



## Technical Bulletin

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**To:** DW® Customers

**Date:** January 28, 2022

**Re:** Illustra Gen 4 ONVIF Auto-discovery Issues with VMAX IP Plus

### Illustra Gen 4 ONVIF Auto-Discovery Issue

#### Affected Model Numbers:

- VMAX® IP Plus Series – *DW-VP16xT16P, DW-VP12xT8P, DW-VP9xT4P*)
- DW Spectrum IPVMS Servers – *DW Blackjack Servers, Custom-Built (non-Blackjack) Servers*

#### Tested with Firmware/Software Version:

- VMAX IP Plus v1.4.2.7
- DW Spectrum v4.2.0.32842
- ONVIF Device Manager (ODM) v2.2.250

### ONVIF Auto-Discovery Issues

As of January 27, 2022 DW Support was informed of an issue with video loss occurring when connecting Tyco Illustra Gen. 4 IP camera models directly to the integrated PoE switch of a VMAX IP Plus. It was later found that the third-party camera series would also have video streaming and connectivity issues when used with other DW products as well.

#### Cause of the Issue

The suspected cause of the issue is that when the IP address of an Illustra camera is set between *10.0.0.1~10.0.0.9*, the ONVIF Auto Discovery feature does not respond to requests from the VMAX IP Plus, [ONVIF Device Manager](#). After testing, it was found that this issue can be resolved by manually making adjustments to the camera's IP address information directly through the camera's web client.

## Testing Steps

The following steps were used for testing while investigating the issue:

- 1) Connected with the camera's web client and set the initial ID/PW for the camera through the PC.
- 2) Connected the Illustra cameras directly to a VMAX IP Plus unit's integrated PoE switch.
- 3) NVR fail to display camera video (same result as customer site)
- 4) Connected a PC to another vacant PoE port in the NVR's integrated PoE switch
- 5) While the PC was connected and set to match the same IP subnet that is managed by the VMAX IP Plus's PoE switch (10.0.0.x), the DW IP Finder and NVR discovery feature were used to search/scan for the IP address of the camera.

The camera was discovered to be using an IP address of "10.0.0.1", but video still failed to display at the NVR.

- 6) Proceed to access the camera's web client again with a web browser. (10.0.0.1) then change the IP to 10.0.0.100 and as a Static network type.
- 7) Camera starts to feed the live stream at NVR.

## Proposed Solution

### Using a VMAX IP Plus and Built-in PoE Switch

If you are using an Illustra Gen 4 camera that is directly connected to a VMAX IP Plus through its built-in PoE switch, you can = connect with the camera's web UI (user interface) and change the camera IP address to use a subset range that differs from the default (10.0.0.x). Changing the IP address value to be between **10.0.0.11~10.0.0.254** will allow the camera to keep using the same IP address scheme that is assigned by the integrated PoE switch of the VMAX IP Plus (for cameras using DHCP) by default. This mitigates the likelihood of a duplicate IP address that may be causing an address conflict.

### Using DW Spectrum and/or an External PoE Switch

If you are using an external PoE switch, that is not built-in to a VMAX IP Plus, to connect the camera with the NVR, it may be easier to first connect with the camera's web client and change the IP address before adding it to the NVR.

You may follow the steps below for an immediate solution.

1) Using a web browser, **connect with the camera's web client.**

- Illustra Default IP: 192.168.1.168

If this is the first time logging in to the camera, you will be prompted to change the default username and password for the camera.

- Illustra Default Username: admin
- Illustra Default Password: admin

**\*\*NOTE:** Illustra Gen4 cameras use a Static (fixed) IP setting of *192.168.1.168* by default. The camera must perform a hardware factory reset to make DHCP (Dynamic Host Configuration Protocol) the new default network type.

2) After applying new login credentials to the Illustra Gen4 camera, open the camera's **Network settings** and set the network type to be "**Static**" so that it will retain the IP address that it is assigned.

While set to a *Static* network type, **manually change the camera's IP address** so that it does not use an address between **10.0.0.1~10.0.0.10**.

For example, an IP address of "10.0.0.11" would be acceptable.

**\*\*NOTE:** If the camera will be added to the NVR (VMAX IP Plus, DW Spectrum, etc.) through an external PoE connection, set the camera IP address to match the IP scheme of the hosting network. For example, an NVR whose cameras are all expected to use a *192.168.1.x* network will need all of the cameras in that group to also use the same IP address subnet (in this case, *192.168.1.x*) to communicate.

3) Save the camera's updated network settings and reboot the camera (if necessary to apply the changes).

Add the camera to the VMAX IP Plus or other NVR model and confirm that the video stream successfully displays for the camera.

If the camera continues to have issues with producing ONVIF video, you may need to Factory Default the Illustra Gen4 camera before attempting to configure its *Network Settings* again.

## For More Information or Technical Support

### DW Technical Support:

Toll-free: 866.446.3595

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