



The 7510^{HD} camera is configured for DHCP

(If a DHCP server is not available, the camera IP address will need to be configured.)

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About this document

This manual contains information on installation and quick start for the 7510^{HD} fixed position camera system. Please read this manual carefully prior to installation to prevent any accidental damage or misuse. A CD, including this manual, is shipped with the Camera. The manual is also available from the CohuHD website at: http://www.CohuHD.com/Files/install_manuals/7510_IM.pdf.

The information in this manual is subject to change without notice. Please refer to the above website for the latest information.

NOTE: All graphics contained within this document, including screenshots and other displays, are for reference use only and are subject to change.

Additional information and documents related to the camera system

For information on the camera system operation and configuration, please see the camera system built-in help. Each page of the camera web interface has a question mark symbol . Clicking the symbol  will connect to explanations related to topics on that page.

Copyright/Intellectual Property Rights statement

Copyright 2014 by CohuHD Costar, LLC. CohuHD Costar, LLC has intellectual property rights to technology embodied in the product described in this manual.

CohuHD[™] and Helios[™] are trademarks of CohuHD Costar, LLC.

FCC compliance

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications to this device can void the user's warranty.

Support services

Please contact the Customer Service Department for technical assistance.

Returns

This item was thoroughly tested and carefully packed at the factory prior to shipping. Upon acceptance by the carrier, the carrier assumes responsibility for the item's safe arrival. Should you receive the item in a damaged condition, apparent or concealed, a claim for damage must be made to the carrier.

If a visual inspection shows damage upon receipt of this shipment, it must be noted on the freight bill or express receipt and the notation signed by the carrier's agent. Failure to do this can result in the carrier refusing to honor the claim.

When the damage is not apparent until the unit is unpacked, a claim for concealed damage must be made. Make a mail or phone request to the carrier for inspection immediately upon discovery of the concealed damage. Keep all cartons and packing materials.

To return the product to the factory for service, please contact the Customer Service Department for a Return Material Authorization (RMA) Number.

Prominently display the RMA number on the outside of the shipping container(s) and on paperwork contained inside. Give a brief description of why the equipment is being returned and list the symptoms of any problems being experienced with the equipment.

For shipment, send package with enough foam padding or other packing material to prevent damage that can occur during shipping. The original shipping carton is a good container if it has not been damaged.

Shipment

IMPORTANT

If the camera needs to be shipped, please use the original packaging material which was designed to protect the product during transportation. If the original packaging is lost or damaged, please order a replacement from Customer Service.

Safety instructions

Important Safeguards



Due to product size and space limitations, this label may not appear on all products.



The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

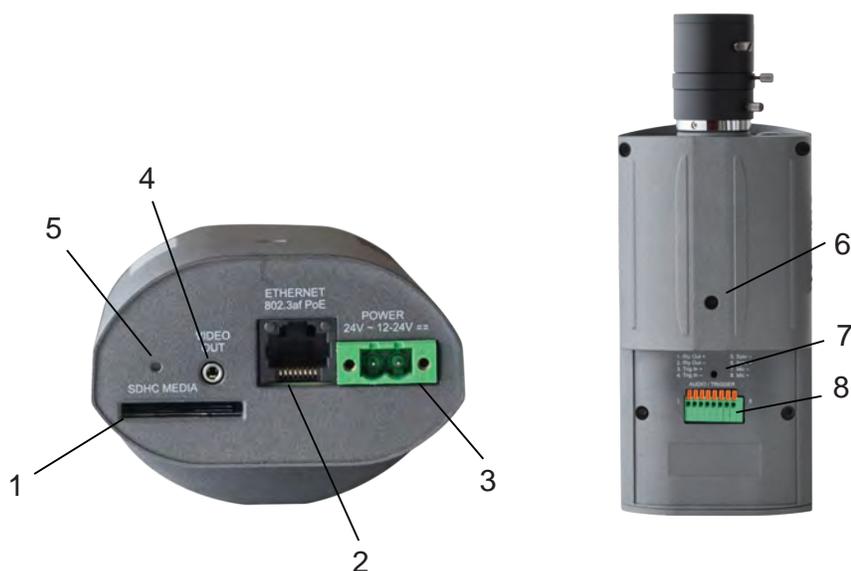
**WARNING: TO PREVENT FIRE OR SHOCK HAZARD,
DO NOT EXPOSE UNITS TO RAIN OR MOISTURE.**



Attention: Installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.

- Installation should be done only by qualified installers and conform to all local codes.
- It is the user's responsibility to ensure that the mounting methods are safe and adequate for the location.
- Use appropriate hardware to fasten the mount to an indoor surface.
- All servicing should be performed by qualified service personnel. Procedures in this manual do not require entry into the housing of the camera positioning system. The unit contains sensitive devices that can be damaged by static discharge. To reduce the risk of damage to the unit by static discharge do not perform any servicing other than described in these instructions. If the unit is defective, please contact the Customer Service Department for technical assistance.
- Liability: It is the sole responsibility of the installer to provide proper installation in compliance with all local codes and regulations.

1.0 Camera Connection Overview



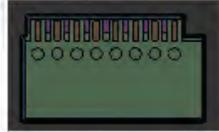
1. SDHC Card Slot - An SDHC card (not included) can be used for on-camera recording.
2. Network Connector - RJ-45 Power-over-Ethernet connector.
3. Power Connector - Captive 2-pin screw terminal for 12-24VDC or 24VAC power source.
4. Analog Video Out - 2.8mm connector with continuous analog video output for NTSC or PAL video systems. Use 7411550-004 BNC video cable adapter (ordered separately)
5. Reset Button - for Setting the camera back to factory default settings.
6. 1/4 - 20 Mount - Provided on both the top and bottom of the camera for mounting to a camera mount.
7. Microphone - Built-in mono microphone.
8. Audio/Trigger Connector - For connecting an external microphone, amplified loudspeakers, alarm trigger input, and outputs to external devices.

For information on 7510^{HD} specifications and a datasheet, please refer to the CohuHD website: www.CohuHD.com/content/7510hd.

2.0 Audio/Trigger Pin Out

- | | | | |
|----|--------------|----|--------------|
| 1. | Relay Out + | 5. | Speaker - |
| 2. | Relay Out - | 6. | Speaker + |
| 3. | Trigger In + | 7. | Microphone - |
| 4. | Trigger In - | 8. | Microphone + |

AUDIO / TRIGGER



1 8

3.0 Getting Started

1. Plug the 7510^{HD} camera into the network.
2. Power the camera using either Power-over-Ethernet or direct power.

Power-over-Ethernet: Input from an IEEE802.3af Power-over-Ethernet (PoE) power injector or switch as show in Figure 1.



Direct Power: Connect either a 12-24VDC or 24VAC power source to the camera. Wire polarity is not important, therefore + or - connections can be connected to either terminal as shown in Figure 2.

Figure 1



Figure 2

NOTE: Using a power source with specifications other than those defined will damage the camera, and will void the product warranty.

3. The 7510^{HD} Series camera position, field-of-view and focus adjustment can be performed using an analog monitor with the optional 7411550-004 BNC video cable adapter (Figure 3) or by using a browser to view the camera image.



Figure 3

4.0 PC Configuration of 7510^{HD} Cameras

Installation and testing of the Camera can be performed with the built-in 7510 Series web interface application.

4.1 System Requirements

In order to test the Camera you need the following items:

- laptop or desktop computer (for recommended computer requirements see section 4.2 of this chapter)
- 100/1000BASE-T network card installed in your computer
- Microsoft Internet Explorer, version 8 if the web browser is used or higher
- 100/1000BASE-T network switch
- Ethernet CAT5e cable

4.2 Recommended Computer Requirements

The following are recommended requirements to run and operate a Camera:

- CPU: Intel i7-860S 2.53 GHz or better
- Operating system: Windows XP Service Pack 3 (SP3), 64 Bit or Windows 7 Pro, 64 Bit
- Memory: 4GB DDR3@1066MHz or better
- Hard Drive: 7200 rpm - minimum speed with sufficient free space
- Video card: NVIDIA® GeForce® 9800 GTX+ with 512 MB RAM or better, or high-end ATI Radeon™ HD series

4.3 Power over Ethernet (PoE)

The 7510^{HD} Camera is compliant with IEEE 802.3af standard. Power to the Camera is supplied through the network. Two types of PoE implementations are specified by the standard:

- Endspan PoE - power is applied directly by the switch to the Camera. This method requires the deployment of a PoE-enabled switch.
- Midspan PoE - power is supplied by an injector placed between an existing non-PoE switch and the Camera.

PoE injector can be ordered from CohuHD. Please refer to the CohuHD web page in the 7510^{HD} Series specifications section for ordering information. The PoE injector selected for use with 7510^{HD} should meet the following requirement::

- be compatible with IEEE 802.3af standard

Figures 1 and 2 show interconnection diagrams for 7510^{HD}:

- Figure 4 shows a setup of the Camera with PoE-enabled switch.
- Figure 5 shows a typical set up interconnection diagram for the Camera using the PoE injector with non-PoE switch.

These diagrams give some idea of a typical installation. Each installation site will have its own unique requirements.

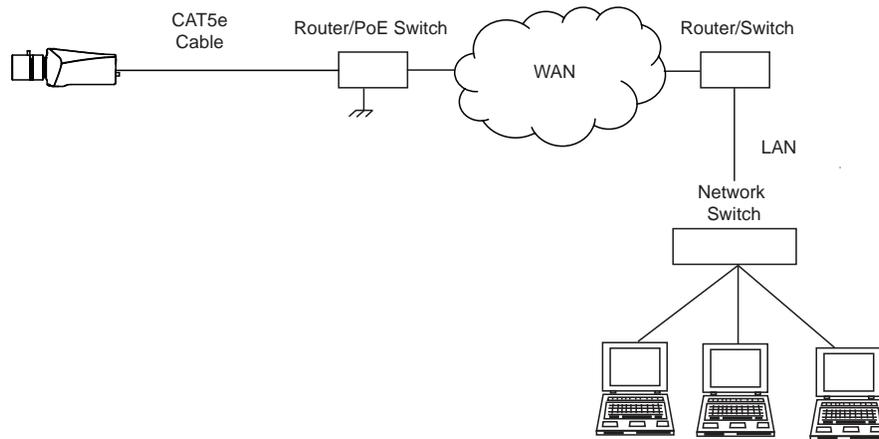


Figure 4. Interconnection Diagram with PoE-enabled switch

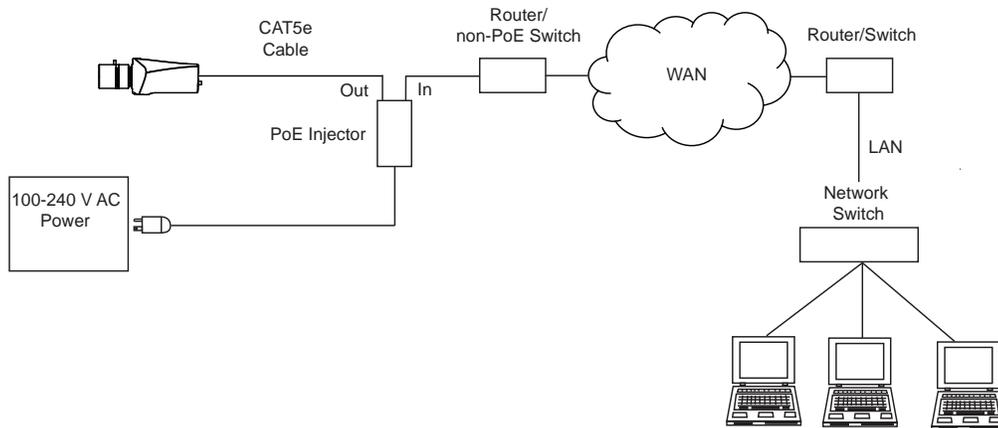


Figure 5. Interconnection Diagram with non-PoE Switch

NOTE: PoE injector can be ordered from CohuHD. Please refer to the CohuHD website in the 7510^{HD} Series specifications section for ordering information.

4.4 Accessing the Camera

NOTE: The default user name for 7500 Series is “**Admin**” and the default password is “**Camera**”.

The 7500 cameras are configured for DHCP and will have an IP address assigned if a DHCP server is on the network. Use the CohuONVIFDiscovery software to find the camera IP address.

4.4.1 Configuring cameras on networks with DHCP

In networks with a DHCP server, the IP camera will acquire dynamic (changeable) network settings when it is initially powered on.

These dynamic settings can easily be converted to static settings, or changed to other static settings that are also compatible with your network.

To configure the network settings of the camera follow the next steps:

- Connect the camera to the LAN, power on the camera.
- Camera automatically will be assigned the DHCP address.
- Discover the camera address using the CohuONVIFDiscovery software. See section 4.4.3.
- Change the PC address to match the camera IP network address. See Section 4.4.5.
- Change the camera assigned address to the desired static Address. See section 4.4.4.

4.4.2 Configuring cameras on networks without DHCP

Cameras installed on a network without a DHCP server will default to the Automatic Private IP Addressing (APIPA), which is a failover mechanism of Microsoft Windows networks.

The IP address range is 169.254.0.1 through 169.254.255.254 with a default class B subnet mask of 255.255.0.0.

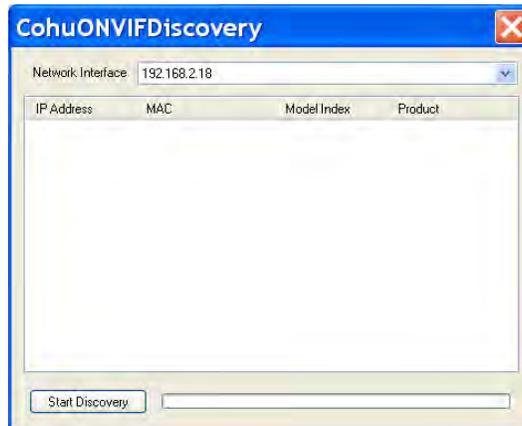
To configure the network settings of the camera follow the next steps:

- Connect the camera to the LAN, power on the camera.
- Camera automatically will be assigned the APIPA address.
- Discover the camera address using the CohuONVIFDiscovery software. See section 4.4.3.
- Access the camera using APIPA address.
- Change the camera assigned address to the desired static Address. See section 4.4.4.

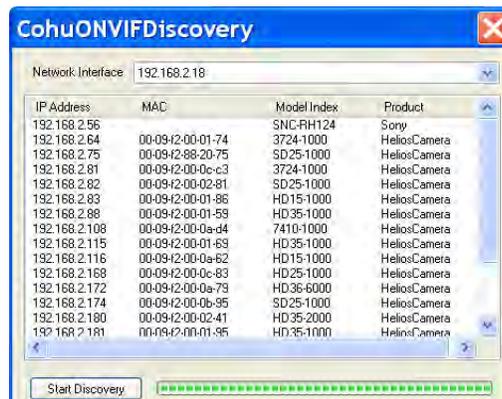
4.4.3 Using the CohuONVIFDiscovery Software to Discover the Camera

- Insert the CohuHD 7500 Series CD into the CD drive of the PC or download the software from the link: <http://www.CohuHD.com/content/downloads>. Under Software & Protocol Downloads see the Helios and 7500 Camera Series discovery tool. Click “download here.”
- Run the CohuONVIFDiscovery.exe file. Click to start it.
- The CohuONVIFDiscovery window will be displayed.

NOTE: Auto discovery feature uses network multicast packets and may not work through network routers.

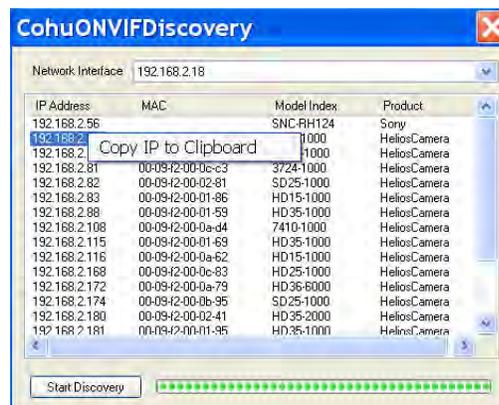


- Click on the “Start Discovery” button. A list of Cameras will be automatically displayed.



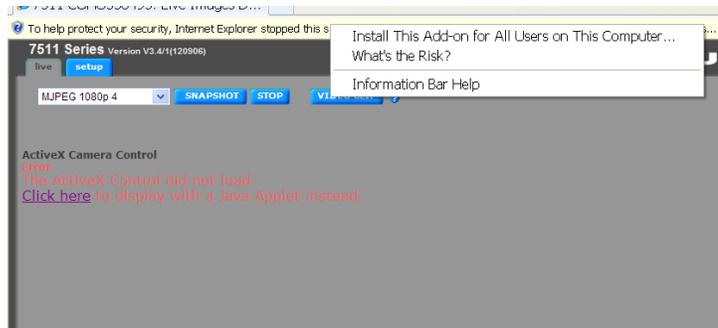
NOTE: Use the MAC Address or Model Index to identify CohuHD cameras. “00-09-f2” and 00-50-1a identify cameras as CohuHD cameras.

- Right click a camera entry. Click Copy IP to Clipboard.

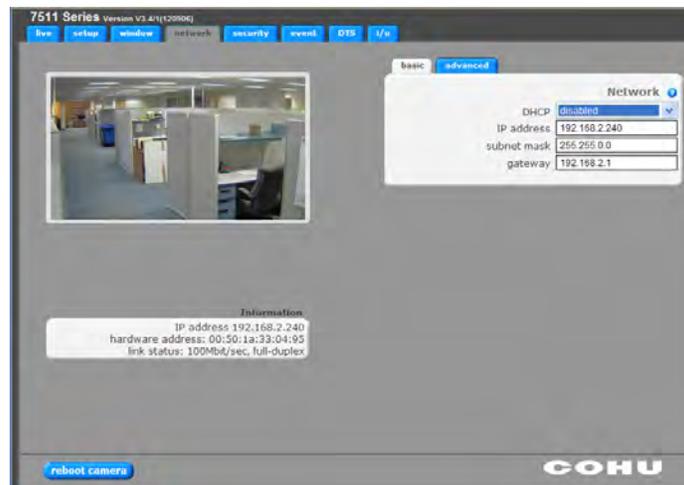


4.4.4 Change the camera IP network address

- Open a browser (IE recommended) and enter the IP address of the 7510^{HD} camera in the address field of the browser. The “Live” page will be displayed.
- If prompted, install the ActiveX control.



- Click the network tab. Choose Disabled line from the DHCP pull-down menu. Type IP address, subnet mask and gateway.



NOTE: Changing between a static IP address and DHCP will cause the camera to reboot.

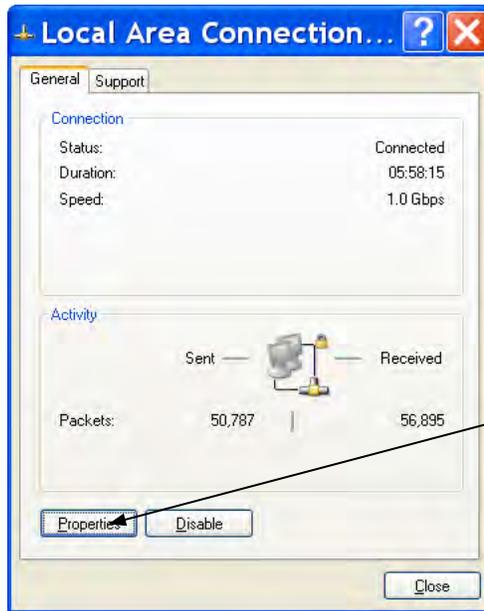
- To perform further configuration of the camera click on the “Setup” tab

NOTE: The default user name is “Admin” and the default password is “Camera”

4.4.5 Assigning the Static IP Address

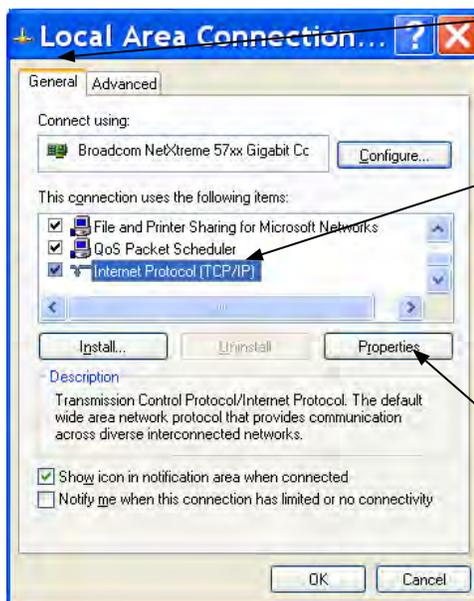
Set your computer IP address to the same subnet as the Camera IP address.

- Go Start > Control Panel > Network connections > Local Area Connection (Windows XP).
 - Go Start > Control Panel > Network and Sharing Center > Local Area Connection (Windows 7).
1. "Local Area Connection" dialog box will appear. Click "Properties."



Click "Properties"

2. The "Local Area Connections Properties" dialog box will be displayed. In the General tab, highlight the "Internet Protocol (TCP/IP)" line. Click "Properties."

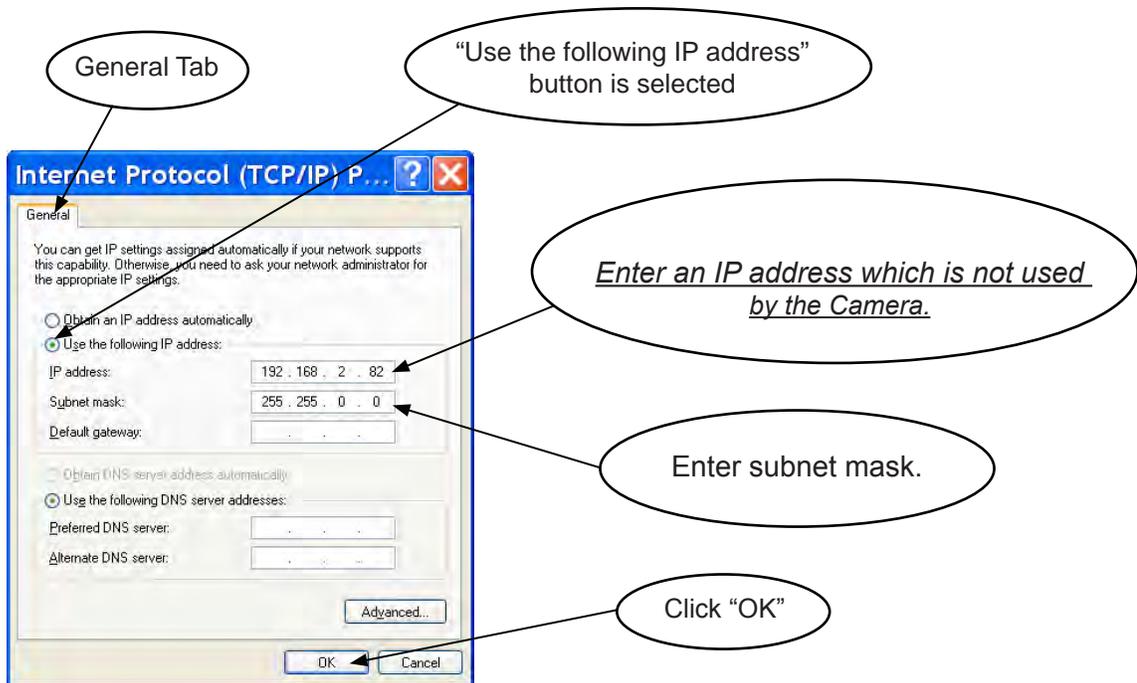


General Tab

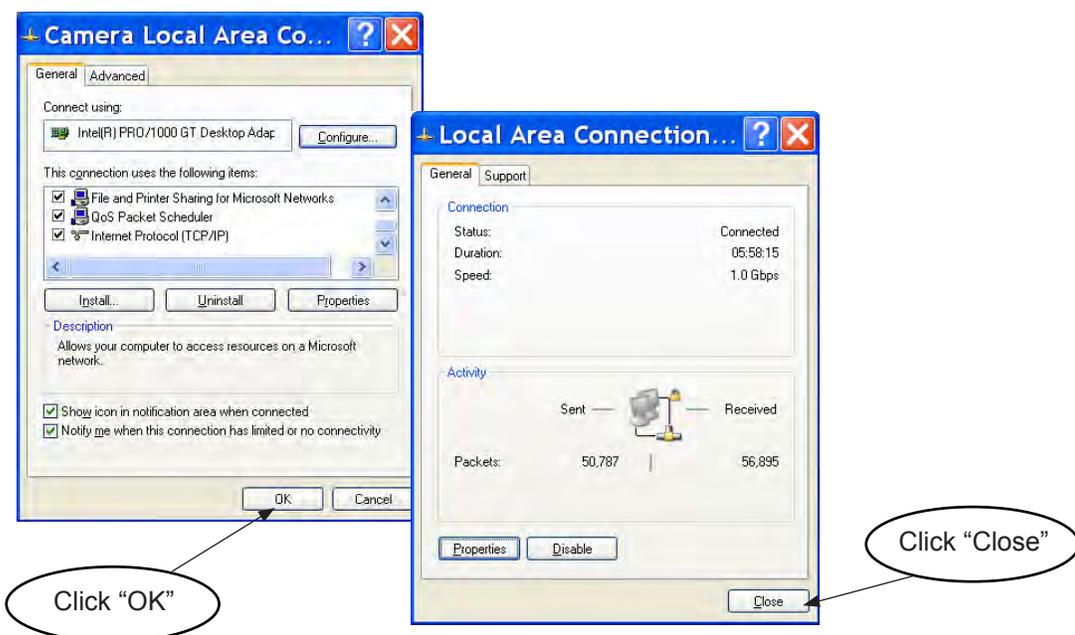
Highlight the "Internet Protocol (TCP/IP)"

Click "Properties"

- You will see the “Internet Protocol (TCP/IP) dialog box. In the “General” tab the “Use the following IP address” button should be selected. Enter IP and subnet addresses. Click “OK” to close the “Internet Protocol (TCP/IP).

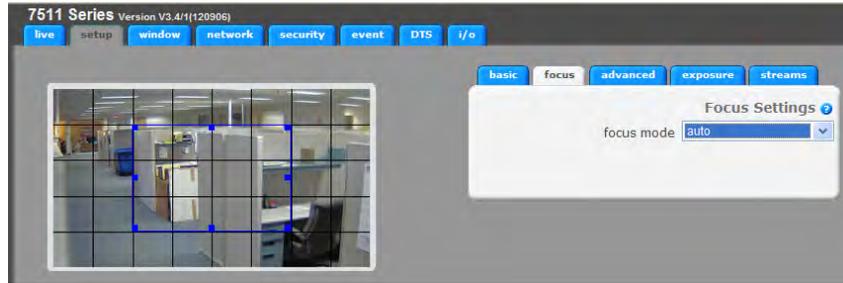


- Click “OK” to close the the “Local Area Connections Properties” dialog box and click “Close” to close the “Local Area Connection” dialog box.



4.4.6 One-Touch-Focus Procedure

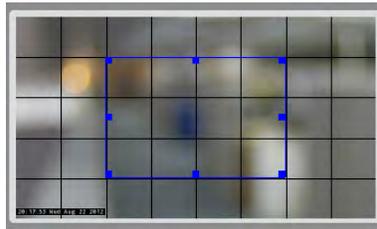
To complete focusing using the one-touch focus method go to the Setup > Focus tab.



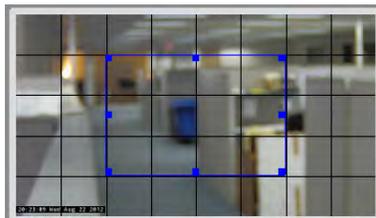
- Set the iris on the lens to the 'Open' position then lock it down with the iris set screw.
- If the back focus has been set before using the camera, click the "restore defaults" button on the Focus tab to reset the back focus adjustment.
- Use the Varifocal adjustment on the lens to set the field-of-view, then lock the Varifocal adjustment set screw.
- Focus the lens using adjustment on the lens, then lock the focus adjustment set screw.

NOTE: The focus adjustment should be close to ensure the one-touch focus adjustment can be completed.

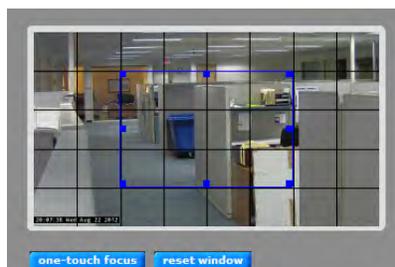
The following image is an example of an image not focused enough to ensure a remote one-touch focus can be completed.



The following image is an example of an image focused enough to ensure a remote one-touch focus can be completed.

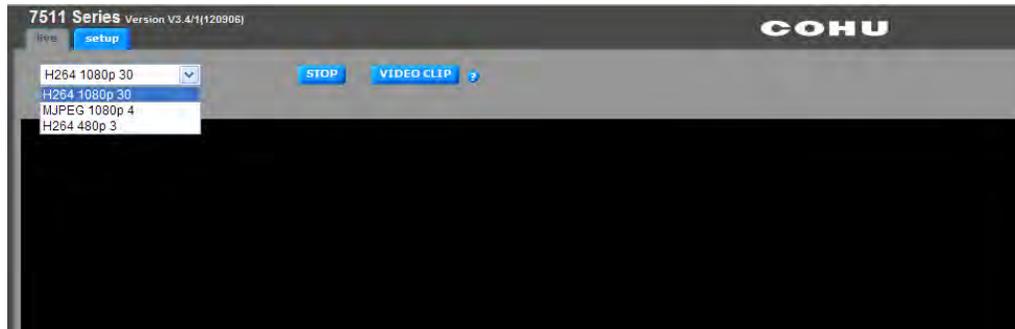


- On the Focus tab click the one-touch focus button to focus the video image.



4.4.7 H.264 Video Streaming

To prepare the camera to serve the H.264 stream, select “H.264” from the drop-down menu. To view the H.264 stream in full screen mode (without ‘Live’ page controls), double click on the video window. Double-click on the video window again to return back to the ‘Live’ page.



NOTE: For information on the camera system operation and configuration, please see the camera system built-in help. Each page of the camera web interface has a question mark symbol . Clicking the symbol  will connect to explanations related to topics on that page.

For additional information and technical documents, please visit www.CohuHD.com.

5.0 Warranty

Please refer to the CohuHD website for product warranty information:

<http://www.CohuHD.com/warranty/WarrantyStatement.pdf>.

Revision History		
Revision	Date	Comments
Rev A	10/1/2012	Initial release
Rev B	10/19/12	p3 - website address was changed
Rev C	7/15/14	• the manual is revised to change company name