

## General IPC Troubleshooting

For networking devices such as IP cameras and Network Video Recorders it is good practice to bring a Windows laptop or computer to site so you are able to troubleshoot, test and reconfigure devices, as this will give you the best chance to identify the problem.

Below is a list of some of the more common issues you may come across and what you can do to fix them.

**Blank Screen:** Resolution of recorder may be out of the range of the currently connected TV / Monitor. Power off the device, hold the SHIFT button on the front panel and turn the power on. Continue to hold the shift button until you see a the recorder display. If after 1 minute there is still no image, check with another cable or display.

**No Camera Image:** Check the power supply powering the cameras, if POE, check what error message you are getting in the channel. Then see below.

**Config error (18):** This is displayed when a camera is not initialized, or has not been setup. You will see this on earlier model recorders when adding new cameras.

To rectify, you will need a Computer/Laptop or an NVR that supports initialization. You will need to login to the camera's web interface using the IP address where you will be asked to set a password.

**Account Locked:** Wrong password entered, camera will be locked until the device is removed from power for at least 10 seconds. If unknown, hardware reset will be required, alternatively try the password of the admin account of the NVR.

**Login Return Timeout:** Incorrect login information or connecting to device to login. If password is unknown, a hardware reset will be required.

**Can't Find Network Host 10.x.x.x :** Device is offline or not discoverable on the current network. Check the correct IP address is assigned to the device. If plugged in the back of the NVR, verify there is not an issue with the cable run, attempt to ping the device, verify the power supply is working properly.

**Video Playback/Live View Issues:** Network may be congested or incorrectly setup, Issue with network cables or the Hard Drive may be faulty. Check the 2<sup>nd</sup> page of this document for instructions on how to assess those settings.

**Can't see camera:** Check the device is online, check the registration section to verify the status is online with a green symbol. A red symbol will be displayed when the NVR is not able to connect to the camera. Depending on what you see in the channel for that camera, will depend on what you will need to check. Refer the Common error codes above.

**Audio Issues / Background noise:** Is Audio playback enabled ? Navigate to Main Menu > Camera > Encode. Enable the checkbox at the bottom for Audio, disabled by default.

You will need to login to the Camera's web interface to set Noise Reduction on to filter out background noise.

For best quality set Compression to ACC and set sampling to 64,000khz

Be sure to check the laws in your area regarding voice recording as each state has different laws and requirement for signage.

### NVR > Adding existing cameras to a new system or vice versa

Devices that have previously been installed for a while, will more than likely need to have the firmware upgraded to work with the new system. Identify the model of camera, for eg, VSIP4MPFBIRM then google "VSIP4MPFBIRM RhinoCo"

You will see the product page and the firmware will be downloadable from there.

Contact support to get the updated firmware.

Its also possible the devices have a custom password set, in which case, you will need to find the password out, or reset the device. To reset the device, check the final page of this document.

## Troubleshooting Issues

If you experience slow or stuttering playback / liveview check the **network load** and **test the HDD** to verify there are no issues.



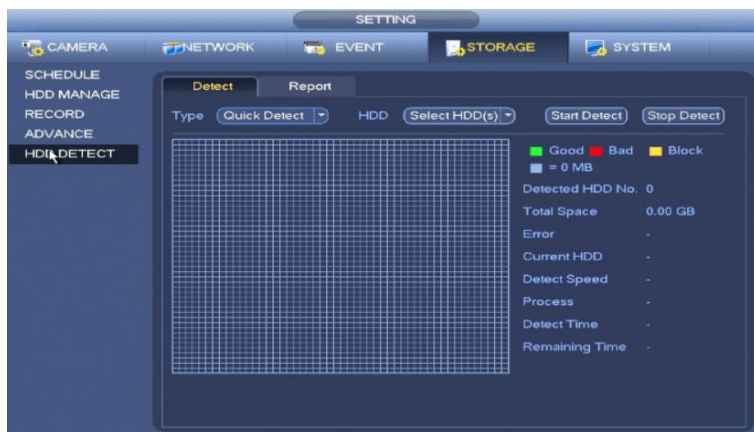
### Main Menu > Info > Network > Load

For example the NVR8COM2 has a total of 80mpbs for the incoming bandwidth/receive speed. To find out your devices specifications, check the RhinoCo Technology website or Google the Model Number to find the product page.

Make sure you do not exceed this value otherwise you will not have all your footage saved have issues with playback and live view.

## HDD Test

### Main Menu > Storage > HDD Detect



Select the HDD, Sata1 for eg. Then click Start Detect. If all green then that's OK. If there are red sections, you will more than likely have a faulty drive, contact tech support for instructions.

### Status and Format Main Menu > Storage > HDD Manage



Check the status section, it should be normal. If it has an error, you can attempt to format the drive, which will erase any footage, but may resolve the issue.

Some NVR's may have a scroll bar at the bottom of this window, move it across to see the status of the drive.

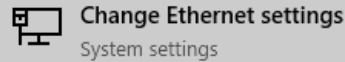
## Testing and Configuring IP addresses.

To test a device's network connectivity, verify you can access the device from a windows PC.

1. Firstly, you need to be in the same IP range as the device. Use the [Config Tool](#) to locate all device's on the connected network find the IP address of the device.
2. Assign your computer a device in the same IP range. For example, if the IP of the device you found was 192.168.0.108, you would assign an address between 1-254 for the last digit. For this example we'll use 150, so our IP will be 192.168.0.150

### On Windows 10

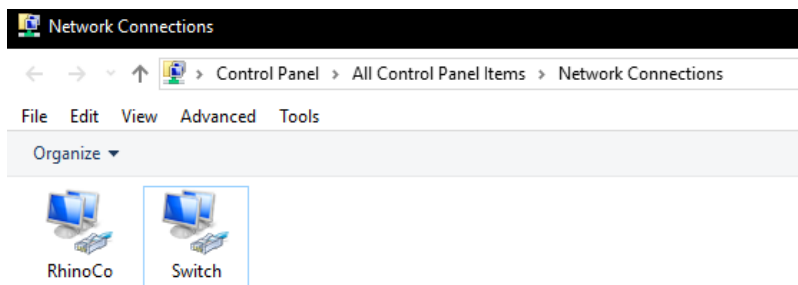
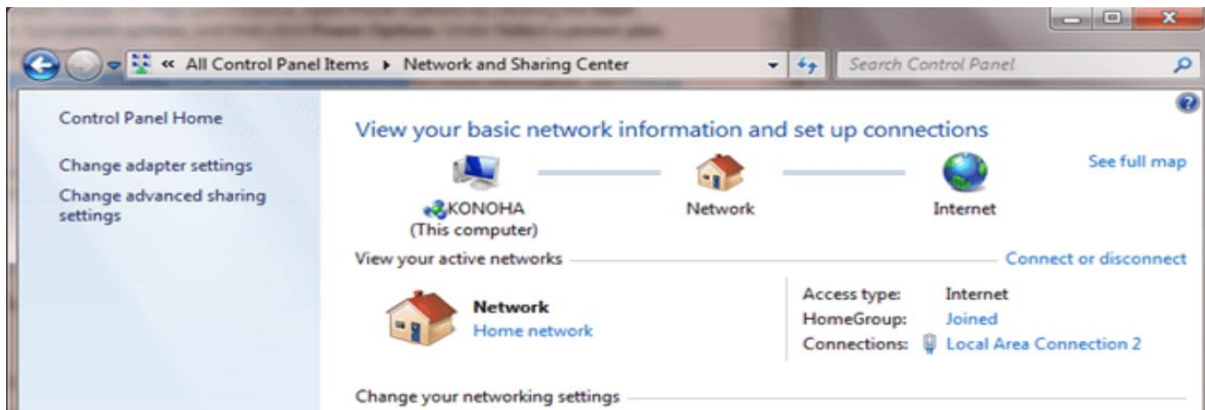
Open start Menu and type " Change ethernet settings "



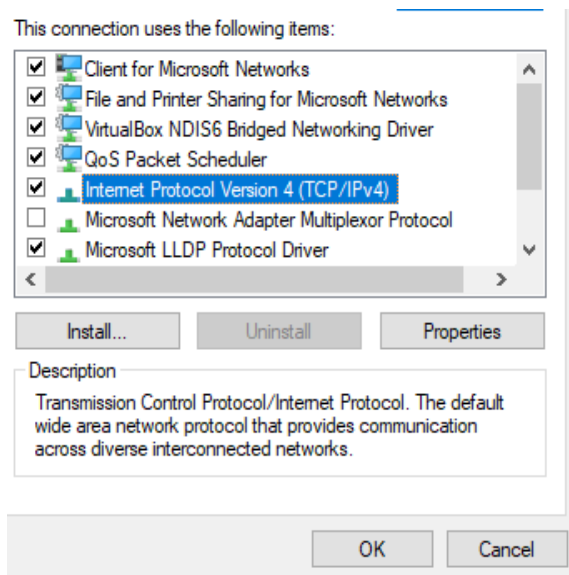
Change Ethernet settings  
System settings

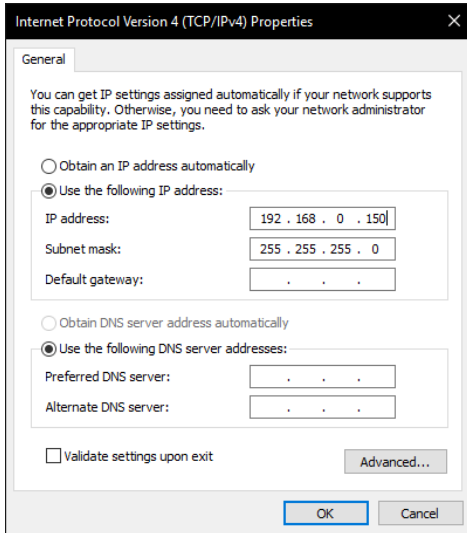
### On Windows 7

Open start menu and type Network and Sharing Centre, then select change adapter settings.



3. Double click on the adapter you are using, for most cases, this will be the Ethernet Connection/Adapter.
4. Select Internet Protocol Version 4 (TCP/IPv4)
5. Select Properties





Enter in your IP address. Click in the subnet mask field and it will generate one, you can leave the gateway blank.

Click OK, then OK again on the next window, then close. Your IP address is now set.

**You will need to come back to this window and set to "Obtain an IP address automatically" once you have finished configuring the device, to connect your device back to the internet.**

Now your IP has been successfully set, you can now access the device by entering in the IP address of said device, into the address bar of **Internet Explorer** and use the default login of admin for both username and password, unless a password has been set on the device already.

*Please be aware, IP Cameras and NVR's use plugins for Internet Explorer and you will run into issues using other browsers such as Edge, Chrome, Firefox etc.*

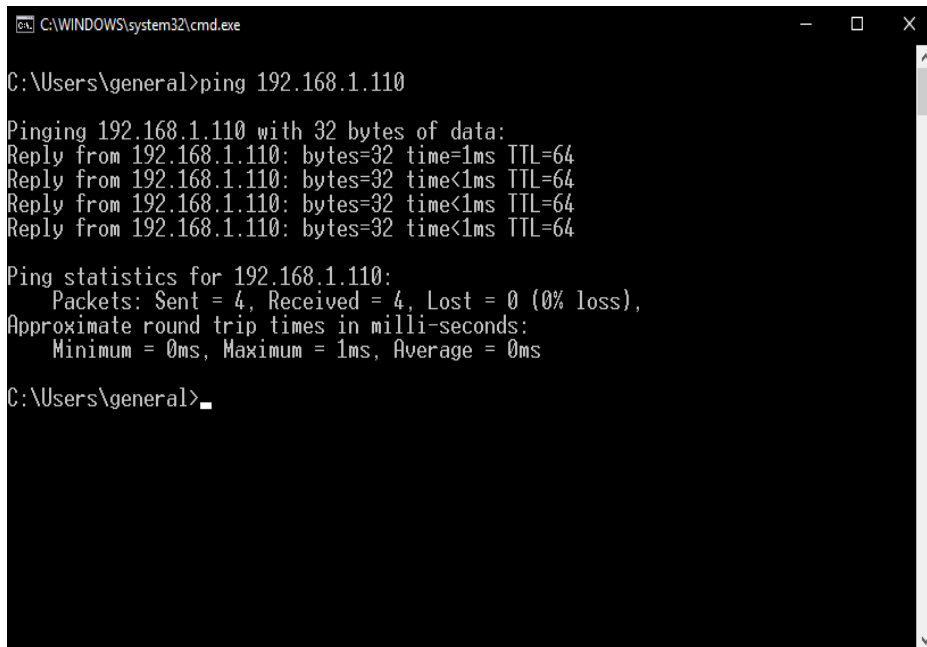


## Testing Device Connection

To verify good connection to the device, you can use the “ping” command from a Windows PC.

Open the start menu and enter **cmd**, click on command prompt to open.

Once there you can type in ping and then the ip address of the device you want to test.



```
C:\WINDOWS\system32\cmd.exe
C:\Users\general>ping 192.168.1.110

Pinging 192.168.1.110 with 32 bytes of data:
Reply from 192.168.1.110: bytes=32 time=1ms TTL=64
Reply from 192.168.1.110: bytes=32 time<1ms TTL=64
Reply from 192.168.1.110: bytes=32 time<1ms TTL=64
Reply from 192.168.1.110: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.110:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\general>
```

You want to see the time at less than < 10ms. This means the device has a 10ms delay.

If this number changes dramatically or sometimes does not get a reply, there may be an issue with the network or device.

Attempt to replace the cable and run the test again to verify where the issue is. If there are still problems the device or the network devices may be faulty.

## Resetting an NVR

To reset an NVR you will need to know the admin password. If the admin password has been lost, the reset procedure is available [here](#).



Simply login, Go to **Main Menu > System > Default**. Select Factory Reset to reset device to default settings.

Otherwise, at the login screen of the NVR, select the Padlock icon or forgot password underneath.

If set up, you will be prompted for the security questions, or to use an email address to reset the password. This procedure is outlined in the video above.



## Resetting an IP Camera

You can reset an IP camera the following ways,

**Reset Button:** Power the device off, hold the reset button down, then while still holding the reset button, turn the power back on for the device and hold for at least 20 seconds.

**Reset Pins:** Labelled 1 and 2 on the board. If unable to identify contact tech support.

Power off the device, you will need to short the 2 pins with tweezers, wire etc, then keeping the short held, power the device on and keep holding for at least 20 seconds.

