

# Add Modes

Adding cameras to an NVR can be a simple or complicated process depending on the adding mode.

## **Plug and Play**

The most basic mode is plug and play, this is the default configuration on the NVR, and directly links POE ports on the back of the unit to display channels. This is the simplest mode.

## **IP Address**

The second mode is IP Address, this entails adding cameras to the system by their IP address. This mode ranges from Intermediate to advanced.

## **Protocols**

Each of these modes shares 2 protocols: Private or ONVIF. Plug and play will automatically select which protocol it is going to use, but IP Address may require that YOU select which protocol, and in addition offers a third protocol called custom.

#### Private

Private protocol is usually reserved for Uniview tec cameras

or cameras with very similar firmware, as the connection process can vary wildly between manufacturers. So, while you may have the correct credentials for the device you are trying to add, it may not be able to communicate that information correctly by this protocol.

#### ONVIF

ONVIF is a communication protocol that is like a translator for 2 devices speaking different languages. If a device supports ONVIF, features of the device will be linked to terms within the ONVIF language, then both devices will communicate with each other using these terms. As this term list can be limiting, not all features of a camera may be available when connected by ONVIF, that will depend on the camera and the ONVIF version.

#### Custom

Custom protocol is user defined and has a separate window that becomes available when selected for you to configure your custom protocol. You can configure multiple custom protocols and when needed, select the right custom protocol for the application. For more information on custom protocols see our <u>3rd party cameras tech note</u>.





By default, the recorder will add cameras by plug and play.

You plug a camera into POE port 1 on the back of the unit, and that camera will connect to channel 1 in the display.

(D3 > 3; D4 > 4; D7 > 7; D8 > 8)

If the password for the camera is default (123456) this process will be automatic. If the password of the camera is something else, you will have to update the password in the channel configuration.

Click on to enter Channel Configuration.

If you want a camera that is plugged into POE port 4 on the back of the NVR to display on channel 1, without moving that ethernet cable to POE port 1, you must use **IP Address** method. If you are using a **POE switch** to connect any cameras, you must use the **IP Address** method.

If you are employing a POE switch, you must also set a static IP address on your cameras. This is true regardless of whether that switch is connected to a POE port on the NVR, a dedicated camera network on a NIC at the NVR, or anywhere on the customer's local network. If cameras <u>are</u> on the customer's local network, please also set a password for those cameras. For information on methods to statically address cameras, see our <u>camera IP setup tech note</u>.

Plug and Play



| Add Mode              |                | Plug-and-Play 🗸   |  |  |  |
|-----------------------|----------------|-------------------|--|--|--|
| Protocol              |                | Private ~         |  |  |  |
| IP Address            |                | 172 . 16 . 0 . 18 |  |  |  |
| Port                  |                | 80                |  |  |  |
| Username              |                | admin             |  |  |  |
| Password              | $ \rightarrow$ | ****** >>+        |  |  |  |
| Total Channels        |                |                   |  |  |  |
| Extended Transmission |                |                   |  |  |  |
|                       | Sear           | rch OK Cancel     |  |  |  |

#### **IP Address**

#### **Importing Cameras not on NVR POE**

The NVR will automatically scan for univiewtec cameras on the network and display them to you during the add process. They will either be displayed below the camera list like so:

| D14(IP Camera 14)   | 172.16.0.15 | Private     |            | $\square$ | -                  | III | $\langle \dot{\gamma} \rangle$ |   |
|---------------------|-------------|-------------|------------|-----------|--------------------|-----|--------------------------------|---|
| 🔲 D15(IP Camera 15) | 172.16.0.16 | Private     |            |           | 1                  | Ш   | Ф                              | 1 |
| 🗋 D16(IP Camera 16) | 172.16.0.17 | Private     |            | $\square$ | ( <del>and</del> ) | III | ¢                              |   |
| $\longrightarrow$   | 10.0.0.59   | <br>Private | IPB4K28AIX |           | 0                  | III | -                              | 1 |

Or, in the table at the top of the Channel Configuration window. You can also click the IP Address From the configuration window to have it populated in the IP Address Box below.

| No. | IP Address | Status    | Qty | Model      |
|-----|------------|-----------|-----|------------|
| 1   | 10.0.0.59  |           | 1   | IPB4K28AIX |
| 2   | 172.16.0.2 | $\otimes$ | 1   | IPV4K212MX |

In Channel Configuration, simply select IP Address for Add Mode, and Private for Protocol. Then enter the IP Address to match those displayed or click it in the table above.

| Add Mode              | IP Address | IP Address  |        |  |  |
|-----------------------|------------|-------------|--------|--|--|
| Protocol              | Private    |             |        |  |  |
| IP Address            | 172 - 1    | 16 . 0 . 18 |        |  |  |
| Port                  | 80         |             |        |  |  |
| Username              | admin      | admin       |        |  |  |
| Password              | *****      | *****       |        |  |  |
| Total Channels        | 1          | 1           |        |  |  |
| Extended Transmission |            |             |        |  |  |
|                       |            |             |        |  |  |
|                       | Search     | OK          | Cancel |  |  |

If it fails to connect, first check your password is correct, then you may want to try ONVIF mode, especially if it is a third-party camera.

Note that third-party cameras may require configuration to be compatible with Uniview tec Recorders.

## Moving an NVR's POE to display on another channel

If you cannot or will not move the ethernet cable to the port that matches the channel you want to display your camera on, and you do not want to change the live view configuration, you can still move it manually. This process, however, usually will require you to change 2 channels, the channel you are moving from, and the one you are moving to. This is because no two channels can host the same IP Address and Camera ID by Private or ONVIF protocol to prevent control commands being duplicated.

Set the channel to IP address Add Mode, and type in a Fake IP Address, like 192.1.1.1, to clear a camera from that channel, so you can use it's real IP Address in another channel and avoid this conflict.