

NETWORKTV

# NTVJ2600SE

## User Guide



# SDI & IP Box Camera

telephone: +44 (0)333 335 5019

email: [info@networktv.tv](mailto:info@networktv.tv) web: [www.networktv.tv](http://www.networktv.tv)

Release 1.0



## TABLE OF CONTENTS

<b>Preface</b>	3
<b>Notes</b>	4
<b>What's in the Box</b>	4
<b>Features</b>	5
<b>Product Specification</b>	6
<b>Main Unit</b>	8
<b>Dimensions</b>	9
<b>RS-232 Interface</b>	10
<b>Menu Setting</b>	11
<b>Network Function</b>	15
<b>Maintenance and Troubleshooting</b>	22



## Preface

Thank you for choosing this SDI and IP HD Video Box Camera.

This manual introduces the function, installation and operation of the HD camera. Prior to installation and usage, please read the manual thoroughly.

### Precautions

This product can only be used in the specified conditions in order to avoid any damage to the camera:

- Don't subject the camera to rain or moisture.
- Don't remove the cover. Otherwise, you may get an electric shock. In case of abnormal operation, contact the authorized engineer.
- Never operate under unspecified temperature, humidity and power supply.
- Please use a soft dry cloth to clean the camera. If the camera is very dirty, clean it with diluted neutral detergent; do not use any type of solvents, which may damages the surface.

### Note

This is class A product. Electromagnetic radiation at the specific frequency may affect the image quality of TV in a home environment.

### Copyright Notice

All contents of this manual are copyright and belong to our company. It cannot be cloned, copied or translated without the permission of the company. Product specifications and information which are referred to in this document are for reference only and the content may be updated at any time without prior notice.



## Notes

- **Electrical Safety**

Installation and operation must be in accordance with the local electric safety standards.

- **Caution with handling**

Avoid stress, vibration and moisture in transport, storage, installation and operation.

- **Polarity of power supply**

The power supply of the product is +12V, the maximum electrical current is 2A. Polarity of the power supply plug is as per the drawing:



- **Care during installation**

Do not grasp the camera head when carrying the camera. Don't turn camera head by hand. Doing so may result in mechanical damage.

Don't apply corrosive liquid, gas or solid environment to avoid damaging the cover which is made of plastic material.

Make sure no obstacle is in the rotation range.

Never power off before installation is completed.

- **Don't dismantle the camera**

We are not responsible for any unauthorized modification or dismantling.

### CAUTION!

**The specific frequency of electromagnetic field may affect the image of the camera!**

### What's in the Box

When you unpack, check that all the supplied accessories are included:

Camera	1PCS
AC power adaptor	1PCS
Power cord	1PCS
RS232 cable	1PCS
User manual	1PCS



## Features

- **20x Optical + 16x Digital Zoom**  
TAMRON high-quality super telephoto lens, supporting 20x optical zoom and 16x digitalzoom.
- **H.265 Support.**  
First H.265 encoding support conference video camera. It enables full HD 1080p60 video stream with ultra-low bandwidth.
- **1080P Full HD.**  
Support Panasonic's 1/2.7 inch, 2.07 million effective pixels with high quality HD CMOS sensor. The camera can reach a maximum of 1920 x 1080 high resolution and provides a high-quality image.
- **Double Interface.**  
Support SDI interface, effective transmission distance up to 150 metres (under 1080p30). SDI and Network can output at the same time.
- **Ultra-high Frame Rate**  
The output frame rate can be up to 60fps
- **AAC Audio Encoding**  
Support AAC audio encoding. Better sound quality and smaller bandwidth can be achieved.
- **Low-light**  
High SNR of CMOS sensor combined with 2D and 3D noise reduction algorithm , effectively reduce the noise. Even under low illumination conditions, clear images can still be acquired.
- **PoE (optional)**  
Support PoE (802.3af), effectively reduce the cost of engineering and routing.
- **ICR Infrared Filter**  
ICR filter with auto switch, keep watch over day and night.
- **SDK**  
Support SDK, easy to implement the custom requirement.



## Product Specification

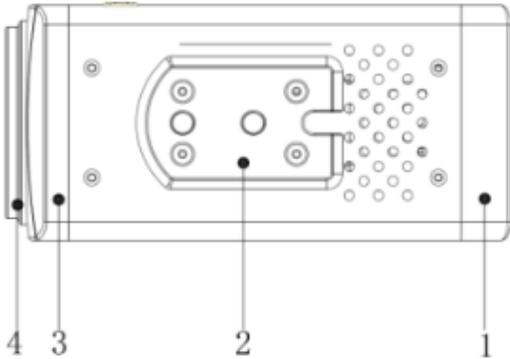
Model	NTVJ2600SE
Name	SDI/IP HD Video Conference Camera
Camera	
Sensor	1/2.7", CMOS, Effective Pixel: 2.07M
Scanning Mode	Progressive
Lens	20X, f4.42mm ~ 88.5mm , F1.8 ~ F2.8 (16X Digital)
Auto Iris	DC Driver
Horizontal Angle of View	60.7°~ 3.36°
Vertical Angle of View	34.1°~ 1.89°
Minimal Illumination	0.05 Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual
Backlight Compensation	Support
Digital Noise Reduction	2D&3D Digital Noise Reduction
Day-night Mode	IR cut filter with auto switch
Day-night Mode	IR cut filter with auto switch
Horizontal & Vertical Flip	Support
Image Freeze	Support
PoE	Support (optional)
IPC Features	
Video coding standard	H.265/H.264/MJPEG
Video Stream	First Stream, Second Stream
First Stream Resolution	1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360
Second Stream Resolution	1280x720, 1024x576, 720x576, 720x408, 640x360, 480x270, 320x240, 320x180
Video Bit Rate	32Kbps ~ 20480Kbps
Bit Rate Type	Variable rate, Fixed rate
Frame Rate	50Hz: 1fps~25fps, 60Hz: 1fps~30fps,
Audio encode standard	AAC



## Product Specification (cont.)

Audio Bit Rate	96Kbps, 128Kbps, 256Kbps
Supported streaming protocols	TCP/IP, HTTP, RTSP, RTMP, Onvif, DHCP, Multicast
<b>Input/Output Interfaces</b>	
HD Output	1xHD-SDI: BNC type, 800mVp-p, 75Ω, complies to SMPTE 424M standard
Network interface	1xRJ45: 10/100/1000M Adaptive Ethernet ports
Audio Interface	1-ch: 3.5mm Audio Interface, Line In 1-ch: 3.5mm Audio Interface, Line Out
Communication Interface	1xRS485: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA/Pelco-D/Pelco-P
Reset Button	Support
Power Jack	JEITA type (DC IN 12V)
<b>Generic Specification</b>	
Input Voltage	DC 12V / PoE (802.3af) (optional)
Current Consumption	0.5A (Max)
Operating Temperature	-10°C ~ 40°C (14°F ~ 104°F)
Storage Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
Power Consumption	6W (Max)
MTBF	>30000h
Size	138.5x76.8x60.3mm
Net Weight	0.650K g

## Main Unit

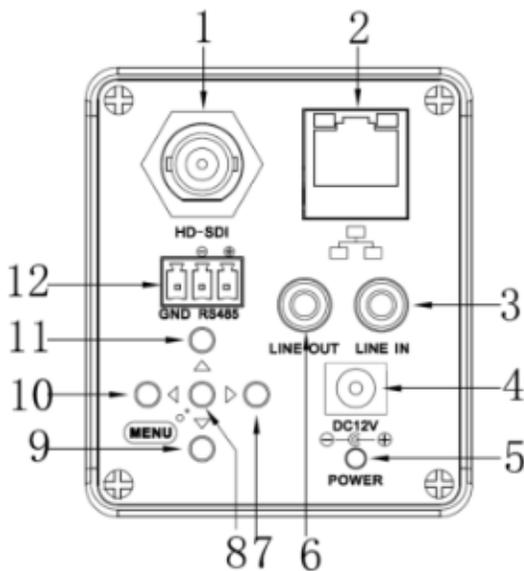


### Camera appearance

1. Camera body
2. The installation location tray
2. Front Cover
4. Lens cover

### Operating tips

Both sides threaded hole is consistent with the positioning hole size, installation can be used with either hole.

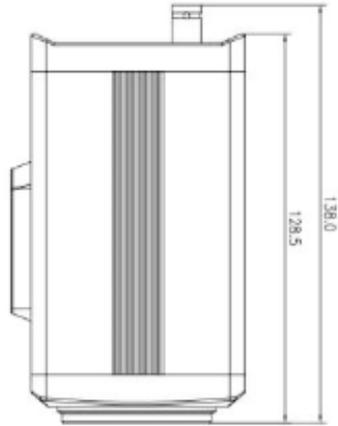


### The back of the interface specifications

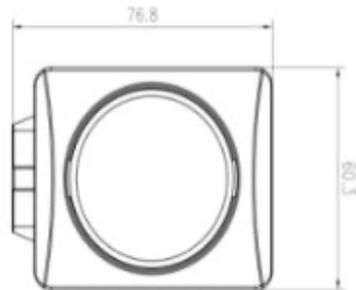
1. HD-SDI interface
2. RJ45 interface
3. Audio Line in interface
4. DC 12V power interface
5. Power light
6. Audio Line out interface
7. Right key
8. MENUkey
9. Downkey
10. Left key
11. Up key
12. RS485 interface



# Dimensions

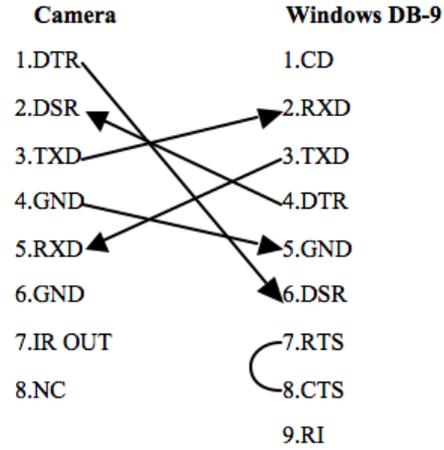
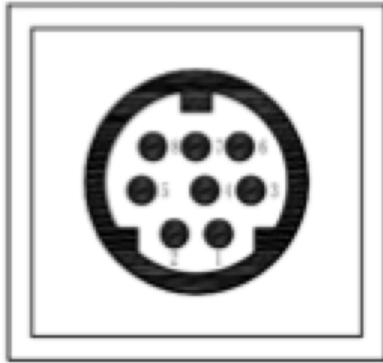


**Top view**

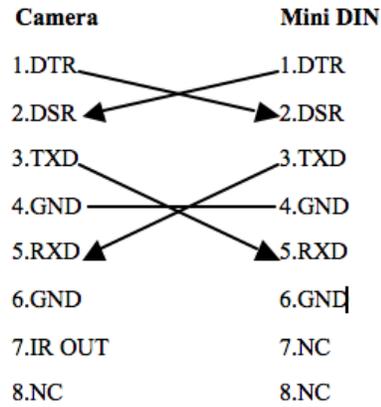


**Front view**

# RS-232 Interface



No.	Function
1	DTR
2	DSR
3	TXD
4	GND
5	RXD
6	GND
7	IR OUT
8	NC





# Menu Setting

## OSD Menu Operation

### Key Description

The camera uses the 4 arrow buttons around the menu button to move the cursor up and down

【▲▼】 left and right 【◀▶】 Press "MENU" key and the screen displays the main menu, when you press the arrows for direction it toggles the arrow onscreen to tell you which item is selected, cycle from top to bottom to access the options menu item and press the select menu button to choose that option when it is highlighted. Each menu page has a "Return" option, to Return to the main menu or exit the menu.

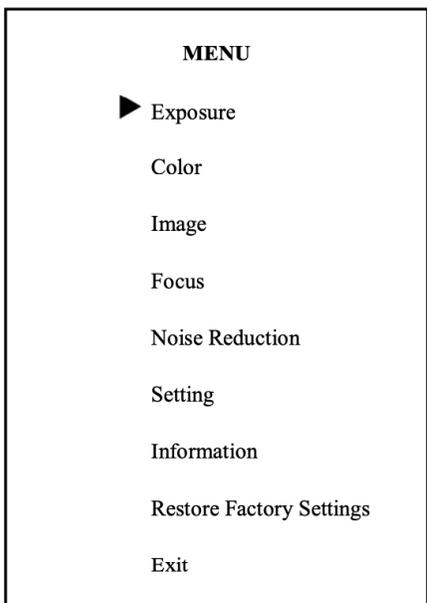
### 1. MENU

Press 【MENU】 button to enter the main menu.

#### Operating tips

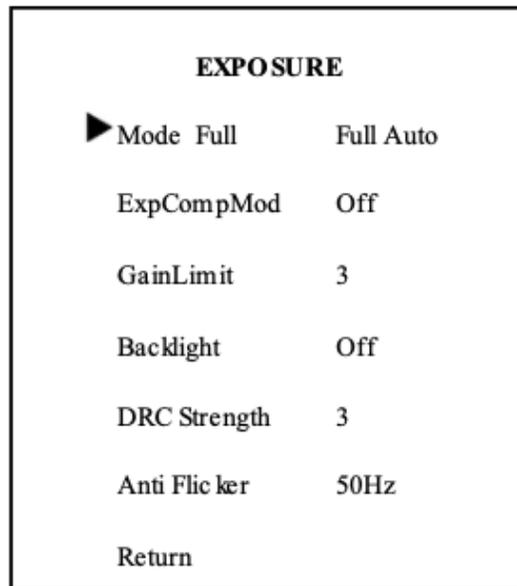
Toggle the buttons up and down. Choose a menu item, press MENU to enter submenu. Choose

【Exit】 press "MENU" button to exit menu.



### 2. EXPOSURE

Move the cursor to the Exposure item in the main menu and press [home] button, EXPOSURE menu appears, as shown in the following figure.



**Mode:** Exposure mode. Optional items: Full Auto, SAE, AAE, Bright, Manual, WDR.

**Shutter:** Set the Shutter values, only when the Mode for the Shutter Priority Mode and Manual Mode effective, Options: 1/10000s, 1/6000s, 1/4000s, 1/3000s, 1/2000s, 1/1500s, 1/1000s, 1/725s, 1/500s, 1/350s, 1/250s, 1/200s, 1/125s, 1/100s, 1/90s, 1/60s, 1/30s.

**Bright:** Set the brightness values, only when the effective Mode for Bright Mode, Options: 0 ~ 17.

**Iris:** Aperture value, only when the Mode for the Iris-Priority and Manual Mode effective, Options: F1.8, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11.0, Close



## Menu Setting (cont.)

**Gain Limit:** Maximum gain limit. Optional items: 0 ~ 15 (Effective only in Auto, AAE, Bright mode)

**Bright:** Bright intensity control, only when the effective Mode for Bright Mode, Options: 0 ~ 17.

**ExpCompMode: On or Off** Exposure compensation value, only when ExpCom pMode item to On effective, Options: -7 ~ 7.

**Backlight:** Set the backlight compensation, Options: On, Off.

**DRC:** DRC strength. Options : 0 ~ 8.

**Anti-Flicker Flicker:** Anti-flicker. Optional items: Off, 50Hz, 60Hz (Effective only in Auto,

### 3. COLOUR

Move the cursor to the Colour item in the main menu and press [home] button, COLOUR menu appears, as shown in the following figure.

COLOR	
▶ WB Mode	Auto
AWB sens	Low
RG Tuning	2
BG Tuning	-1
Saturation	100%
Hue	7
Return	

**WB-Mode:** Set the camera white balance mode, Options: Auto, 3000K/Indoor, 4000K, 5000K/Outdoor, 6500K-1, 6500K-2, 6500K-3, One Push, Manual.

**AWB sens:** Options: High, Medium, Low

**RG Tuning:** Red gain fine-tuning, Options: -10 ~ +10 (Effective only when WB Mode is Auto).

**BG Tuning:** Blue gain fine-tuning, Options: -10 ~ +10(Effective only when WB Mode is Auto)

**R Gain:** Adjust the camera white balance mode of red gain, Options: 0 ~ 255 (Effective only in WB Mode is Manual).

**B Gain:** Adjust the camera white balance mode of blue gain, Options: 0 ~ 255 (Effective only in WB Mode is Manual).

**Sat.:** Saturation. Optional items: 60% ~ 200%.

**Hue:** Chroma adjustment, Optional items: 0 ~ 14.

**IR Filter:** Choose IR Filter, Options: 1~ 3. **AWB sens:** The white balance sensitivity, Options: Low, Middle, High.

### 4. IMAGE

Move the cursor to the Image item in the main menu and press [home] button, IMAGE menu appears, as shown in the following figure.

IMAGE	
▶ Luminance	7
Contrast	9
Sharpness	2
Flip-H	Off
Flip-V	Off
Gamma	Default
Style	Clarity
Return	



## Menu Setting (cont.)

**Luminance:** Brightness adjustment. Optional items: 0 ~ 14

**Contrast:** Contrast adjustment. Optional items: 0 ~ 14

**Sharpness:** Sharpness adjustment. Optional items: Auto, 0 ~ 14

**Flip-H:** Image flipped horizontally. Optional items: On, Off.

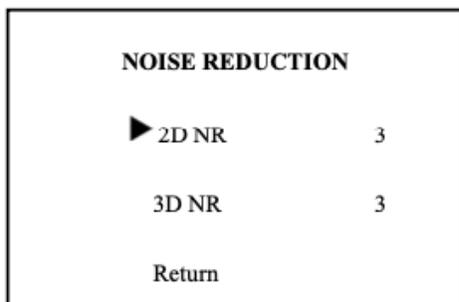
**Flip-V:** Image Flip Vertical. Optional items: On, Off

**Gamma:** Optional items: Default, 0.45, 0.5, 0.56, 0.63

**Style:** Optional items: Norm, Clarity, Bright, Soft, 5S

### 5. NOISE REDUCTION

Move the cursor to the NOISE REDUCTION item in the main menu and press [home] button, NOISE REDUCTION menu appears, as shown in the following figure.

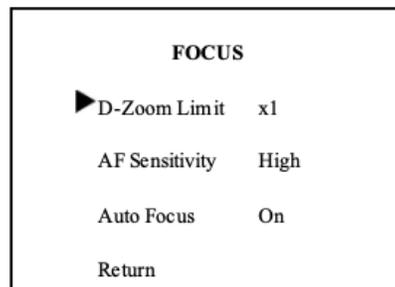


**NR2D-Level:** 2D noise reduction. Optional items: Close, Auto, 1 ~ 5

**NR3D-Level:** 3D noise reduction. Optional items: Close, 1 ~ 8

### 6. FOCUS

Move the cursor to the FOCUS item in the main menu and press [home] button, FOCUS menu appears, as shown in the following figure.



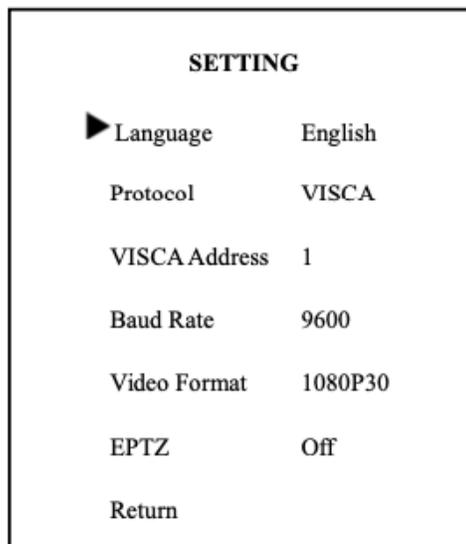
**D-Zoom Limit:** Digital zoom camera settings, Options:x1.

**AF Sensitivity:** Focus camera sensitivity, Options: Low, Middle, High.

**Auto Focus:** Autofocus camera settings, Options: On, Off.

### 6. SETTING

Move the cursor to the SETTING item in the main menu and press [home] button, SETTING menu appears, as shown in the following figure.



**Language:** Language Settings, Options: English, Chinese.

**Protocol:** Communication protocol Settings, Options: VISCA, PELCO-D, PELCO-P.

**VISCA Address:** Address of the Visca Settings, Options: 0 ~ 7.

**P-D Address:** P-D address settings, valid in PELCO-D mode, Options: 0 ~ 254.

**P-P Address:** P-P address settings, valid in PELCO-P model, Options: 0 ~ 31.

**Baud Rate:** Camera baud rate settings, Options: 38400, 19200, 9600, 4800, 2400.

**Video Format:** Camera video format settings, Options: 1080P25, 1080P30, 1080P50, 1080P60, 1080I60, 1080I50, 720P50, 720P60.

**Lens:** Set lens type, Options: Type1, Type2.

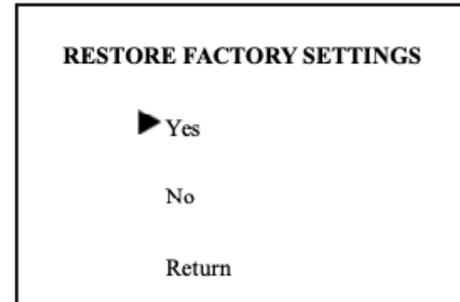
## 7. INFORMATION

Move the cursor to the Information item in the main menu and press [home] button, INFORMATION menu appears, as shown in the following figure.

INFORMATION	
Verion	7.2.23
Data	2017-06-21
AF Version	1.1.25
IP	192.168.100.99
Gateway	192.168.100.1
Netmask	255.255.255.0
Return	

## 8. RESTORE FACTORY SETTINGS

Move the cursor to the Restore Factory Settings item in the main menu and press [home] button, the RESTORE FACTORY SETTINGS menu appears, as shown in the following figure.



### NOTE:

If you press the "MENU" button and then turn on power and keep holding down the "MENU" button for 8 seconds, the camera will Restore Default settings.



# Network Function

## 1. Operating Environment

Operating System: Windows 2000/2003/XP/vista/7/8/10

Network Protocol: TCP/IP

Client PC: P4/128MRAM/40GHD/ support scaled graphics card, support DirectX8.0 or more advanced version.

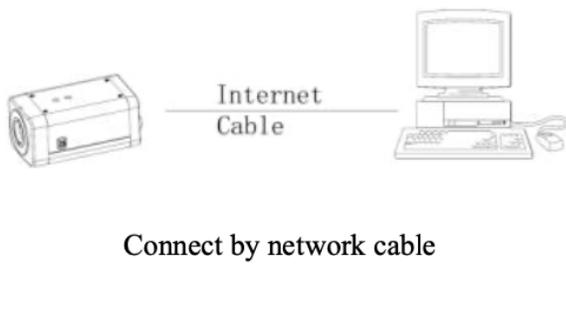
## 2. Equipment Installation

- 1) Connect the camera to your network or to your PC directly via network cable.
- 2) Turn on DC12V power.
- 3) The orange light of the network port will be lit with a green flashing light, the physical connection is ready.

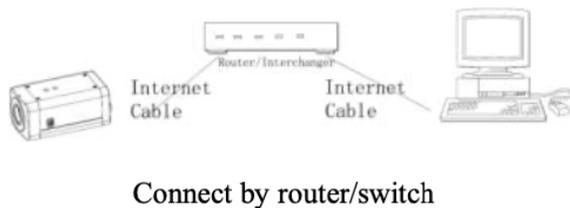
## 3. Network Connection

Connect the camera to a computer in one of the 2 ways shown in pictures 1.1 and 1.2 below:

Picture 1.1 connect by network cable



Connect by network cable



Connect by router/switch

Picture 1.2 Connect by router /switch

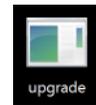
## 4. IP camera controlled over LAN

### 4.1 Set up IP address

The camera default IP address is: 192.168.100.88  
If you don't know the camera's IP address, follow one of the instructions below:

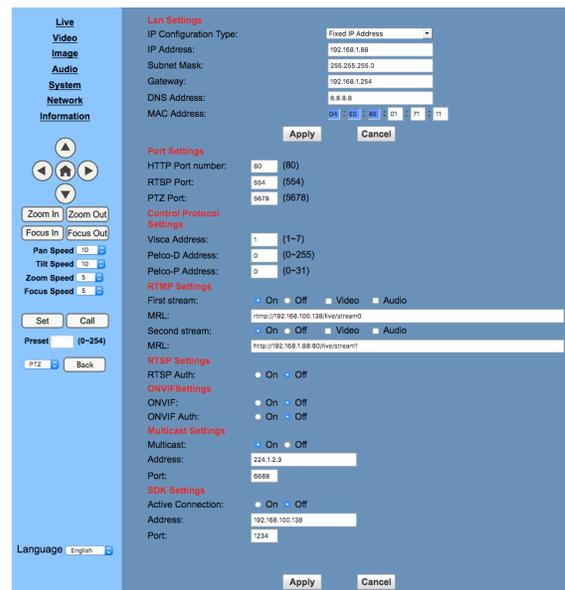
Method 1: press \* and # and 4 on remote controller one by one, the camera IP address will be shown on screen.

Method 2: connect camera to PC with an ethernet cable, and use the "upgrade\_En.exe" programme to search for the IP address (programme available on the networktv.tv website).



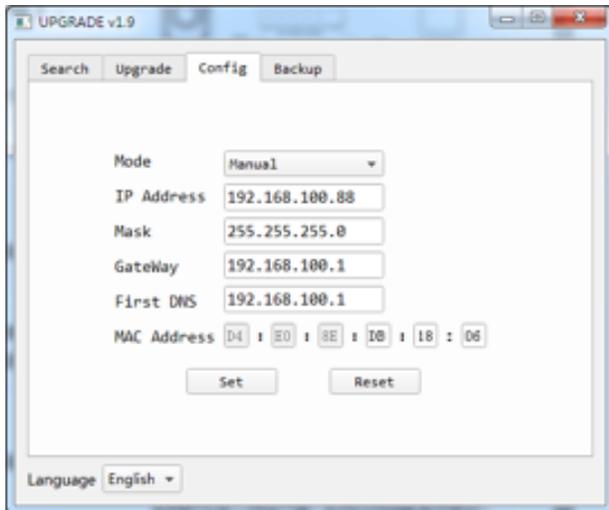
To change the IP address, follow the 2 methods below:

Method 1: On the web control page, click the "Network" tab and change the IP Address. Then click "Apply" to save and restart the camera.





Method 2: Open "upgrade\_En.exe", Click "Search" and it should find your camera/cameras. In Config, change its IP and click "Set". After you've modified the address, restart the camera.



#### NOTE!

The fault IP address for the camera is "192.168.100.88", and login details are:  
user "admin"  
password "admin".

## 4.2 Access IP Camera

Input <http://192.168.100.88> to a browser (eg Internet Explorer, Firefox etc), a login window will pop up, input login name: admin, password: admin, shown as below:



#### NOTE !

If this is the first time this camera has been accessed via a network, you will need to install media player software such as VLC. Please go to the Videolan web-site (<http://www.videolan.org/vlc>) and download and install VLC (player software).



After installation, login again (4.2) and you will see the setup page above.

## 5. IP Camera accessed/controlled by WAN (Internet)

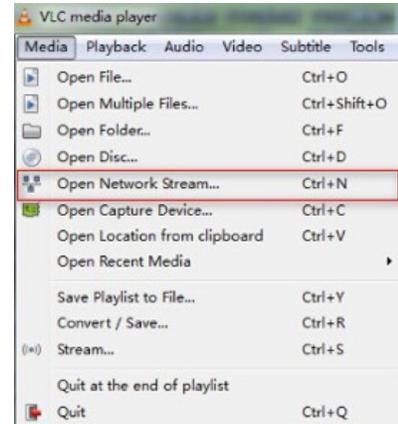
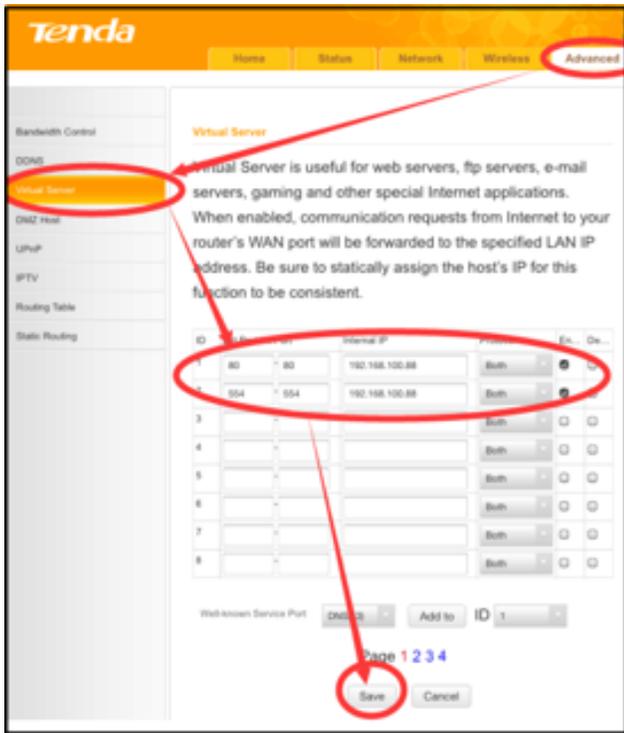
### 5.1 Setup IPC accessed/controlled by dynamic DNS

2 dynamic DNS available:

Dyndns.org,  
3322.org

Router Port Mapping:

Take Tenda router for example, enter Router Home Page (interface page), select "Advanced" - "Virtual Server", add a new port number in "Ext Port", add a new port number in "Int port", put the camera IP address in "Internal IP", then select "Save", shown as below:



Insert the URL address:  
 rtsp://ip: port number/1 (First stream);  
 rtsp://ip: port number/2 (Second stream).

**NOTE !**  
 RTSP port number default 554.

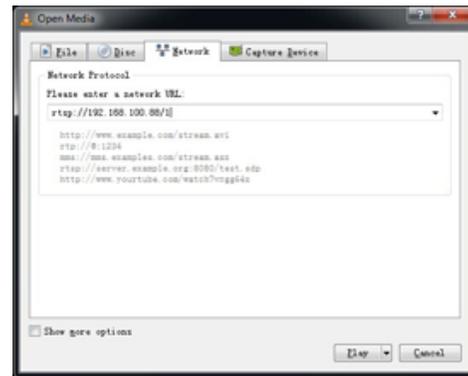
### 5.2 Setting Dynamic DNS

Set the domain name for the camera, setup the parameter, so dynamic DNS can access the camera. Access the link: <http://hostname :port number> (for example, set host computer name: youdomain.f3322.org, camera port number: 554—for this the access url should be: <http://youdomain.3322.org:554>).

**NOTE !**  
 If the camera's port default is 80, then it is not necessary to input the port number, the host name can access the camera directly .

### 5.3 VLC stream media player monitoring

Using VLC media to view a stream:  
  
 Open VLC media player, click "Media", then "Open Network Steam" (or click "Ctrl+N") as show below:



## 6. IP Camera parameter setup

### 6.1 Homepage introduction

#### Menu's

All of the pages contain 2 menu bars, navigation and camera control on the left hand side and the settings page details on the right.



#### Live

Click the "Live" tab and it will provide a real time video image to help with camera positioning and parameter setup

#### A. Video viewing window

Video viewing window must be same as video resolution, the bigger the resolution is, the bigger the playing area is. Double click viewing window, will show full-screen, double click again, will return to the initialized size.

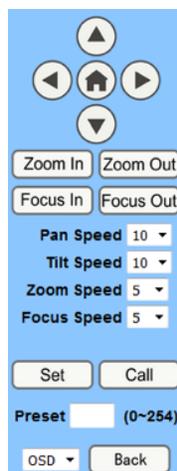
The Status Bar in the viewing window shown as below.



- 1) Video playback pause button: control real-time video pause, stop the last picture, click to restart the video again.
- 2) Audio control buttons: can set mute mode.
- 3) Full screen switch button.

#### B. PTZ Setup

- 1) PTZ direction control box: Up, down, left, right, home button as shown right.
- 2) Rate: Vertical speed can be chosen as 1 ~ 24, horizontal direction at the rate of 1 ~ 20.



- 3) Select corresponding speed and click direction button to change PTZ speed up or speed down.
- 4) Zoom In/Zoom out: for zooming in or zooming out, Focus In/ Focus Out: Focusing on distant objects or Focusing on close objects.
- 5) Set/Call: When you want to set a specific position and zoom for the camera, you can set up a preset for that position—see below:

Method 1: Type a number into the Preset box.



Method 2: Type name into the Preset information.

Then click the "Set" button.

When you want the camera to return to that preset position, click the relevant "Call" button or click the relevant preset number ("No."). The camera will then turn back to that preset position.

Presets Information		
No.	Name	
1		Set
2		Set
3		Set
4		Set
5		Set
6		Set
7		Set
8		Set
9		Set

6) PTZ Menu: If you select OSD from the dropdown, this setting allows the user to see the On Screen Display (OSD) menu in the video viewing window. Use the PTZ direction control buttons (up/down arrows to select the menu, left/right arrows to modify the submenu and the home button as enter). After the menu has been modified, select PTZ from the dropdown if you are in the main menu, it will save the setting and exit automatically. Otherwise, return to the previous menu by clicking the Back button (effective only in the submenu).



PTZ : system in PTZ mode.

#### C. Language selection

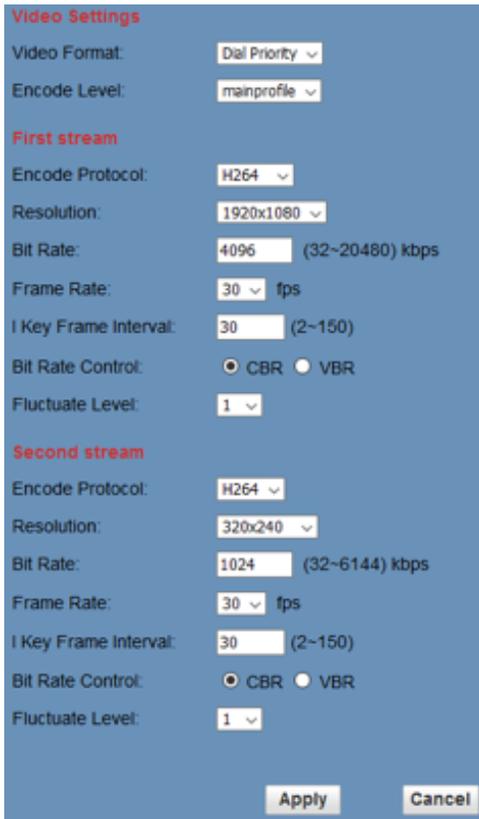
Chinese/English/Russian





### 6.2 Video

To set up the video parameters, click the "Video" tab.



#### 1) Video format

There are 3 formats, support for 50HZ (PAL), 60HZ (NTSC) and Dial priority (chosen via the RC menu).

#### 2) Encode Level

Choose between baseline, mainprofile, highprofile.

#### 3) Encode Protocol

Choose H.264 , H.265 and MJPEG three formats.

#### 4) Resolution

The First stream supports either 1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360. The Second stream supports 1280x720, 1024x576, 720x576, 720x408, 640x360, 480x270, 320x240, 320x180.

Note: the bigger the resolution is, the clearer the image will be, but more network bandwidth will be taken.

#### 5) Bit Rate

The user can assign the bit rate flow for each stream. Note: the bigger bit rate is, the clearer the image will be. But the bit rate allocation must combine with the available network bandwidth, when the network bandwidth is too narrow and the allocated bit flow is too big, it will cause the video signal to be compromised and not transmitted normally, ie you are likely to get unsatisfactory video images.

#### 6) Frame Rate

The user can specify the size of the frame rate, generally if the Frame Rate is higher, the image quality is more smooth; If the Frame Rate is smaller, the video image will be more juddery.

#### 7) I Key Frame Interval:

Set the interval between two I frames, the bigger interval is, the response will be lower from viewing window.

#### 8) Bit Rate Control

Choose between:

Constant bit rate: video coder will be coding according to preset speed

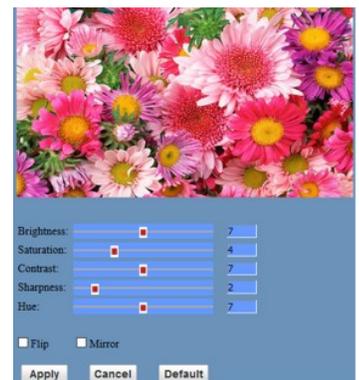
Variable bit rate: video coder will adjust the speed based on video bandwidth speed to gain the best image quality.

#### 9) Fluctuate Level

Choose the fluctuation magnitude of variable rate, grade 1 ~ 6

### 6.3 Image

To adjust the video image, click on "Image" and you will get the following settings:



### 1) Brightness

Image brightness 0~14, slider control, on the right shows the corresponding numerical. Default 7.

### 2) Saturation

Saturation 0~14, slider control, on the right shows the corresponding numerical. Default 4.

### 3) Contrast

Contrast 0~14, slider control, on the right shows the corresponding numerical. Default 7.

### 4) Sharpness

Sharpness 0~15, slider control, on the right shows the corresponding numerical. Default 2.

### 5) Hue

Hue 0~14, slider control, on the right shows the corresponding numerical. Default 7.

### 6) Flip & Mirror

Click Flip to turn the image upside down (useful if you are ceiling mounting the camera),  
Click Mirror to horizontally flip the image.

### 7) Apply

After setting the different parameters, click the "Apply" button to save or click "Cancel" to cancel the adjustment of the parameters. If you click "Default", it will revert to original camera default settings.

## 6.4 Audio Setup

### 1) Audio Type

Audio type AAC.

### 2) Sample rate

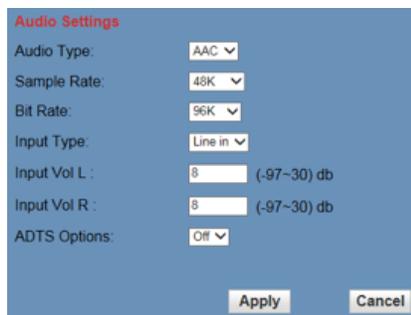
Sample rate 44.1K and 48K.

### 3) Bit rate

Bit rate 96K, 128K, 256K.

### 4) Input Type

Line in only.



### 5) Input Vol L

Adjust the volume of the left channel.

### 6) Input Vol R

Adjust the volume of the right channel.

### 7) ADTS Options

Optional items: On, Off

### 8) Button

Press "apply" button to save the setting parameters, press "cancel" button to cancel parameters.

## 6.5 System Setting

Click the "System" tab to enter the System setting page.

### 1) Work Mode

The Work Mode is usually RTSP.

### 2) Reboot

Click the "Reboot" button for a camera system restart.

### 3) User and password

The user can modify the password (letters and numbers only).

### 4) Apply / Cancel

If you have modified the password, enter the new password and click the "Apply" button to the login page, or press "cancel" button to cancel password change.



## 6.6 Network Setting

Click "Network" to enter the network settings page.

### 1) Lan Settings

The Default IP address is 192.168.100.88.

The MAC address can be modified.



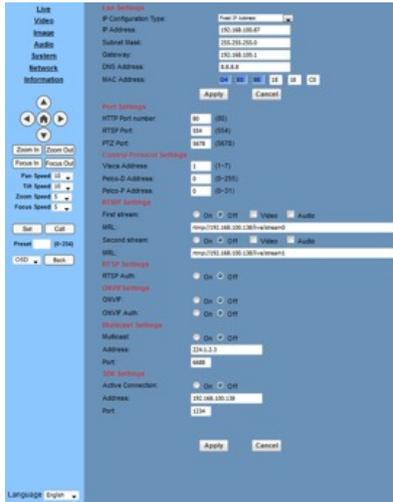
## 2) Port Settings

### A. HTTP Port

IP address identifies the network device, the device can run multiple web applications, each network program using network port to transmit data, so data transmission to be carried out between the port and port. Port setting is to

set up WEB SERVER program using which port to transmit.

When port mapping, need to be consistent with the port number (default port: 80)



### B. RTSP Port

Network camera support RTSP protocol, use the VLC tools broadcast.

### C. PTZ Port

Support PTZ protocol, default port: 5678.

## 3) Control Protocol Setting

Setting camera control communication protocol, include Visca address, Pelco-D address, Pelco-P address.

## 4) RTMP Setting

Setting the camera stream, can set up two stream, in the two stream selection control code stream of "On", "Off", "Video", "Audio", etc.

## 5) RTSP Setting

Setting network camera rtsp protocol of "On", "Off".

## 6) ONVIF Setting

Setting the ONVIF protocol and ONVIF authorization "On", "Off".

## 7) Multicast Setting

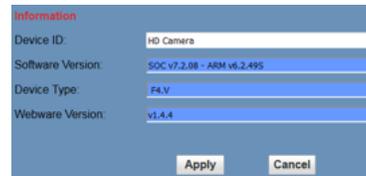
Setting multicast "On", "Off" and multicast address (default address 224.1.2.3) and port (default 6688).

## 8) Apply / Cancel

Modify network parameters then press "Apply" button to modify network parameters, press "Cancel" button to cancel network parameters.

## 6.7 Information

Click "Information" to show the current device information, as shown below.



## 7. Download the Network upgrade program

If you need the camera upgrade program, please contact info@networktv.tv.



## Maintenance & Troubleshooting

### Camera Maintenance

- If camera will not be used for a long time, please turn off the power switch, disconnect AC power cord of AC adaptor to the outlet.
- Use soft cloth or tissue to clean the camera cover.
- Please use the soft dry cloth to clean the lens. If the camera is very dirty, clean it with diluted neutral detergent. Do not use any type of solvents, which may damages the surface.

### Unqualified Application

- No shooting extreme bright object for a long period of time, such as sunlight, light sources, etc.
- No operating in unstable lighting conditions, otherwise image will be flickering.
- No operating close to powerful electromagnetic radiation, such as TV or radio transmitters, etc.

### Troubleshooting

#### Image

- No image
  1. Check whether the power cord is connected, voltage is OK, POWER lamp is light.
  2. Check whether the camera can self-test after startup.
  3. Check video cable is connected correctly.
- Abnormal display of image
  - Check video cable is connected correctly.
- Image dithering even at widest zoom position
  1. Check whether camera is fixed correctly.
  2. Make sure if there are something like vibration machine or other things nearby.

#### Control

- IR remote controller cannot control the camera
  1. Change the battery
  2. Check the camera working mode.
  3. Check IR address of the Remote Commander is set correctly.

#### **Serial communication cannot control the camera**

1. Check the camera working mode.
2. Check control cable is connected correctly.



### **No video image IE browser**

When the IP camera is used for the first time and accessed by Internet Explorer (or other web browser), you first need to install a media player plug-in. If you are using the camera via the Internet (for new users), then you will need to install a player software (VLC). Please go to the VLC website <http://www.videolan.org/vlc>, download and install VLC (player software). After installation, login again, and the video image is displayed (see the Network Function section, point 5.3).

Follow the checklist below if you are unable to access IP camera web pages via a browser:

1. Access the network with a PC and test whether you can access the camera via a Ping test. You may have a firewall issue or a cable may be unplugged.
2. If you need to, disconnect IP camera from the network and connect it to a PC (please refer to the Network Function section) to re-set the IP address.
3. Check the camera's IP address, subnet mask and gateway address.
4. Check for MAC addresses conflict.
5. Check that the Web port is not occupied by other devices.

If you modify the IP address and set it incorrectly, or forget web passwords, press the IR remote controller "[\*]+[#]+[Manual]" to restore the default value (Default IP: 192.168.100.88 Default username: admin Default password: admin)