



Eclipse HD Stainless Steel Installation/Configuration Manual



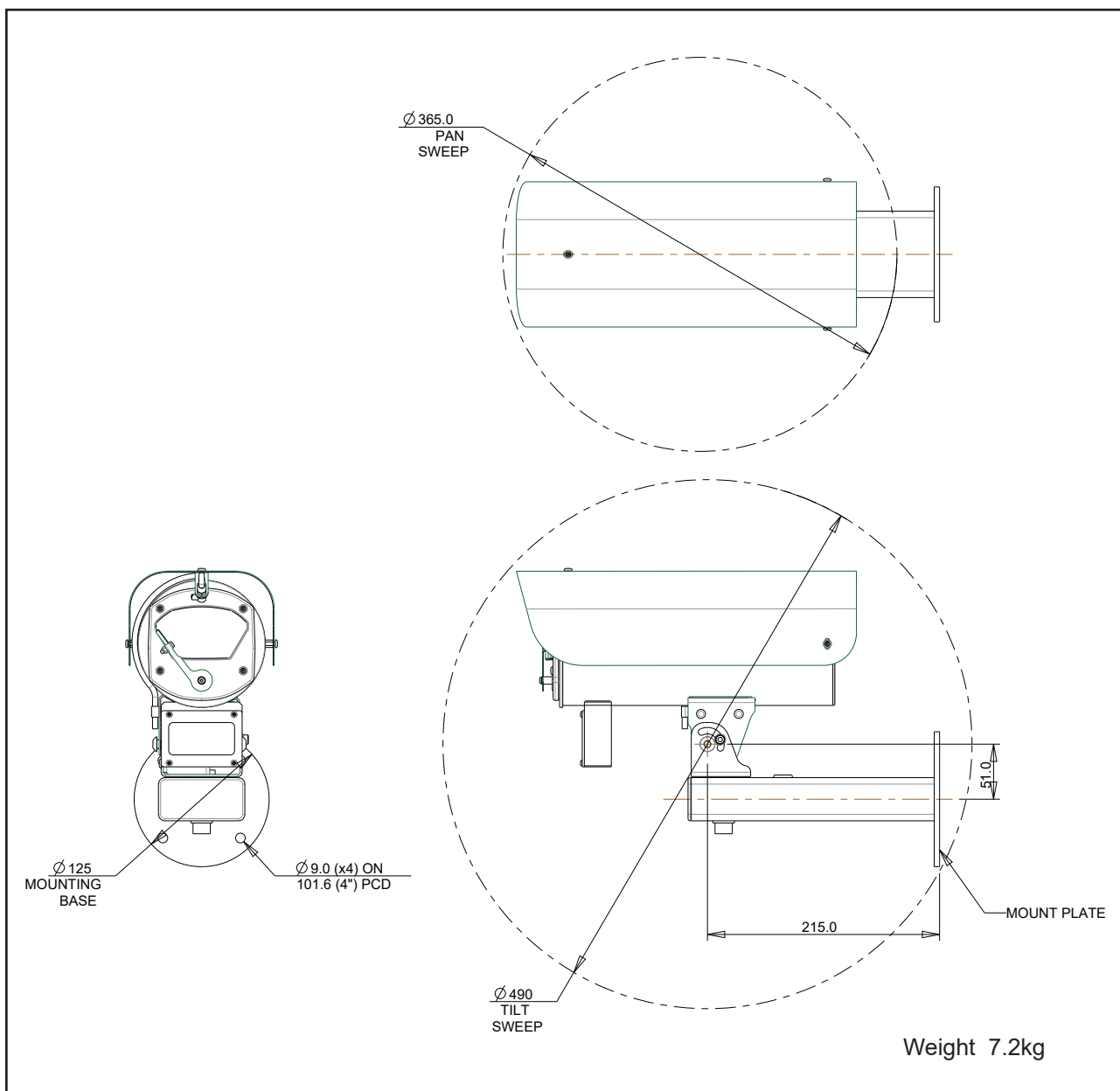
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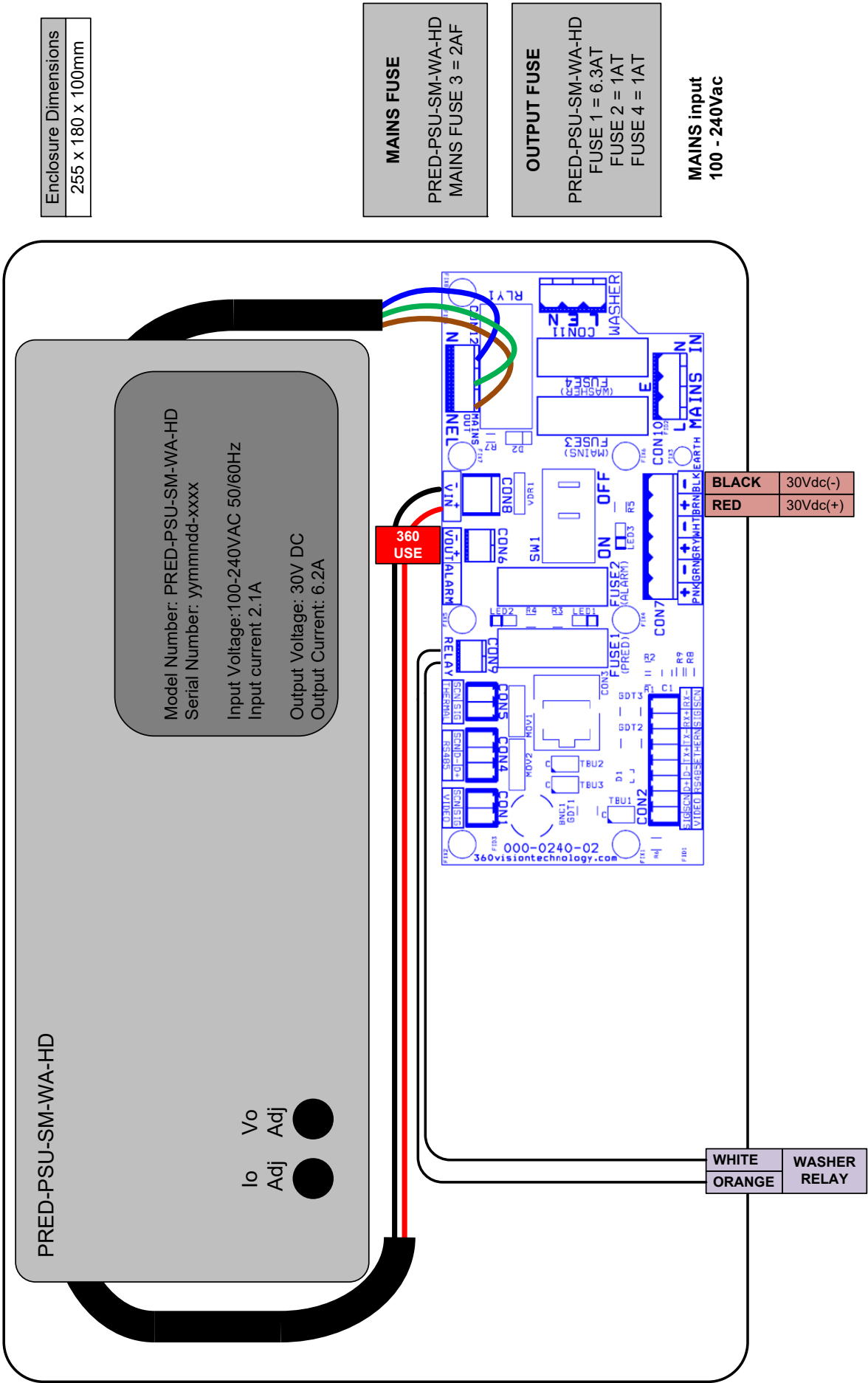
1 Safety and Precautions

1. Please read these notes before attempting to operate the 360 Vision Eclipse HD Stainless Steel, and keep for future reference.
2. DO NOT disassemble or remove covers. This will break the water seals and invalidate the warranty.
3. All servicing and repairs must be handled by 360 Vision Technology.
4. Avoid pointing the camera directly towards a bright light source (sunlight), or expose the camera to intensive light situations as this may damage the camera pick-up device.
5. Installation should be carried out by suitably qualified personnel, in accordance with local codes of practice and regulations.
6. 360 Vision Technology Limited accept no liability for any damage caused by incorrect or improper installation.
7. Use only 360 Vision Eclipse HD power supplies.
8. Please handle the Eclipse HD with care, as improper handling may cause damage within this unit.

2 Housing Dimensional Drawing



3 Connection



The Ethernet connection uses standard CAT5, CAT5e or CAT6 cables fitted with RJ45 connectors.

RJ45	CAT5, CAT5e, CAT6 Cable	Signal
Pin 1	White with Orange Band	Tx+
Pin 2	Orange	Tx-
Pin 3	White with Green Band	Rx+
Pin 4	Blue	
Pin 5	White with Blue Band	
Pin 6	Green	Rx-
Pin 7	White with Brown Band	
Pin 8	Brown	

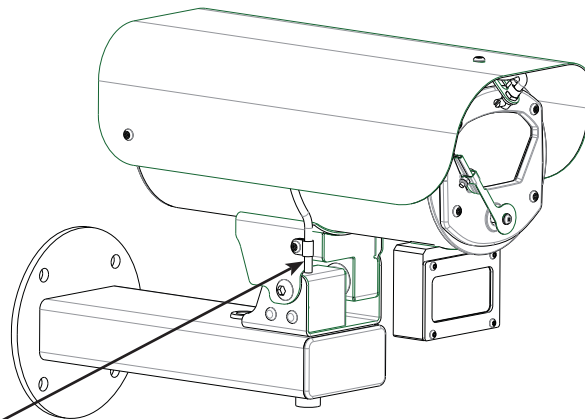
The power connection is supplied as a standard length of 2m cable (red/black)

- 24Vdc - 36Vdc (Max)
- 24Vac - 28Vac (Max)

The washer connection is supplied as a standard length of 2m cable (orange/white)

- Normally Open Volt Free contact
- Contact ratings - 1A 30Vdc (Resistive) or 0.5A 125Vac

3.1 Washer Connection



Tube Connection

- Suitable tube (not supplied) for connection to the nozzle is PVC with internal diameter 3mm and outside diameter 6mm PVC.
- The end of the tube is pushed over the ridged tube. Fit a cable tie around the joint between the PVC tube and the ridged tube to ensure that the tube can not become detached.

Eclipse HD Stainless Steel Configuration

4 Locating the Eclipse HD on your Network

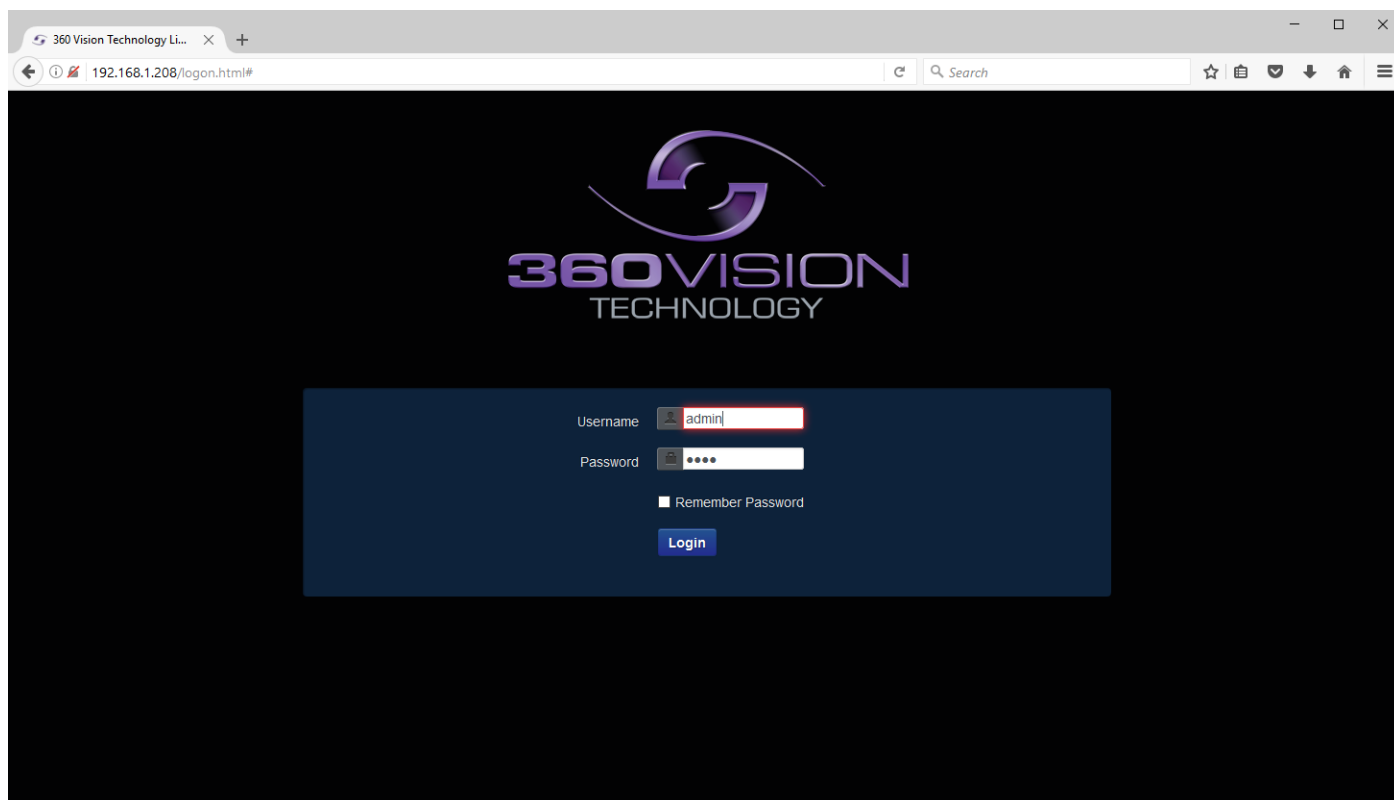
Default IP Address	192.168.1.187
Subnet	255.255.255.0
Gateway	192.168.1.4

Using the DVR management software, 'Onvif Device Manager' or 360 Vision Discovery Tool (which can be found on the CD supplied or from the 360 Vision Technology technical support) to find the IP address of the Eclipse HD. Note the ports used by the Eclipse HD are:-

Protocol	Port
ONVIF/HTTP	80 TCP
RTP Stream 1	6970 TCP/UDP
RTCP Stream 1	6971 TCP/UDP
RTP Stream 2	6972 TCP/UDP
RTCP Stream 2	6973 TCP/UDP
RTSP	554 & 8554 TCP
360 SDK	3600 TCP
360 Event	9001 TCP
NTP	123 UDP

5 Connecting to the Eclipse HD

Type in the IP address of the Eclipse HD into the address bar of Internet browser and install the plug-ins as required. The web page of the camera will then appear.



Eclipse HD Web Page Login screen

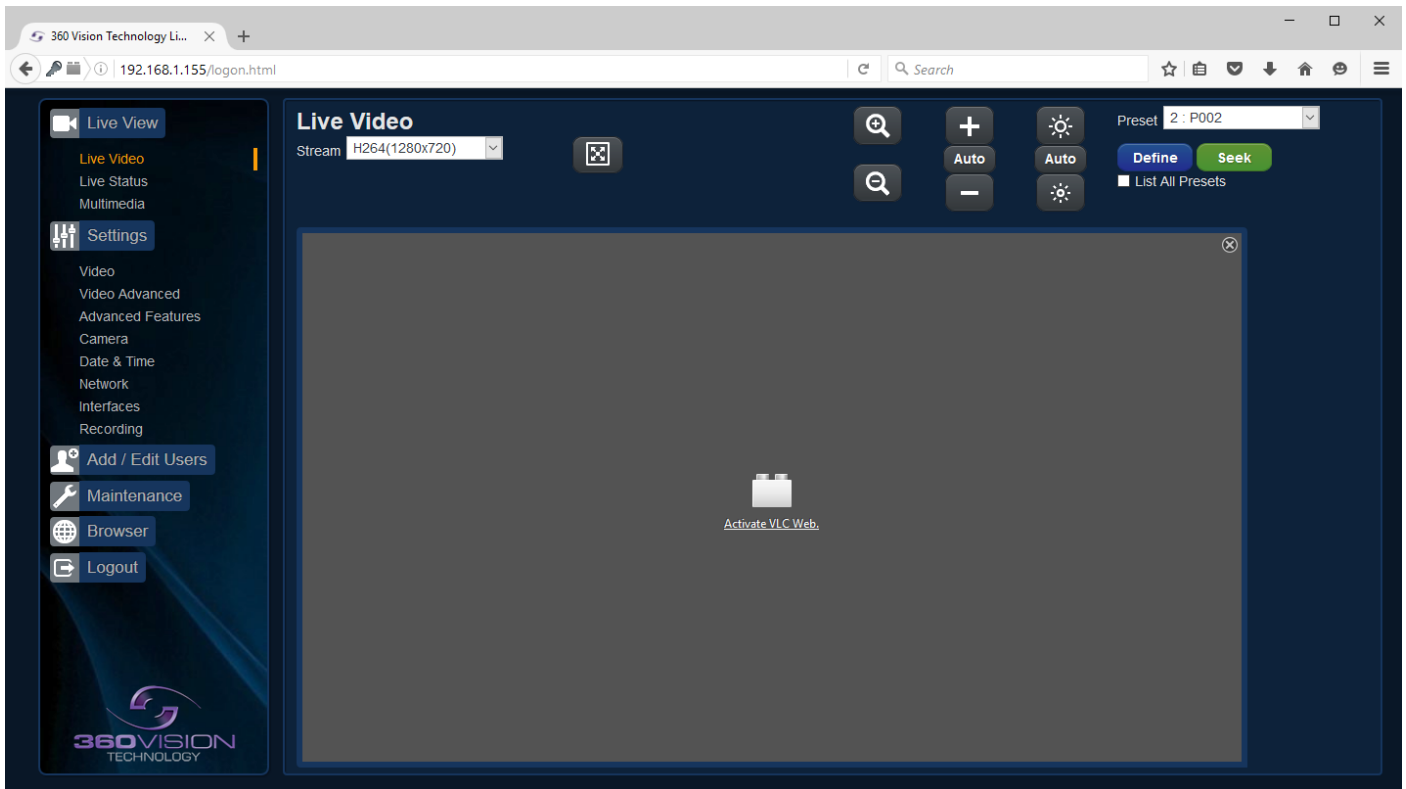
Enter the User Name (default is **admin**)
Enter the Password (default is **9999**)

If you select the box 'Remember Password' it could compromise the security of the Eclipse HD camera.

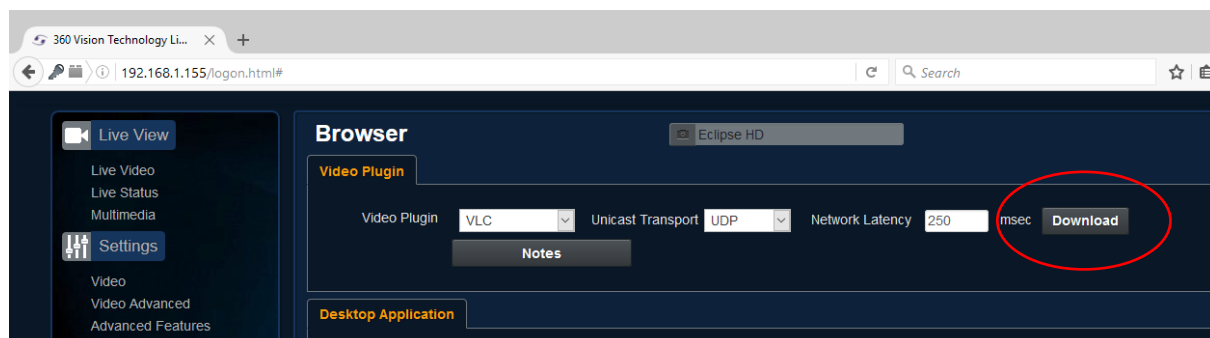
Select Submit



The camera web page uses VLC as the video player.



VLC video plug-in file can be downloaded from the camera if it is not installed on the connecting PC/laptop
(See *Browser* - page 24)

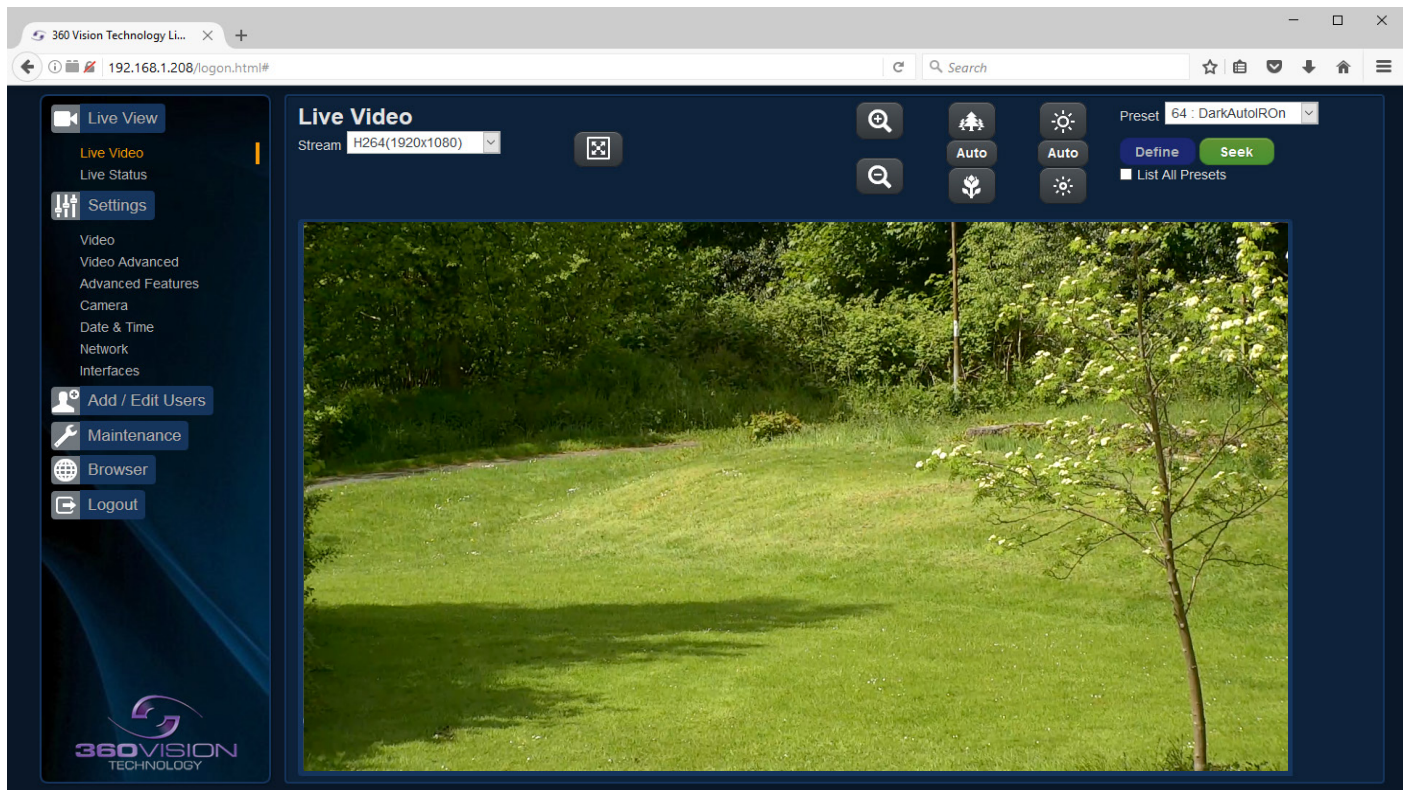


There are six main tabs on the left of the web page/screen.

- 1 Live View
- 2 Settings
- 3 Add/Edit Users
- 4 Maintenance
- 5 Browser
- 6 Logout

5.1 Live View

5.1.1 Live Video



The Live Video page offers options to:-

- Stream - Choose required stream from drop down selection.
- 1x Display - Use to show selected stream as full screen.
- Zoom In/Out - This will operate the optical and digital zoom (if digital zoom is enabled).
(See Camera - Digital Zoom - page 16)
- Focus +/-/Auto - This will operate the manual focus near, far or automatically focus as required.
(See Camera - AF AI when PTZ - page 16)
- Iris +/-/Auto - This will operate the manual iris open, close or automatic as required.
(See Camera - AF AI when PTZ - page 16)
- Preset Seek/Define - This will allow admin and operator user levels to seek or define presets (Viewer user level can only seek presets). (See Advanced Features - Presets - page 14)
- List all Presets - Use to show all presets or programmed presets in drop down selection box.

5.1.2 Status

Status page shows information relating to the camera status.

Live Status Eclipse HD

Refresh Manual 5 sec 10 sec 30 sec 1 min 5 min Save

Camera : 'Eclipse HD'

Camera Time	Thu Feb 16 15:37:54 2017	Timezone	Europe/London
IP Address	192.168.1.208	Firmware Version	ECLIPSE_SSHD_1_22_02
Zoom Range	x 30.0	Hardware Version	0_00_04
NTP Status	DISABLED		

Video Streams

Stream	CODEC	Resolution	Frame Rate	Bit Rate	Rate Control	Quality	IP Ratio	RTP Block	I-Frame
Stream 1	H264	1080P	25	4000	CVBR	-	25	DEFAULT	55

Streaming

Time	IP Address	Port
System		
Uptime	0 d 0 h 1 m	Storage
Network Transmit	4.196 Mb/s	Transmit Total
Network Receive	0.020 Mb/s	Receive Total

Current Status

Zoom Position	x 1.00	Zoom Proportion	0.00 %	Zoom Moving	HALTED
Current Preset	-	Night Mode	FALSE	Night Presets	ENABLED
Focus Mode	AUTO	Focus Position	53.65 m	Near Focal Limit	4.2 m
Iris Mode	AUTO	Iris Position	14	Iris Attenuation	60.71 dB
Sensor Mode	COLOUR	Focus Range	AMBIENT		
White Lights	-	IR Lights	-		
Wiper	-	Washer	-		

Status page, top section.

Live Status Eclipse HD

Refresh Manual 5 sec 10 sec 30 sec 1 min 5 min Save

Video Streams

Stream	CODEC	Resolution	Frame Rate	Bit Rate	Rate Control	Quality	IP Ratio	RTP Block	I-Frame
Stream 1	H264	1080P	25	4000	CVBR	-	25	DEFAULT	55

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Focus Mode	AUTO	Focus Position	53.65 m	Near Focal Limit	4.2 m
Iris Mode	AUTO	Iris Position	14	Iris Attenuation	60.71 dB
Sensor Mode	COLOUR	Focus Range	AMBIENT		
White Lights	-	IR Lights	-		
Wiper	-	Washer	-		

Frame Statistics

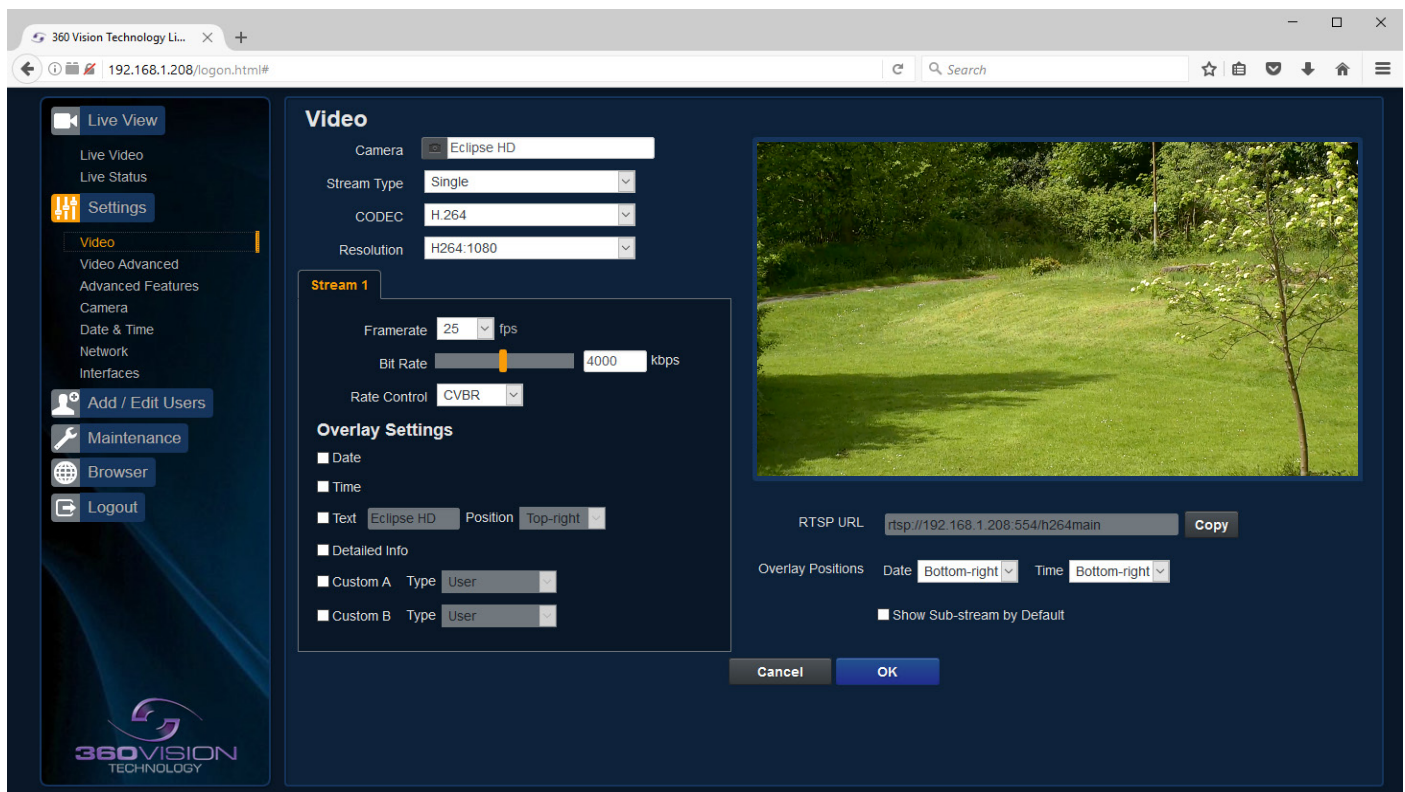
Frame Size	Bytes	Transmission Time	ms
Frame Average	20043	P-Frame Average	0.000
I-Frame Average	111070	I-Frame Average	0.000
Max	111522	I-Frame Max (FU-A)	0.000

Status page, bottom section.

- Save - Used to save the status page information as a HTML file.
- Refresh - Select an automatic page refresh option.
- Camera - Shows information relating to the camera time & date settings, the version of codec and mainboard software loaded
- Video Streams - Shows the current video streams configuration.
- Streaming - Shows the IP address on the PC that is receiving the video streams.
- System - Shows how long the camera has been powered, how much bandwidth it is using etc.
- Current Status - Shows the camera function information.
- Frame Statistics - Gives information about the video stream, how big the frames are, how big the I frames are, how long it is taking to transmit the frames.

5.2 Settings

5.2.1 Video



The Video page, offers options to setup:-

- Camera - Add or edit the camera name.
- Stream Type - Choice of single or dual video streams.
- Codec - Choose which compression format, the stream will use.
(See page 27 for table of options).
- Resolution - Set what resolution the stream will use. (See page 27 for table of options).

Stream Tabs, offer options to:-

- Framerate - Configure how many frames per second (fps) the stream uses.
(Also see Camera - Sensor Frame Rate - page 16).
- Bit Rate - Set the bit rate that the stream will use. Type in figure in Kbps. (E.g. 4000Kbps is 4Mbps)
- Rate Control - Configure the rate control of the stream, choices are VBR (Variable), CBR (Constant) and CVBR (Constrained Variable, limited to 8Mbps).

Overlay options

- Date - Selecting this option will show the date as text on the video stream.
(See Date/Time - page 18).
- Time - Selecting this option will show the time as text on the video stream.
(See Date/Time - page 18).
- Text - Selecting this option will show the selected text on the video stream. Positions available are top left or right of the image.
- Detailed Info - This will show the information about the stream on the video.
- Custom A - Used to enable the option to display text when the camera is operated. See options for text selections below. Text will be shown on top line of video.
- Custom B - Used to enable the option to display text when the camera is operated. See options for text selections below. Text will be shown on second from top line of the video.

Text selections available are

- User - For SDK use.
- PTZ Status - Shows camera PTZ co-ordinates.
- Camera Status - Shows the current state of the camera, what focus, iris and sensor mode the camera is in.
- Current Preset - Used to show the stored preset text when the camera is at the preset position.

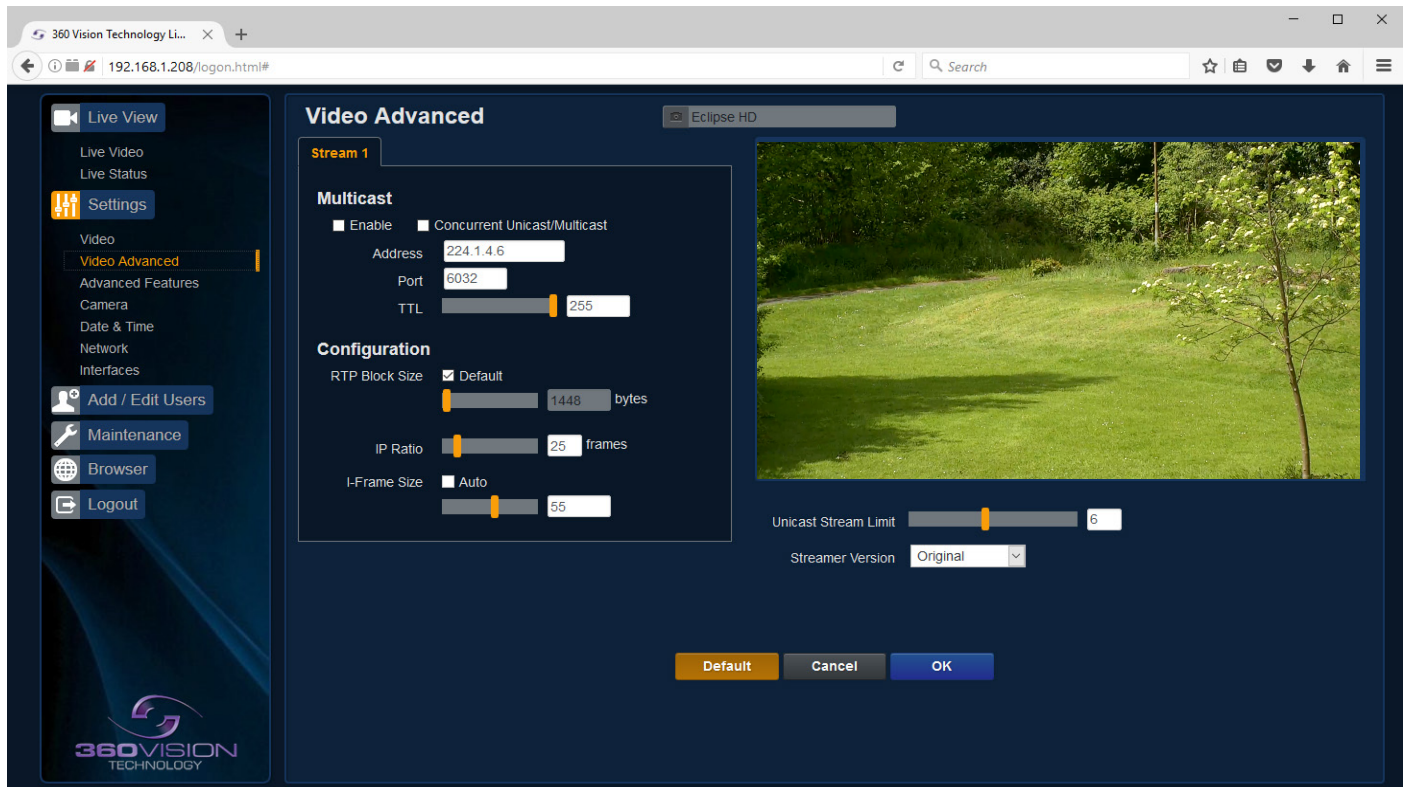
RTSP URL

- Copy - Use this option to copy the RTSP URL
- Date Position - Choose date text to bottom right or left of the image.
- Time Position - Choose time text to bottom right or left of the image.
- Show Sub-stream - Shows second sub-stream if enabled.

OK to program the new settings into the Eclipse HD.

Cancel to abandon the changes to the video settings.

5.2.2 Video Advanced



Multicast - *(See Stream Tables - page 27).*

Tick the box to enable 'multicast'. If the box is not ticked then 'unicast' is selected.

- Multicast Stream 1 - Set IP address and port for stream 1.
- Multicast Stream 2 - Set IP address and port for stream 2.

Concurrent Uni/Multicast - Enable to allow concurrent unicast/multicast streams.

Note: Unicast - `rtsp://ipaddress:554/h264main` and Multicast - `rtsp://ipaddress:8554/h264main`

RTSP protocols allow 'multicast' or 'unicast' transmission. In addition to the 'multicast' feature being available on the Eclipse HD, the 'multicast' feature must also be available on the receiving device.

Unicast

If lots of receivers (users) want to receive video streams from the Eclipse HD, each receiver will have a separate video stream. This would increase the network bandwidth used. E.g. five users would require five video streams, that typically will require five times the bandwidth.

Multicast

If the receivers of the video streams are suitable for using 'multicast' and the video streams will all have the same format, then it may be possible to use 'multicast'. In this mode, the CODEC in the Eclipse HD chooses a 'new UDP address' (Typically an address which is outside the normal range of addresses for the network to which the Eclipse HD is connected) and sends a video stream to the 'new UDP address'. Multiple receivers can then access this single video stream. Consequently the bandwidth that is required by the Eclipse HD is typically reduced to the single video stream.

When using 'multicast' all intermediate network-switches and routers must be set to allow the stream from the 'new UDP address' to be routed correctly.

Configuration

Use the below settings to set how the video is sent, adjusting the settings can help to eliminate any 'stutter' or 'pulsing' on the video image.

	Stream 1	
IP Ratio/GOP value (type in a number)	25 (default)	E.g. 1 'i-frame' every 25th image.
RTP Block Size	1448 (default)	Range 1440 to 65500
I Frame Size	55 (default)	Range 0 to 99 (average frame size x value/10 = i frame size)

Unicast Stream Limit

- Used to set the unicast stream limit.

Streamer Version

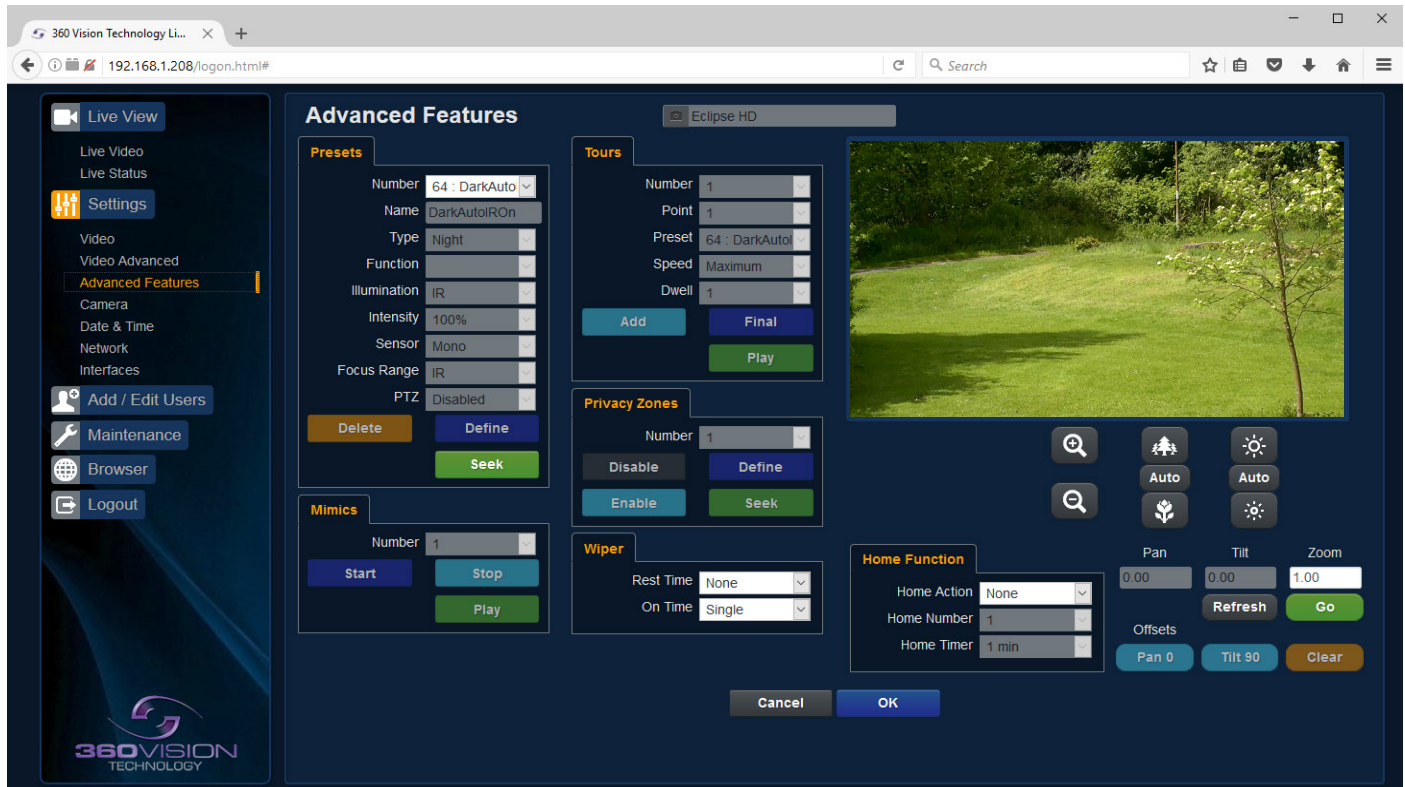
- Option allows the user to set the video streamer version. Options are original and 2016a.

OK to program the new settings into the Eclipse HD.

Cancel to abandon the changes to the advanced video settings.

Default is used to factory reset the video stream settings.

5.2.3 Advanced Features



The Advanced Features page, offers options to:-

- Camera - Cannot be edited, shows label/name given to the camera.
(See Video - Camera - page 11).

A 'Preset' is a stored view. When a preset is defined, it will store the zoom, focus and iris positions.

Presets

Set Preset using the following options:-

- Number - Choose from a list of presets using the drop down box.
- Name - Edit the preset name to suit/help identify the position.
- Type - Options available are:-
 - Night - Allows different options to be used for the preset.
(See also Camera - Night Presets - page 16).
 - Simple - For setting a simple preset.
 - Wiper - Set the preset to activate the wiper.
 - Washer - Set the preset to activate the washer.
 - Re-Map - Choose which function/preset you want to re-map to the new preset number above.
 - User - Used on systems supporting 360 SDK.
 - Auxiliary - Can be used to recall an auxiliary command.
- Function - Function option will change to suit the above type.
- Illumination - Choice of illumination for preset with night presets function enabled. Options are IR, White Light and off.
- Intensity - Set lamp intensity for the preset using the illumination chosen above.
- Sensor - Presets have the choice of being either colour or mono, when the scene is dark.
- Focus Range - Sets how the camera will focus when in mono. Options are ambient or IR. The Focus Range setting will set the camera focus, (when in mono) to suit the light source in the scene.
If this is set incorrectly the image may not be in focus, when in mono at night.
- PTZ - Camera can be set to zoom or not. This can be used to operate the sensor function.

Use the **Seek preset** button to test the preset.
Define preset button to set the above parameters.
Delete preset to remove the preset.

Wiper

- Rest Time - Set wiper rest time.
- On Time - Set time period for how long wiper will run.

Home Function

The camera will perform an action (goto preset), after a period of inactivity.

- Home Action - This sends the camera to a preset.
- Home Number - This sets the preset the camera will go to/start.
- Home Timer - This sets the time for the period of inactivity.

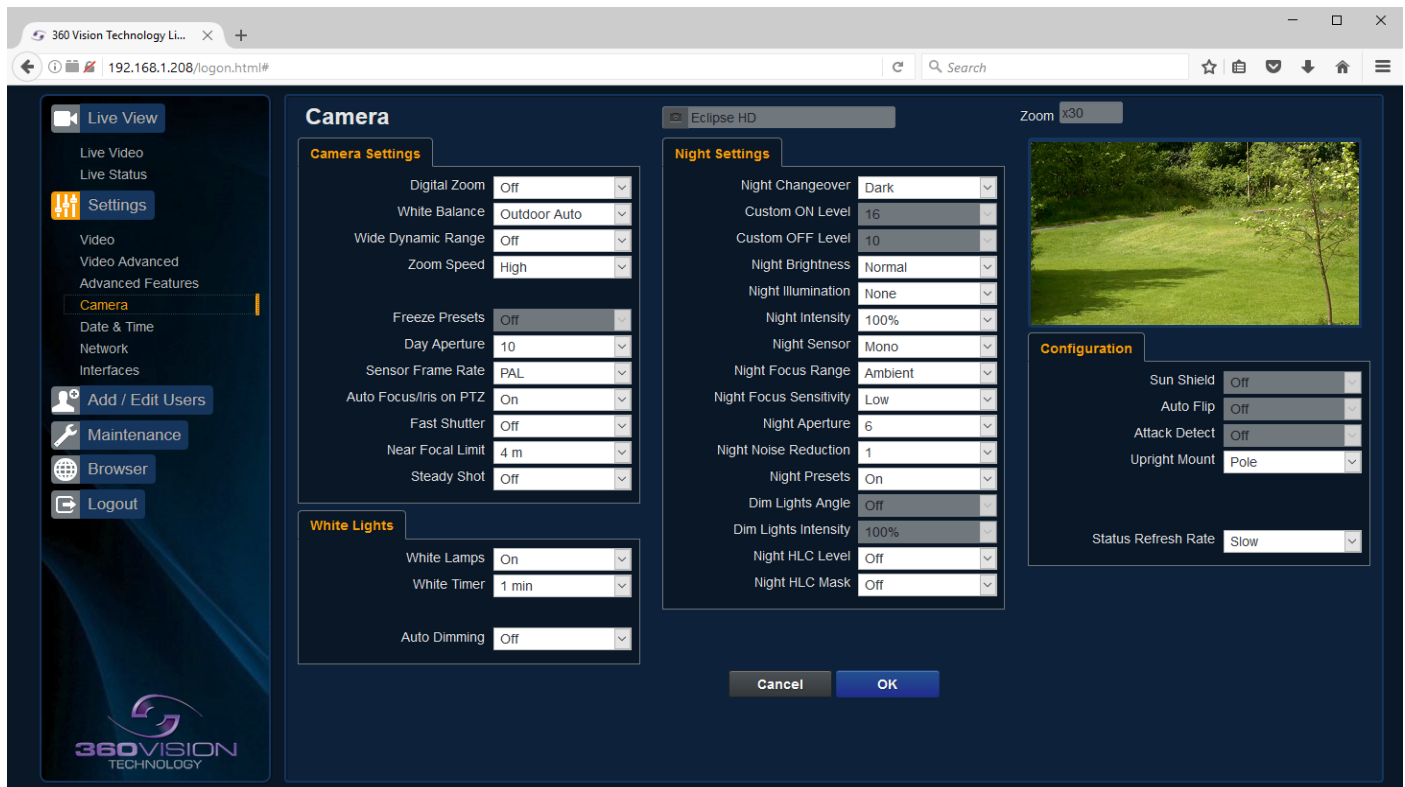
Zoom ratio is also shown, use the refresh button to refresh the data if the camera has been moved.

Zoom ratio can also be added manually, use the go button to send the camera to the ratio set.

PTZ preset offsets - Feature not available.

OK to program the new settings into the Eclipse HD.
Cancel to abandon the changes to the advanced feature settings.

5.2.4 Camera



- Camera - Cannot be edited, shows label/name given to the camera.
(See Video - Camera - page 11).

The Camera page, offers options to:-
Camera Settings

- Digital Zoom - Enable digital zoom. Default is off.
- White Balance - Select White Balance settings to suit camera location.
(See page 29 for table of options).
- Wide Dynamic range - Enable WDR. Options available are ON, Auto and Off. Default is off.
- Zoom speed - Select zoom speed of the lens. Options are slow, medium, high and highest. Default is high.
- Freeze Preset - Feature not available.
- Day Aperture - Can be used to increase the picture detail. Default is 10.
- Sensor Frame Rate - Can be used to set the camera to suit 25fps or 30fps. Unit must be rebooted for settings to apply. Default is PAL.
- AF/AI on PTZ - Auto focus/iris will activate when zoom is used, can be switched off. Default is on.
- Fast Shutter - Select fast shutter if using the Eclipse HD camera on a ANPR system. Default is off.
(See page 29 for table of options).
- Near Focal Limit - Can be used to set the near focal limit. This will help in scenes where the camera is focusing on objects near to the camera, causing the camera to be out of focus on distant objects. Default is 4m.
- Steady Shot - Can be used to reduce camera shake from the picture.

White Lights

- White Lamps - Set if white lights are to be used.
- White Timer - Set white light timer.
- Auto Dimming - When selected the camera will reduce the lamp power, when looking in scenes where there is too much light.

Steady Shot – The viewed picture is made from a window which shows part of the full picture from the camera sensor. This means that part of the picture is wasted. The viewed part of the picture is moved automatically to use some of the wasted part so that the observed picture is stable and has compensated for the vibrations and minor movements of the Eclipse HD. The maximum amount of picture stability is achieved for all zoom settings. The part of the picture that is wasted reduces the resolution of the viewed picture when the camera is set to 1080P and steady shot is selected. When the camera is set to 720P it is usual for no resolution to be lost when steady shot is selected.

Stable Zoom – In this mode, when the picture is zoomed fully out (wide angle) the steady shot feature has no effect. As the picture is zoomed out the effect of the vibrations is naturally minimized. As the picture zooms in, the part of the picture that is viewed is a window within the whole (unzoomed) picture. The unused part of the picture is used to allow the viewed part of the picture to be moved automatically to compensate for the vibrations. In this mode, the viewed picture has full resolution for all of the zoom range, but the camera does not compensate for the vibrations when the picture zoom is at or near to the fully zoomed out setting.

Extended Zoom – This option doesn't produce a steady picture, instead of which, a window within the whole picture is viewed i.e. the scaling of the picture is altered slightly which gives the advantage that the normal 30x zoom has been extended to 36x zoom. This is effectively a digital zoom and as such, when 1080P is used, the resolution of the picture has been slightly reduced. When the camera is set to 720P it is usual for full resolution to be achieved for the full range of zoom settings.

Night Settings

- **Night Changeover** - Night Changeover settings can be changed to suit the site requirements. Options are dark, medium, light and custom. Default is dark. *This sets when the camera goes into 'dark mode'.*
- **Custom On Level** - Range is 7 to 25. A lower value will set the level on when the scene is brighter, a higher value will set the level on when the scene is darker. Default is 7.
- **Custom Off Level** - Range is 1 to 20. A lower value will set the level off when the scene is brighter, a higher value will set the level off when the scene is darker. Default is 1.
- **Night Brightness** - This controls the exposure compensation, by artificially brightening the image. Options are normal and auto. Default is normal.
- **Night Illumination** - Choose which type of light source is required for when the camera is in dark mode. Options are IR or white light if supported by the camera.
- **Night Intensity** - Set what power the lamps will run at. Default is 100%.
- **Night Sensor** - Can be set to colour or mono. Default is mono.
- **Night Focus Range** - Sets how the camera will focus (when in mono) to suit the light source in the scene. If this is set incorrectly the image may not be in focus.
- **Night Focus Sensitivity** - This can be set to normal or low. When it is set to low the method used to focus the camera is suited to low light conditions. Default is low.
- **Night Aperture** - Can be used to increase the picture detail. Default is 3.
- **Night Noise Reduction** - Used to reduce noise with scenes of low illumination. NR must be set to suit the environment. Default is 1.
- **Night Presets** - This can be used to set the presets to different settings if required. Default is on. *(See Advanced Features - page 14).*
- **Dim Lights Angle** - Feature not available.
- **Dim Lights Intensity** - Feature not available.
- **Night HLC Level** - Set a value to help mask high intensity light sources, options are low, medium and high.
- **Night HLC Mask** - Sets a mask for the light source, options are 1 (white) to 15 (grey).

Configuration

- **Sun Shield** - Feature not available.
- **Auto Flip** - Feature not available.
- **Attack Detect** - Feature not available.
- **Upright Mount** - Can be used to flip the image, so the camera can be used on a pole or a ceiling. Default is pole.
- **Status Refresh Rate** - Can be used to help speed up telemetry control of the camera, by slowing down the refresh rate.

OK to program the new settings into the Eclipse HD.
Cancel to abandon the changes to the camera settings.

5.2.5 Date/Time

The screenshot displays the 'Date & Time' configuration page for the Eclipse HD camera. The interface is divided into a sidebar and a main content area. The sidebar on the left contains navigation options, with 'Settings' and 'Date & Time' highlighted. The main content area features a 'Date & Time' header and three primary sections: 'Camera Time', 'Set Time', and 'Timezone'. The 'Camera Time' section shows the current date and time of the camera and allows selection of the date format and time display format. The 'Set Time' section offers three methods: manual setting, synchronization with the computer's time, or synchronization with an NTP server. The 'Timezone' section allows selection of a region and city, and provides the corresponding POSIX Timezone. A checkbox for 'Automatically adjust for daylight saving time changes' is also present. 'Cancel' and 'OK' buttons are located at the bottom right of the settings area.

- Camera - Cannot be edited, shows label/name given to the camera.
(See Video - Camera - page 11).
- Camera Time - Cannot be edited, shows the current date and time of the camera.
- Date Format - Select from the drop down the date format.
- Time Format - Choose 24hr or 12hr time display.

Set Time

The Date/Time page, offers options to:-

- Set Manually - Input time/date manually.
- Synchronize with Computer Time - Put a tick in the button and then click OK, to apply the local computer date/time to the camera.
- Synchronize with NTP Server - Put a tick in the button and then click OK, to apply the local server date/time to the camera.
- NTP Server - Input the address of the time server required, default is pool.ntp.org.

Time Zone

- Time Zone - Select time zone to suit the location of the camera/system.

OK to apply the new settings into the Eclipse HD.

Cancel to abandon the changes to the date/time settings.

5.2.6 Network

The screenshot shows the Eclipse HD Network settings interface. The interface is divided into several tabs: Network, Quality of Service, Web Server, NTP, and MAC. The Network tab is active, showing fields for DHCP Enable, IP Address (192.168.1.208), Netmask (255.255.255.0), Default Gateway (192.168.1.4), Primary Name Server (192.168.1.3), MTU Size (1500), and Default Recovery (Inhibit Multiple Power Cycle Method). The Quality of Service tab shows DSCP settings for Stream 1 and Stream 2. The Web Server tab shows HTTP Access (Enabled) and HTTPS Port (443). The NTP tab shows NTP Server (pool.ntp.org). The MAC tab shows MAC Address (00:60:35:25:25:83) and a Copy button. At the bottom right are Cancel and OK buttons.

- Camera - Cannot be edited, shows label/name given to the camera.
(See Video - Camera - page 11).

Network

The Network tab, offers options to:-

- DHCP Enable - Allows the camera to be set using a dynamic IP address.
- IP Address - Input a static IP address, if DHCP is not used.
- Netmask - Input the Network Subnet Mask.
- Default Gateway - Input the Network Gateway.
- Primary Name Server - Input the Domain name server, if required.
- MTU Size - Option to change the MTU size, default is 1500 bytes.
- Inhibit Multiple Power Cycle Method - Disables the Network recovery process
(See Network Settings Recovery - page 25)

NTP

- NTP Server - Input the address of the time server required, default is pool.ntp.org.

MAC

- MAC Address - Displays the camera MAC address.

Quality of Service

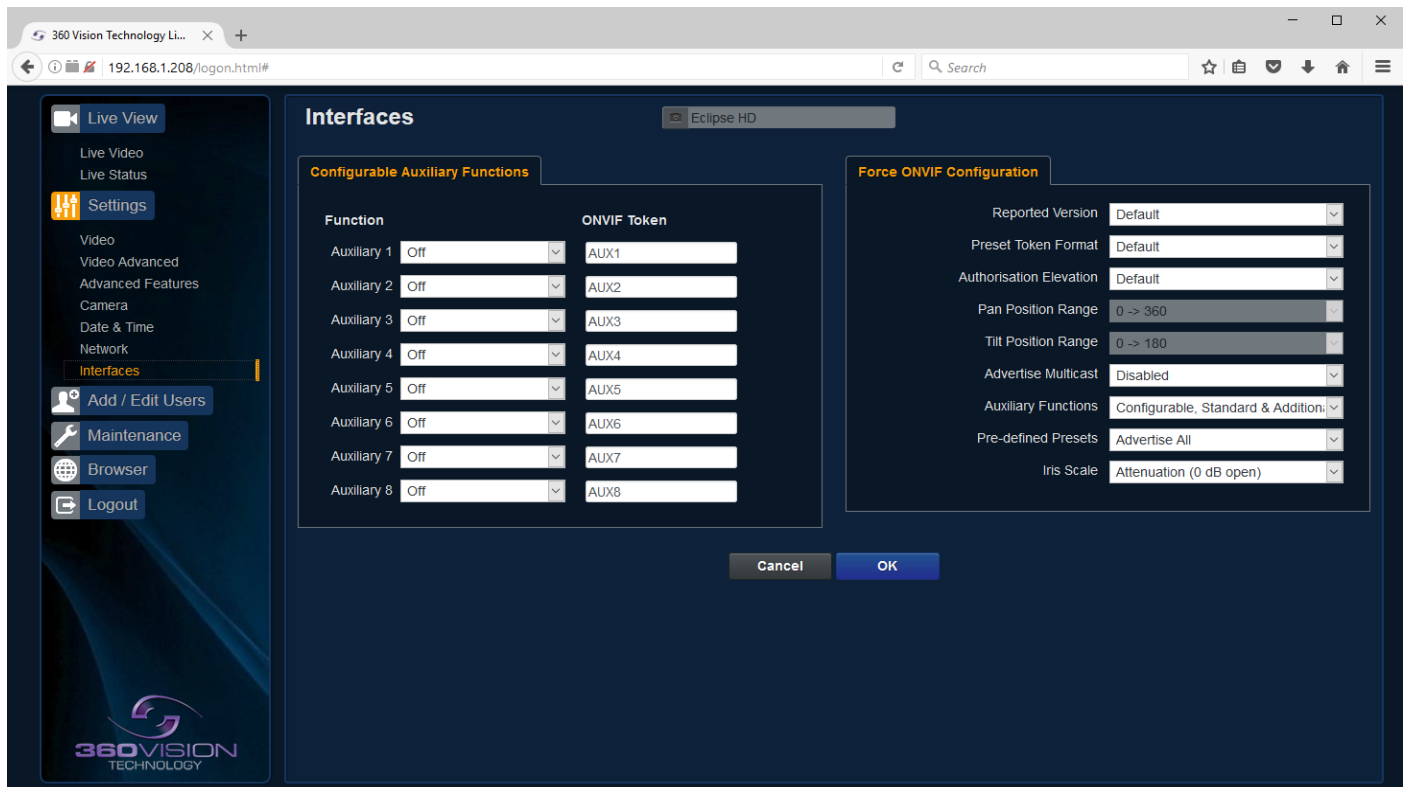
- Best Effort - Will send network packets with no quality of service policies.
- Expedited Forwarding - Will send network packets with an assured bandwidth quality of service policy.
- Custom - Input required Hex figure for quality of service policy
 - Best Effort = 0x00
 - Expedited Forwarding = 0x2E

Web Server

- HTTP access - Enable or disable HTTP access, must be connected using HTTPSs.
(See Maintenance - SSL Key/Certificate - page 22)
- HTTPS Port - Set required HTTPSs port. Default is 443.

OK to apply the new settings into the Eclipse HD.
Cancel to abandon the changes to the network settings.

5.2.7 Interfaces



Auxiliary Functions

Allows the camera to be configured to use Onvif Auxiliary commands.

Features available are:-

- Force White Light On - Forces white lights on.
- Force White Light Off - Switches off forced white lights.
- Wiper On - Activates wiper.
- Wiper Off - Stops wiper.
- Dark IR Light On - Switch on IR, when dark.
- Dark White Light On - Switch on white light, when dark.
- Dark Lights Off - When dark, switch off all lamps.
- Dark Sensor Mono - Sets the camera to a mono image, when dark.
- Dark Sensor Colour - Sets the camera to a colour image, when dark.
- Dark Focus Ambient - Sets the camera focus (when in mono), to suit the scene when ambient light is present.
- Dark Focus IR - Sets the camera focus (when in mono) to suit the scene when IR light is present.
- Washer On - Activates wash function, sends camera to preset 359, activates washercard relay and wiper. *(PSU must support wash function for washercard relay to activate).*
- Washer Off - Stops wash function.
- Iris Open - Opens the camera iris.
- Iris Close - Closes the camera iris.
- Iris Auto - Switches on auto iris.
- Iris Manual - Sets camera to manual iris mode.

Dark relates to when the camera is in dark mode, see section Camera - Night Changeover - page 16.

- Onvif Token - Used to alter the name of the Onvif Auxiliary token.

Force Onvif Version Configuration

- Reported Version - Can be used to change the Onvif version reported by the camera to the VMS, options are:- Default - Onvif 2.40, V2.02, V2.20 & V2.40. Ok setting and then re-boot camera from web page to apply.
- Preset Token Format - Default (Used on certain VMS servers. Uses mix of text and 'P' zero-pad number as preset tokens). Number only (Used on certain VMS servers. Uses numbers as preset tokens). 'P' zero-pad number (Used on certain VMS servers. Uses P001 to P360 as preset tokens).
- Authorisation Elevation - Used on Vicon VMS, allows the anonymous user to set as admin, viewer or operator.
- Pan/Tilt position Range - Feature not available.
- Advertise Multicast - Switch on to advertise the camera supports multicast via Onvif. Camera does not support multicast and unicast on the same video stream, unless concurrent option is enabled.
(See Video Advanced - page 12)
- Auxiliary Functions - Used to set how the VMS will see the Onvif Auxiliary Token.
Configurable - Aux 1 - 8, configurable via web page
Standard - Standard Onvif
Additional - Additional control commands using the Onvif Standard
- Pre-defined Presets
Advertise All - Show all pre-defined presets, when the VMS requests the presets from the camera.
Advertise Re-definable - Show re-definable pre-defined presets only e.g. Home
Omit - Do not show the pre-defined presets, when the VMS requests the presets from the camera.
- Iris Scale - Used on certain VMS systems, can be used to switch iris close/open operation.

OK to apply the new settings into the Eclipse HD.

Cancel to abandon the changes to the network settings.

5.3 Add/Edit Users

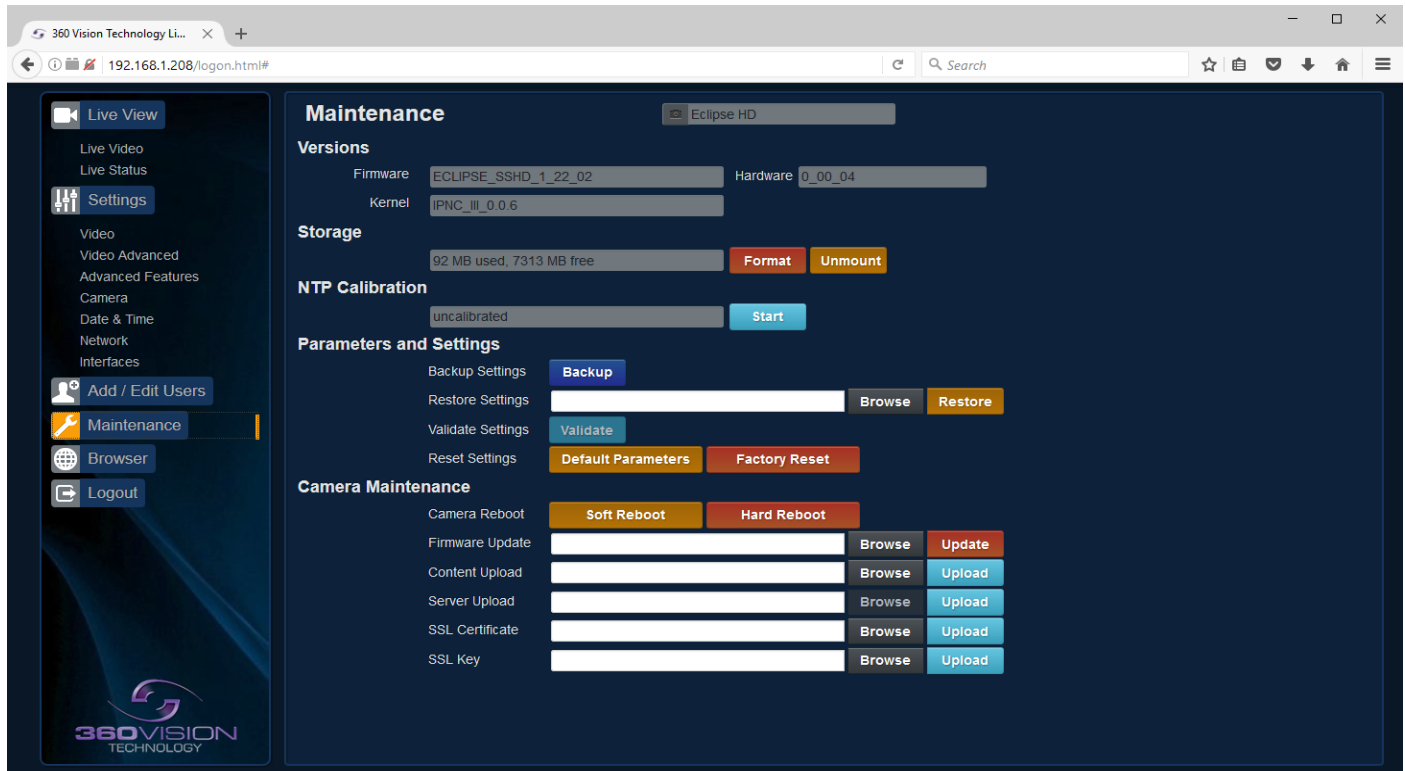
User Name	Authority
admin	Administrator

The Add/Edit Users page, allows the admin user to create both operator and viewer level login details. The admin user login password, can also be changed here. The web page admin password is also the Onvif admin password. Care must be taken, when changing the admin password.



There is no way of recovering the Eclipse HD admin password if forgotten.

5.4 Maintenance



- Camera - Cannot be edited, shows label/name given to the camera.
(See Video - Camera - page 11).

Version

- Firmware - Current firmware loaded onto the camera.

Storage

- Used and free space on the memory device. Used for the firmware update process.
- Format - You can use this option to format the storage device. Please stay on the web page while it is doing this. Once formatted the unmount button will show as mount. Use this to mount the device so that it can be used by the camera.
- Unmount - Select this option to unmount the storage, once confirmed. The web page will report back that the process is successful.

NTP Calibration

Used to calibrate the codec clock to a NTP server so that the codec time is more accurate.

- Start - Click on this option to start the process. Synchronize with NTP Server option must be selected with access to the NTP server. The process takes approx 20 minutes.

Parameters and Settings

- Backup Settings - Save - Used to save the camera settings.
The file is displayed as Eclipse_HD_YYYYMMDD_HHMM.DAT clicking on this file will download the file to the PC download folder.
- Restore Settings - Browse to the required DAT file and then click restore. The camera will then apply the settings and reboot the camera.
PLEASE note:- All saved camera settings including passwords will be uploaded to the camera.
- Validate Settings - Used to validate the uploaded settings, after the camera reboot process.
- Reset Settings
 - Default Parameters - Reset codec parameters i.e. video stream settings.
 - Factory reset - This will reboot the camera and all the settings, except IP address will be lost.

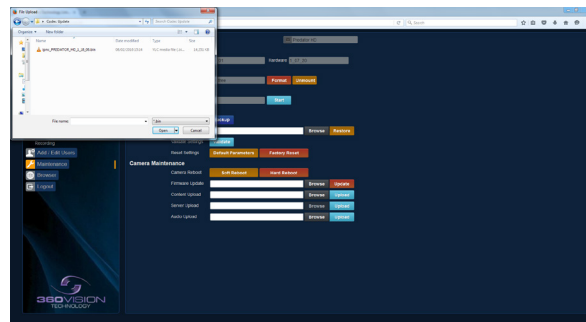
Camera Maintenance

- Camera reboot
 - Soft reset - This will reboot the codec, no settings will be lost.
 - Hard reset - This will reboot the camera, no settings will be lost.
- Firmware Update - Browse to codec file and then click on update. The camera codec will then be updated. The Eclipse HD camera will re-boot once the update has been performed.

DO NOT interfere with this process as it may stop the camera from working.

Contact 360 Vision Technical Support for the link to the codec update files.

- Content Upload - Upload application software to camera memory. Contact 360 Vision Support for files.
- Server Upload - Download application files from FTP/HTTP server.
- SSL Certificate - Import SSL certificate.
- SSL Key - Import SSL key.

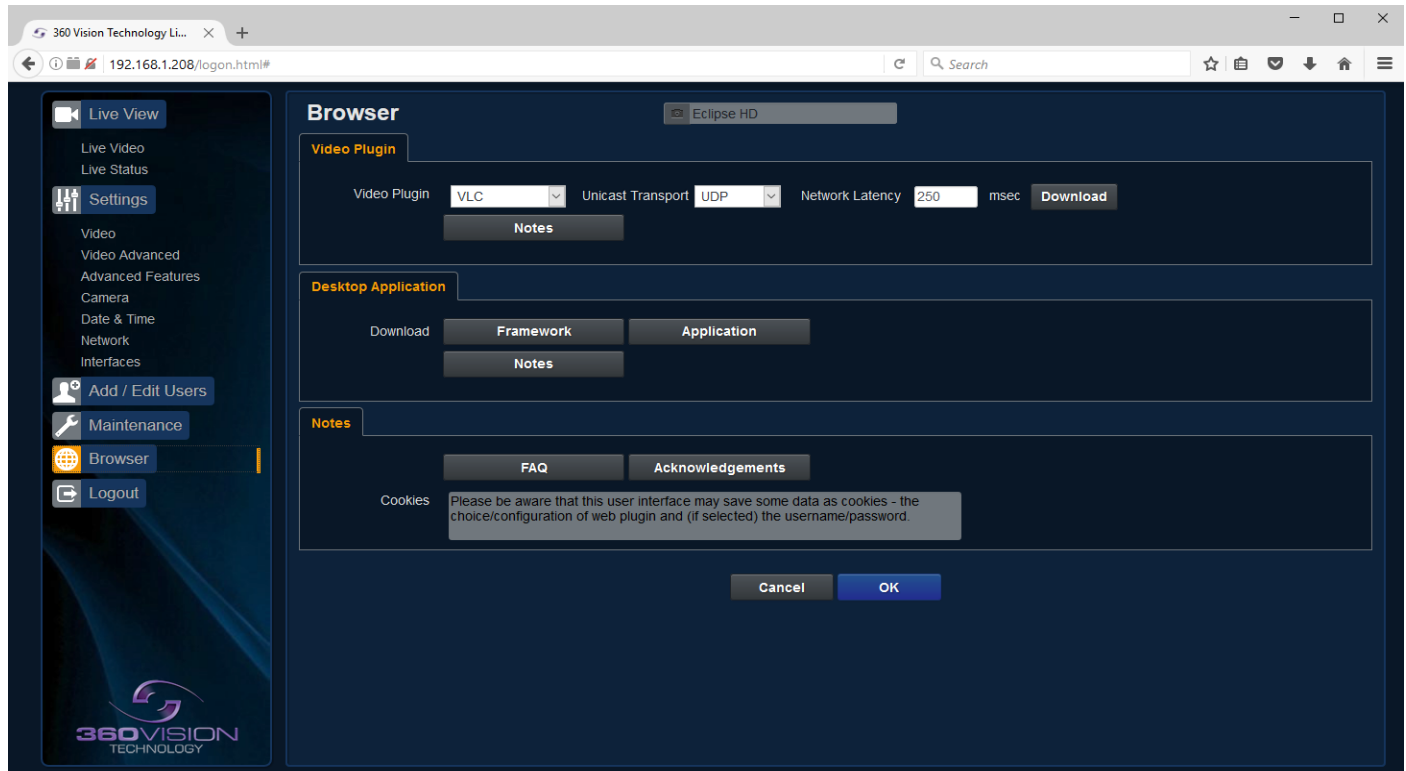


Update Screen

OK to apply the new settings into the Eclipse HD.

Cancel to abandon the changes to the maintenance settings.

5.5 Browser



Video Plug-in

- Video Plug-in - Choose video plug-in, choice of VLC, JPEG (every 5 seconds), or none.
- Unicast Transport - Choice of UDP or TCP.
- Network Latency - Adjust Video player latency/buffer.
- Download - Download video plug-in from the camera.

Desktop Application

- Framework - Download framework to run 360 HD Camera Discovery Tool.
- Application - Download software for the standalone application.
- Notes - Notes on how to install the desktop application.

OK to apply the new settings into the Eclipse HD.

Cancel to abandon the changes to the maintenance settings.

6 Network Settings Recovery

When network settings are changed, the IP address, Net Mask and Gateway are validated before they are saved. However if the settings are such that the Eclipse HD has settings which mean that it cannot be seen on the user's network, it may become necessary to use the 'Network Settings Recovery' feature as described below.

The 'Network Settings Recovery' IP address may conflict with an IP address that is already defined on the network, it may be necessary to disconnect the Eclipse HD from the network and control it locally using a network connection to a laptop so that the IP address can be set to a suitable setting before the Eclipse HD is reconnected to the main network.

Procedure for 'Network Settings Recovery'

Disconnect the Eclipse HD from the network.

Turn power to the Eclipse HD OFF for 3 seconds.

Turn power to the Eclipse HD ON for 4 seconds.

Repeat the above three times.

On the final power ON, leave the power switched on for at least 5 minutes to allow the Eclipse HD to initialise.
(See section *Locating the Eclipse HD on your network - page 6*).

7 Special Presets

Illumination (when it is dark)	Seek 64 (On)	IR (mono/colour not changed)	Seek 66 (Off)
	Seek 65 (On)	White Lights (mono/colour not changed, no timer)	Seek 66 (Off)
Night Sensor (when it is dark)	Seek 67 (Mono)		Seek 68 (Colour)
Night Focus Range (when it is dark)	Seek 69 (Ambient)		Seek 70 (IR)
Wiper	Seek 81	Double Wipe	Seek 86 (Stop)
	Seek 82	Permanent Intermittent Wipe	
	Seek 83	Permanent Fast Wipe	
	Seek 84	Timed Intermittent Wipe	
	Seek 85	Timed Fast Wipe	
De-Fog	Seek 87 (On)		Seek 88 (Off)
Washer	Seek 89 (Start)	Define Preset 359 (Defines Washer Position)	Seek 90 (Stop)
White Lights (when it is dark)	Seek 100 (On)	White Lights change to colour, timer is used)	Seek 101 (Off)
Home	Define 360	Defines Home Position	

8 Important - Care of Painted Surfaces

The powder coating applied to the Eclipse HD external housing is recognised as being in the forefront for quality and finish. However, in order to preserve the aesthetic finish it is recommended that the coating is regularly cleaned.

Regular cleaning on a maximum three month interval, using warm and mild detergent must be undertaken. Abrasive cleaners including strong solvent must NOT be used at any time.

In areas where the coating may come in contact with concentrated atmospheric pollutants [marine, chemical and especially bird droppings] it would be prudent to clean more frequently e.g. monthly.

Full documentation of the cleaning schedule MUST be maintained to ensure that a warranty claim can be considered.

If damage occurs to the coating (e.g. the Eclipse HD is dropped, scrapped etc..), repairs MUST be carried out immediately.

When the Eclipse HD is installed in areas where there is a high risk of damage from birds or their droppings, additional precautions and measures should be used to keep the birds away from the Eclipse HD e.g. fit anti-bird spikes.

9 Storage and Handling

Eclipses should be handled with care and must not be dropped. When Eclipses are being stored before installation they should be kept in the transit packaging and located in a dry indoor environment preferably between 1°C and 35°C which is dry and dust free. Humidity should such that water vapour is non-condensing. Eclipses can be allowed to be outside this range for short periods of time (24 hours maximum) for transport (e.g. in aircraft or vans) but must never be allowed to be outside the normal operating temperature range of -40°C to +60°C even during storage.

Before installation the Eclipse should be clean and dry. (If necessary it should be cleaned and dried taking care that the glass is not scratched).

10 Warranty

This information and/or any technical information – whether received verbally or writing – is given in good faith but without warranty and this also applies where proprietary rights of third parties are involved. The information provided does not release you from your obligation to check its validity and to test the products suitability for the intended purpose(s) and use(s). The application, use and installation of the products either in isolation or in conjunction with other products used, provided and installed by you on the basis of the technical advice issued are beyond our control and therefore remain entirely your own responsibility.

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11 PSU Enclosure

Material	PC/ABS
Dimensions (PRED-PSU-SM-WA-HD enclosure)	255 x180 x 100mm

12 1080p Stream Resolutions & RTSP Links

		Resolution				Resolution	
H.264 (rtsp://ipaddress/h264main)	720p (1280 x 720)				MPEG4 (rtsp://ipaddress/mpeg4main)	720p (1280 x 720)	
	D1 (720 x 576)					D1 (720 x 576)	
	SXVGA (1280 x 960)					SXVGA (1280 x 960)	
	1080p (1920 x 1080)					1080p (1920 x 1080)	
				Resolution			
MJPEG (rtsp://ipaddress/mjpeg)				1080p (1920 x 1080)			
				Resolution			
H.264 (rtsp://ipaddress/h264main) & MJPEG (rtsp://ipaddress/mjpeg)		720p (1280 x 720)		VGA (640 x 480)			
		D1 (720 x 576)		D1 (720 x 576)			
		720p (1280 x 720)		720p (1280 x 720)			
		1080p (1920 x 1080)		QVGA (432 x 240)			
		1080p (1920 x 1080)		D1 (720 x 576)			
				Resolution			
MPEG4 (rtsp://ipaddress/mpeg4main) & MJPEG (rtsp://ipaddress/mjpeg)		720p (1280 x 720)		VGA (640 x 480)			
		D1 (720 x 576)		D1 (720 x 576)			
		720p (1280 x 720)		720p (1280 x 720)			
		1080p (1920 x 1080)		QVGA (432 x 240)			
		1080p (1920 x 1080)		D1 (720 x 576)			
				Resolution			
Dual H.264 (rtsp://ipaddress/h264main) (rtsp://ipaddress/h264sub)		720p (1280 x 720)		QVGA (432 x 240)			
		D1 (720 x 576)		D1 (720 x 576)			
		D1 (720 x 576)		QVGA (432 x 240)			
		1080p (1920 x 1080)		QVGA (432 x 240)			
		1080p (1920 x 1080)		D1 (720 x 576)			
				Resolution			
Dual MPEG4 (rtsp://ipaddress/mpeg4main) (rtsp://ipaddress/mpeg4sub)		720p (1280 x 720)		QVGA (432 x 240)			
		D1 (720 x 576)		D1 (720 x 576)			
		D1 (720 x 576)		QVGA (432 x 240)			
		1080p (1920 x 1080)		QVGA (432 x 240)			
		1080p (1920 x 1080)		D1 (720 x 576)			
				Resolution			
H.264(rtsp://ipaddress/h264main) & MPEG4(rtsp://ipaddress/mpeg4sub)		D1 (720 x 576)		D1 (720 x 576)			
		1080p (1920 x 1080)		D1 (720 x 576)			

13 720p Stream Resolutions & RTSP Links

	Resolution
H.264 (rtsp://ipaddress/h264main)	720p (1280 x 720)
	D1 (720 x 576)

	Resolution
MPEG4 (rtsp://ipaddress/mpeg4main)	720p (1280 x 720)
	D1 (720 x 576)

	Resolution
MJPEG (rtsp://ipaddress/mjpeg)	720p (1280 x 720)

	Resolution	
H.264 (rtsp://ipaddress/h264main) & MJPEG (rtsp://ipaddress/mjpeg)	720p (1280 x 720)	VGA (640 x 480)
	D1 (720 x 576)	D1 (720 x 576)
	720p (1280 x 720)	720p (1280 x 720)
	720p (1280 x 720)	D1 (720 x 576)

	Resolution	
MPEG4 (rtsp://ipaddress/mpeg4main) & MJPEG (rtsp://ipaddress/mjpeg)	720p (1280 x 720)	VGA (640 x 480)
	D1 (720 x 576)	D1 (720 x 576)
	720p (1280 x 720)	720p (1280 x 720)
	720p (1280 x 720)	D1 (720 x 576)

	Resolution	
Dual H.264 (rtsp://ipaddress/h264main) (rtsp://ipaddress/h264sub)	720p (1280 x 720)	QVGA (432 x 240)
	D1 (720 x 576)	D1 (720 x 576)
	D1 (720 x 576)	QVGA (432 x 240)
	720p (1280 x 720)	D1 (720 x 576)

	Resolution	
Dual MPEG4 (rtsp://ipaddress/mpeg4main) (rtsp://ipaddress/mpeg4sub)	720p (1280 x 720)	QVGA (432 x 240)
	D1 (720 x 576)	D1 (720 x 576)
	D1 (720 x 576)	QVGA (432 x 240)
	720p (1280 x 720)	D1 (720 x 576)

	Resolution	
H.264(rtsp://ipaddress/h264main) & MPEG4(rtsp://ipaddress/mpeg4sub)	D1 (720 x 576)	D1 (720 x 576)

14 White Balance and Fast Shutter options

White Balance Options
Auto
Outdoor
Indoor
Auto Tracing
Indoor A, B & C
Sodium
Sodium Auto A & B

Fast Shutter Options
1/1000
1/1250
1/1750
1/2500
1/6000
1/10000

