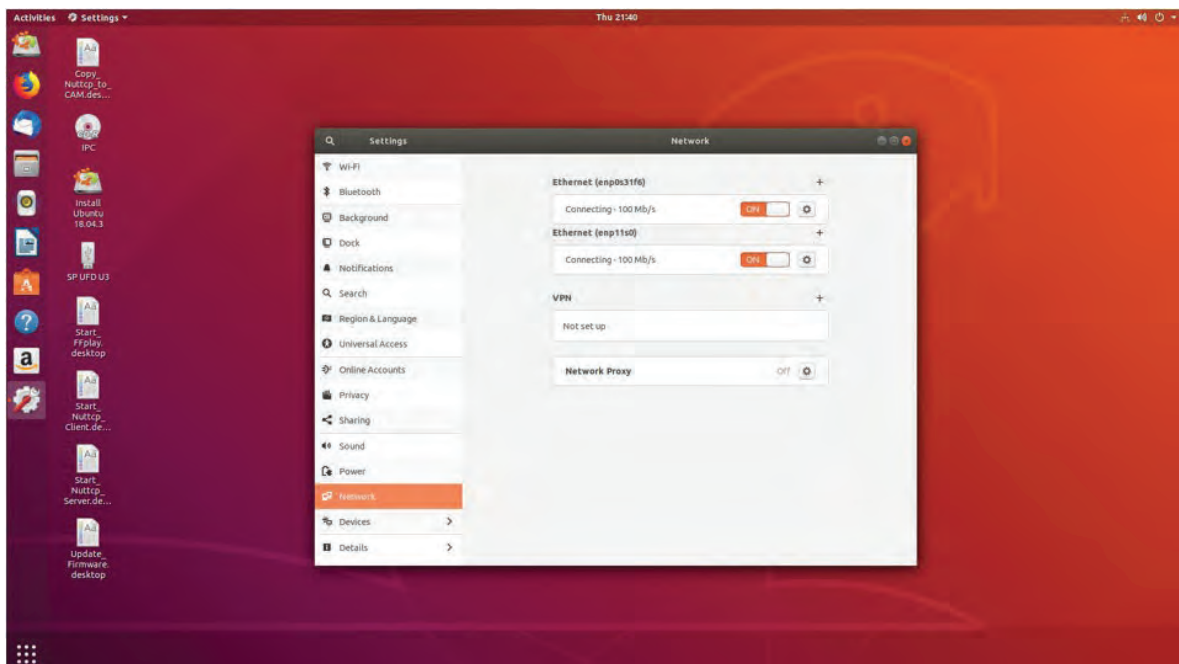
3. Restart PC

TIPS & TROUBLESHOOTING

1. If there is only one NIC present in the network window and that connection cannot be turned on, check your Ethernet cables to verify you're connected to the correct physical NIC; you may need to swap from one NIC to another for it to be recognized.

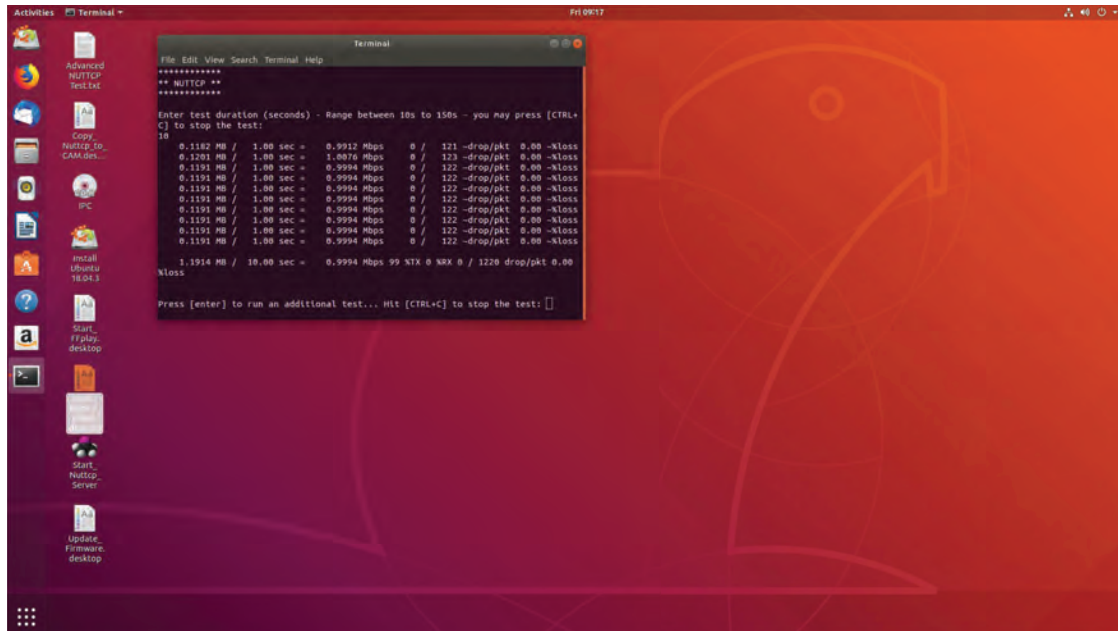


2. If you have multiple NIC cards installed and do not know which is connected to the bridge, you can configure the first to the static IP 192.168.0.99 and netmask 255.255.0.0 and test by pinging the camera's IP 192.168.0.126 as instructed in the section "Configuring the Network". If the ping fails, 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.



- If the “Terminal” window is closed by pressing “Ctrl+C” while the Nuttcp test is running the test will still run in the background. If you click “Start_Nuttcp_Client” and start another test before the previously started test finished (in the background) you will receive 100% packet loss until the original test is finished.

NOTE: The best thing to do is to wait for the original time entered then start another test. Alternately, you can run smaller shorter tests to visually identify when the original test finishes.



- It is possible to run an extended duration Nuttcp test. Clicking the “Start_Nuttcp_Client” icon only allows for a max 150 second test. Click on the “Advanced Nuttcp Test” text file on the desktop and follow the instructions to perform a test of any duration.

NOTE: Pressing “Ctrl+C” in this testing method will end the NUTTCP test and provide a test summary.

