



IP Camera

Web Interface Manual

Please refer to www.brigade-electronics.com for the latest version of this manual



IP Camera Web Interface Manual

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1 Introduction to IP Camera Technology

Brigade's IP (Internet Protocol) Cameras comply with multiple network protocols such as MDR, ONVIF, TCP/IP, FTP. This allows for data transmission through a network. The IP cameras also have built-in web servers. This allows users to utilise a web browser to view the IP camera's live video streams and change settings. Please refer to IG and Operational guide for hardware and MDR-related settings.

An Installation Guide is found in the IP camera's box for quick setup information. For further information, please refer to the Operational Guide on Brigade's website. This guide includes details on a system containing an IP camera with an MDR.

2 IP Camera Web interface setup

2.1 Hardware Setup

There are 2 ways to view/set the IP camera through a computer:

For Single IP camera

Use the IP-1XXX-PC (5985) power and ethernet cable (shown below) to connect to an IP camera via the 6-pin VBV connector. Connect the ethernet cable to a computer for data transmission. The camera **MUST BE CONNECTED** to a 12V regulated power supply.



Power and Ethernet Cable
IP-1XXX-PC (5985)

2.1.1

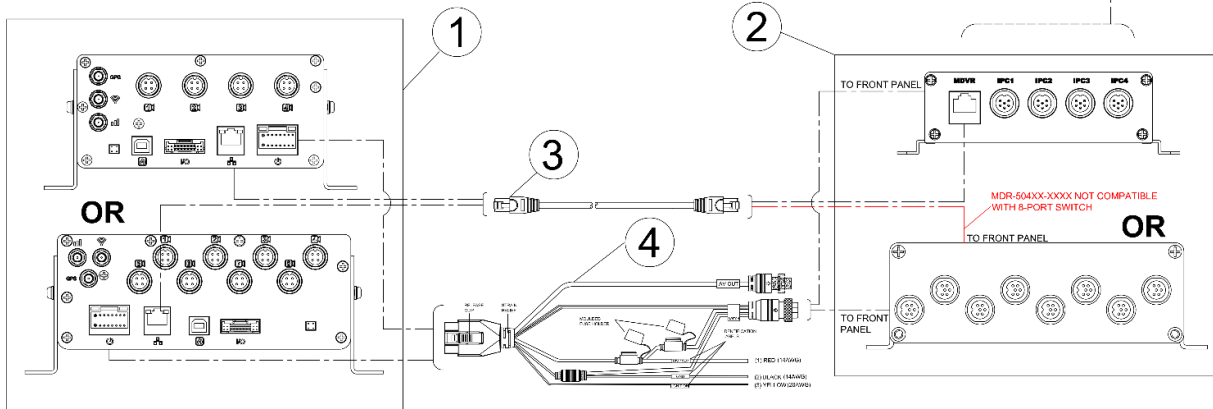
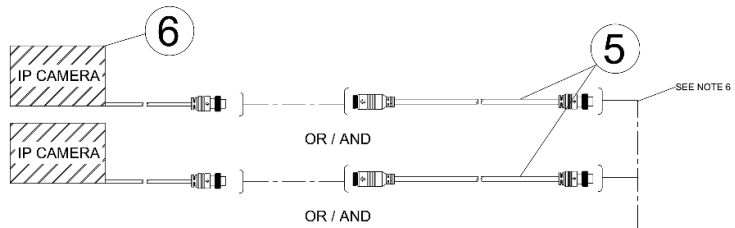
For multiple IP cameras (MDR-50X)

This method requires MDR 50X Series and a PON (Power Over Network) Switch product.

Setup the MDR 50X Series product, a PON Switch and multiple IP cameras (no more than 4 sets) as in the connection diagram below:

2.1.2

ITEM	MODEL NUMBER	DESCRIPTION
①	MDR-504XX-XXXX	4 CHANNEL MOBILE DIGITAL RECORDER WITH 500GB / 1TB / 2TB HDD, 32GB SD CARD, GPS, 4G (OPTIONAL) AND WI-FI (OPTIONAL)
	MDR-508XX-XXXX	8 CHANNEL MOBILE DIGITAL RECORDER WITH 1TB / 2TB HDD, 64GB SD CARD, GPS, 4G (OPTIONAL) AND WI-FI (OPTIONAL)
②	IP-EM4	MDR - POWER OVER NETWORK SWITCH - 4 PORTS
	IP-EM8	MDR - POWER OVER NETWORK SWITCH - 8 PORTS
③	IP-EC-1	CAT5E ETHERNET CABLE - 1 METER (INCLUDED IN ITEM 2 PACKAGE)
	IP-EC-5	CAT5E ETHERNET CABLE - 5 METER
④	IP-EC-PC	MDR-PON POWER CABLE (INCLUDED IN ITEM 2 PACKAGE)
⑤	VBV-1.6XX	IP CAMERA EXTENSION CABLE - 1M, 3M, 5M, 10M, 15M, 20M, 30M (OPTIONAL)
⑥	IP-100XX	IP CAMERAS



Single IP Cameras to MDR Connection Diagram

If you are using IP-EM4, after powering up the entire system, please use an extra Ethernet cable to connect the "LAN" port on IP-EM4 front panel to a computer.

If IP-EM8 is being used, please use the single port called "MDVR" to connect to a computer.

Note: For differences between IP-EM4 and IP-EM8, please refer to the table below:

IP-EM4 Ethernet Port	Supported	Unsupported
"LAN"	(1) Connect to another IP-EM4. This will allow for additional IP camera inputs (additional IP-EM4 will need to be powered up separately) (2) Connect to a computer to access the web menu	(1) Connect to a computer to access the web menu
"MDVR"	(1) Connect with a computer to access the web menu (2) Connect to MDR 50X Series for recording purposes	

IP-EM8 Ethernet Port	Able to do...	Unable to do
"LAN"	(1) Connect to MDR 50X Series for recording purposes	



**PON Switch 4 Port
IP-EM4**



**PON Switch 8 Port
IP-EM8**

For multiple IP cameras (MDR-644 only)

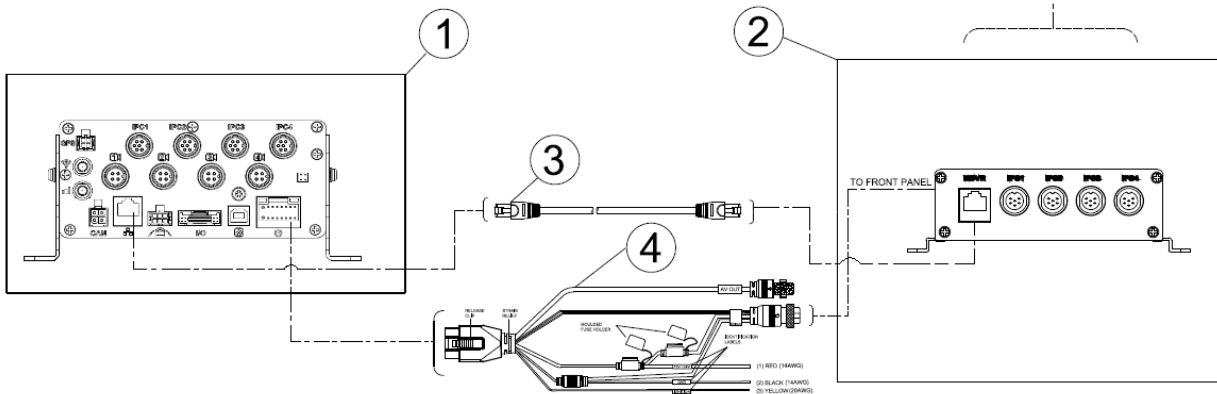
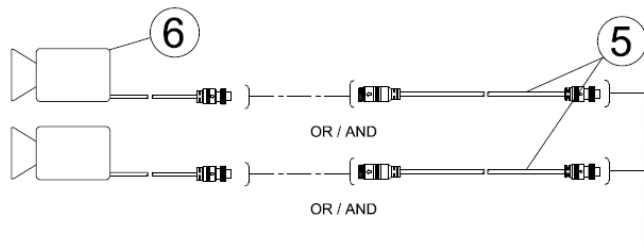
This method requires an MDR 644 and a PON (Power Over Network) Switch product.

Note: The MDR-641 is not compatible with either IP-EM4 or IP-EM8 PON Switches.

Setup the MDR 644 Series product, an IP-EM4 (PON 4 Switch) and multiple IP cameras (4 sets on the MDR 644 directly, and 4 sets attached to the PON 4 switch) as in connection diagram shown below:

2.1.

Item	Model Number	Description
1	MDR-644 and Variants	MDR-644 4G (OPTIONAL) & WIFI (OPTIONAL), 4 ANALOGUE CHANNELS, 4 IP CHANNELS, OPTIONAL CMR/SSD, 64GB SD
2	IP-EM4	MDR-POWER OVER NETWORK SWITCH – 4 PORTS
3	IP-EC-1	CAT5E ETHERNET CABLE – 1METRE (INCLUDED IN ITEM 2 PACKAGE)
	IP-EC-5	CAT5E ETHERNET CABLE – 5 METRES
4	IP-EC-PC	MDR-PON POWER CABLE (INCLUDED IN ITEM 2 PACKAGE)
5	VBV-L6XX	IP CAMERA EXTENSION CABLE – 1M, 3M, 5M, 10M, 15M, 20M & 30M (OPTIONAL)
6	IP-1XXC	IP CAMERAS



Single IP Cameras to MDR Connection Diagram



**PON Switch 4 Port
IP-EM4**

IP-EM4 Ethernet Port	Supported	Unsupported
"LAN"	(1) Connect to another IP-EM4. This will allow for additional IP camera inputs (additional IP-EM4 will need to be powered up separately) (2) Connect to a computer to access the web menu	(1) Connect to a computer to access the web menu
"MDVR"	(1) Connect with a computer to access the web menu (2) Connect to MDR-644 Series for recording purposes	

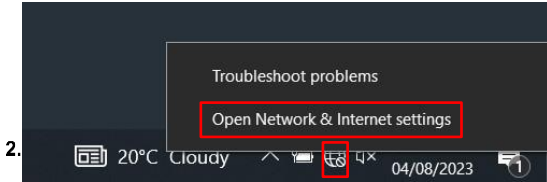
2.2 Computer Network Setup


Each individual IP camera has its own built-in web server. Therefore, each has its own IP address which enables access to a web interface menu. Communication between the IP camera and computer will only work if the correct IP address is used.

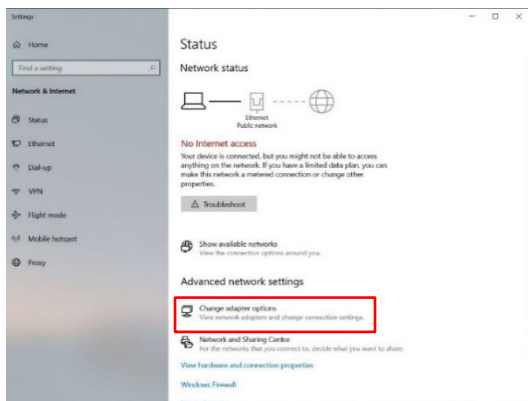
The IP camera's default IP address is **192.168.1.100**. If the IP camera previously used the "Fast Setup" feature of the MDR, then please note down its new IP address before attempting to connect it to a computer, as the "Fast Setup" feature will automatically re-assign a new IP address for Brigade's IP cameras to **10.100.100.100** for example.

How to Change a Computer IP Address

Connect the IP camera to a computer, then go to the computer network settings. Here is a Windows 10, Microsoft Edge example:



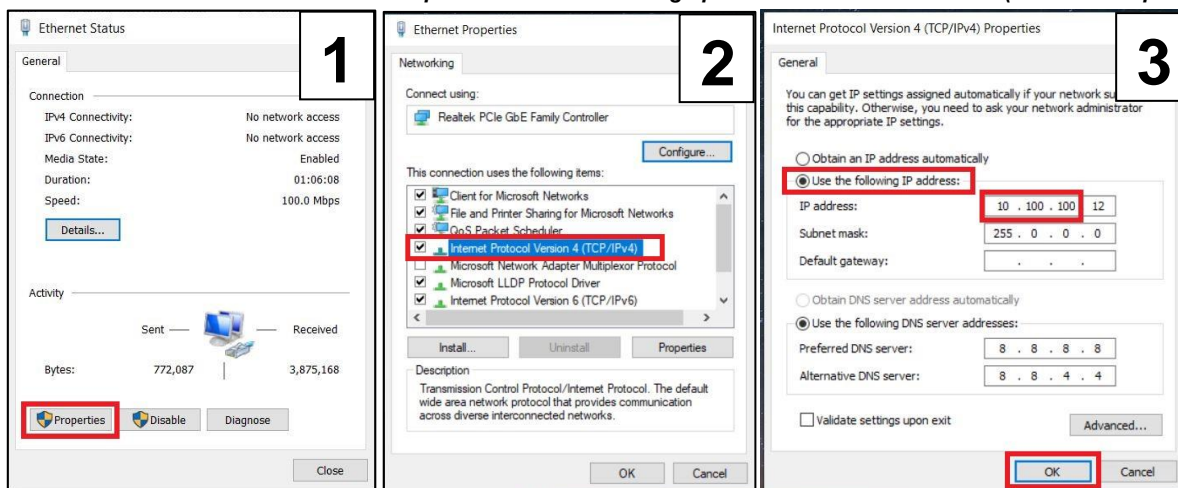
Right-click on the network icon  and then left-click on the **"Open Network & Internet settings"** prompt. This will open the Network Status window (shown below).



In the Network Status page left click on the **"Change adapter options."** This will then open the Network Connections window (shown below).



Then Double left click on the **"Ethernet"** option. This will then bring up the Ethernet status window (shown in Step 1 below).



Three steps showing how to set your computer's Ethernet connection to the same IP range as the IP camera.

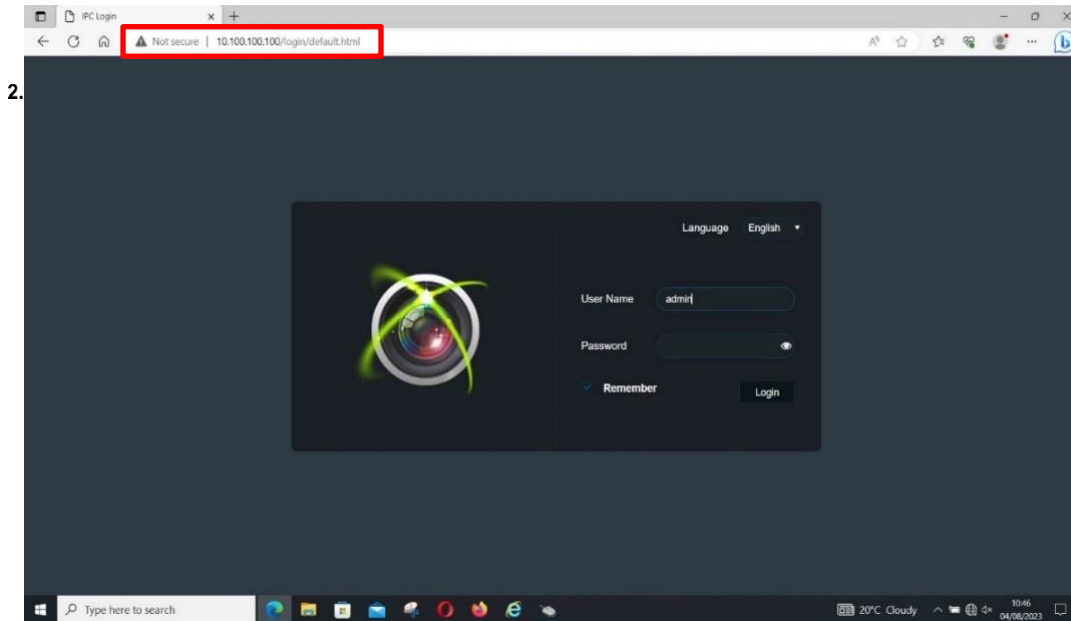
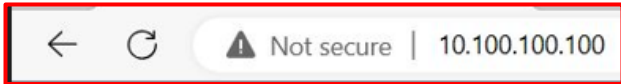
Step 1: In the Ethernet Status window, left click on the "Properties" button. This will open the Ethernet properties window.

Step 2: Then Double right-click on the "Internet Protocol Version 4 (TCP/IPv4)" item. This will open the IP4 (TCP/IPv4) properties window.

Step 3: In the IP4 (TCP/IPv4) properties window then select the "Use the following IP address:". In the IP address box please enter the same 3 groups of numbers as the IP camera (see example above). The last group can be any number from 2 to 254 (12 in this example). This IP address must be unique as it is the only way for it be recognised. Therefore, please choose a different IP address from those of any other existing IP camera. The Subnet Mask is automatically filled in. Press OK after configuring the IP address.

Access the Web Menu (IPC View)

Open your web browser (e.g., Microsoft Edge or Google Chrome). Enter the IP camera's IP address (for example: **10.100.100.100**) into the address bar at the top of the screen (see below). The webpage will load in a few seconds and then display the Login prompt (shown below).



Example of IPC Login screen

2.3 IPC Login



A login prompt is displayed after entering the IP address.

Default Language is “English”.

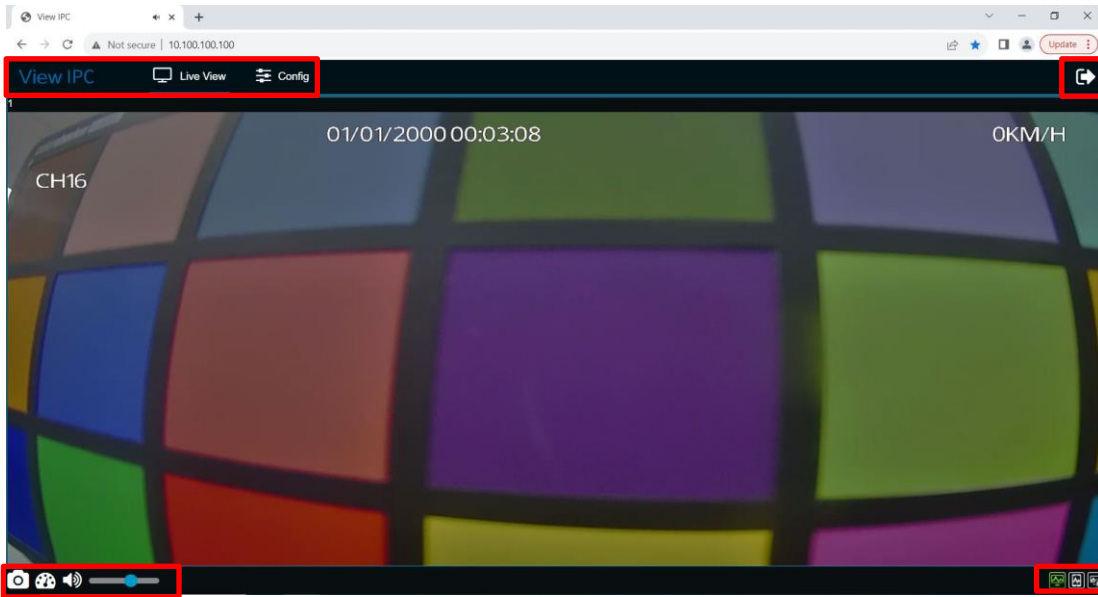
Default Username entry by user is “admin”.

The password entry is left blank (by default). The password can be changed in the user setting window (see P9).

***Note:** Currently only English and Chinese are supported.

Warning: Entering the password incorrectly more than 5 times will result in the login function being locked-out for a period of 30 minutes before accepting another login attempt. Please correctly note down the new password, as there is no way to retrieve it if the user forgets their new password.

2.4 View IPC



IP Camera Live View

There are 2 tabs options shown at the top left of the control bar: **Live view** and **Config**.

The top left icon is for exiting back to the login screen (as shown above).



Capture A still image will be automatically saved in the configured file pathway. The default pathway is C:\Users\YOUR USERNAME\downloads.



Image Setup Defaults to 31 for all settings (see right). Settings changed here will be carried over to an MDR (if connected). Refer to image setup (see right). The settings from top to bottom are as follows. **Brightness (BRI), Colour (COL), Contrast (CON), Saturation (SAT) and Sharpness (SHA)**.



Mute To toggle audio output of the live view on or off.



Volume Slider To decrease or increase the audio output of the live view image.



Mainstream Gives the best image quality. The bitrate is at its highest settings. This requires a good network bandwidth and data speed. The mainstream detail can be configured in the settings menu.



Sub Stream Gives a slightly lower quality image when compared to the mainstream mode. But network requirements are reduced. The sub stream detail can be configured in the settings menu.



Network Stream This mode is used for slow network environments. The image quality is at its lowest but saves network bandwidth for faster data transmission.



Bottom left buttons shown in IP camera live view above



Bottom right buttons shown in IP camera live view above

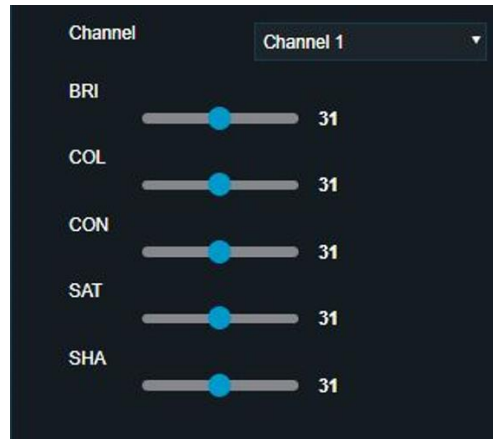
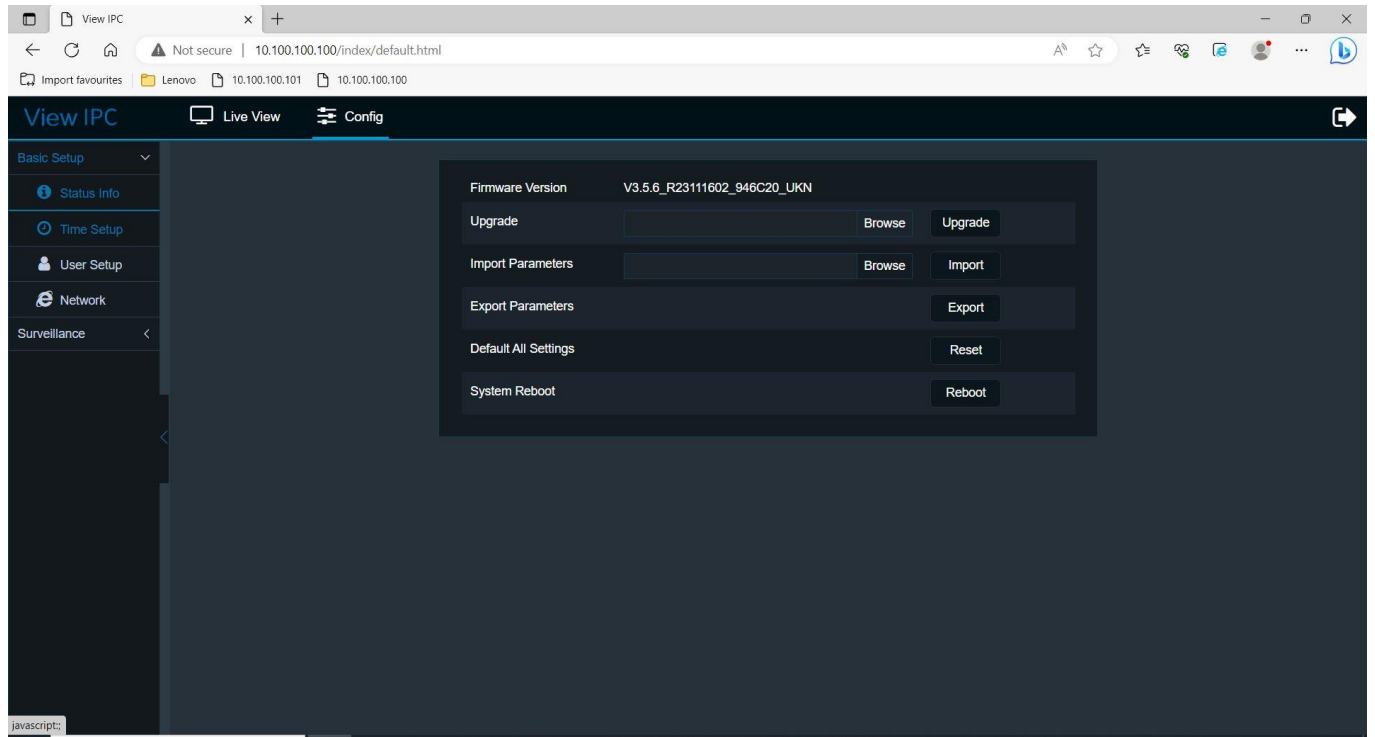


Image Setup

2.5 Config



Config view

Status Info

2.5.1

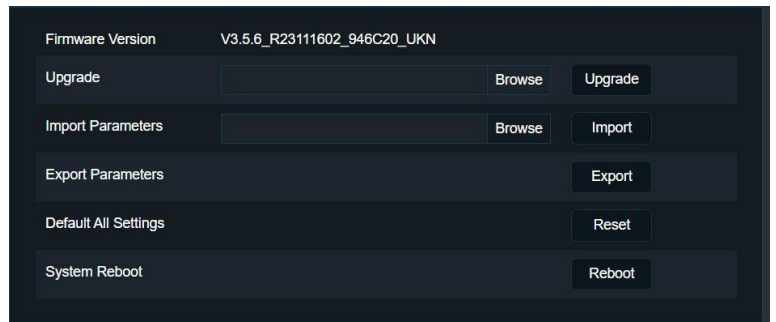
Firmware Version: Displays current firmware version number.

Upgrade: Used to choose the firmware file from a local folder to perform an upgrade.

Import and Export Parameters: Are used to either export or import the camera configuration to/from a local folder.

Default All Settings: To reset camera to its original factory settings.

System Reboot: To power cycle the IP camera off and on.



Status Info view

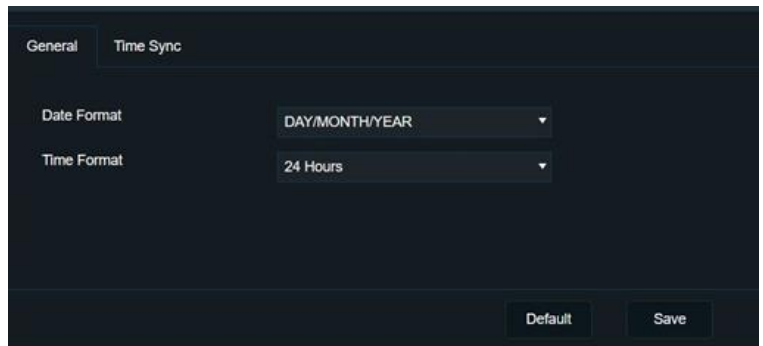
Time Setup

General

Date format Has three options: DAY/MONTH/YEAR, MONTH/DAY/YEAR or YEAR-MONTH-DAY.

This setting uses the MDR default setting. Once connected with an MDR XXX Series, it obtains this information.

Time format Can either be 12 hours or 24 hours, default setting is 24 hours.



Time Setup General

Time Sync

Date/Time Can be entered manually. Press "Change time" button to apply any changes.

Sync with PC Automatically syncs the IP camera with current computer time.

Note: These settings will be re-used from MDR settings if it is different from each other.

2.5.3

General Time Sync

Manually

Date/Time 01/01/2000 01:06:37

Sync With PC Change Time

Default Save

Time Sync

User Setup

Two levels of authentication method: admin and user. Admin has a maximum of one account. User accounts can have up to three accounts maximum.

2.5.4

Add To add a new user account.

Delete Only works for a user account, the admin account is undeletable.

Setup Be able to reset the password and re-name user account.

Warning: At this point is recommended that the password is left unchanged, because if it is changed here and this new password is then not manually imputed on the MDR IPC setup page, it will result in video loss on the MDR as it will then fail to logon to the IP camera's video stream.

User Management Add

User Name	User Group	Setup
admin	Admin	☰
user	Normal User	✕ ☰

Default Save

User Setup

Edit

User Name

User Group Normal User

Password

Confirm Password

Cancel OK

Add New User

Local

DHCP mode (Dynamic Host Configuration Protocol) allows the device to obtain an IP address automatically from the network. Recommended not using this mode as random addresses will make it difficult for users to find and access the web menu.

Note: If the DHCP mode is enabled, user can connect the IP camera to MDR XXX Series product and use the "IP Setup" feature to reset its IP address.

2.5.5 Static IPv4

Is enabled by default. After IP setup feature in MDR, the **IP address** will automatically be changed to under 10.100.100.xxx subnet for MDR to recognize. If the camera has not gone through the IP setup feature, the default IP address will be 192.168.1.100.

Subnet mask is used to identify the network address of an IP address, will be automatically filled in.

Gateway Helps route network traffic.

Auto get DNS (Domain Name System) is off by default. The IP camera has pre-filled DNS. DNS server resolves website addresses into IP address from the DHCP server, it will simultaneously attempt to resolve address.

Use following DNS Is enabled by default and allows the IP camera to use these DNS addresses regardless of what IP addresses the DHCP server is using.

Preferred DNS server By default is 192.168.1.1.

Alternate DNS server By default is 192.168.1.1.

MAC address (Media Access Control Address) is a unique character string which is unchangeable. The IP address for the camera can change to fit different network ranges. The MAC address is a unique number to identify the camera.

Local	Port Settings
Local	
<input type="radio"/> DHCP Mode	
<input checked="" type="radio"/> Static IPv4	
IP Address	10.100.100.100
Subnet Mask	255.255.255.0
Gateway	10.100.100.1
<input type="radio"/> Auto Get DNS	
<input checked="" type="radio"/> Use Following DNS	
Preferred DNS Server	192.168.1.1
Alternate DNS Server	192.168.1.1
MAC	
MAC Address	56:44:11:33:22:04
Default Save	

Network – Local

2.5.6

Port Settings

Web port Is used when a PC is connecting to the IP camera. If it is incorrect, the web page will not open. By default, this port is 80.

RTSP port (Realtime Streaming Protocol) is for transmitting the live view from the camera to a web page. The port is 554 by default. If the live view is not working, please check if this port is correct.

Local	Port Settings
Web Port	80
RTSP Port	554
Default Save	

Network - Ports

Surveillance

2.5.7.1 Record

2.5.7.2 Mainstream

Note: all content in this page will be covered by MDR settings after connecting with any MDR XXX Series product.

Channel Name will be displayed in the OSD. After connecting with an MDR it will automatically change to “CH” + numbers. Refer to Mainstream (see right).

Enable by default is on. The live view will close if this is turned off.

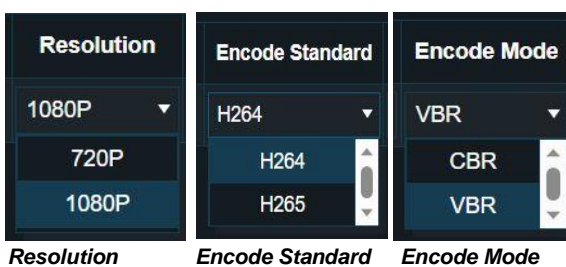
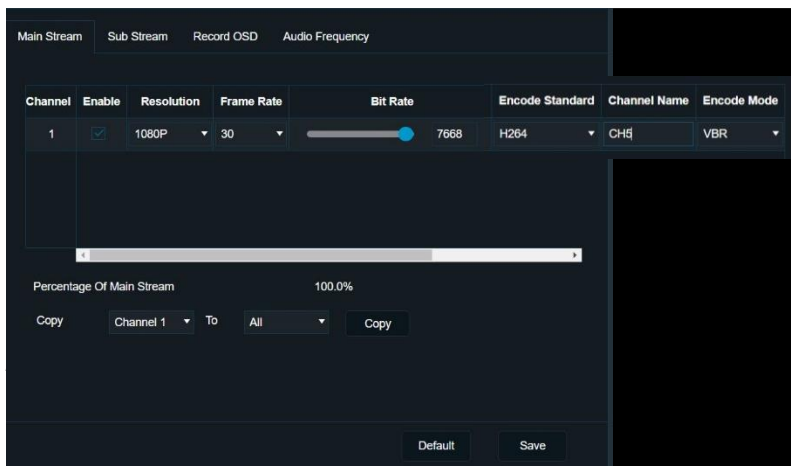
Resolution has options of “1080P”, and “720P”. The maximum resolution is autodetected. For example, if the camera hardware supports 720P maximum, the available option will only contain “720P” for example.

Frame rate can be chosen from the range of 1 – 30. The IP camera is not affected by TV system, the settings of the recorder can be 25Hz/PAL or 30Hz/NTSC, the frame rate can be up to 30 frames per second.

Bit rate Used for transmitting image can be set between 1024 to 8192. A higher bitrate gives clearer image output whilst requiring a wide network bandwidth. Recommend using default value which is 4608. A higher bitrate can cause image stutters and pauses in slow network environments.

Encode standard supports both H.264 and H.265. The camera is set to H.264 by default.

Encode mode has constant bit rate (CBR) and variable bit rate (VBR) options. The default setting is VBR encoding. CBR is more consistent and reliable for time-sensitive encoding, and VBR produces higher-quality results by varying its bit rate dependent on whether the image is stationary or moving.



2.5.7.3 Sub Stream

Note: all content in this page will be covered by MDR settings after connecting with any MDR-XXX Series product.

This sub stream setting works in 2 ways, the first is for when working with an MDR, the sub stream has a lower resolution and frame rate (usually) and will be saved on the SD card as a backup (not available for MDR-641). The second scenario is for live viewing on the web page, in the bottom right corner there are buttons to choose view mode, either mainstream or sub stream.

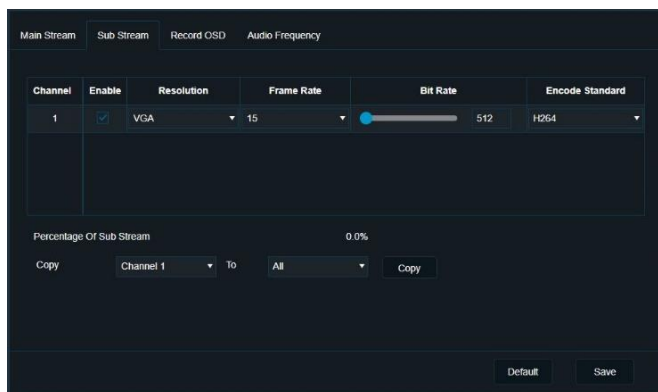
Enable Is on by default.

Resolution Is VGA type by default. Users can also choose from CIF and D1.

Frame rate By default is 15 but it can be set between 1 and 30.

Bitrate Defaults to 512kbps. Used for transmitting an image and can be set between 512 to 2048.

Encode standard Supports both H.264 and H.265. The camera is set to H.264 by default.



Sub stream

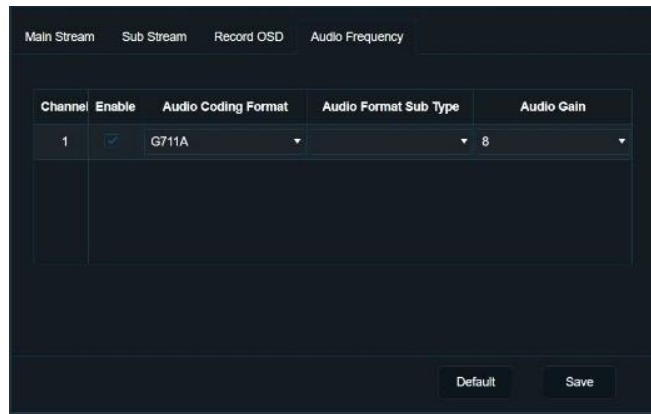


2.5.7.4 Audio Frequency

Enable Is used to activate the audio setting. By default, this is on.

Audio Coding Format Can be selected from "G711A", "G711U", "ADPCM" and "G726". G711A is the default and recommended setting.

Audio gain Can be selected between 1-16, 1 is the lowest and 16 is the highest. The audio gain controls how loud the sound is during recording (prior to processing). It will change the tone for the audio output. Users can adjust this figure according to actual usage. The default setting is 8.



Audio Frequency



Audio Coding Format

2.5.7.5 Video parameters

Picture settings The picture setting controls for **BRI** (Brightness), **COL** (Colour), **CON** (Contrast), **SAT** (Saturation), and **SHA** (Sharpness) values may be individually selected between a minimum of **0** and a maximum of **63**. The default value for each setting is **31**.

Note: That changing any of these settings will also alter any recordings made subsequently with that IP camera.

Day/Night Mode Has options for **Auto** (the default for IP-1100C and IP-1200C), **Day mode** (the default for IP-1000C) and **Night mode**. Auto enable is the default setting and this enables the IR to turn off in daylight and on in darkness. Selecting Day mode will disable the cameras IR function (if available) and the selection of Night mode will permanently switch on the cameras IR function (if available).

Mirror/Flip Is used to mirror the image, usually used by installers during setup and installation. The possible selections are **OFF** (default), **Mirror**, **Flip**, and **Mirror+Flip**.

WDR (Wide dynamic range) helps the camera handle dark and bright conditions and improves freeze frame quality. It is **Auto** by default but can also be switched to either **OFF** or to **Manual**. **Non-selectable for IP-1200C cameras only**.

2DNR (Digital Noise Reduction) works by individually analysing the different frames of the video, it detects any pixels that are likely to cause noise and corrects them. It is **Auto** by default but can also be switched to either **OFF** or to **Manual**. **Non-selectable for IP-1200C cameras only**

3DNR (Digital Noise Reduction) rectifies any noise causing pixels by additionally analysing the difference occurring between the successive frames in order to make the pixels noiseless and improve image clarity. It is **Auto** by default but can also be switched to either **OFF** or to **Manual**. **Non-selectable for IP-1200C cameras only**

Defog Is an algorithm that highlights certain object features of interest in the image and suppresses those of no interest, resulting in improved image quality and enhanced images. Is set to **Auto** by default but can also be switched to either **OFF** or to **Manual**. **Non-selectable for IP-1200C cameras only**

Backlight Compensation Compensates for dark areas in an image and show more details. Defaults to Strength **8** but may be manually selected between (0-15). **Non-selectable for IP-1200C cameras only**

Exposure Defaults to **Auto** but can be manually set from **1/30Second** up to **1/5000Second** or it can be **User-Defined**. **Non-selectable for IP-1200C cameras only**

Professional Applications Is reserved for future development, not used currently. It is currently non-selectable and defaults to **Normal**.

Auto-flip Allows any IP cameras with this feature to automatically flip its picture in order to maintain an upright image. This setting can be either **Enabled** (default) or **Disabled**.

Infrared Light Defaults to **Auto** and is not selectable.

Profile Is selectable as either **Standard** (default), **Indoor** or **Outdoor**.

WDR Strength Defaults to Strength **8** but may be manually selected between (0-15). **Fixed at Strength 8 for IP-1200C cameras only**.

2DNR Setup Defaults to Strength **8** but may be manually selected between (0-15). **Fixed at Strength 8 for IP-1200C cameras only**.

3DNR Setup Defaults to Strength **8** but may be manually selected between (0-15). **Fixed at Strength 8 for IP-1200C cameras only**.

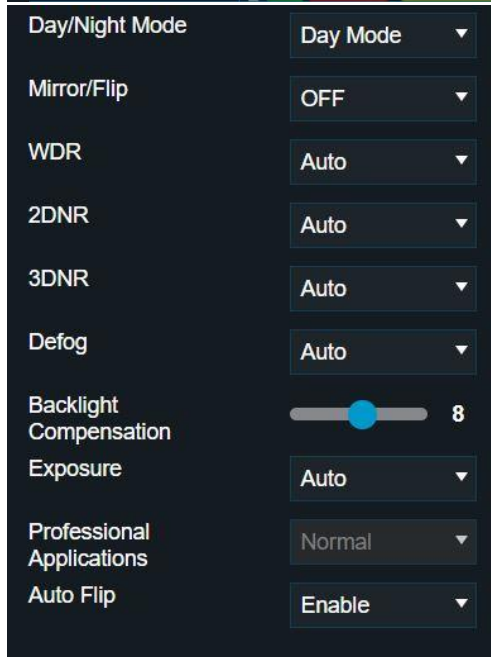
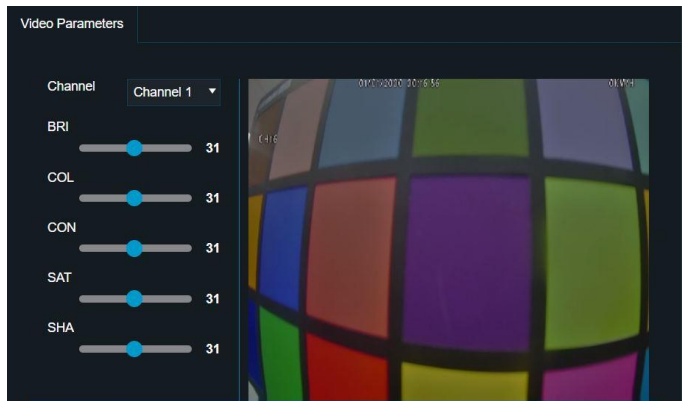
Defog Setup Defaults to Strength **8** but may be manually selected between (0-15). **Fixed at Strength 8 for IP-1200C cameras only**.

HLC (Highlight Compensation) is to compensate for overexposure of highlights or strong light sources like spotlights, headlights, etc. It helps to ensure the image does not get overexposed by strong light. Defaults to Strength **8** but may be manually selected between (0-15). **Fixed at Strength 8 for IP-1200C cameras only**.

Gain Defaults to **Auto** but can be manually set from **1X** up to **16X** or it can be **User-Defined**. **Fixed at Auto for IP-1200C cameras only**.

Focal length Shows current status information, it is non-selectable and informs users of the IP cameras focal length.

Install Angle The installation angle of the camera may be set as **OFF** (default) or by **+90°** or by **-90°**.



Video parameters

Note: The White Balance (WB) feature is supported across all Brigade IP cameras, and therefore is not configurable.

2.5.7.6 OSD (On Screen Display)

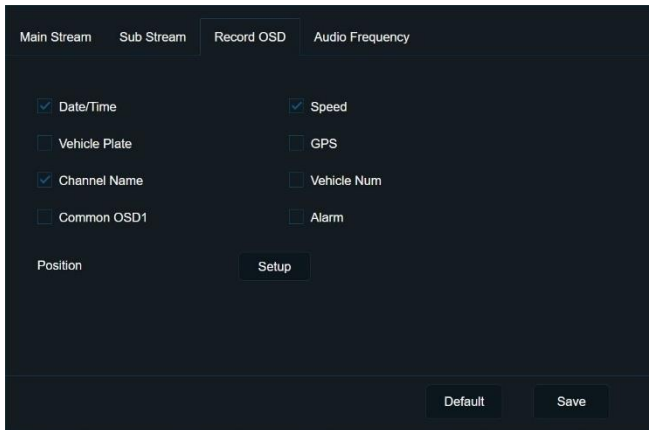
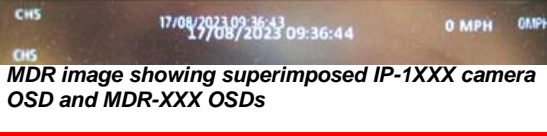
Tick the desired items and press the Setup button to drag and move the items into the desired position on the image using the Record OSD position window.

Once the desired selection(s) have been selected or deselected and moved as desired press the ok button

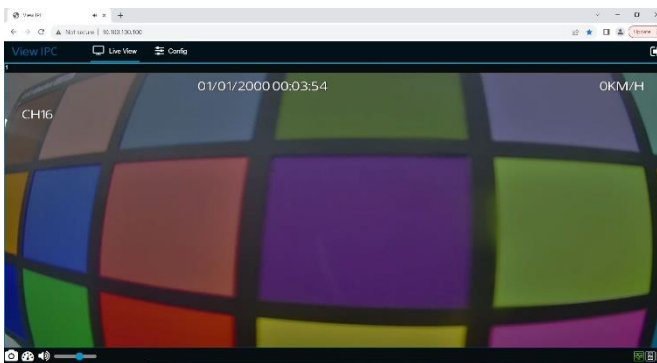
The IP cameras own OSD (if selected) will always be shown overlaid onto the image regardless of mode – live view or playback. Standard analogue cameras will only send images and audio direct to an MDR, and then the MDR does all the encoding and compression.

Brigade IP cameras include their own onboard encoding, so before it sends images to the MDR it will always encode it first and this will always include its own OSD (if selected) in the MDR image.

Therefore, when the user is in MDR live view or MDR recording playback and any IP camera OSD (and any MDR OSD will always be displayed together (see below).



Record OSD



Default LIVE/RECORD OSD Positions

3 On-screen Display Map

Note: *GREEN ARIAL BLACK ITALICS* represents default settings

Blue represents explanations or directions.



3.1 Live View

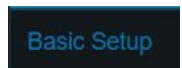


Live View Image (*Mainstream*, *SUB STREAM*, or Network Stream)

3.2.1 Config



Basic Setup



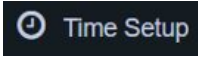
3.2.1.1 Status Info



3.2.1.2 Firmware Version

Firmware Version	xx.x.xx_XXXXXXXXX_XXXXX_XXX		
Upgrade	Browse (Select File Location)	Remark: Are you sure you want to Upgrade?	Cancel or Ok
Import Parameters	Browse (Select File Location)	Import – Import Successful	
Export Parameters	Export	Exports Config file to (downloads folder)	
Default All Settings	Reset	Remark: Are you sure you want to restore factory settings?	Cancel or Ok
System Reboot	Reboot	Remark: Are you sure to Restart?	Cancel or Ok

Time Setup



3.2.2.1 General

3.2.2

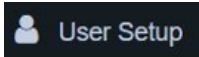
General	
Date Format	MONTH/DAY/YEAR YEAR-MONTH-DAY DAY/MONTH/YEAR
Time Format	24 Hours 12 Hours Default or Save

3.2.2.2 Time Sync

Time Sync			
Manually			
Date xx/xx/xxxx	Select calender entry	Sync with PC Remark: Setup time successfully!	OK
Time xx:xx:xx	Enter time	Change Time Remark: Setup time successfully!	Ok
			Default or Save

3.2.3

User Setup



3.2.3.1 User Management

User Management		Add User
User Name	User Group	Setup
admin	Admin	Edit
user	Normal User	Delete User or Edit

3.2.3.2 Add User

Edit		
User Name	Enter username	
User Group	Normal User (non-selectable)	
New Password	Enter password	(View password)
Confirm New Password	Enter password	(View password)
	Cancel or OK	

3.2.3.3 Admin User Group Setup

Edit		
User Name	admin (non-selectable)	
User Group	Admin (non-selectable)	
New Password	Enter password	(View password)
Confirm New Password	Enter password	(View password)
	Cancel or OK	

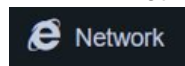
3.2.3.4 Normal User Group Setup

Edit		
User Name	<i>user</i>	
User Group	Normal User (non-selectable)	
New Password	Enter password	(View password)
Confirm New Password	Enter password	(View password)
	Cancel or OK	

3.2.3.5 Delete [user]

Are you sure to delete this user?	Cancel or OK
-----------------------------------	--------------

Network



3.2.4.1 Local

3.	LOCAL	DHCP Mode	
		<i>Static IPV4</i>	
		IP Address	<i>192.168.1.100</i>
		Subnet Mask	<i>255.255.255.0</i>
		Gateway	<i>192.168.1.1</i>
		Auto Get DNS	
		<i>Use Following DNS</i>	
		Preferred DNS Server	<i>192.168.1.1</i>
	Alternate DNS Server	<i>192.168.1.1</i>	
	MAC	MAC Address	xx:xx:xx:xx:xx:xx
			Default or Save

3.2.4.2 Port Settings

Port Settings	
Web Port	<i>80</i>
RTSP Port	<i>554</i>
	Default or Save

3.2.5

Surveillance



3.2.5.1 Record

3.2.5.2 Mainstream

Mainstream	
Channel	<i>1</i>
Enable	<i>Enable</i> or Disable
Resolution	<i>1080P</i> 720P
Frame Rate	<i>30</i> Select (30 to 1)
Bit Rate	<i>4608</i> Select (8192-512)
Encode Standard	<i>H264</i> H265
Channel Name	<i>CH1</i>
Encode Mode	<i>VBR</i> CBR
Percentage of Main Stream	<i>100.0%</i>
Copy	<i>Channel 1</i>
To	<i>All</i>
	Copy
	Default or save

3.2.5.3 Sub Stream

Sub Stream	
Channel	1
Enable	Enable or Disable
Resolution	VGA CIF D1
Frame Rate	15 Select (30 to 1)
Bit Rate	512 Select (2048-512)
Encode Standard	H264 H265
Channel Name	CH1
Encode Mode	VBR CBR
Percentage of Sub Stream	0.0%
Copy	Channel 1
To	All
	Copy
	Default or save

3.2.5.4 Record OSD

Record OSD		
Time	Enable or Disable	YYYY-MM-DD HH:MM:SS
Vehicle Plate	Enable or Disable	Vehicle Plate Location
Channel Name	Enable or Disable	Channel Name Location
Speed	Enable or Disable	Speed Location
GPS	Enable or Disable	GPS Location
Vehicle Num	Enable or Disable	Vehicle Num Location
Common OSD1	Enable or Disable	Common OSD1 Location
Alarm	Enable or Disable	Alarm Location
Position	Setup	Drag to selected locations
		Default, Cancel or OK
		Default or save

3.2.5.5 Record Audio Frequency

Audio Frequency	
Channel Enable	Enable or Disable
Audio Coding Format	G711A G711U ADPCM G726
Audio Format Sub Type	Blank (no text)
Audio Gain	8 Select (1-16)
	Default or save

3.2.5.6 Image Setup
3.2.5.7 Video Parameters

IMAGE SETUP			
Video Parameters			
Channel	Channel 1		
BRI (Brightness) COL (Colour) CON (Contrast) SAT (Saturation) SHA (Sharpness)	31 Select (0 to 63) 31 Select (0 to 63) 31 Select (0 to 63) 31 Select (0 to 63) 31 Select (0 to 63)		
Day/Night Mode	Auto (IP-1100C & IP-1200C) Day mode (IP-1000C) Night mode	Infrared Light (non-selectable)	Auto (non-selectable)
Mirror/Flip	Off Mirror Flip Mirror + flip	Profile	Standard Indoor Outdoor
WDR	Auto OFF Manual	WDR Strength	8 Select (0-15)
2DNR	Auto OFF Manual	2DNR Setup	8 Select (0-15)
3DNR	Auto OFF Manual	3DNR Setup	8 Select (0-15)
Defog	Auto OFF Manual	Defog Setup	8 Select (0-15)
Backlight Compensation	8 Select (0-15)	HLC	8 Select (0-15)
Exposure	Auto 1/30Second 1/50Second 1/60Second 1/100Second 1/120Second 1/300Second 1/500Second 1/1000Second 1/2000Second 1/5000Second User-Defined	Gain	Auto 1X 2X 3X 4X 5X 6X 7X 8X 9X 10X 11X 12X 13X 14X 16X User-Defined
Professional Applications (non-selectable)	Normal (non-selectable)	Focal Length (non-selectable)	As type (non-selectable)
Auto Flip	Enable or Disable	Install Angle	OFF +90° -90°
			Default or Save

Note: Not all of the parameters shown above, are selectable for IP-1200C cameras.

4 Troubleshooting and FAQ

Q: What if I forget the IP camera login details?

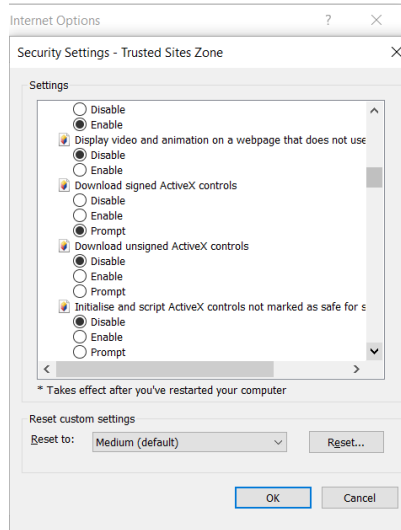
A: There is no way to retrieve the password if the user forgets the saved password.

Q: What if I forget the IP address of the camera?

A: The easiest way to rediscover a lost IPC, IP address (The default IP address for an IPC (IPCamera) is 192.168.1.100). Is to connect the IPC to an MDR and use either the **Fast Setup** feature of MDR-50X or the **Automatic Setup** feature of MDR-64X (this should take around 10-20 seconds approx.) to reset its IP address back to 10.100.100.xxx. The newly assigned IP address can then be checked on the IPC setup page as shown in Section 2.4, Page 7 of this manual.

Q: I cannot download the IE (Internet Explorer) plug-in (Active X).

A: The download will show up when the first-time user opens the IE to access an IP camera. Try re-open the browser and check the Live view, it may have already been installed. Or the Active X has been blocked by IE security settings. Go to IE Internet Options -> Security Settings. Enable related ActiveX options as below.



IE ActiveX Settings

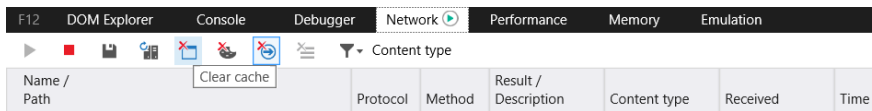
Q: The Image is of a low resolution when live viewed in the web browser.

A: The live view stream may set as sub stream or network stream. Find the 3 buttons in the bottom-right corner of the screen. The first one on the left is for Mainstream viewing; and this will supply the clearest image.



Q: I cannot login to the IP camera, the login details are right, but interface is stuck.

A: Press F12 to open the browser settings. Under "Network" click the "Clear Cache". Then re-open the web browser, the problem will be fixed.



Clear cache for IE web browser

