

USER MANUAL AND QUICK START GUIDE

**Network IP Cameras
EXPCMR-NDAA-IP-POE SERIES**

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Safety Instruction

These instructions are intended to ensure that the user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into ‘Warnings’ and ‘Cautions’:

Warnings: Serious injury or death may be caused if any of these warnings are neglected.

Cautions: Injury or equipment damage may be caused if any of these cautions are neglected.

	
Warnings Follow these safeguards to prevent serious injury or death.	Cautions Follow these precautions to prevent potential injury or material damage.



Warnings:

- This installation should be made by a qualified service person and should conform to all the local codes.
- Please install blackouts equipment into the power supply circuit for convenient supply interruption.
- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

TO AVOID EXPLOSION:

- Make sure the supply voltage is within the voltage rating.
- Ensure that the marked T rating is less than the ignition temperature of the hazardous atmosphere.
- DO NOT operate in ambient temperatures above those indicated on the product nameplate.
- DO NOT operate if the lens, cord, seals, housing, receptacles, etc. are cracked or damaged. If so, discontinue use and contact manufacturer for replacement parts.
- All fasteners should be properly seated.

**Cautions:**

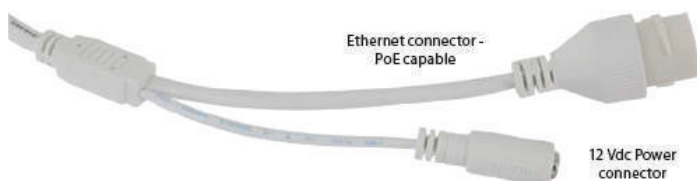
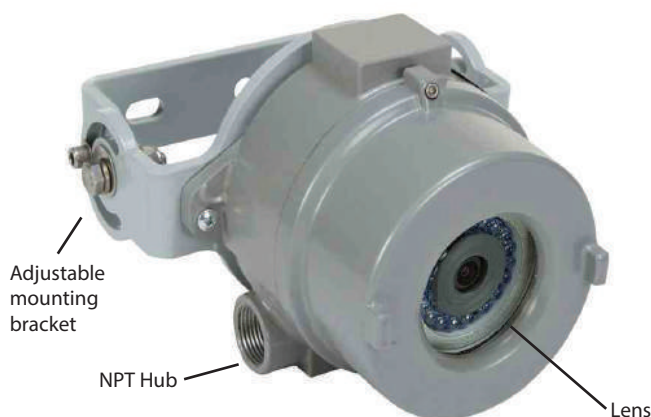
- Make sure the power supply voltage is correct before using the camera.
- Do not drop the camera or subject it to physical shock.
- Do not touch sensor modules with fingers. If cleaning is necessary, use a clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period of time, put on the lens cap to protect the sensor from dirt.
- Do not aim the camera lens at the strong light such as sun or incandescent lamp. The strong light can cause fatal damage to the camera.
- The sensor may be burned out by a laser beam, so when any laser equipment is being used, make sure that the surface of the sensor not be exposed to the laser beam.
- Do not place the camera in extremely hot, cold temperatures (the operating temperature should be between -30°C ~ 60°C), and do not expose it to high electromagnetic radiation.
- To avoid heat accumulation, good ventilation is required for a proper operating environment.
- Keep the camera away from water and any liquid during installation.
- While shipping, the camera should be packed in its original packing.

Notes:

For the camera supports IR, you are required to pay attention to the following precautions to prevent IR reflection:

- Dust or grease on the dome cover will cause IR reflection. Please do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.
- Make certain the installation location does not have reflective surfaces of objects too close to the camera. The IR light from the camera may reflect back into the lens causing reflection.
- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDS. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

- H.265+ / H.265 / H.264OVC / H.264 / MJPEG compression
- 120 dB Wide Dynamic Range
- Ultra low light sensor
- 120 ft Full Frame Illumination Smart IR array,
- Supports onboard storage up to 128GB Max microSD (card not included)
- IP67 rated, -22 °F ~ 140 °F temperature range
- ONVIF Profile S & Profile G, PSIA, CGI, ISAPI



Camera drop cables



WARNING Failure of the power or Ethernet connector due to moisture or another contaminant is considered an installation error, which voids the warranty. If installing this camera in a location such as an overhang, shop, garage, kitchen, etc. where high humidity or dust is present, seal these connections adequately.



CAUTION Do not apply power to the camera at this time. Before applying power to the camera, ensure that the polarity is correct. An incorrect connection may cause a malfunction and can damage the camera.

Installation

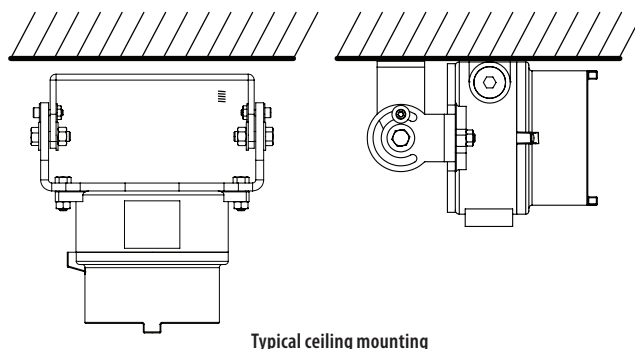
Before installation:

- Make sure that the device is in good condition and all the assembly parts are included.
- Check the specification of the products for the installation environment.
- Make sure that the wall or ceiling is strong enough to withstand 3 times the weight of the camera.

During installation:

- **Camera Lens:** Handle the camera carefully to prevent scratching or soiling the lens. If the lens or IR array shield becomes soiled, clean it only with approved products. See the cleaning section.

Step 1. Mounting the camera



1. Mark the location of the screws that anchor the mounting base to the mounting surface. See the note above. If you are routing the drop cable through mounting surface, also mark the position of the hole for the drop cable.
2. Drill holes for the screws that anchor the base to the mounting surface. The mounting hardware provided is appropriate for most surfaces. However, depending on the surface materials, more appropriate fasteners may be required.
3. Drill a 3/4" hole through the mounting surface for the drop cable, if necessary.
4. Route extension cables from the power source and LAN switch (or LAN with PoE) to the mounting location.
5. Connect the network LAN and power extension cables to the camera drop cables:
 - a. Connect the Ethernet LAN cable to the camera LAN drop cable. Protect the connection from moisture and other contamination, if necessary. A Weatherproof Ethernet Fitting is provided. Installation instructions for the fitting are included later in this document.
 - b. If the camera is not powered using PoE (Switch or Injector), connect the 12 Vdc power cable to the camera drop cable. The polarity of the drop cable is shown to the left.
6. Secure the camera to the mounting surface using appropriate screws.
7. Apply power to the camera through the 12Vdc power cable or PoE switch/injector, as configured.

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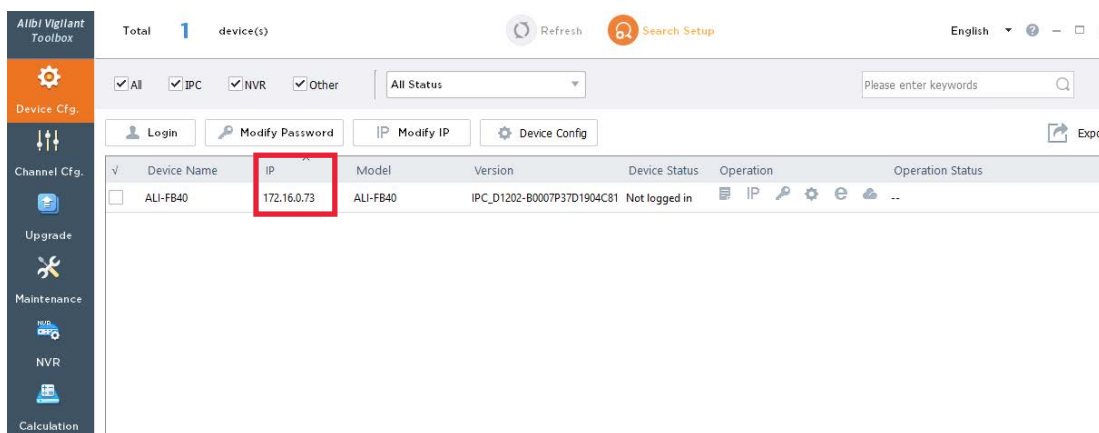
This guide provides generic instructions for activating and setting up the network parameters for new NDAA cameras **Connected to a network switch with PoE** using the **Vigilant Toolbox**. The examples shown herein activate an NDAA camera and configure its network settings.

About the Vigilant Toolbox

The Vigilant Toolbox is a PC-based network utility for discovery of compatible devices on an IP network. It provides an easy way to configure cameras, record network configuration settings, and set device passwords. It can be installed on a Microsoft Windows operating system that has access to the IP network where your devices are installed.

Step 1. Install the Software

1. Download the Vigilant Toolbox from the web: <https://www.larsonelectronics.com/images/upload/VigilantToolbox.zip>
2. Un-zip the file on a computer with Microsoft Windows that is connected to the LAN where your camera is connected.
3. Run the setup file contained in the zip file. Follow the on-screen instructions to install the file.
NOTE : Be sure to allow the software administrative access or it will not work properly.
4. Open the Vigilant Toolbox application. When the application opens, it automatically “discovers” and lists all compatible devices on the LAN. The discovery of devices can take several minutes. **Take note of the IP address of your camera as you will need this to log into and activate it.** See below.



Step 2. “Activate” Inactive Camera

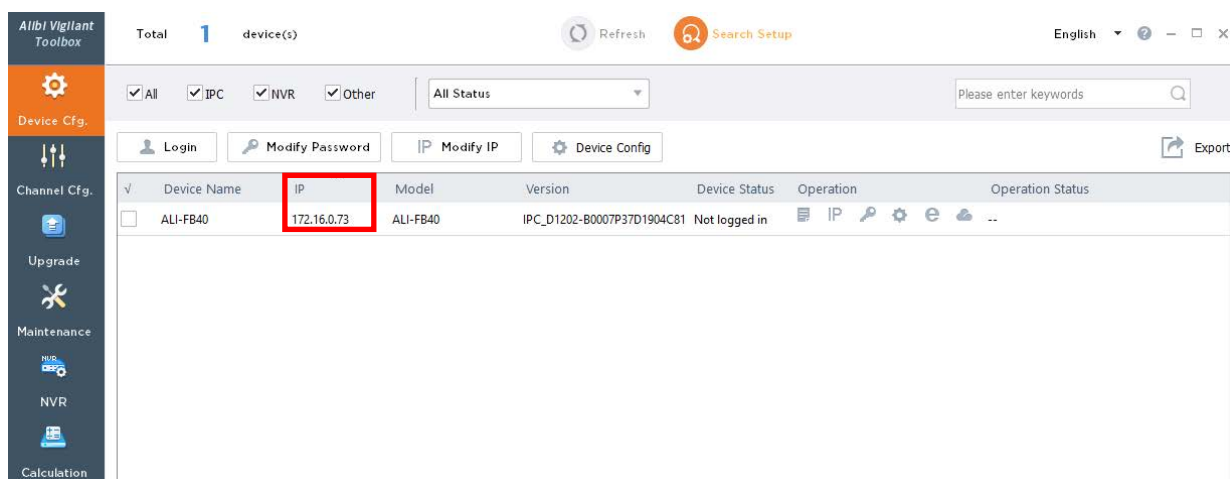
NOTE: Cameras are shipped with the default IP Address of 172.16.0.xxx. The last set of numbers in your IP address will be random, but will always be in the 172.16.0.xxx subnet. See "Step 3. Modify Network Parameters" for more information on how to change these.

DEFAULTS: Username: admin Password: 123456

When a camera is first installed, or reset to its factory configuration, it must be “Activated” before it can be used. A device is “Activated” when a password is assigned to the **admin** username of the device. To do this you will need to login to the camera through a browser.

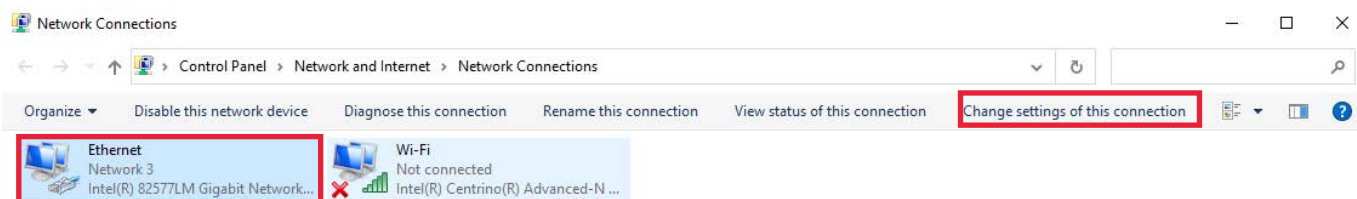
In the following steps, a camera is activated and configured for its network using Microsoft Edge.

1. Scan through the list of devices the Vigilant Toolbox discovered for the device you want to activate (see below) and take down the IP address of the device.

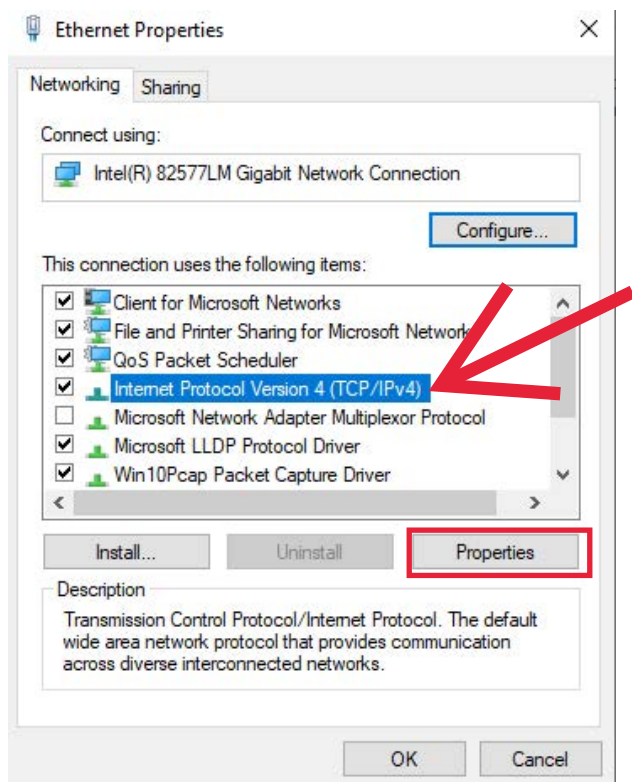
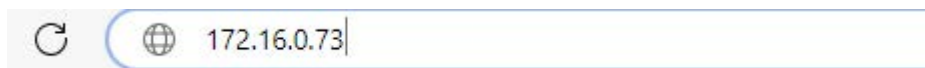
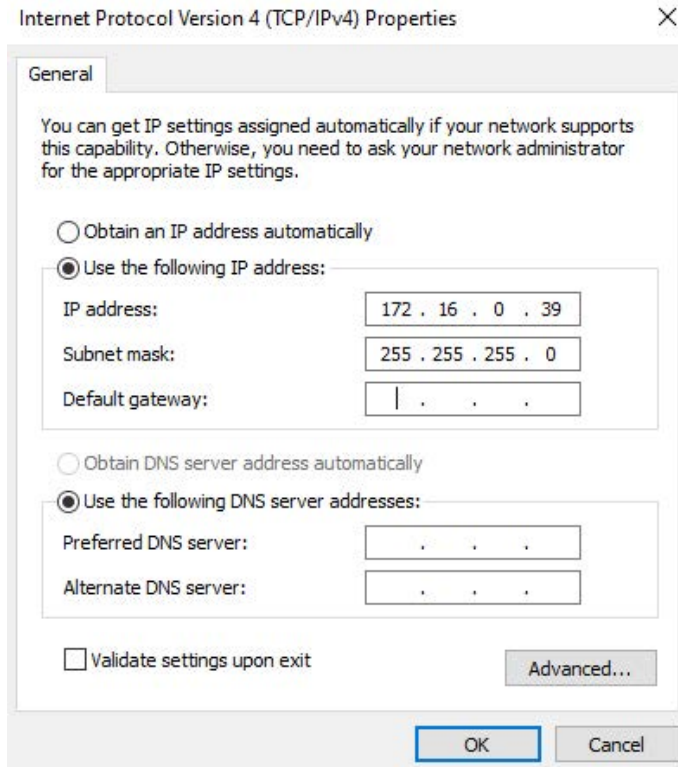


2. To login to your device and create a new password you will need to change the IPv4 settings of your PC to match those of the camera.
 - a. Click on the Windows start menu or press the Windows key on your keyboard and type "View network connections" and press enter to bring up your Network Connections (Fig. A). Click once on your current network connection to highlight it and then choose "Change settings of this connection". (Fig. A)
 - b. In the properties menu, highlight "Internet Protocol Version 4 (TCP/IPv4)" and then click the properties button. (Fig. B)
 - c. In the Internet Protocol Version 4 (TCP/IPv4) properties, if "Obtain an IP address automatically" is checked, click the circle next to "Use the following IP address". **NOTE: If you are currently using a static IP address, be sure to note this information down so you can switch it back later.** (Fig. C)
 - d. In the IP address box you will need to input an IP address of 172.16.0.xxx. For the last section in the IP address, it can be any number between 2 and 250, as long as it is not the same as the one you noted down earlier for your device. In the Subnet Mask box use 255.255.255.0. All other boxes can be left blank. (Fig. C)
 - e. Click OK to close that dialogue box, and then click close, to close the previous dialogue box.

FIG. A



CAUTION: If you lose your **admin** (administrator) password, you cannot configure the device or restore it to its factory settings. To reset your password, **call** your support organization for specific instructions.

FIG. B

FIG. C


3. Open Microsoft Edge and input the IP address of your camera into the search bar and press enter.
 - a. Navigate to the top right of the browser window and select the 3 horizontal dots and then look down the popup list and click "Reload in Internet Explorer mode"(Fig. D)
 - b. After the page reloads in Internet Explorer mode you will be able to download and install the plugin so that you can view the camera. (Fig. E)
 - c. Click "Run" in the popup along the bottom of the window and after following any prompts click "Allow". (Fig. F)
 - d. Input the default Username and Password into the appropriate boxes and then click OK. You will get another popup window instructing you to create a new password for your device. The new password must be at least **9 characters in length, contain at least 1 number, 1 lowercase letter, 1 uppercase letter and 1 symbol**. Click OK after you enter your new password (Fig. G) and another window will popup stating that you need to log in with your new password, click OK and wait until the page refreshes. (Fig. H)
 - e. After creating your new password and the page refreshes, the device is now activated.

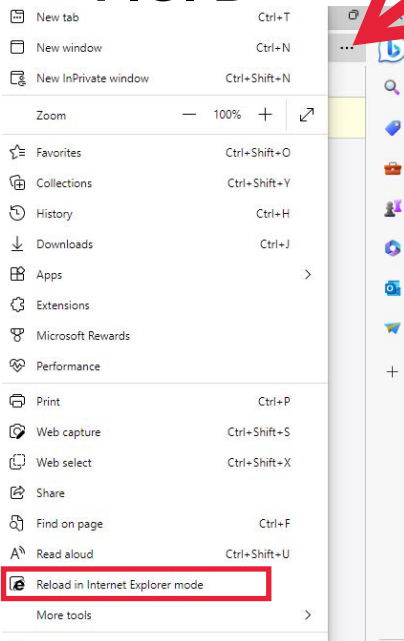
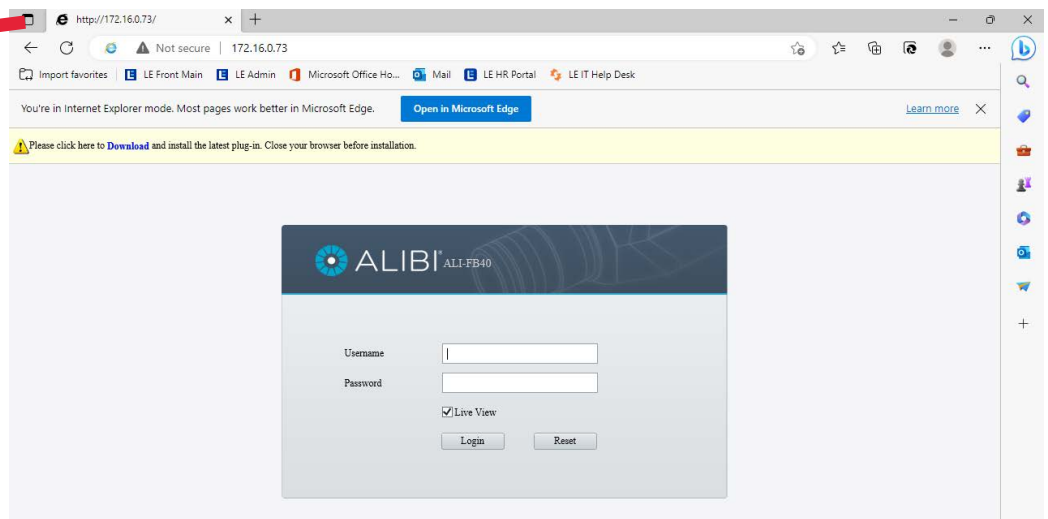
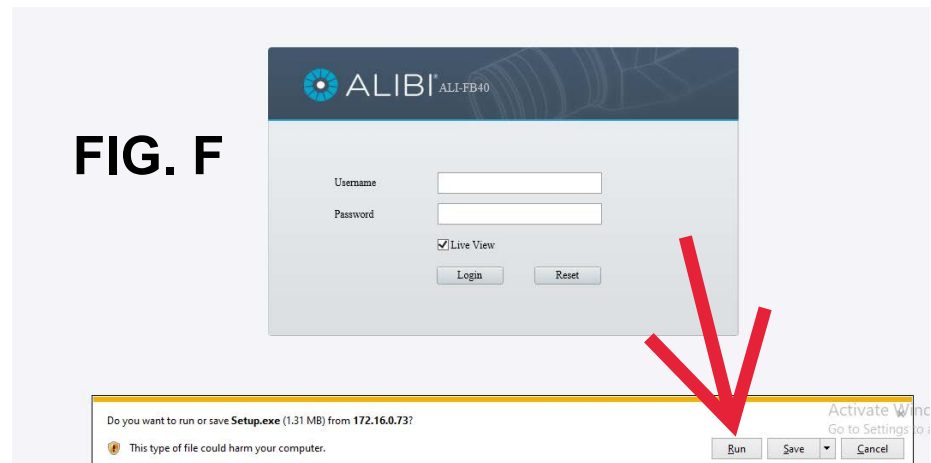
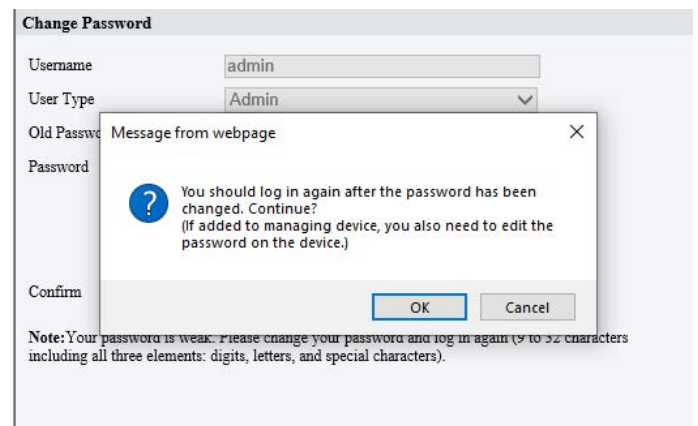
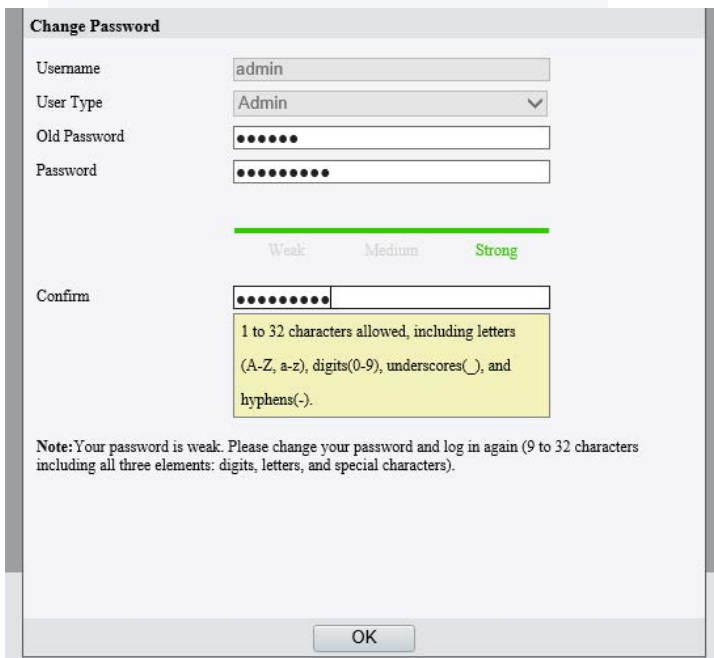
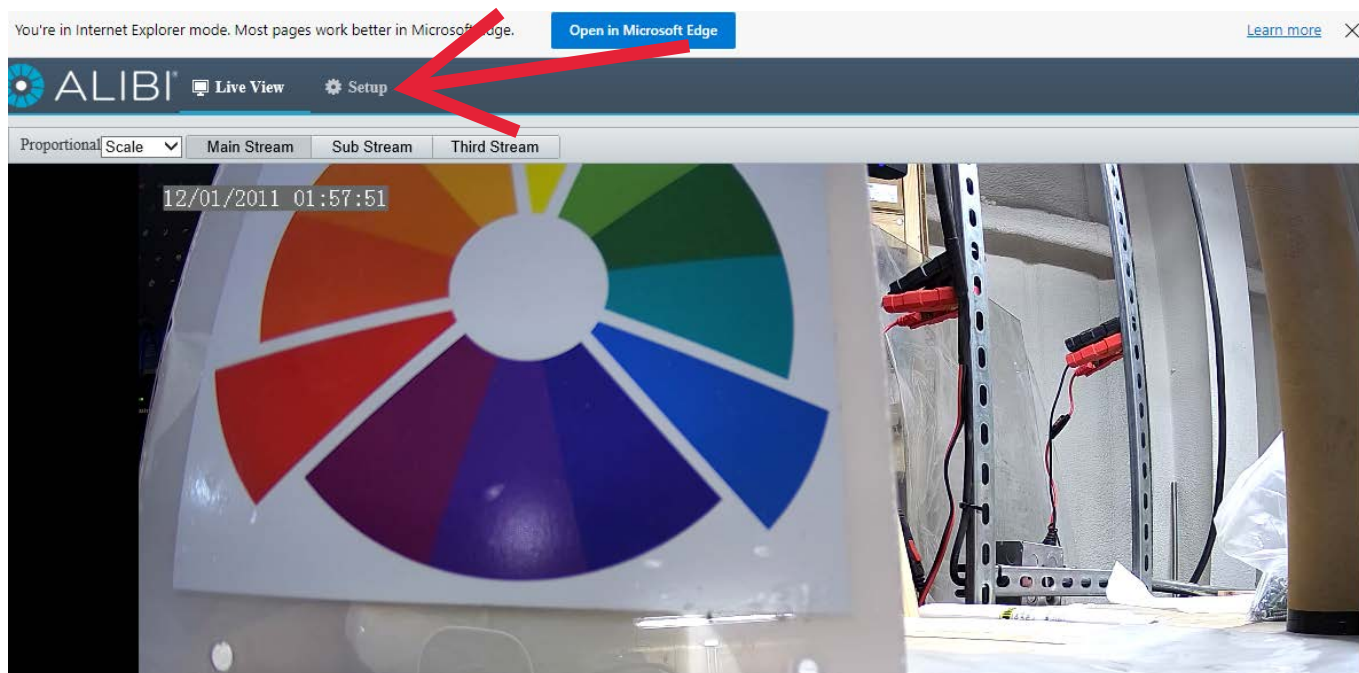
FIG. D

FIG. E

FIG. F

FIG. G

FIG. H


Step 3. Modify Network Parameters

1. Once you have logged into the device with your new password you will see the live view. Click on Setup to change the parameters of the device. (See below)



2. In the Setup screen you will have many different options listed on the left side. Click on the Network tab, or click Network in the Common tab that is already expanded. (Fig. I)
 - a. **Enable DHCP:** You can select **DHCP** to acquire compatible network settings from a DHCP server installed on the LAN. However, these settings can be changed by the DHCP server. Since it is recommended to use a static IP address, you can use DHCP to acquire compatible network settings, and then select **Static** and save that configuration to retain the new network parameters. (Fig. J)
 - b. **Static:** If you were using a static IP address in Step 2, Section 2, part C, then you can input an unused static IP address here for your new device (not the same as the one used for your PC or other devices on your network, consult with your network administrator if you are unsure what IP addresses are available).
 - c. After inputting the new IP address for your device, click the Save button. (**NOTE: After saving your settings you will need to return the IPv4 settings of your PC back to the original settings. To do this simply follow Step 2, Section 2 as done previously**)

NOTE: If you have set your camera to DHCP, you can run the Vigilant Toolbox again after returning your PC IPv4 settings to the previous settings, to get the new IP address of your camera.

- d. To login to your camera again, input the new IP address into the search bar and press enter. Use "admin" as the Username and your newly created password that you set in the previous step.

NOTE: Most IP cameras have a **Reset** button for returning the camera configuration to its factory settings. The reset button needs to be pressed with the camera disconnected from power. Continue holding the reset button down and plug the camera back into power and continue to hold the reset button for an additional 30 - 45 seconds.

NOTE: For more details on using the functions of this camera, refer to the instruction manual for the Camera Management Software (CMS) you are using.

THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT SALES@LARSONELECTRONICS.COM OR BY PHONE AT 1-877-348-9680 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR WARRANTY AND RETURN INFORMATION.

FIG. I

You're in Internet Explorer mode. Most pages work better in Microsoft Edge. [Open in Microsoft Edge](#) [Learn more](#) X


ALIBI
[Live View](#)
[Setup](#)

Common

Basic Info

Local Parameters

Network

Time

OSD

User

Video

Image

Intelligent

Events

Storage

Security

System

Basic Info

Model	ALI-FB40
Firmware Version	IPC_D1202-B0007P37D1904C81
Hardware Version	A
Boot Version	V0.1
Serial No.	210235THJT3207000029
Network	172.16.0.73/255.240.0.0/172.16.0.1
MAC Address	64:25:5e:10:08:b4

Status

System Time	2011/12/1 02:02:35
Operation Time	0 Day(s) 2 Hour(s) 2 Minute(s)

Refresh

Common Configuration

 Network

 Time

 OSD

 User

FIG. J

You're in Internet Explorer mode. Most pages work better in Microsoft Edge. [Open in Microsoft Edge](#)


ALIBI
[Live View](#)
[Setup](#)

Common

Network

DNS

Port

DDNS

P2P

E-mail

QoS

Video

Image

Intelligent

Events

Storage

Security

System

Network

Obtain IP Address

Static

IP Address

172.16.0.73

Subnet Mask

255.240.0.0

Default Gateway

172.16.0.1

IPv6

IPv6 Mode

Manual

IPv6 Address

Prefix Length

64

Default Gateway

MTU

1500

Port Type

FE Port

Operating Mode

Auto-negotiation

Save