

TFT LCD MONITOR

USER MANUAL

IP-16 Series V5.

L101IP16. L156IP16

L215IP16. L238IP16. L270IP16

L320IP16. L420IP16. L460IP16

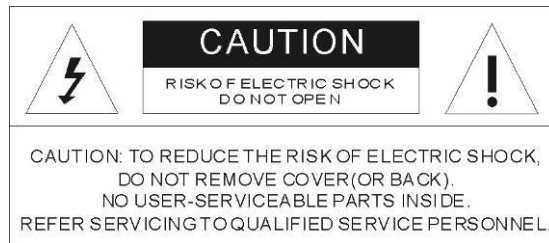


1. WARNING:

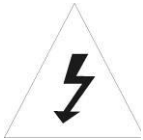
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION:



Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, 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 people.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Precautions

Safety-----

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat built-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

Installation-----

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust or mechanical vibration.

The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

Cleaning-----

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

2. Safety Precautions

Federal Communications Commission (FCC) Statement

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

- You are cautioned that changes or modifications not expressly approved by that party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received including interference that may cause undesired effects.

About this user manual

This manual aims at assisting the user on how to operate the monitors described in this manual.

This manual is subject to rigid quality control. However, no guarantee can be given that mistakes are not present. We reserve the right to make changes to the manual without prior notice.

Before operating the appliance, please read this manual carefully and retain it for further reference. Verify that all appliance items are included in the delivery. Should items be missing, do not operate the appliance and contact your local dealer.

Never attempt to repair the appliance yourself. This should only be done by qualified service personnel.

Improper handling of the appliance will invalidate the warranty.

Package List

A. LCD IP Monitor	x 1
B. Power Cord	x 1
C. User Manual	x 1
D. 12V Power Adapter	x 1 [Except for the 32"/42"/46"]
E. USB Mouse	x 1

Features

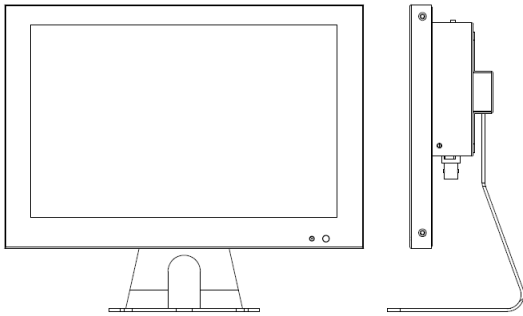
- H.264/H.265 compression format
- Support Max.5MP IP camera.
- Graphical and text interfaces (GUI)
- Use Ethernet connection control.
- Support HDMI/VGA/DVI-D input.
- Supports Max. 16CH/32CH network cameras via HUB/Switch (Not supplied).
- Supports ONVIF compliance, Real Time Streaming Protocol
- Protectable Metal casing. VESA standard.

3. LCD Monitor Mounting Guide

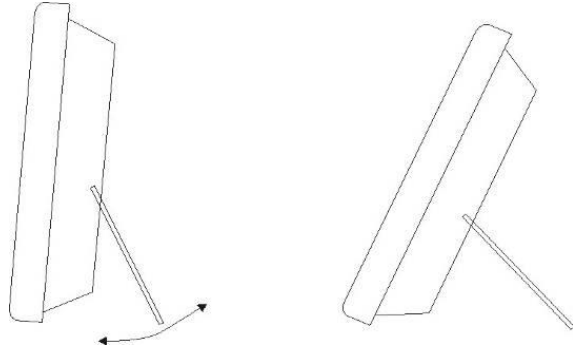
A. Desktop

Adjust the viewing angle of LCD to fit most comfortable monitoring status.

10.1"



15.6"/21.5"/23.8"/27"

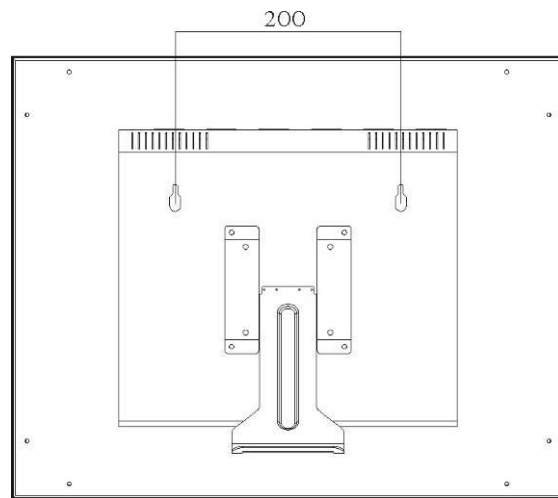


B. Wall mount

Free your space with wall mount design.

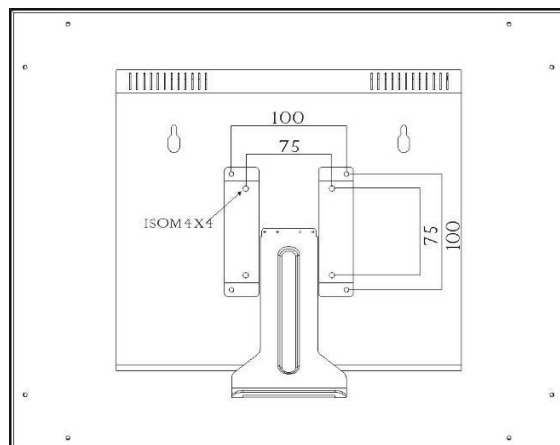
Please follow the fix-hole size in back panel to install the LCD to the wall.

15.6"/21.5"/23.8"/27"

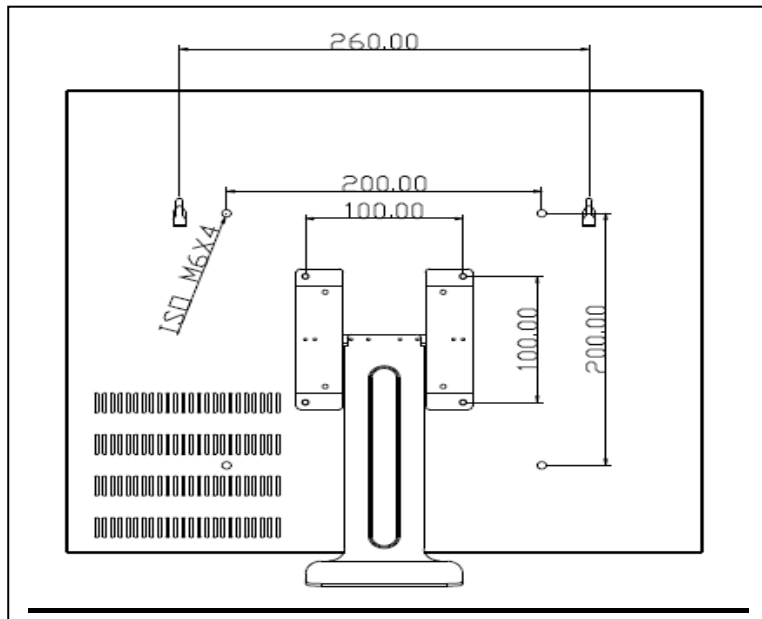


C. VESA Bracket

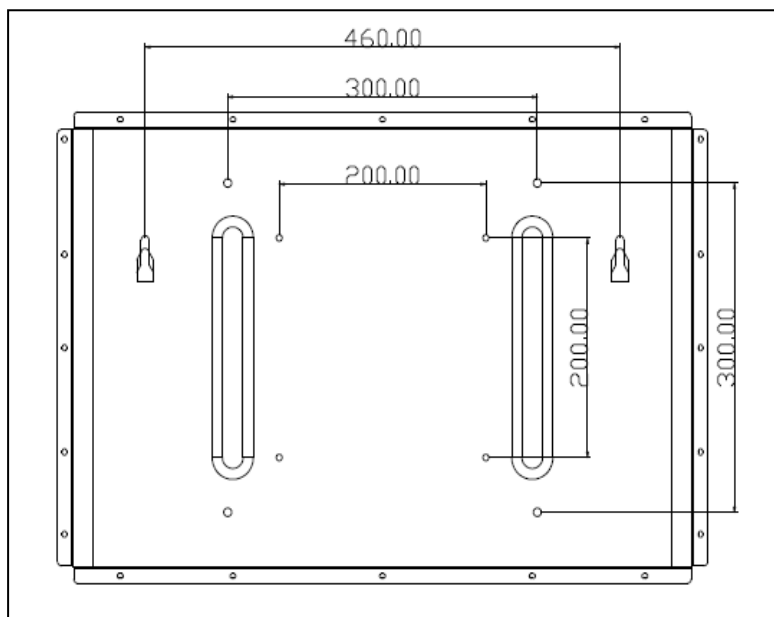
10.1"(75x75) 15.6"/21.5"/23.8"/27"



VESA Bracket: 32"

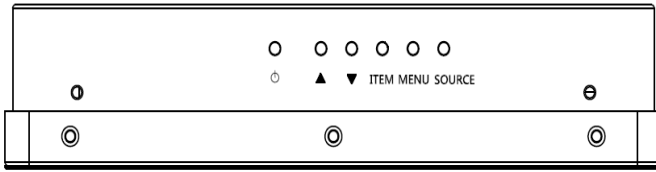


VESA Bracket: 42"/43"/46"

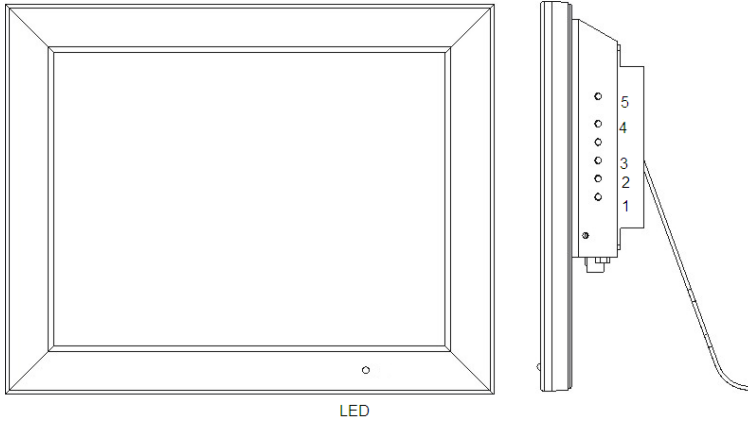


4. Monitor Controls

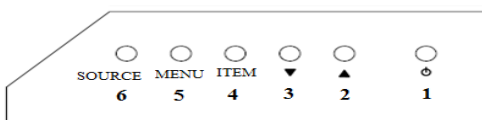
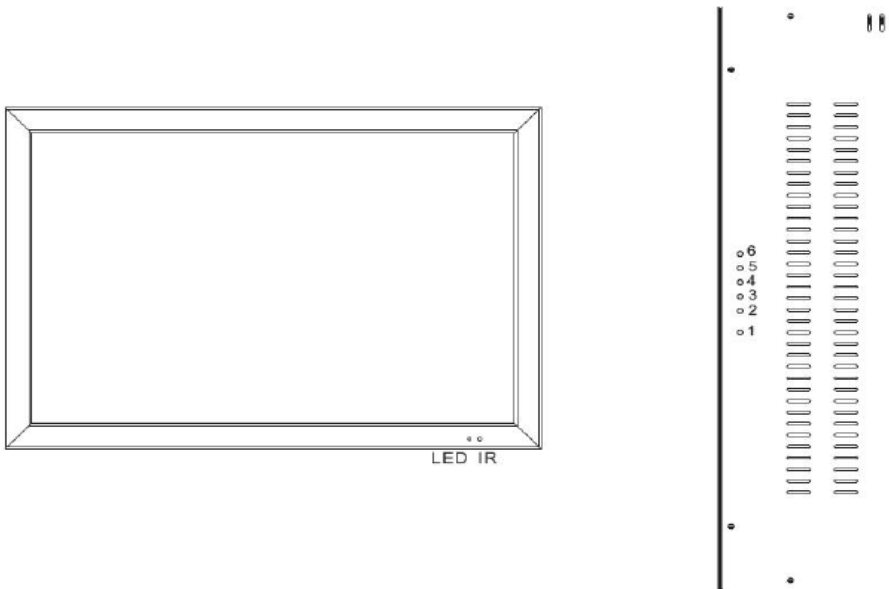
10.1"



15.6" /21.5" /23.8" /27"



32" /42" /46"



Key Board

1. Power

Push to turn on and turn off the unit.

LED Green light: Power on

LED Red light: Standby mode.

2. / 3. Adjust UP /DOWN

UP: Used as UP function. Or Increase value on the OSD Menu.

And as a hot key for colour adjust function.

DOWN: Used as DOWN function. Or Decrease value on the OSD Menu.

And as a hot key for auto adjust function.

4. Item:

Hot key for OSD adjustments of Volume, Contrast, Brightness, and Red, Green, Blue.

5. Menu

Push to call out OSD menu. Or Used as Confirm function in OSD Menu.

6. Source

Select input signal from D-SUB, HD, DVI, and IP.

KEY Lock Function:

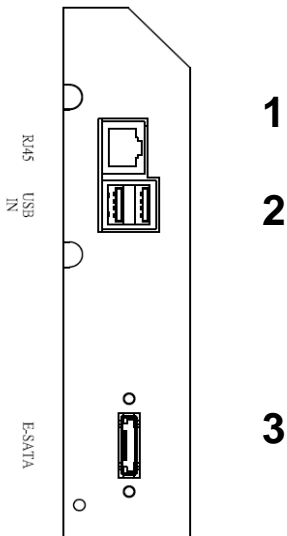
Push "Menu" and "Item", OSD of screen will show "Key Lock on", Into key lock mode.

And push again, OSD of screen will show "Key Lock off ", into key unlock mode.

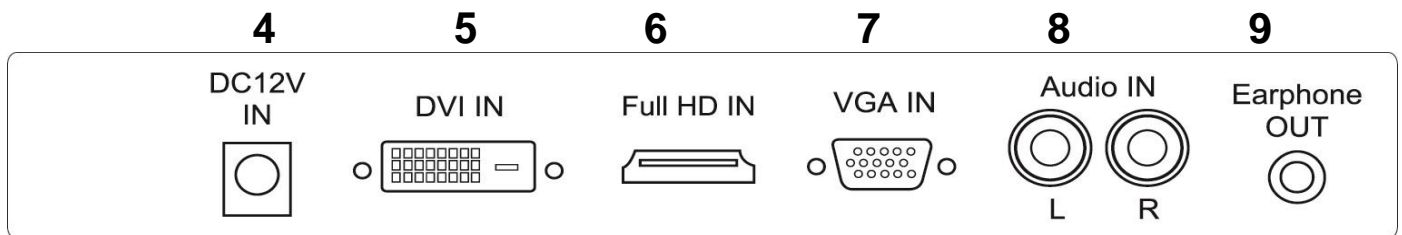
5. Connections: HDVS IP Series

10.1" /15.6" /21.5" /23.8" /27"

Side



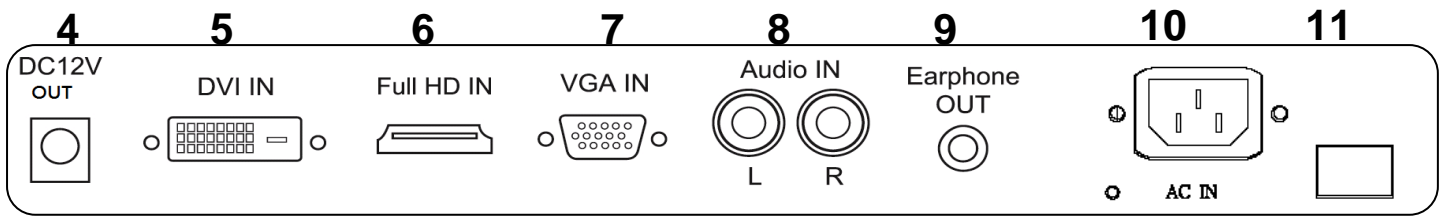
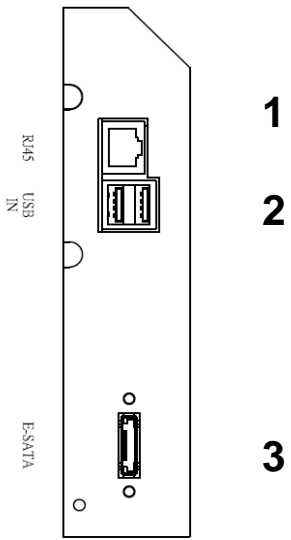
Bottom



- 1: RJ-45 (Ethernet Interface)
- 2: USB IN *2 (USB Mouse/Record Backup Connector)
- 3: e-SATA
- 4: DC 12V IN
- 5: DVI IN
- 6: Full HD IN
- 7: VGA IN
- 8: AUDIO L/R IN
- 9: Earphone OUT

32" /42" /43" /46"

Side



- 1: RJ-45 (Ethernet Interface)
- 2: USB IN *2 (USB Mouse/Record Backup Connector)
- 3: e-SATA
- 4: DC 12V OUT(1A)
- 5: DVI IN
- 6: Full HD IN
- 7: VGA IN
- 8: AUDIO L/R IN
- 9: Earphone OUT
- 10: Power Cord
- 11: Power Switch

6. LCD OSD Function

Colour Image Setting OSD Menu Signal Source Audio Misc. Back

Colour:

Contrast

Adjust background black level of the screen image.

Brightness

Adjust foreground white level of the screen image.

Colour Adjust

Adjust Red, Green, Blue, colour deepness for Users.

Colour Temp

Adjust colour temperatures for users.
9300, 6500, 5800, sRGB, USER

Back

Exit OSD menu.

Image Setting:

Clock

Adjust image distortion appearing as vertical or “noise” on the screen.

Phase

Adjust image distortion appearing as horizontal or “noise” on the screen.

Sharpness

Adjust the clarity and focus of the screen images.

H. Position

Move the screen image left or right.

V. Position

Move the screen image up and down.

Back

Exit OSD menu.

OSD Menu:

OSD H. Pos

Move the OSD menu position left or right.

OSD V. Pos

Move the OSD menu position up or down.

OSD Timer

Set the OSD menu display time.

Language

Select the desired language as English, French, German, Spanish, Traditional Chinese Simplified Chinese, and Japanese.

Back

Exit OSD menu.

Signal source.

Select the input signal VGA, HD, DVI, and IP.

Back
Exit OSD menu.

Audio

Volume
Control built-in speakers' output Volumes.

Mute
Disable the unit's sound output.

Back
Exit OSD menu.

Misc:

Auto Adjust
Adjust the best image.

Colour Adjust
Adjust the best image colour.

Reset
Return to factory default setting.

Screen saver.
Use the manual buttons to on/off the screen saver.

Back:
Exit the OSD menu.

7. PC Timing

Mode	Resolution
1	800*600@60
2	800*600@72
3	800*600@75
4	1024*768@60
5	1024*768@70
6	1024*768@75
7	1280*1024@60
8	1280*1024@75
9	1360*768@60
10	1920*1080@60

8. Specification

Monitor model	L101IP16	L156IP16
LCD panel	10.1"	15.6"
Visible area (mm)	216.96 x 135.60	344.1 x 193.5
Picture format	16 :10	16: 9
Max. resolution	1280 x 800	1920 x 1080
Pixel dot pitch (mm)	0.0565x 0.1695	0.17925 x 0.17925
Colours	16.2M	262K
Brightness	350 cd/m ² [LED]	300 cd/m ² [LED]
Contrast	800 :1	600 :1
Response time (Tr/Tf)	10/15ms	3/8ms
View angle (U/D/L/R)	85/85/85/85	60/60/70/70
Full HD input	1 x Full HD	
Audio input(R/L)	2 x (RCA)	
PC input	1 x VGA input 1 x DVI-D input	
Earphone out	1 x Phone jack ,3.5ψ	
Speaker	2 x built-in speaker (2 watt)	
IP Video support	Split Resolution: 8M / 1080P / D1	
OSD setting	Yes	
Network Port	1 x RJ45, 10M/100M	
USB Port	2 x USB 2.0 ports	
HDD Port	1 x e-SATA port	
Power input	AC 100-240V 50/60Hz, Adapter DC 12V/5A	
Power consumption	Approx. 12 watts	Approx. 15 watts
Dimensions (WxHxD) mm	255.1 x 173.6 x 54.6	401.5 x 251 x 60.3
Weight	1.6kg	3.2kg
Operating temperature	0° to 50° C	

Subject to technical changes without prior notice. Error excepted.

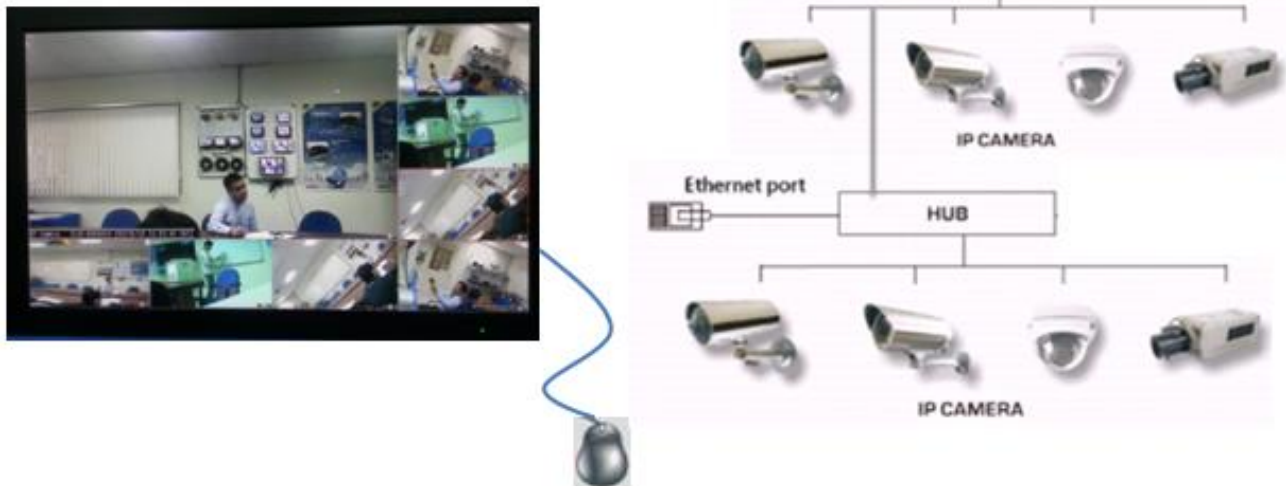
Monitor model	L215IP16	L238IP16	L270IP16
LCD panel	21.5"	23.8"	27"
Visible area (mm)	476.6 x 268.1	527.04 x 296.46	597.6 x 336.15
Picture format	16:9	16:9	16:9
Max. resolution	1920 x 1080	1920x1080	1920x1080
Pixel dot pitch (mm)	0.248x0.248	0.2745 x0.2745	0.31125x0.31125
Colours	16.7M	16.7M	16.7M
Brightness	250 cd/m ² [LED]	250 cd/m ² [LED]	300 cd/m ² [LED]
Contrast	3000 :1	3000:1	5000:1
Response time (Tr/Tf)	1.3/3.7ms	10/6ms	3.5/5ms
View angle (U/D/L/R)	89/89/89/89	89/89/89/89	89/89/89/89
Full HD input	1 x Full HD		
Audio input(R/L)	2 x (RCA)		
PC input	1 x VGA input 1 x DVI-D input		
Earphone out	1 x Phone jack ,3.5ψ		
Speaker	2 x built-in speaker (2 watt)		
IP Video support	Split Resolution: 1 x (2592*1944)/ 4x (1280*720)/ 8x (720*576)/ 16 x (640*480)		
OSD setting	Yes		
Network Port	1 x RJ45, 10M/100M		
USB Port	2 x USB 2.0 ports		
HDD Port	1 x e-SATA port		
Power input	AC 100-240V 50/60Hz, Adapter DC 12V/5A		
Power consumption	Approx. 24 watts	Approx. 27watts	Approx. 35watts
Dimensions (WxHxD) mm	531.2 x 322.5 x 71.2	585.56 x 353.09 x 77	658 x 396.5 x 63.9
Weight	5.7 kg	5.8 kg	7kg
Operating temperature	0° to 50° C		

Subject to technical changes without prior notice. Error excepted

Monitor model	L320IP16	L430IP16	L460IP16
LCD panel	32.0"	42.0"	46.0"
Visible area (mm)	698.4 x 392.8	930.24x 523.26	1018.08 x 572.76
Picture format	16:9	16:9	16:9
Max. resolution	1920 x 1080	1920 x 1080	1920 x 1080
Pixel dot pitch (mm)	0.36375 x 0.37375	0.4845 x 0.4845	0.53025 x 0.53025
Colours	16.7M	16.7M	1073.7M
Brightness	350 cd/m ² [LED]	400 cd/m ² [LED]	500 cd/m ² [LED]
Contrast	3000:1	4000:1	4000:1
Response time (Tr/Tf)	6.5ms	6.5ms	6.5ms
View angle (U/D/L/R)	89/89/89/89	89/89/89/89	89/89/89/89
Full HD input	1 x Full HD		
Audio input(R/L)	2 x (RCA)		
PC input	1 x VGA input 1 x DVI-D input		
Earphone out	1 x Phone jack ,3.5ψ		
Speaker	2 x built-in speaker (2 watt)		
IP Video support	Split Resolution: 1x (2592*1944)/ 4x (1280*720)/ 8x (720*576)/ 16x (640*480)		
OSD setting	Yes		
Network Port	1 x RJ45, 10M/100M		
USB Port	2 x USB 2.0 ports		
HDD Port	1 x e-SATA port		
Power input	AC 100-240V 50/60Hz		
Power consumption	Approx. 58 watts	Approx. 78 watts	Approx.107 watts
Dimensions (WxHxD) mm	761.6 x 455.2x 93.5	994.6 x 587.2 x 82.7	1081.5 x 635.5 x 80.5
Weight	13.2 kg	23kg	25kg
Operating temperature	0° to 50° C		

Subject to technical changes without prior notice. Error excepted.

9. HDVS IP Monitor Host Side Operation



10. IP Monitor Operation

10.1 Start System

Plug power cable, the power led will be on and the IP Monitor will start. After booting, the video output default to multi-window output mode. If the booting time is within the record setting time period, the system will auto enable the record function



Notice: Please use the IP Monitor matching power supply instead of any other power supply of any other type or brand.

10.2 System Login


After normal boot, click the **【Start】** icon, or click the right mouse button, there is a shortcut menu, Select Start - login. Input username admin and initial password 123456 or NO Password in the dialogue box.

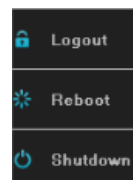
10.3 Menu Operation

After login successfully, do the related setting according to the tool bar on the top of GUI:



10.4 Start Setting

Click  icon on the toolbar, show the image as right



1. Log out: click the "Log out" button, can log out the current user
2. Booting Guide: Click "Booting Guide" button will pop out the setting menu, can set language, monitor resolution and network parameter and mobile App QR code
3. Reboot: click the "Reboot" button, the device automatically restart;
4. Shutdown: click the "Shutdown" button, the device automatically shut down.

10.5 How to connect IP Monitor with IP Camera

Before do configuration for IP Monitor, need add camera to IP Monitor:

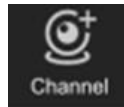
This device supports multi-version Onvif protocols, compatible with main brand IP cameras.

Before connect the IP camera with IP Monitor, please make sure that the IP addresses of the IP camera and the IP Monitor are in a same network section, and the main stream and sub stream are adjusted to be the suggested values (main stream: 2048k, sub stream: 512k), otherwise, these problems may appear: the IP Monitor cannot search the IP camera, the image cannot be connected, the image is not fluent, the image quality is bad and so on.

Connect the IP Monitor with the network cable, and the switch in the LAN. After booting, click



and enter the system configure interface to set the network parameters including the IP address, subnet mask, network gateway of the NVR. User can run the command ping through the PC in the LAN to ping the IP of the IP Monitor to see if the IP Monitor has connected with the LAN.



Then click the right mouse button and appear the below menu :

The screenshot shows the IP Monitor software interface. At the top, there is a navigation bar with icons for Preview, Playback, Channel, Configuration, and Smart search. The main area is divided into two sections. The top section is for searching devices, with a table showing columns for IP address, Protocol, Device information, Version number, Edit, and Status. The bottom section is for managing added devices, with a table showing columns for Address, Protocol, Port, Device information, Setting, Status, and Maintenance. The interface also includes various buttons for search, add, import, export, and network settings.

IP address	Protocol	Device information	Version number	Edit	Status
Number of searched devices: 0					
Double-click the IP address to quickly add, click the address bar, the status bar can be sorted and displayed					

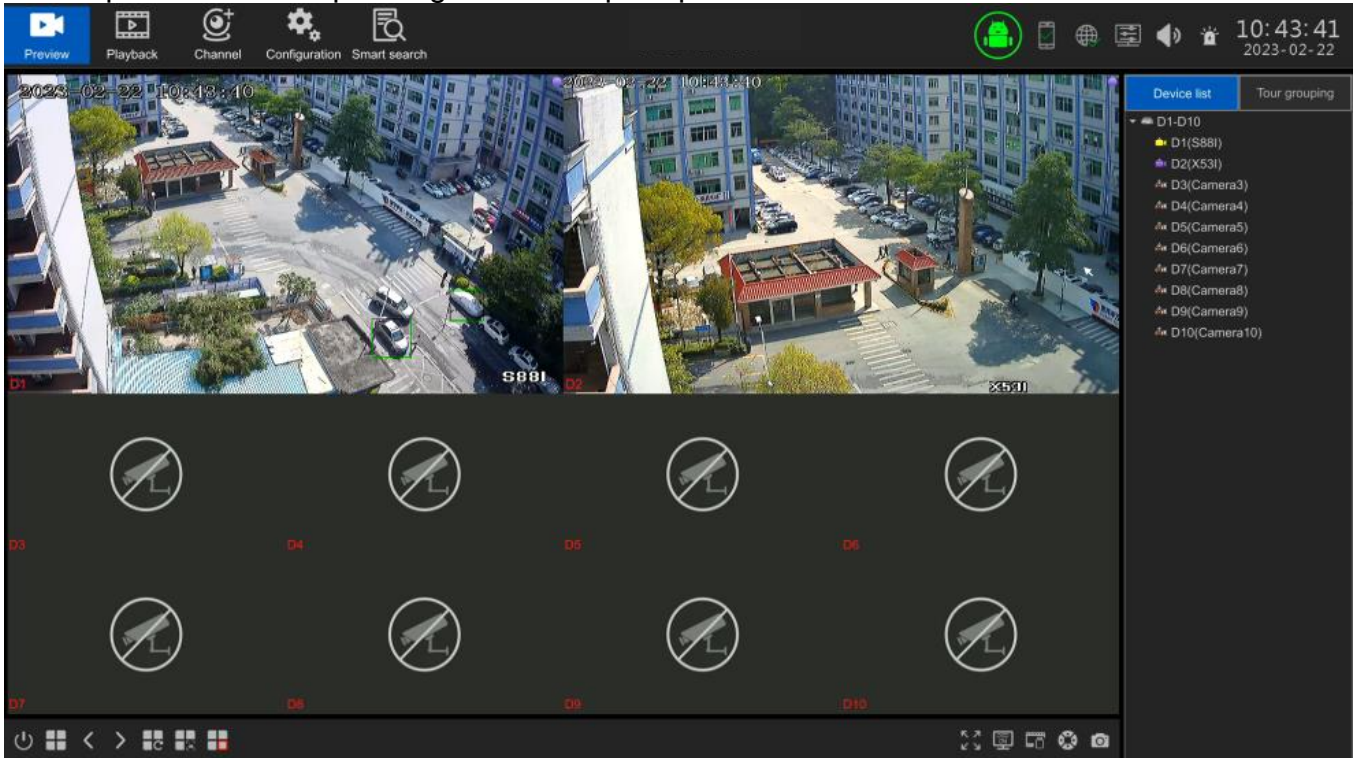
All	Address	Protocol	Port	Device information	Setting	Status	Maintenance
D1	192.168.0.6	SLINK	80	T40XP+334		Connect success	
D2	192.168.0.21	SLINK	80	T31X+4023 X53		Connect success	
D3	+	-	-	-	-	-	-
D4	+	-	-	-	-	-	-
D5	+	-	-	-	-	-	-
D6	+	-	-	-	-	-	-
D7	+	-	-	-	-	-	-
D8	+	-	-	-	-	-	-

click "Search device", IP Monitor will auto search the IP cameras in LAN, then it will appear IP camera list and add the camera to IP Monitor channel according to the requirement. Additionally, know the IPC IP address, port and so on parameter, can input directly and save, then can add camera to IP Monitor.

Following is main 7 functions of IP Monitor instruction: preview, playback, backup, channel setting, hard disk management, system configuration, system maintenance:

11 . Real-time preview

After the device starts normally, it enters the real-time monitoring screen, as shown in the following figure: Among them, the red rectangles are marked with function shortcut keys, and the mouse pointer is corresponding to the text prompts.



The following focuses on the preview interface of the various functions, PTZ control functions, real-time playback.







11.1 Interface quick function introduction

There are multiple toolbars on the preview interface. The upper, right and lower toolbars can be hidden manually. Each toolbar has different shortcut functions, and there are some hidden convenient functions.



◆ Top toolbar

All configuration interface exist on this tool bar under it is not hided

- Audio Input ,user can adjust voice volume by slider.
- Channel audio volume switch , user can adjust volume through slider.
- Real time alarm light , when alarm occurs, light would be flash, after click indicator, it will display detailed alarm information, refer to following picture.
-  APP and QR code
-  Network Information
-  Monitor Adjust











- System information  icon

◆ Right Toolbar

Image play mode

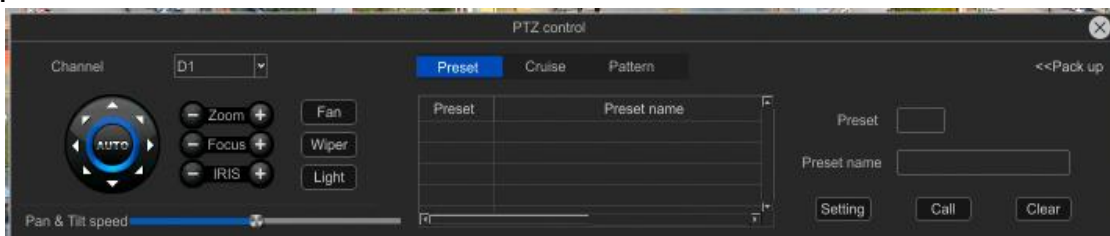
There are two kinds of play mode, preview picture would be displayed according to requirements such as "device list" and "grouping patrol", default mode is "device list", however user needs to configure "grouping patrol" firstly, then it works .

◆ Lower toolbar

- Preview split mode  , click it, user can choose preview split mode at will
- Flip over  ,turn the page of the current preview screen.
- Patrol switch and interval time  , enable patrol and set patrol interval time.
- Linkage preview switch  , enable linkage preview with, if trigger alarm, the preview image of alarm channel would be popped up to current preview interface.
- Alert flashing frame  , enable it, if trigger alarm, the frame of preview channel image will flash automatically.
- Full screen mode  , display image in full screen on preview interface
- Hide OSD  , hide preview interface OSD.
- P/T control  , enter P/T control interface.
- File backup  , enter local backup interface.
- Fullscreen snapshot  , take a snapshot for all channels in preview mode.

11.2 PTZ control

Before controlling P/T, please confirm set relative parameters is correct or not, after finish setting parameters, please choose controlling channel on preview interface, then control lens direction on P/T control interface, focal length, focus, aperture zoom in and out, P/T speed setting, now take following introductions as example to explain how to set preset, cruise, patrol function in detail.



- Preset setting and call
 - 1) First choose channel, second turn camera to appointed place through controlling electronic Pan/Tilt, third choose one preset in the list of preset, finally click "setting".
 - 2) To choose one preset from list of preset, then click "call".
- Configure/call/delete cruise.
 - 1) Choose one cruise number in the "cruise" list, to click "set" to enter "cruise setting" interface, then choose preset, cruise time, cruise speed, to click "add" icon, preset of cruise would be added successfully(add multi- presets) ;
 - 2)Choose one cruise number in the cruise list, to click "call" icon, will call it;







- 3) Choose one cruise number in the cruise list, to click “delete” icon, it will delete this cruise number;
- Configure patrol and call.
 - 1) Choose one patrol number in the patrol list, to click “set” icon to start to record, then carry out a series of direction operation, to click “set” again to stop recording trail, the trail would be recorded successfully.
 - 2) Choose one patrol number in patrol list, to click ”call”. will call it
 - Swap channel.

To choose one channel and drag it to another channel, all configurations are swapped by default.

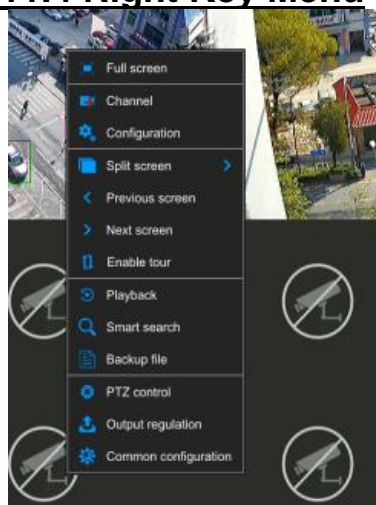
11.3 The toolbar

The toolbar is suspended on the lower side of the channel. When the mouse points to the bottom of the screen, it will appear a floating toolbar, refer to following picture.



- Enable P/T Control 
- Display smart detection switch 
- Current channel snapshot 
- The same channel IPC intercom switch 
- Current channel audio switch 
- Video parameter configuration  IPC upgrade maintenance

11.4 Right Key Menu




The menu basically includes above functions in full screen or non-full screen, user can operate it according to personal requirement, refer to following picture.


11.3 Real-time playback (Require Connecting Additional Hard Disk)

There is a hidden toolbar on the lower side of each channel screen. The mouse will appear



when it slides to the lower side. Click the rightmost button  , a progress bar will appear, and the channel screen will be put forward 5 minutes from the current moment. Video recording can be played, reversed, paused or stopped for 5 minutes of recording as required, and the screen can be returned to the real-time monitoring screen after stopping playing. (Note: The default time for real-time playback is 5min, which can be modified)

12. Video Playback(Require Connecting Additional Hard Disk)

Click  icon to enter recording playback interface, there are local recording, local capture picture, external file in playback mode, default mode is local recording interface (like the following picture)



12.1 Local video

- Channel choice
System already chosen CH1 from channel list by default, user can choose inquiring recording channel and play it
- File search.
Default time is date of the current day, user can choose date, recording style, recording situation would be displayed on blank area of downside bar (note: different style recording corresponds to different colour)
- Play recording.
User can drag it through mouse for searched recording bar, also slowly enlarge it through mouse roller to adjust time axis scale in 24 hours, time unit scale is 1h,0.5h,15 min,5min, 2min,1min; when mouse cursor move to time axis of coloured column, it will display exact time hint, accuracy is second. Double click time axis to playback recording quickly, system will adjust recording scale according to playback accuracy, playback time position would be accurate.

12.2 Display Mode

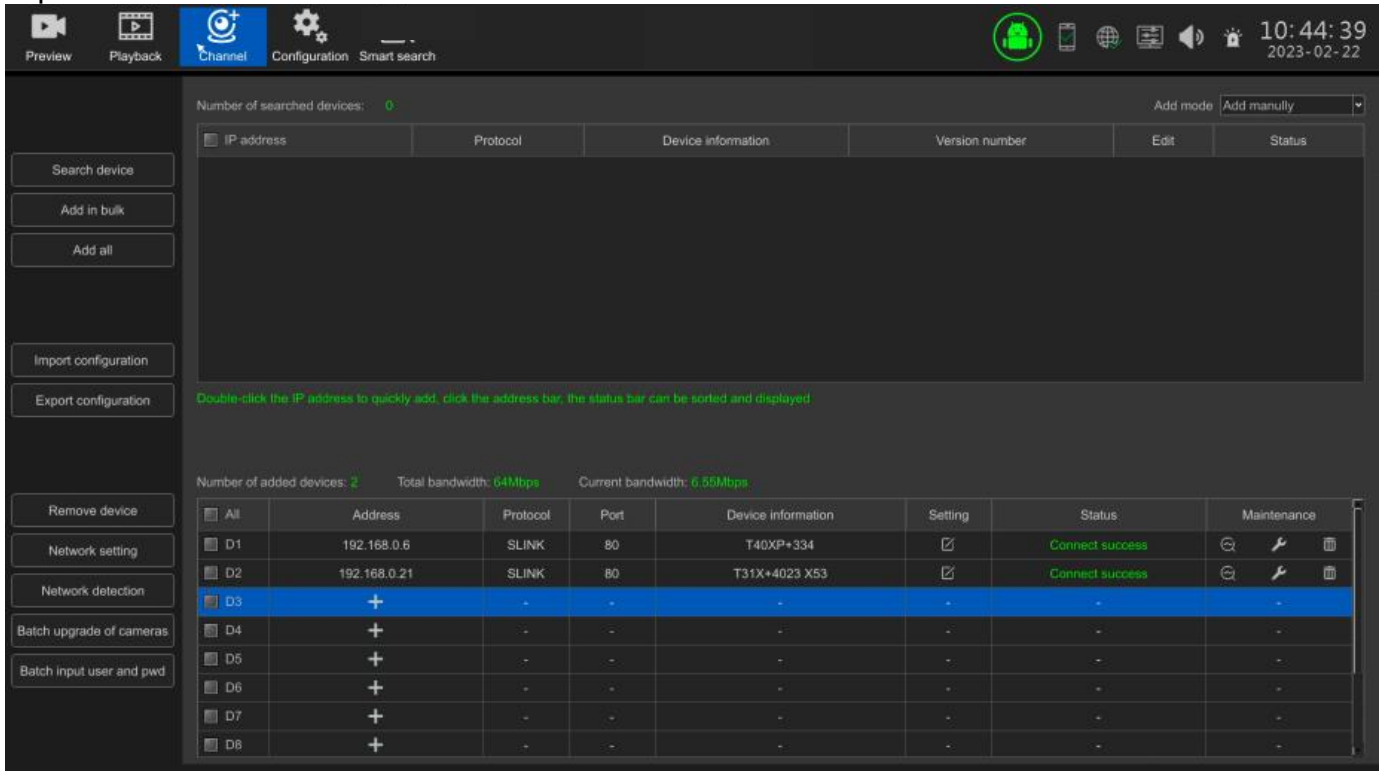
- Right side Tool Bar
- Default display mode is “local recording”, to choose relative channel, time and recording style, then click” inquiry” to get recording file.

12.3 External File

- This module is to visit the files in the USB external storage device inserted into the IVR, and all the backup files can be searched in this module.
- Click the “Refresh” button at the under right corner, then the files in the USB external storage device can be retrieved, operate the controls on the toolbar underside the interface, you can do a series of operations to the selected files to play/pause 、 stop 、 fast play 、 audio adjustment. Otherwise, click the “Delete” button at the under right corner can delete the selected files

13. Channel Setting

After entering channel connection interface, IP Monitor will search IPC automatically in LAN, after finish searching, user can add channel according to requirements, please refer to following picture.



- Add mode: there are two modes- manual add and auto add.
 - Auto mode: For ONVIF,SLINK,I9 protocol, bind adding camera MAC address, no matter how the camera IP address is changed in the future, and the network segment is changed, as long as it can still be searched by IP Monitor, IP Monitor can adaptively display image by cross the network segment
 - Manul mode: add IP camera by manual
- Search device: to search through selecting relative protocol, IP Monitor will finish searching all devices in LAN within 10 seconds
- Add device in batches: IP Monito will sequece IP address of camera searched by system, to select many IP cameras to add them in batches,
 - Add all: add all searched IP cameras to IP Monitor
- Export configuration, export system configuration to external storage device connected to IP Monitor by USB
- .Import configuration: import system configuration file in external device into IP Monitor, it would be valid after restarting device.
- Plug and play: Enable or disable this function.
- .Delete device: to delete IPC through selecting one or many IP cameras.
- .Network configuration: enter network management-basic parameters interface
- Network test: user can make PING test through choosing relative network card or destination address.

14. Video Parameter- OSD Setting

- Preview playback display VCR channel name: default red font displayed in the upper left corner of the screen, can be modified.
- Superimposed camera name in the video data: is the name of the camera

- Overlay time information in the video data: user can select different time/date formats for the specified channel, the channel name and time and date are marked with yellow rectangular boxes on the screen, the mouse can be dragged arbitrarily, and the display size can be set; Copy to: Copies the configuration parameters of the current channel to another channel
Note: The above configuration for the IPC needs the IPC support, then it would be effective!

15. Video Storage

➤ **Video plan**

There are 4 video modes, the default is "timing recording + alarm recording", which can be switched.

1. Timing recording + alarm recording: in the set timing video period, or the alarm has triggered the video, the current channel system will carry out the video operation.
2. Timing recording: The current channel system will perform the recording operation only during the set timing recording period
3. Alarm recording: Only if the alarm recording function is triggered, the current channel system will perform the recording operation.
4. Stop recording: The current channel immediately stops recording, unless the manual recording function is enabled in the preview screen.

➤ **Disk Formatting**

Format: check the hard disk that needs to be formatted, and then click the button (Note: when the state is "need to format", the hard disk must be formatted before it can continue recording. In addition, do not do other operations during the format process)

Create network disk: fill in the network disk name, select the protocol, IP address, and network disk directory.

16. Alarm Management

➤ **Ordinary event**

Detection mode: The default is "front-end detection", when "device capability" supports smart (intelligent detection), the mode can be switched to " IP Monitor local detection.

Sensitivity: When properly set, the accuracy of motion detection trigger can be increased

Area setting: directly hold down the left mouse button on the screen and drag to the area that needs to be moved. The red grid area that appears is the selected area for moving detection.

Arm time: Select the time interval for arm.

Linkage mode: Select the linkage mode

➤ **Intelligent Event (It required specific IPC)**

Under this mode, the intelligence supported by the ipc is automatically obtained according to the connected channel ipc, as shown in the following figure. The current ipc channel only supports human detection, and the following focuses on the specific operation of other intelligence

➤ **Voice Alarm**

User can manually trigger one or all of the local alarm outputs individually

➤ **System abnormality**

There are 6 types to choose; HDD full, HDD disconnection, HDD offline, HDD SMART error, network disconnection, IP address conflict

17. Network Management

➤ **Local Network**

1. Network card: choose different network card types according to needs;
2. Physical address: display the physical address of the current network interface, which is not modified;
3. Automatically obtain IP address: the DHCP function. When it is turned on, the IP/mask/gateway cannot be set. If the current DHCP takes effect, it will obtain the new IP/mask/gateway assigned by the router (a new IP is required for remote login Address), if it does not take effect, the IP/mask/gateway will display the previous address (you can use the old IP address to remotely log in to the device);
4. IP address: Enter the corresponding number to change the default IP address;
5. Subnet mask: Enter the subnet mask of the corresponding IP;
6. Gateway address: input the corresponding gateway address.

➤ **Network protocol**

This page is P2P service configure interface, enable or disable P2P, refer to following picture

18. System Setting

➤ **Time setting**

Device time: IP Monitor time can be modified manually;

Date format: There are three date formats to choose;

Time zone: switch the time zone, the page will pop up the new date and time, and some time zones have the summer time function;

NTP time calibration: After the function is enable, user needs to click **Check time** the button to synchronize the network time (the device needs to access the external network).

➤ **User Management**

1. Modify user: modify the username, password and user type of the selected user;

2. Add user: add a new user;

3. Delete user: you can delete the selected user (except admin and default users);

4. User authority: set authority for the selected user.

5. Recover password: user can recover password through APP scanning QR code or mailbox.

➤ **Device parameter**

Equipment name: the name can be set for the IP Monitor device

Language selection: the system language of IP Monitor can be modified, and it needs to be restarted to take effect;

Main display resolution: The local display resolution of the IP Monitor can be modified (display support is required), and it will take effect immediately after modification;

Auto logout time: You can choose the auto logout time, the default is 0 minutes;

Boot preview mode: Full screen preview or non-full screen preview

19. Upgrade Maintenance

➤ IVR upgrade

Device information: the software version and hard disk version currently used by the IP Monitor;

- 1) Upgrade online: to click "testing" button to upgrade if there is new version
- 2) USB upgrade: to upgrade ivr on this page, user need to use memory flash to insert usb port of IVR, to choose correct file, then click upgrade, after finish upgrade, device will restart.

Note: Do not operate locally or remotely during upgrade to avoid irreparable errors !

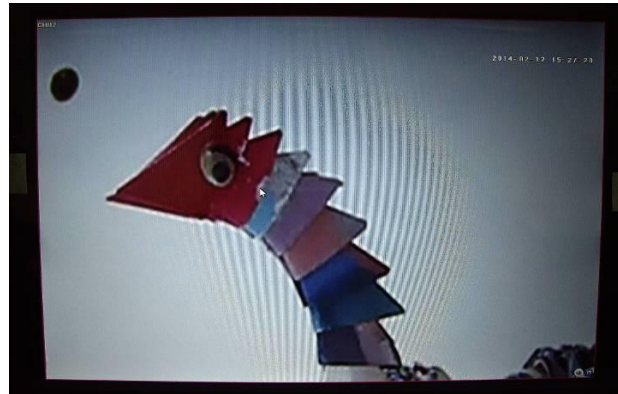
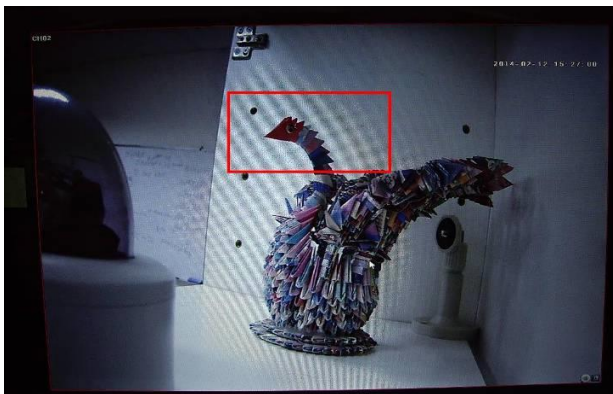
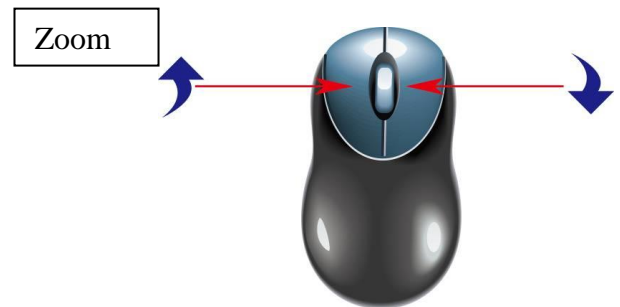
➤ IVR Maintenance

There are three function keys, each key has its function:

1. Export configuration: Export the system configuration to the external storage device
2. Import configuration: import system configuration file from external storage device into IP Monitor, imported configuration will take effect after reboot device.
3. Restore: Choose single or multi configuration according to requirements, the parameter are restored to the factory default value. The device needs to be restarted to take effect.

20 . Digital Zooming

During image preview and playback, roll mouse roller to do digital zooming, it zoom the image as mouse pointer as the center. The max can do 15X zooming. Drag the zoomed image by mouse to see image detail.



21 . Viewing by Webpage and User Login and Logout

- 1.After the IP Monitor is correctly connected to the network, you can log in and access the IP Monitor through the Web browser;
- 2.User can download and install the IE plug-in from IP Monitor via the network. After running plug-in, enter the IP address, username, and password of the network digital video recorder in the Web browser, and the following interface will pop up after the connection is successful:

After logging in correctly, user can enter the network preview interface. For details on the operation method of the network terminal, please refer to the host terminal.

22 . Viewing by Mobile Phone Guide

his operation guide is an instruction on how to install and use the mobile client on Android and iOS mobile phones. The mobile client APP commonly used for using our products is [See Easy]

The mobile client software supports Android 4.0 and above system versions (mobile phones include commonly used brands on the market, such as Huawei, Xiaomi, Oppo, etc.), and iOS 11.0 and above system versions.

23 . Troubleshooting for Display Problems

The tables provided below include some problems that the user may encounter while using the display and the corresponding solutions. Please refer to the contents of this section prior to contacting service personnel.

Problem	Possible Causes	Solutions
No picture	<ol style="list-style-type: none"> 1. Is the power cable connected to the unit? 2. Is the unit turned on? 3. Is the signal cable connected to the unit? 4. Is the unit in power saving mode? 	<ol style="list-style-type: none"> 1. Make sure the power cable has been properly connected to the unit. 2. Turn on the unit. 3. Make sure the signal cable has been properly connected to the unit. 4. Press any key on computer keyboard.
Strange colour	<ol style="list-style-type: none"> 1. Is the signal cable connected to the unit? 	<ol style="list-style-type: none"> 1. Make sure the signal cable has been properly connected to the unit.
Picture distortion	<ol style="list-style-type: none"> 1. Is the signal cable connected to the unit? 2. Is the video input signal within the unit's specified frequency range? 	<ol style="list-style-type: none"> 1. Make sure the signal cable has been properly connected to the unit. 2. Make sure the input signal is within the unit's specified frequency range.
Picture is too dim	<ol style="list-style-type: none"> 1. Have the unit's brightness and contrast settings been set to the lowest level? 	<ol style="list-style-type: none"> 1. Adjust brightness and contrast
Only sound but no picture	<ol style="list-style-type: none"> 1. Is the connection of the input signal correct? 	<ol style="list-style-type: none"> 1. Check connection of input signal. 2. Make sure the signal cable has been properly connected.
Only picture but no sound	<ol style="list-style-type: none"> 1. Is the signal cable connected to the unit? 2. Has the volume been set to the min level? 3. Is the audio cable connected to the unit? 	<ol style="list-style-type: none"> 1. Make sure the signal cable has been properly connected to the unit. 2. Adjust the volume to an appropriate setting. 3. Make sure the audio cable has been properly connected to the unit.

Please contact the customer service centre of your local dealer if you have any questions regarding the unit after reading the information provided above.

24 . Troubleshooting for IP Camera Problems

1. Internet disconnected to HDVS IP Monitor system

Possible reasons:

- 1) Please check if your physical network is normal or not.
- 2) Please check your HDVS IP Monitor parameter setting.
- 3) Please if there is IP conflict with each other, please set the gateway correctly.
- 4) Please ensure all the IP addresses in LAN are unique.

2. No preview image

Possible reasons:

- 1) IP cameras time synchronization with HDVS IP Monitor.
- 2) The Onvif device camera needs to select UDP network type.
- 3) The IPCAM device camera needs to select TCP network type.
- 4) Please check the channel select correctly.
- 5) HDVS IP Monitor's username and password should be correctly filled in.

3. IP Camera IP address can be searched, multi-images sub stream and single image main stream all cannot have image

Possible reasons:

- 1) Please check your IP channel setting "Stream Type"
- 2) Adjustment of stream type, choose "Mainstream" or "Sub stream"
- 3) The username and password should be correctly filled in.

4. The multi-images sub stream has image and single image mainstream is on black screen or still image as well as black-screen playback

Possible reasons:

- 1) Adjustment of stream type to 1080p mode.
- 2) Users need to adjust HDVS IP Monitor mainstream with resolution ratio for 1080p or 720p.

5. The colour garbage preview image

Possible reasons:

- 1) Please check your IP channel setting "Stream Type"
- 2) Adjustment of stream type, choose "Mainstream" or "Sub stream"