

Virtuoso Series 5 and 8 Virtuoso Series 5 and 8 MegaPixel Network Cameras

QUICK START GUIDE



*Lens Sold Separately

FEATURES:

- 5 or 8 MegaPixel [4K] Network Camera (2592x1944px / 3840x2160px @ 30/25fps)
- 1/2.8" 5.69 / 8.29 MegaPixel Sony STARVIS CMOS® Sensor,
- ONVIF Compliant with Zero Configuration, ONVIF Event Mapping
 - · Cross Web Browsing (IE, Edge, Safari, Firefox, Chrome)
 - · Adaptive web-based resizing (Layout / Display Device Resolution Dependent)
 - · Quad Streaming: H.265, H.264 & MJPEG
 - HTML5 Playback
 - MicroSD Memory Card Slot Supporting Local Recording up to 128GB (H.264)
 - ICR Dual Filter Switch
 - · CS mount supported (Option: C-mount adaptor)
 - 120dB Dynamic Range with DOL (Digital Overlap) WDR @30/25fps
 - · Improved Noise Reduction with XD-DNR
 - · LDC (Lens Distortion Compensation)
 - Smart Stream, Rol (Region of Interest)
 - Enables Smart Processing of Video Data According to Users' Needs
 - Enables High Quality Video on Rol and Lower Quality Video on non-Rol
 - Lowers Overall Bandwidth and Reduces Storage Burden
 - Motion Detection, Privacy Masking, Defog, D-Zoom (~10x), Mirror/Flip, Sens-up (Slow shutter), Hue, Contrast, Brightness / Saturation, Sharpness
 - IP68 (VTD-MV8NZ311P, VTD-MV5NZ212P, VTC-IR8NZ4311P), IP67 (VTC-IR5NZ3212P)
 - Circuit Protection Protects Against Faulty Connection in Power Polarity
- Isolated Power Supply Protects Against Ground Loop Problems
- 12VDC, 24VAC and PoE Operation (Power over Ethernet, EEE Std. 802.3af)

?*Virtuoso

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Safety Precautions

To prevent electric shocks and risk of fire hazards, do NOT expose this unit to rain or use other than with the specified power source.





The symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the unit.

• Warning :

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution :

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Mains power quality should be that of a typical commercial environment. If the user of the model requires continued operation during power mains interruptions, it is recommended that the model be powered from an uninterruptible power supply (UPS) or a battery.

Safety Precautions

- The images used in this instruction manual are processed to help comprehension and may differ from actual video of the camera.
- Avoid installing in areas where there shock or vibration which results in problems.
- Pay attention to safety when laying the connection cable and observe that the cable is not subjected to heavy loads, kinks or damage and no moisture can get in.
- Never open the device such as boards or lens. The warranty becomes void if repairs are undertaken by unauthorized persons.
- Maintenance and repair have to be carried out only by authorized service centers.
- Use only a mild detergent to clean the housing body only but never for the clear bubble dome.
- The camera should never be operated beyond the technical specifications. This can lead to destruction.
- The camera should never be operated in water.

Composition - VTC-IR5NZ3212P



Camera



Mounting Template



Wiring Connector (1pc)



Mounting Screw: 4 x 1.58" 40mm (3pcs)

Torque Wrench: .12" 3mm (1pc) Quick Start Guide

Dimensions - VTC-IR5NZ3212P

unit : inches / (mm)





Part Names - VTC-IR5NZ3212P





- Extreme care should be taken NOT to scratch the surface of window while installing or adjusting the camera.
- Care should be taken so the cable is NOT damaged, kinked or exposed in a hazardous area.
- Do not expose the camera directly to a strong light source such as the sun or a spotlight.

- Position the mounting template at the installation location and drill the ceiling or wall if needed.
- 2. Route the cable and connect according to instructions below.
- Place the camera bracket on the pre-drilled position and attach it using mounting screws (4x40mm).
- 4. Set the camera's viewing angle.
- 5. Put the sunshield on the camera unit and tighten the sunshield-bolt.



Pan & Tilt adjustments

- Unlock the screw on the camera bracket using the torque wrench supplied.
- Set the camera's viewing angle then lock the screw on the bracket.

1) Pan limit:

Pan is limited to +/- 90°.

2) Tilt limit:

Tilt is limited to $0^{\circ}(2^{\circ})$ min ~ 90° max. for wall (ceiling) installation respectively with reference to the wall (ceiling) when the inclination of camera module is 0° , that is, the image is aligned horizontally.





3) Inclination limit

(Horizontal image alignment): Inclination limited to +/-90° max.







Adjustment of viewing angle with one-touch 3-Axis bracket

Installation Instructions

- Make sure the power is removed before installation.
- After all connections are properly finished, follow the order for applying power.
 a) Plug the network cable into RJ-45 Ethernet Port.

If PoE is the only power, there is no need to connect power terminal.

- b) When DC12V or AC24V local power is necessary, connect the low voltage (DC12V or AC24V) first, then plug the AC adapter to AC outlets to avoid an improper reset from a power spike and damage from the voltage surge with no load.
- When PoE and local dual power are connected at the same time, local power has priority.

Power Supply Connections

This camera can work with either 24AC or 12VDC, dual voltage power and PoE (IEEE Std. 802.3af). Primary and secondary grounds are completely isolated to avoid possible ground loop problems.



Composition VTC-IR8NZ4311P



Dimension VTC-IR8NZ4311P

unit : inches / mm



Part Names - VTC-IR8NZ4311P



Cover Opening Alarm and External Alarm Input :

Cover Opening Alarm and External Alarm Input are electrically tied together internally.

Alarm contact types, N.O or N.C are selectable by the Alarm Input Selection Jumper and the selection types should be matched with Alarm Type in setup menu.

When both the Cover Opening Alarm and External Alarm Input are used at the same time, the alarm contact types must match. Otherwise, the alarm malfunctions. When only the External Alarm Input is used with disabling Cover Opening Alarm, remove the jumper cap of Alarm Input Selection Jumper.

N.O : Alarm is generated when Junction box is OPEN.

N.C : Alarm is generated when Junction box is CLOSED.

Default setting for Alarm Input selection jumper is N.C. It prevents the Alarm from generating when Junction box is OPEN during installation. The alarm Input selection jumper should be set to N.O and Event Trigger/Action should be denied to enable Cover opening alarm.



For Cover Opening Alarm, please go to SETUP> Event Rules> Event Processing> Add Event Trigger should be set to "Alarm In" an Event Action should be set from the available options.

• Using Grommet :

Tear off the grommet caps and pull up the grommet so that the seal can wrap arund the cable properly as illustrated. If it doesn't wrap properly, it could cause water leakage problems.



• Using RJ45 Easy Cap for Network cable :



• Recommended cable length into the Junction box base :

- CABLE with RJ-45 Connector: 2.76~3.15"
- CABLE for Network Wiring Connector: .79~1.18" (excluding cable tripping section) 8P cable stripping distance: .79~1.18"
- Power CABLE: .79~1.18" (excluding cable tripping section) 8P cable stripping distance: .79~1.18"



Install the mount onto a strong structure.

Prepare the junction box base and the accessories for installation.

- (1) Locate the mounting template at the installation position and drill the wall if needed.
- ② Route the Power/Ethernet cables through the grommets from the wall. Insert the grommets into the Junction box base.
- ③ Place the Junction box base on the pre-drilled position and attach it using mounting screws (4 x 1.18" [30mm]).



④ Hook up the Power & I/O wires and Network cable to the connectors. Network cable can be connected to either RJ-45 connector or LSA connectors.



• Connections to LSA connectors



- Connections to RJ-45 connector
- (5) Attach the cable plate and tie the cable to it.



- (6) Assemble the Junction box top to the Junction box base using a hinge pin. Hinge can be inserted at either side for convinience.
- (7) Connect the Power/Ethernet cables from camera.



- (8) Set Alarm Input Selection Jumper. (Refer to 'Cover Opening Alarm and External Alarm Input' section)
- (9) Cover the Junction box top and tighten with assembly screws.(4pcs)

* Caution:

If screws are not firmly assembled, it could cause water leakage.



- 1 Set the camera's orientation and tighten the Lock/Unlock screws using hex wrench.
- (1) Open the side cover to insert the Micro SD memory or control the Zoom / Focus using the joystick.
- ② After adjusting the settings, close the side cover and tighten it.
- ③ Put the sunshield on the camera unit and tighten the sunshield bolt.



Adjustment of viewing angle with a bracket



- Extreme care should be taken NOT to scratch the surface of window during camera installation or adjusment.
- Care should be taken so the cable is NOT damaged, kinked or exposed in a hazardous area.
- Do not expose the camera directly to a strong light source such as the sun or a spotlight.

Pan & Tilt adjustments

- Unlock the screw on the camera bracket using the hex wrench supplied.
- Set the camera's viewing angle then lock the screw on the bracket.

1) Pan limit:

Pan is limited to +/- 90°.

2) Tilt limit:

Tilt is limited to $0^{\circ}(2^{\circ}) \min \sim 90^{\circ} \max$. for wall (ceiling) installation respectively with reference to the wall (ceiling) when the inclination of the camera module is 0° , that is, the image is aligned horizontally.







3) Inclination limit

(Horizontal image alignment): Inclination limited to +/-90° max.



Composition - VTD-MV5NZ212P / VTD-MV8NZ311P



Dimensions vtd-mv5Nz212P / vtd-mv8Nz311P

unit: inches / mm



Part Names - VTD-MV5NZ212P / VTD-MV8NZ311P



[BOTTOM VIEW]

ETHERNET & POWER CABLE



1. Position the mounting template at the installation location and drill the ceiling or wall if needed.

2. Open the dome cover by loosening screws (.16 x .47" / 4 x 12mm). Use the torque wrench supplied.

A. Flush mount type:

- Place the dome base unit on the pre-drilled position and attach it using mounting screws (16 x 1.18" / 4 x 30mm).
- Route the Power & Ethernet cable and connect accordingly.
- B. Surface mount type:
- Place the surface mount on the pre-drilled position and attach it using mounting screws(.16 x 1.18" / 4 x 30mm). Assemble the cable pipe, otherwise tighten a pipe hole cap with PM screw (.1 x .24" / 2.6 x 6mm).
- Route the Power & Ethernet cable and connect accordingly.
- Attach the dome base unit to the surface mount using the assembly screws
- (.16 x .55" / 4 x 14mm). Before securing the dome base make sure the assembly holes are aligned with the surface mount assembly holes.
- 4. Set the camera's viewing angle and focus.
- 5. Put the dome cover on the dome base unit and tighten the assembly screws.



Optional Mounting Accessories





 Tilted iunction mount











Tilted mount



CAUTION

- Extreme care should be taken NOT to scratch the bubble dome surface while installing or adjusting.
- · Care should be taken the cable is NOT damaged, kinked or exposed in a hazardous area.
- · Tighten the dome cover screws so that there should be NO gap between Lens hood and clear bubble to avoid light inflow from IR LEDs.



- In the case of installation with Flush/ Surface/ Tilted mount, IP protection rating is not guaranteed.
- If power, Video connectors are exposed to water or rain, separate protection shield is essential.

Option 1.

Installation with Flush mount / Tilted Junction mount

- ① Cables are unattached on the Dome base.
- 2 Disassemble coupler board for LAN cabling.
- ③ Connect the ethernet and power cables to their respective connections.
- Option 2.

Installation with Surface mount / Tilted mount

- 1 Cables are unattached on the Dome base.
- ② Organize the cables to attach the dome base as illustrated. Attach the power supply connector with screw.
- ③ Connect the ethernet cable to the coupler board.
- ④ Tie up the cables with the cable holders.
- (5) Check the final view for cable exit.
- 6 Connect the wiring connector to their respective connections.

* Refer to the signal assignment for wiring connection.



- In the case of installation with Flush / Surface / Tilted mount, IP protection rating is not guaranteed.
- If power, Video, Network connectors are exposed to water or rain, a separate protection shield is essential.

Limit of pan & tilt

1) Pan limit:

Pan is limited to +/- 173°.

Do force turn the gimbal over the limit to prevent internal damage.

2) Tilt limit:

Tilt is limited to 25° min ~ 90° max. with reference to the ceiling when the rotation of camera module is 0° , that is, the image is aligned horizontally.

 Rotation limit (Horizontal image alignment): Rotation is limited to +/-95° max.





- Extreme care should be taken NOT to scratch the bubble dome surface while installing or adjusting the camera.
- Care should be taken so the cable is NOT damaged, kinked or exposed in a hazardous area.
- Tighten the dome cover screws so that there is NO gap between the lens hood and clear bubble to avoid light inflow from IR LEDs.

Installation and commissioning Instructions

- Make sure the power is removed before installation.
- · After all connections are properly finished, follow the order for applying power.

- a) Plug the network cable into the RJ-45 Ethernet Port. If PoE is the only power, there will be no need to connect the Power terminal.
- b) When DC12V or AC24V local power is necessary, connect the low voltage (DC12V or AC24V) first, then plug the AC adapter to AC outlets to avoid an improper reset from a power spike and damage from the voltage surge with no load.

When PoE and Local dual power are connected at the same time, Local power has priority.

Power Supply Connections

This camera can work with either 24VAC or 12VDC, dual voltage power and PoE (IEEE Std. 802.3af). Primary and secondary grounds are completely isolated to avoid possible ground loop problems.



Attach the Signal Assignment Sticker in a visible spot for wiring reference.



Description of the ZOOM&FOCUS adjustment by Joystick

- 1) ▲ : Zoom In 3) ◀ : Focus Near
- 2) ▼ : Zoom Out 4) ► : Focus Far



JOY STICK for Zoom / Focus control

Composition - VTC-CB5N



Network Box Camera



Dust Protection Cap (1pc)



Torque Wrench: .12" (3mm) (1pc)



Quick Start Guide

Dimensions - VTC-CB5N

inches (mm)



Part Names VTC-CB5N





- IP Reset Button
- Alarm Input / Output terminal
- ③ Power Input terminal
- ④ RJ-45 Ethernet Port
- S Audio Input / Output Jack
- 6 SD Memory card Slot

Installation Instructions

- Make sure the power is removed before the installation.
- When PoE and Local dual power are connected at the same time, Local power has priority.
- Connect PoE(IEEE Std. 802.3af) or the power supply to the power terminal on the rear panel of camera first.
- Plug in the power adaptor.
 - 1. Remove the dust protection cap from the lens mount.
 - 2. Screw the lens onto the camera firmly.
 - 3. Plug the lens plug into the lens connector on the side of front case.
 - 4. Mount the camera to a wall or ceilling with a corresponding mounting bracket through the camera mount holes (1/4" thread insert) on its top or bottom.

- Care should be taken so the cable is NOT damaged, kinked or exposed in a hazardous area.
- Do not expose the camera directly to a strong light source such as the sun or a spotlight.

Power Supply Connections

The camera can work with PoE(IEEE Std. 802.3af) and either 24VAC or 12VDC, dual voltage power. It does NOT require the polarity-matched connection for 12VDC supply.

Primary and secondary grounds are completely isolated to avoid a possible ground-loop problem. Its wide operating voltage range of 10.5V-30V for DC and 12-28.8V for AC gives extra flexibility at installation.

Start up

When the camera is powered properly, it starts up with initializing the internal parameters.

Setup Menu table

Category	Menu	Configuration									
	Player Control	Pause, Snaps	Pause, Snapshot, Speaker, Microphone, Record								
		Display (Window Fit, Full Screen, Custom)									
LIVE VIEW	Video Stream	Stream1, Stre	Stream1, Stream2, Stream3								
	Protocol	HTTPS, HTTP, TCP, UDP									
	PTZ Contol	Zoom, Focus	Push AF								
PLAYBACK	Event Search, Ti	imeline Search, Timeline Bar									
	Information	General, Syst	em Informatic	on, Open source Information							
	Video & Image	Source									
		Stream1/2/3									
		Smart Stream	ROI(Region	Of Interest), Dynamic GOP							
		Image	Basic	Brightness, Contrast, Saturation, Hue, Sharpness, Enable flip image, Enable mirror image							
			OSD	Enable text OSD, Enable date&time OSD, Enable zoom&focus OSD							
			AE	Mode, Slow shutter, Auto Iris, Auto flicker-less, Shutter, Max. Shutter, Gain, Max. Gain							
			AWB	Mode, R Gain, Gr Gain, Gb Gain, B Gain							
SETUD			AF	Mode, Speed, Lens Locking, Loking Time Lens Calibration, Enable Day & Night sync focus							
SETU			Day&Night	Mode, Switching Time, Threshold							
			WDR	WDR(Mode, Level), Defog(Mode, Level)							
			BLC	BLC(Mode, Level), HLC(Mode)							
			DNR	3DNR(Mode, Level)							
			LDC	Mode, Level							
			VerticalView Mode, Rotation								
		Privacy Mask	Color, Name								
		Digital Zoom	Level								
		DIS	Enable								
	Audio	Compression, Audio auto ac	Sample rate, tivation on ON	Bitrate, Input Volume, Output Volume,							
	Record	Record	Overwrite wh	en storage is full, Continuous record setting							
		Schedule	Enable sched	luled record							
		Recycling	Enable Recyc	ling, Recycling Time Setting(Month, Day, Hour)							
		Storage	Format, Rem	nove, Storage Information							

	Event	Triggers	Motion, VCA, Alarm In, System, Manual, Network, Timer, Day/Night
		Actions	Record, Alarm Out, E-Mail, FTP, Video Boost, Notification Server
		Rules	Event Processing, ONVIF Mapping
	System	Security	User, HTTPS, IP Filter, ONVIF, Video Stream, Export/Import
SETUP		Date & Time	Current Time, New Time, Time Zone, Date & Time Display
		Network	TCP/IP, DDNS, RTP, UPnP, Zeroconf, Bonjour
		Language	English, Deutsch, Français, 한국어
		Maintenance	Maintain(Restart, Reset, Default), Upgrade, Setup Export, Setup Import
		Logs & Report	Logs (Database Capacity, Search Condition, Log List), Logs Server , Report
LOG OUT			

Network Control menu Setup

Log-in the Web-Viewer

- 1. After camera is connected with server, install the 'IP MANAGER' (enclosed CD), its control is available via WEB.
- 2. Make sure the server is connected before accessing IP MANAGER.
- 3. After installing, double clicking IP MANAGER's icon to start.
- 4. The Camera is automatically scanned when IP MANAGER is runnig.
- 5. If you double-click the model name on IP Manager, it goes to Login page.
- 6. Install Active-X. according to the instruction at the bottom of browser.

The default user name / password are 'admin'.

SYSTEM Requirements

- OS : Windows 7 or higher / MAC OS
- Web browser :
- MS Internet Explorer (Ver. 9 or higher)
- Mozilla Firefox : Windows Only
- Google Chrome : Windows Only
- Apple Safari : Mac OS X only
- Supports only officially released version.

VITEK	XXX-XXXXXXXXX-XX
A admin	
3	*
Jump to setup	
	login

Change IP Address

The default IP address of cameras are 192.168.1.10. If you want to change IP address, click right button of Mouse to access the control panel. Type the IP address to change and click OK button.

Stop Discov	very Refre	esh			Default Log	S/W Versior
😒 IP Mana	ager					×
	¢° A					م و
Mod	lel Name	IP Address	Zeroconf Address	MAC Address	Version	
VTC	-IR8NZ4212P	192.168.1.10	169.254.94.234		1.2.1.76	
VTC	-IR5NZ321	192.168.1.11	0.0.0.0		2.2.2.60-RC03	
VTD	-MV8NZ212P	192.168.1.23	169.254.247.12		1.2.1.76	
VTD	-MV5NZ212P	192.168.1.12	0.0.0.0		2.2.2.72-RC190926	
	D Change IP E Quick View. F Login G Maintenance H Upgrade	 e ▶	•	Obtain IP address Use the following IP Address:	via DHCP server IP address 192 . 168 . 1 . 1 255 255 255 (
	Web Browse	er		Subnet:	200 200 200 . 0	
				Gateway:	192 . 168 . 1 . 1 OK Cancel	
4 camer	a detected					EAL

X Change all connected cameras' IP addresses at once:

- 1) Click the models on the list with 'Shift key' then click right button of Mouse.
- 2) Open the Change IP control panel.
- 3) Type the IP address to change and click OK button.
- 4) Change all the selected camera IP addresses in serial order.

■ IP MANAGER description

- A Model Name: Show the connected camera models.
- (B) IP Adress: Show the IP adress of connected camera.
- © Version: Show the camera F/W version.
- D Change IP: Available to change IP.
- (E) Quick View: Available to have Quick View after Login.
- (F) Login: Available to Login (admin/admin) and then Quick View.
- G Maintenance: Factory default / Reset / Reboot are available.
- \bigcirc Upgrade: Upgrade is available.
- ① Web Browser: Go to Web browser.

1 I IVF VIFW

Enter the live view menu on the Web Viewer.

Web Viewer description



- A) Menu button : Click the button to show or hide the setup menu bar.
- B) Model name : Show a camera model name connected.

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- C) Select Language : Set the web viewer language English, Deutsch or French.
- D) Main setup menu bar : Set the camera or network functions.
- E) Camera monitoring window: Display the currently connected camera view or function.
- F) Log out and exit the web viewer



Window Fit

Full Screen

Custom

- (1) Pause : Pauses the live view.
- 2 Snapshot : Captures the image in .jpg format with the current stream resolution.
- (3) Speaker : Enables Audio to be output to the audio out port.
- (4) Microphone : Enables Audio to be input from the audio input port.
- (5) Record : Records the live video in H.264 format into the equipped storage memory like SD, SDHC & SDXC with the selected video stream at the RECORD menu.



- (6) Window Fit : Resizes the live view display to fit along with the display window size.
- ⑦ Full Screen: Resizes the live view display to fit to the monitor resolution. ESC key returns to the previous view.
- (8) Custom : Selects the live view display scale, 0%~200%, by the control bar. 100% is original size.

PTZ Control

Used to adjust zoom/focus manually or one-push focus automatically.

PTZ Control	
Zoom	
Focus	
	Push AF

- \bullet ZOOM : Controls the lens optical zoom in/out for WIDE & TELE.
- FOCUS : Adjusts the lens focus manually for NEAR & FAR.
- *PUSH AF : Gets the lens to focus at the push of a button.

- CAUTION
- Do not adjust zoom/focus in low light conditions or night mode. It might cause erroneous focusing.

Quick Setup

1-1. Information

Shows the overall information about the system such as Model name, MAC address, IP address, Zeroconf, IP address, Firmware version, Server time, Running time, CPU usage, Inbound/Outbound Bandwidth and Open source list.

	Information	
	SELOP / Information	
Information	General	X A C
Video & Image	Model	XXX-XXXXXXXXX
Audio	MAC Address	
Record	IP Address	192.168.0.12
PTZ	< Zeroconf IP Address	169.254.17.225
Event	< Firmware Version	5.2.X.X-XXX
System	*	
USER MANUAL	System Information	x ~ C

1-2. Users

Manages the user accounts by names, groups and authorities.

- > Mark ENABLE ANONYMOUS VIEWER LOGIN if anyone is permitted to login anonymously. Accessing SETUP menu with the anonymous login will exit and require ID/Password login.
- > USERS : Can be added, edited or deleted.

LIVE VIEW	Security setup / syst	tem / Securit	У				🖺 Save
SETUP V	Users	HTTPS	IP Filter	ONVIF	Video Stream	Export / Import	
Video & Image Audio	< Enab	le anonymous Name	viewer login	Group		Authority	
Record PTZ Event	< 1 <	admin		admin	Istrator	live, setup, system	
System Security Date & Time	·			Add	Edit Delete		

1-2-1. Add 1-2-2

	Add User	~		Edit User	
Name	Nerre		Nama	admin	
Password	Paterierd		Password	Paramet	
	1			1	
Confirm Password	Parameterit		Confirm Password	Password	
Group	pest	v	Group	administrator	39
	ptz				
	playback				DH Close
		Close			

Edit

To add a new user:

- 1. Click the Add tab and type a new username. (1 to 14 alphanumeric characters).
 - Usernames are not case sensitive.

- 2. Type a password and retype confirm password. (1 to 8 alphanumeric characters).
- Passwords are case sensitive.
- 3. Select one of the groups you wish to assign to the user and authority for PTZ and Playback.
- 4. Click the OK button to save the settings and add a new user

1-2-2. Edit

To edit a user:

- 1. Select one of the User Names in the User List you want to modify.
- 2. Click the Edit tab, then new pop-up window appears.
- 3. Type a password (1 to 8 alphanumeric characters) and retype confirm password.

• The user name can't be modified.

- 4. Select one of the groups you wish to assign to the user.
- 5. Click the OK button to save the settings and modify a user.

1-2-3. Delete

To delete a user:

- 1. Select one of the User Names in the User List you want to remove.
- 2. Click the Delete tab. A dialog box appears with confirmation message.
- 3. Click the OK button. The user profile is removed from the User List profile.

1-3. Date & Time

1-3-1. Current Time

Shows the current date and time. Clicking SAVE tap updates and saves the date and time with the selected time in NEW TIME.

1-3-2. New Time

Select one of the following server times.

- > SYNCHRONIZE WITH COMPUTER TIME : Obtains the time from the computer.
- > SET MANUALLY : Sets the date and time manually.
- > SYNCHRONIZE WITH NTP SERVER : Obtains the time from the assigned NTP server at every hour in INTERVAL. The NTP server's IP address or host name has to be specified in the time server.

1-3-3. Time Zone

Select the time zone to be referenced to the NTP server where the camera is installed. Mark AUTOMATICALLY ADJUST FOR DAYLIGHT SAVING CHANGES check box to update the time automatically with daylight savings.

1-3-4. Day & Time Display

Select the date & time formats to be displayed.

	* NOTICE : After settin to apply the viewer.	g, click the SAVE button	✓ Success × This request has been performed without error	
	LIVE VIEW	Date & Time		_
B	PLAYBACK	SETUP / System / Date & Time	🖺 Sav	e
۵	SETUP ~	Commit Theor		
	Information	Current Time	CAX	
	Audio	Date 01-01-1970	Time 23:57:25	
	Record			
	PTZ <	New Time	С л ж	e.
1	System ~	Synchronize with computer time		
	Security	Date 13-01-2016	Time 17:04:23	
	Network	Set manually		
	Language	Date 🗎 01-01-1970	Time O 23:57:10	
	Maintenance	Synchronize with NTP server		
	and an appre	Server 0.pool.ntp.org	Interval [Hour]	
=				
¢	LOG OUT	Time Zone	C ^ ×	1

1-4. Network

The DHCP (Dynamic Host Configuration Protocol) server has a feature that automatically assigns an IP address to the device if there is a device on the network.

- > IPv4 ADDRESS :
 - OBTAIN IP ADDRESS VIA DHCP : Gets the IP address assigned by the DHCP(Dynamic Host Configuration Protocol) server.
 - STATUS : 'Allocated' shows that the IP address is obtained from the DHCP.
 - IP ADDRESS, SUBNET MASK, GATEWAY : Displays the current IP address which is obtained from the DHCP.
 - USE THE FOLLOWING ADDRESS : Requires the input of a static IP address manually.
- > IPv6 ADDRESS : Mark ENABLE check box to use IPv6 address and click SAVE button, then new IPv6 address will be obtained.
- > DNS :
 - OBTAIN DNS ADDRESS VIA DHCP SERVER : Obtains the DNS address automatically assigned by DHCP server.
 - USE THE FOLLOWING DNS ADDRESS : Requires manual input as per below.
 - DOMAIN NAME : Enter the domain for the host name
 - PRIMARY DNS SERVER : Enter the IP address of the primary DNS server.
 - SECONDARY DNS SERVER : Enter the IP address of the secondary DNS server.

	LIVE VIEW	Network SETUP / System / N	letwork							B Save
۵	₿ SETUP ~	700/00 000					0-0	7	Benleur	
			NS 1	RIP		U	PNP	Zerocont	Boulour	
		IDud Address								
		IFV4 Address								
		📀 Obtain IP a	address via	DH	CP sei	rve	r			
		Status			All	loca	ted			
	Event <	IP address	192		168		0	87		
/	Security	Subnet mask	255		255		255	0		
		Gateway	192		168		0	1		
	Network Language	Use the fol	llowing IP a	add	ress					
	Maintenance									

Upgrading the Firmware

Firmware is software that determines the functionality of the network camera. One of your first actions when troubleshooting a problem should be to check the current firmware. The latest version may contain a correction that fixes your particular problem. The current firmware version in your camera is displayed on the Basic Configuration or About. For the latest firmware of the camera, please contact with your product administrator.

Detailed instructions on how to perform the upgrade process are provided with each new release. See Maintenance / Upgrade for more information.

Detailed Specifications: VTC-IR5N	23212P				
Imaging Sensor	1/2.8" Sony 5.69 MegaPixel Sony STARVIS® CMOS Progressive Scan Sensor*				
Effective Pixels	2592(H) x 1944(V)				
S/N Ratio	51 dB				
IR LEDs / Range	30 850nm Dynamic Intensity IR LEDs / 100'				
Lens	F=2.7~12mm Motorized Zoom Lens				
Day/Night	ICR by Auto, Day, Night, External, Color D/N				
Auto Exposure	Automatic (Priority: Frame rate/Low noise), Manual				
Shutter Speed Control	Automatic: Min. 1/10,000 sec ~ Max.1/30 sec, Manual: Min. 1/10,000 sec ~ Max.1/30 sec				
Gain Control	Automatic: ~ Max. 54dB / Manual: ~ Max. 54dB (default: 1.2dB)				
Auto White Balance Mode	ATW-Indoor/Outdoor, Shade, Clear sky, Fluorescent light, Light bulb, Flame, Manual				
DOL WDR	120dB Dynamic Range with Digital Overlap by Triple Scan Images at 30/25fps				
DNR	XD-DNR (2D-NR, 3D-NR)				
Functions	Motion Detection, Privacy Mask, Defog, D-Zoom(~x10), Mirror/Flip, Sens-up(Slow shutter), Brightness, Contrast,				
	Saturation, Sharpness, Hue, LDC, Vertical View (90°/270°)				
Installation Temp., Operating Temp.	-4°F~122°F (-20°C ~ +50°C) / Humidity : 20%RH ~ 80%RH, -4°F~122°F (-20°C ~ +50°C) / Humidity : 20%RH ~ 80%RH				
Dimensions	3.17" W x 3.43" H x 9.72" L (80.5 x 87 x 247mm)				
Weight	1.98lbs (900g)				
Ingress Protection	IP-67				
Housing	Aluminum Cast, Dual window, Fan & Optimized Cooling system, One Touch 3-Axis Locking Bracket				
Power Input	PoE(IEEE Std. 802.3af), DC12V/AC24V				
Pwr Consump. (12VDC, 24VAC) (PoE)	350mA (IR Off) / 1010mA (IR On), 175mA (IR Off) / 505mA (IR On) (8.5 Watts)				
NETWORK SPECIFICATIONS					
Video Compression	H.265 Main profile, H.264(High, Main, Base line profile) MJPEG				
Video Resolution	2592x1944, 560x1440, 2048x1536, 1920x1080, 1280x1024, 1280x720, 704x480, 704x576, 640x480, 352x288, 320x240				
Video Frame Rate	Up to 30@2592x1944px				
Video Streaming	Simultaneous H.265 and MJPEG (Quad Streaming) or Simultaneous H.264 and MJPEG (Quad Streaming) Independent				
	Frame Rate and Bandwidth Control, VBR/CBR Mode				
FTP Uploading	MJPEG Still Image				
Login Authority	Administrator, Operator, Guest				
Security	Multi User Authority, IP Filter, HTTPS, Vid. Stream, Export/Import				
Network Time Sync.	Synchronize Computer/NTP Server, Manual				
Software Reset	Restart, Reset, Factory Default				
Auto Recovery	Backup, Restore				
Remote Upgrade	Using Web Browser				
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour				
Client Software	Built-In Web, ONVIF Compatible 3rd Party VMS				
SD Memory Card	Slot for 128GB Micro SD Memory Card (H.264 recording)				
SDK Support	API, ONVIF Profile S and T Compliant				
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Detailed Specifications: VTC-IR8N	Z4311P
Imaging Sensor	1/2.5" 8.29 MP [4K] RGB Bayer Array Sony CMOS STARVIS® Progressive Scan Sensor*
Effective Pixels	3840(H) x 2160(V)
Sensitivity	Color : 0.2 Lux, B/W : 0.02 Lux (Sens-up OFF)
S/N Ratio	51dB
IR LEDs / Range	40 850nm Dynamic Intensity IR LEDs / 150'
Lens	F=3.6 ~ 11mm F1.5, 3x Motorized Zoom Lens
Day/Night	ICR by Auto, Day, Night, External, Color D/N
Auto Exposure	Automatic (Priority: Frame Rate/Low Noise), Manual
Shutter Speed Control	Automatic: Min. 1/10,000 sec ~ Max.1/30 sec, Manual: Min. 1/10,000 sec ~ Max.1/30 sec
Gain Control	Automatic: ~ Max. 39dB / Manual: ~ Max. 39dB
Auto White Balance Mode	ATW-Indoor/Outdoor, Shade, Clear sky, Fluorescent light, Light bulb, Flame, Manual
DOL WDR	120dB Dynamic Range with Digital Overlap by Triple Scan Images at 30/25fps
DNR	XD-DNR (2D-NR, 3D-NR)
Functions	Motion Detection, Privacy Mask, Defog, D-Zoom(~x10), Mirror/Flip, Sens-up(Slow shutter), Brightness, Contrast,
	Saturation, Sharpness, Hue, LDC, Vertical View (90°/270°)
Installation Temp., Operating Temp.	-4°F~122°F (-20°C ~ +50°C) / Humidity : 20%RH ~ 80%RH, -40°F ~ +122°F (-40°C ~ +50°C) / Humidity: 20%RH ~ 80%RH
Dimensions. w/ J-Box, w/out, Weight	4.35" W x 5.14" H x 11.81" L (110.5 x 130.5 x 300mm), 4.35" W x 4.33" H x 10.11" L (110.5 x 110 x 260mm) 3.64lbs (1.65kg)
Ingress Protection	IP68
Housing	Cast Aluminum, Dual window, Fan & Optimized Cooling system, One Touch 3-Axis Locking Bracket & Junction Box
Power Input	PoE(IEEE Std. 802.3af), DC12V/AC24V
Pwr Consump. 12VDC, 24VAC, (PoE)	580mA (IR Off) / 1100mA (IR On), 290mA (IR Off) / 550mA (IR On) (11 Watts)
NETWORK SPECIFICATIONS	
Video Compression	H.265:+, Main, H.264:+, High, Main, Base, & MJPEG
Video Resolution	3840x2160(4K), 2592x1520, 1920x1080, 1600x900, 1280x720, 960x540, 640x360, 320x180
Video Frame Rate	Up to 30/25fps@3840x2160p
Video Streaming	Simultaneous H.265 and MJPEG (Quad Streaming) or Simultaneous H.264 and MJPEG (Quad Streaming)
	Independent Frame Rate and Bandwidth Control, VBR/CBR Mode
FTP Uploading	MJPEG Still Image
Login Authority	Administrator, Operator, Guest
Security	Multi User Authority, IP Filter, HTTPS Video Stream, Import/Export
Network Time Sync.	Synchronize Computer/NTP Server, Manual
Software Reset	Restart, Reset, Factory Default
Auto Recovery	Backup, Restore
Remote Upgrade	Using Web Browser
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software	Built-In Web, ONVIF Compatible 3rd Party VMS
SD Memory Card	Slot for 128GB Micro SD Memory Card (H.264 recording)
Audio & Alarm	2-way Audio** & Alarm Input / Output
SDK Support	API, ONVIF Profile S and T Compliant

Detailed Specifications: VTD-MV5NZ212P			
Imaging Sensor	1/2.8" 5.69 MeoaPixel Sonv STARVIS® CMOS Progressive Scan Sensor*		
Effective Pixels	2704(H) x 2104(V)		
Sensitivity	Color: 0.2 Lux, B/W : 0.02 Lux (Sens-up OFF)		
S/N Ratio	51dB		
IR LEDs / Range	2 Hi Pwr 850nm IR LEDs / 100'		
Lens	F=2.7 ~ 12mm Motorized zoom lens		
Day/Night	ICR by Auto, Day, Night, External, Color D/N		
Auto Exposure	Automatic (Priority: Frame rate/Low noise), Manual		
Shutter Speed Control	Automatic: Min. 1/10,000 sec ~ Max.1/30 sec, Manual: Min. 1/10,000 sec ~ Max.1/30 sec		
Gain Control	Automatic: ~ Max. 54dB / Manual: ~ Max. 54dB (default: 1.2dB)		
Auto White Balance Mode	ATW-Indoor/Outdoor, Shade, Clear Sky, Fluorescent Light, Light Bulb, Flame, Manual		
DOL WDR	120dB Dynamic Range w/ Digital Overlap with Triple Scan mages @30/25fps		
DNR	XD-DNR (2D-NR, 3D-NR)		
Functions	Motion Detection, Privacy Mask, Defog, D-Zoom(~x10), Mirror/Flip, Sens-up(Slow shutter), Brightness, Contrast,		
	Saturation, Sharpness, Hue, LDC, Vertical View (90°/270°)		
Installation and Operating Temp.	-4°F~122°F (-20°C ~ +50°C) / Humidity : 20%RH ~ 80%RH		
Dimensions, Weight	5.51" W x 4.69" H x 3.94" Diameter (140 x 119 x 100mm), 2.2lbs (1kg) w/out Surface Mount		
Ingress Protection	IP68 / IK10		
Housing	Aluminum Cast, Flush and Surface Mount, 3-Axis Gimbal, Double Sided Anti-Scratch Hard Coated Clear Bubble		
Power Input	PoE(IEEE Std. 802.3af), DC12V/AC24V		
Pwr Consump. 12VDC, 24VAC, (PoE)	350mA (IR Off) / 850mA (IR On), 175mA (IR Off) / 425mA (IR Off), (7.5 Watts)		
NETWORK SPECIFICATIONS			
Video Compression	H.265 Main profile, H.264 (High, Main, Base line profile) MJPEG		
Video Resolution	2592x1944, 2560x1440, 2048x1536, 1920x1080, 1280x1024, 1280x720, 704x480, 704x576, 640x480, 352x288, 320x240		
Video Frame Rate	Up to 30@2560x1440p		
Video Streaming	Simultaneous H.265 and MJPEG (Quad Streaming) or Simultaneous H.264 and MJPEG (Quad Streaming), Independent		
	Frame Rate and Bandwidth Control, VBR/CBR Mode		
FTP Uploading	MJPEG Still Image		
Login Authority	Administrator, Operator, Guest		
Security	Multi User Authority, IP Filter, HTTPS, Vid. Stream, Export/Import		
Network Time Sync.	Synchronize Computer/NTP Server, Manual		
Software Reset	Restart, Reset, Factory Default		
Auto Recovery	Backup, Restore		
Remote Upgrade	Using Web Browser		
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour		
Client Software	Built-In Web, ONVIF Compatible 3rd Party VMS		
SD Memory Card	Slot for Micro SD Memory Card (H.264 recording)		
Audio & Alarm	2-Way Audio** & Alarm Input / Output		
SDK Support	API, ONVIF Profile S and T Compliant		

Detailed Specifications: VTD-MV8N	IZ311P
Imaging Sensor	1/2.5" 8.29 MP [4K] RGB Bayer Array CMOS Sony STARVIS® Progressive Scan Sensor*
Effective Pixels	3840(H) x 2160(V)
Sensitivity	Color: 0.2 Lux, B/W: 0.02 Lux (Sens-up OFF)
S/N Ratio	51dB
IR LEDs / Range	2 Hi Pwr 850nm IR LEDs / 100'
Lens	F=3.6~11mm F1.5, 3x Motorized Zoom Lens
Day/Night	ICR by Auto, Day, Night, External, Color D/N
Auto Exposure	Automatic (Priority: Frame rate/Low noise), Manual
Shutter Speed Control	Automatic: Min. 1/10,000 sec ~ Max.1/30 sec , Manual: Min. 1/10,000 sec ~ Max.1/30 sec
Gain Control	Automatic: ~ Max. 39dB / Manual: ~ Max. 39dB
Auto White Balance Mode	ATW-Indoor/Outdoor, Shade, Clear sky, Fluorescent light, Light bulb, Flame, Manual
DOL WDR	120dB Dynamic Range w/ DOL: 3x Scan Images @ 30/25fps
DNR	XD-DNR (2D-NR, 3D-NR)
Functions	Motion Detection, Privacy Mask, Defog, D-Zoom(~x10), Mirror/Flip, Sens-up(Slow shutter), Brightness, Contrast,
	Saturation, Sharpness, Hue, LDC, Vertical View (90°/270°)
Installation Temp., Operating Temp.	-4°F~122°F (-20°C ~ +50°C) / Humidity : 20%RH ~ 80%RH, -40°F~122°F (-40°C ~ +50°C) / Humidity : 20%RH ~ 80%RH
Dimensions, Weight	5.51" W x 4.69" H x 3.94" Diameter (140 x 119 x 100mm), 2.2lbs w/out Surface Mount (1kg)
Ingress Protection	IP68 / IK10
Housing	Aluminum Cast, Flush and Surface Mount, 3-Axis Gimbal, Double Sided Anti-Scratch Hard Coated Clear Bubble
Power Input	PoE(IEEE Std. 802.3af), DC12V/AC24V
Pwr Consump. 12VDC, 24VAC, (PoE)	570mA (IR Off) / 1080mA (IR On), 285mA (IR Off) / 540 (IR On), (8.5 Watts)
NETWORK SPECIFICATIONS	
Video Compression	H.265:+, Main, H.264:+, High, Main, Base, & MJPEG
Video Resolution	3840x2160(4K), 2592x1520, 1920x1080, 1600x900, 1280x720, 960X540, 640x360, 320x180
Video Frame Rate	Up to 30/25fps@3840x2160p
Video Streaming	Simultaneous H.265 and MJPEG (Quad Streaming) or Simultaneous H.264 and MJPEG (Quad Streaming), Independent
	Frame Rate and Bandwidth Control, VBR/CBR Mode
FTP Uploading	MJPEG Still Image
Login Authority	Administrator, Operator, Guest
Security	Multi User Authority, IP Filter, HTTPS Video Stream, Import/Export
Network Time Sync.	Synchronize Computer/NTP Server, Manual
Software Reset	Restart, Reset, Factory Default
Auto Recovery	Backup, Restore
Remote Upgrade	Using Web Browser
Protocol	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, FTP, UPnP, RTP, RTSP, RTCP, DHCP, ARP, Zeroconf, Bonjour
Client Software	Built-In Web, ONVIF Compatible 3rd Party VMS
SD Memory Card	Slot for 128GB Micro SD Memory Card (H.264 recording)
Audio & Alarm	2-way Audio** & Alarm Input / Output
SDK Support	API, ONVIF Profile S and T Compliant

Detailed Specifications: VTC-CB5N	
Imaging Sensor	1/2.8" 5.69 MegaPixel Sony STARVIS CMOS® Progressive Scan Sensor*
Effective Pixels	2704(H) x 2104(V)
S/N Ratio	51dB
Lens	CS Mount Lens Support (Option: C-mount adaptor)
IR Input	N/A
Day/Night	ICR by Auto, Day, Night, External, Color D/N
Auto Exposure	Automatic (Priority: Frame Rate/Low Noise), Manual
Shutter Speed Control	Automatic: Min. 1/10,000 sec ~ Max.1/30 sec, Manual: Min. 1/10,000 sec ~ Max.1/30 sec
Gain Control	Automatic: ~ Max. 54dB / Manual: ~ Max. 54dB (Default: 1.2dB)
Auto White Balance Mode	ATW-Indoor/Outdoor, Shade, Clear sky, Fluorescent light, Light bulb, Flame, Manual
DOL WDR	120dB Dynamic Range with Digital Overlap by Triple Scan Images at 30/25fps
DNR	XD-DNR (2D-DNR, 3D-DNR)
Functions	Motion Detection, Privacy Mask, Defog, D-Zoom(~x10), Mirror/Flip, Sens-up(Slow shutter), Brightness, Contrast,
	Saturation, Sharpness, Hue, LDC, Vertical View (90°/270°)
Operating Temp.	14°F~122°F (-10°C ~ +50°C) / Humidity : 20%RH ~ 80%RH
Dimensions	2.99" W x 2.83" H x 3.5" L (76 x 72 x 89mm)
Weight	.66lbs (300g)
Housing	Aluminum Cast
Power Input	PoE(IEEE Std. 802.3af), AC24V/DC12V
Pwr Consump. (12VDC, 24VAC)	350mA, 175mA
Pwr Consump. (PoE)	4.5W
NETWORK SPECIFICATIONS	
Video Compression	H.265 Main profile, H.264(High, Main, Base Line Profile) MJPEG
Video Resolution	2592x1944, 2560x1440, 2048x1536, 1920x1080, 1280x1024, 1280x720, 704x480, 704x576, 640x480, 352x288, 320x240
Video Frame Rate	Up to 30@2592x1944px
Video Streaming	Simultaneous H.265 and MJPEG (Quad Streaming) or Simultaneous H.264 and MJPEG (Quad Streaming) Independent Frame Rate
	and Bandwidth Control, VBR/CBR Mode MJPEG Still Image,
FTP Uploading	MJPEG Still Image
Login Authority	Administrator, Operator, Guest
Security	Multi User Authority, IP Filter, HTTPS, Vid. Stream, Export/Import Synchronize Computer/NTP Server, Manual
Network Time Sync.	Restart, Reset, Factory Default
Software Reset	Backup, Restore
Auto Recovery	Using Web Browser
Remote Upgrade	TCP/IP, UDP, IPv4/v6, HTTP, HTTPS, FTP, UPnP, RTP,
Protocol	RTSP, RTCP, DHCP, ARP, Zeraconf, Bonjour
Client Software	Built-In Web, ONVIF Compatible 3rd Party VMS
SD Memory Card	Slot for Micro SD Memory Card (H.264 recording)
Audio & Alarm	2-Way Audio** and Alarm Input / Output
SDK Support	API, ONVIF Profile S and T Compliant
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Optional Mounts and Accesories for Vitek Virtuoso Cameras



VT-MV/WMT Wall Mount for Select AFZ Dome Cameras



VT-MV/PLMT

Pole Adapter for AFZ Dome Cameras and Premium IRM & IR Network AFZ Bullets --Use with VT-MV/WMT in Dome Applications



VT-MV/TB

Tilted 15 Degree Wall Mount Base for Select AFZ Dome Cameras

VT-MV/JMT Junction Mount for Select AFZ Dome Cameras w/15 Degree Tilt



VT-MV/SB Surface Mount Base for Select AFZ Dome Cameras



LIMITED PRODUCT WARRANTY

VITEK products carry a three (3) year limited warranty. VITEK warrants to the purchaser that products manufactured by VITEK are free of any rightful claim of infringement or the like, and when used in the manner intended, will be free of defects in materials and workmanship for a period of three (3) years, or as otherwise stated above, from the date of purchase by the end user. This warranty is nontransferable and extends only to the original buyer or end user customer of a VITEK Authorized Reseller.

The product must have been used only for its intended purpose, and not been subjected to damage by misuse, willful or accidental damage, caused by excessive voltage or lightning.

The product must not have been tampered with in any way or the guarantee will be considered null and void.

This guarantee does not affect your statutory rights.

Contact your local VITEK Reseller should servicing become necessary.

VITEK makes no warranty or guarantee whatsoever with respect to products sold or purchased through unauthorized sales channels. Warranty support is available only if product is purchased through a VITEK Authorized Reseller.



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