UNIVIEW CAMERA SETUP

THINGS TO CONSIDER

The first thing is to always know beforehand if the cameras are going to be used on a Uniview recorder or a 3rd party recorder. If the cameras will be used on a Uniview recorder the cameras can be configured via the recorder with no need for a computer. If using the cameras on a 3rd party recorder they will have to be configured via the web browser first before adding them to the recorder.

DH Vision recommends that you always have a computer on site with you for an IP camera job set up.

Resolution that a camera can display should be taken into consideration when selecting a NVR. Most NVRs cannot display more than 2MP (1080P). Uniview’s 4k recorder options should be used if the site will have 4MP cameras that will need to be displayed on a monitor.

Last thing to be aware of on a job site is cable run length, if a camera is going to need to be ran longer than 300ft then the best NVR for the job will be Uniview's built in PoE unit that is part of the 200 series. These recorders include the long distance transfer mode that can allow cameras to reach up to 900 feet over standard CAT5e.

SETTINGS THAT WILL NEED TO BE CONFIGURED

SETTING UP MOTION

Motion will not come enabled by default on the cameras. Each camera will have to have motion set up on it. This goes for cameras being used on 3rd party recorders and Uniview recorders.
The first step will be to use the EZTools software on a windows PC to find the IP address of the cameras. (All cameras will come on DHCP by default.) Once the IP cameras address if found on the EZTools the “E” button in the row can be clicked to open the camera in Internet Explorer. The default login for each camera is Username: admin and Password: admin.

Once logged into the camera on the web navigate to the “Setup” menu in the top navigation bar.

Next navigate to “Events > Common Alarm” in the left navigation menu. Then select the “Motion Detection” tab. In the Motion Detection menu the first thing is going to be set up your cameras area.

Click on the “+” button next to Detection Area to create a new area. A pink box will appear in the camera image to the left, grab a corner of the box and drag it until it covers the full image.

Next thing is to set the Sensitivity, Object Size, and History. DH Visions recommended settings are sensitivity set to 85, object size set to 5, and history set to 1. Each setting should be adjusted based on image scene though.

Last for the motion detection menu will be to click the check box for “Enable Plan” at the bottom of the page and make sure that the full plan is set to be blue (Armed).

**PREPARING THE CAMERA FOR 3\textsuperscript{RD} PARTY USE**

When using the camera with a 3\textsuperscript{rd} party recorder the camera will have to be added as an ONVIF camera.

Some manufactures such as Dahua and Hikvision are competitors and do not like to function fully with Uniview. Uniview has added a feature called "Registration Info" this allows the camera to hide all of its vendor information from the recorder.

To turn this feature on after logging into the camera on the web browser and navigating to the “Setup” menu. On the left hand navigation menu navigate to “System > Security > Registration Info”. In this menu check “Enable” on for “Hide Vendor Info”.

**USING BUILT ON POE ON 3\textsuperscript{RD} PARTY RECORDERS**

When using a PoE that is not a standard switch but is built directly into the 3\textsuperscript{rd} party recorder the cameras are not always able to automatically change IP address and add automatically to the recorder. This is because of the recorders software that is normally only looking for cameras from the same manufacture. In some cases if the camera is on DHCP this feature will work. In cases where this does not work the cameras will first have to be plugged into the main network or directly into a computer, then have the IP address that the built in PoE uses directly configured.

For Example if using a Dahua built in PoE NVR the PoE switch is using a 10.1.1.1 gateway, this means that the camera will be static configured to the 10.1.1.1 gateway with a 10.1.1.xxx IP address. Once the camera is configured the camera will then be plugged back into the recorder and then under the remote devices menu the camera will be manually added to the recorder.
SETTING UP IMAGE SETTINGS

Some cameras have special features for the image sensor such as WDR and License Plate Capture. All of the settings for this will be configured in “Setup > Image > Image > Scenes”. All cameras that have the extra features built in will already have premade scenes setup and configured for use, under scene number one drop the drop down box and change the default scene to the desired configuration.

LPC MODE

1. First setting that should be changed in the camera should be the cameras default “Scene”. This setting can be found under “Setup > Image > Scenes”. The default scene is set to <Common> and should be changed to <License Plate>.

2. After setting the scene to <License Plate> all of the setting in the camera will change to best fit a common situation of about 100 feet capture at night time. You will need to adjust the “Exposure” settings based on where you have your camera installed. DH Vision suggest using 1/4000 ~ 1/1000 for best capturing mode.
1. Facing Direction – If the camera is facing directly East or West and is in direct view of the sun while it is rising or setting we suggest that you set the camera to be in permanent night time mode. In order to set the camera to night time mode first you need to Change the “Smart Illumination” control mode to manual”. Next you will have to click the “Day/Night Mode“ under Exposure to “Night”.

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**Settings and situational things to look for**

- **Exposure Mode**: Custom
- **Shutter (s)**: 1/8000 ~ 1/150
- **Gain (dB)**: 0 ~ 36
- **Slow Shutter**: Off On
- **Slowest Shutter**: 1/25
- **Compensation**: 0
- **Metering Control**: Center-Weighted Average Metering
- **Day/Night Mode**: Automatic Day Night
- **Day/Night Sensitivity**: Medium
- **Day/Night Switching(s)**: 3
- **WDR**: Off
- **WDR Level**: 5
- **WDR Sensitivity**: 5
2. Speed of the cars – Depending on the speed of the cars that you are trying to capture the plate from frame rate of the camera needs to be taken into consideration. The faster the cars are moving the lower the frame rate of the camera should be. Cameras frame rates can be set in the “Setup > Video & Audio > Video” menu. We suggest that for cars from 0-25MPH use up to 25-30 fps. Cameras from 25-40MPH use 12-15 fps and for cars faster than 40MPH to use 2-7 fps.

Keep in mind that faster cars will need to be frozen in playback and then have a snapshot taken of the plate for it to be clear. Most cars will not be able to be seen in live view mode.
DH Vision suggest that all other settings such as Video Encode settings be set via the recorder. If they cannot be set via a 3rd party recorder DH Vision suggest setting them in the web service for the camera.

The recommended settings are 1080P(2MP) at 15 FPS with 2048 Kbps bitrate and turn “smoothing” all the way down.