

# HD HVR 1080P IP Camera + Analog Solutions

## Quick Operation Guide



This product is designed specially for security and surveillance field which is an outstanding digital surveillance product. It introduces embedded LINUX operating system which is more stable. It introduces standard H.264mp video compressed format and G.711A audio compressed format which insures the high quality image and low error coding ratio. Strong network services greatly enhance the network data transmission capacity and remote control capabilities.

### Main Screen & Setup

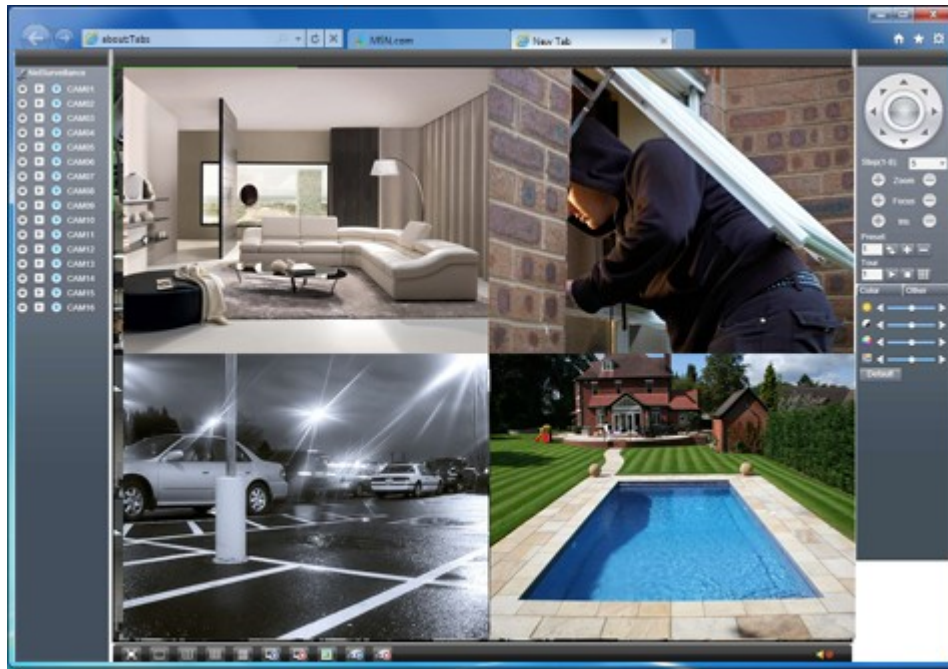


- NVR, DVR and HVR, 3 in 1
- H.264 High profile compression algorithm ideal for standalone DVR
- Realtime live display up to 24/32 cameras.
- Pentaplex function: live, recording, playback, backup & remote access;
- Support Dual-streams, to make mobile monitoring very easy, flexible for network transmission
- Multiple control methods: IR Remote controller, USB mouse and front panel press button.
- Smart video detection: motion detection, video blind, video loss
- Smart camera settings: privacy masking, camera lock, color setting, and title display
- Pan Tile Zoom and Speed Dome Control: more than 60 protocols supported, preset, scan, auto pan, auto tour, pattern, auxiliary function supported.
- Easy backup methods: USB devices, remote network and client software backup
- Alarm triggering screen tips, buzzer, PTZ preset, e-mail & FTP upload
- Smart HDDs Management: non-working HDD hibernation, HDD faulty alarm, RAID function
- Powerful network software: built-in web server, multi-DVR client & SMS Networking access for remote live viewing, recording, playback, setting, system status, event log, email & ftp function
- Support DHCP / PPPoE / FTP / DNS / DDNS/ NTP / Email alarm / IP right management / IP search / network alarm center functions, support web client, standalone client and SDK
- With the sound system for the protection circuit, unique triple watchdog function, very low power consumption, to ensure technology, can monitor the whole run process of the equipment, can greatly reduce the maintenance cost.
- Enable strong multi-way synchronization with max 16 channels playback, realize the zero-delay between playback channels
- Networking Protocol: support ONVIF 2.0, Support 80% IPCamera in the market

Playback



IE



## BASIC OPERATION

1

### Hard Disk Installatio

For the first use, please install the hard disk.

For the first use, ple:

4CH series HVR sup;  
8CH / 16CH HVR Ser

Note: DVR can run ar  
while it can't record a

#### Mouse Conn

4CH DVR has two US

8CH / 16CH DVR ha  
panel,the 2 USB could



① disassemble the screw



② disassemble the cover



③ fix the screw of hard disk



④ fix the screw of hard disk



⑤ connect the data wire



⑥ connect the power wire



⑦ cover the machine



⑧ fix the cover

2

### Turn On

Plug the power supply and turn on the power supply switch. Power supply indicator light shining indicates turning on the video recorder. After finishing the startup you will hear a **Beep**, and the default setting of video output is multiple-window output mode.

**Note:** Restart the power after the abnormal power off, DVR will automatically recover the state before power off.

### Turn off

There are two methods to turn off the DVR which are soft switch and hard switch.

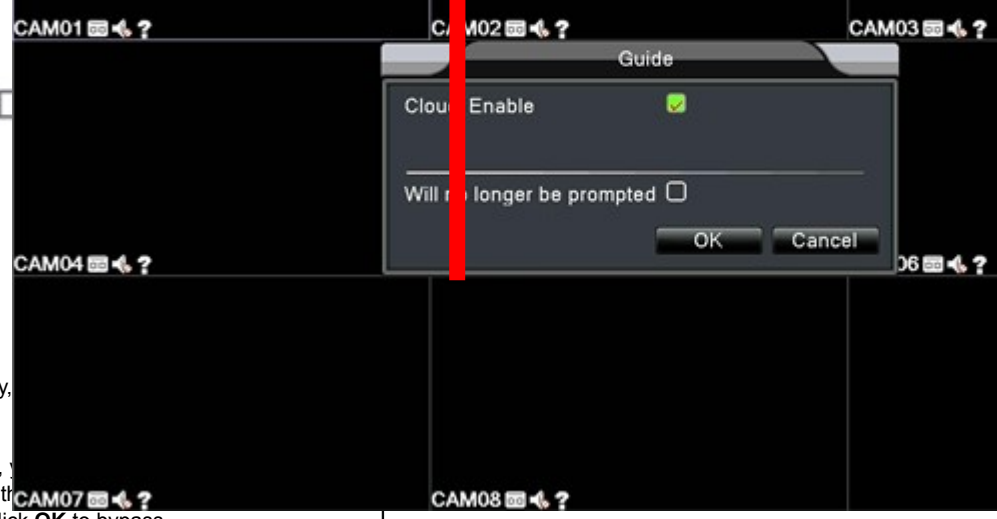
**Soft switch:** Entering [Main menu] and choosing [Logout] in the [turn off the system] option is called soft switch.

**Hard switch:** Pressing the power supply switch is called hard switch.

**Note:** The setting information must be saved before replacing the battery otherwise information will lose.

H.264  
Digital video

2014-01-31 04:19:02 Fri



**Live Display**

After boot up Successfully,

**Guide**

When you first time open, If you don't want to see the no longer to prompted Click **OK** to bypass.

**4 System Date / Time is list on the top right corner**

In each viewing window, camera channel number and recording symbol status icon will list on each channel window cornder.

Here is the Symbol means:

1		Recording	3		Video loss
2		Motion	4		Camera lock

**5 Mouse Right Click**, then you should see the Popup Menu.

And, Choose **Main Menu**



6 **Super** User Name: **admin**  
Password: **(no password)**

**Basic** User Name: **guest**  
Password: (no password)

**Enter Wrong Password protection:**

- (3) Enter wrong password continues 3 times, then **Alarm Beeps**.
- (5) Enter wrong password 5 times, HVR will **Lock User** and prevent to enter anymore.

To Release from Lock down, wait for half hour will allow you try again, or you need to Power Off & Power on to release the Lock down.



**For your system security, please modify your password after first login.**

7 **Recording:**

**By Default: Normal recording**

The system's default set is 24 hours continuous recording.

Set the recording parameters in the surveillance channel.  
You can enter **[Main Menu]> [Record]> [Record Config]** to set.

**Note:**  
There is at least one read-write hard disk if the DVR records normally.



**Description:**

**【Channel】** Choose the corresponding channel number to set the channel. Choose the "all" option to set the entire channels.

**【Redundancy】** Choose the recording file and backup in two hard disks. The one is read-write disk, another is redundant disk.

**【Length】** Set the time length of each video file. 60minutes is default length.

**【Prerecord】** Record 1-30 seconds before the action. (file length is decided by the code stream)

**【Record Mode】** Set video state: configuration, manual and stop.

**Schedule:** Record according to the set video type (regular, detect and alarm) and time section.

**Manual:** Click the "all" button & make the corresponding channel recording no matter it is in any state.

**Stop:** Click the "stop" button & make the according channel stop recording no matter it is in any state.

**【Week】** Weekday

**【Period】** Set the time section of common recording, The recording will start only in the set range.

**【Recording Type】** Set recording type: regular, detection or alarm.

**regular:** Perform the regular recording in the set time section. The video file type is "R".

**detect:** Trigger the "motion detect", "camera mask" or "video loss" signal. When above alarm is set as opening recording, the "detection recording" state is on. The video file type is "M".

**alarm:** Trigger the external alarm signal in the set time section. When above alarm is set as opening recording, the "detection recording" state is on. The video file type is "A".



7 **Change to Motion Detect Recording (Schedule Detection for Analog Recording)**

Right Click Mouse button and enter **【Main Menu】> 【Record】> 【Record Config】** to set.

**Note:** There is at least one read-write hard disk if the DVR records normally.



8 **Change All Channel**

For Example:  
Select/Change Channel

**Record Mode:** select (

Change **Week** from Mo

Regular: Normal Record

**Detect:** Motion Detect

Alarm: External device

Click **OK** when finish.

Now, you just enable Sche

**Enable Motion**

9 Right Click Mouse bu  
[Main Menu]> [Alar

### Record Conf.

Channel	All	Redundancy	<input type="checkbox"/>
Length	60 min		
Mode	<input checked="" type="radio"/> Schedule <input type="radio"/> Manual <input type="radio"/> Stop		
Week	All	Regular	Detect Alarm
Period 1	00:00 - 24:00	<input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>
Period 2	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Period 3	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Period 4	00:00 - 24:00	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

### Main Menu

Record Alarm System Advanced Info

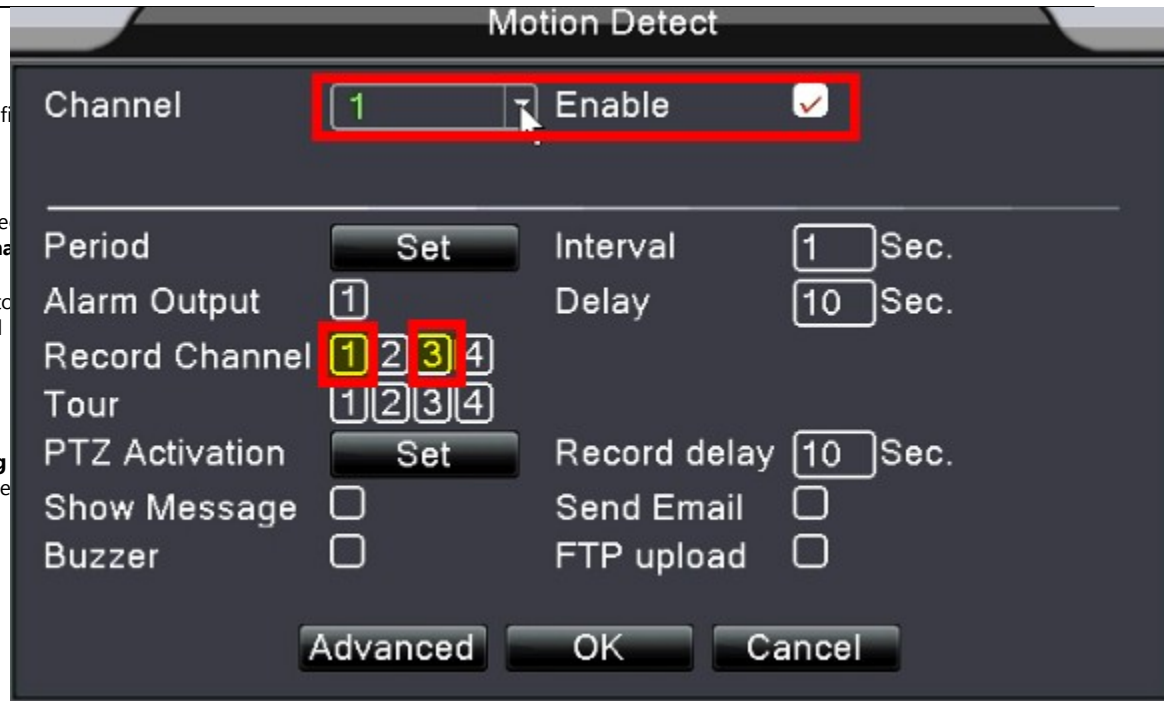
Motion Detect Video Blind Video Loss

Alarm Input Alarm Output Abnormality

Alarm.

### Enable Motion Detection

- 1 For Example:  
Select **Channel [1]** **Enable [✓]** f
- 0 Select Record Channel **[1]** **[3]**  
That means: When Channel [1] dete  
will enable recording on Cha
- Then, switch to Channel [2] on the to  
Repeat same steps until finish all  
recording channels.
- Click **OK** when finish.
- After adjust to **Schedule Recording**  
Congratulation, you have Motion De



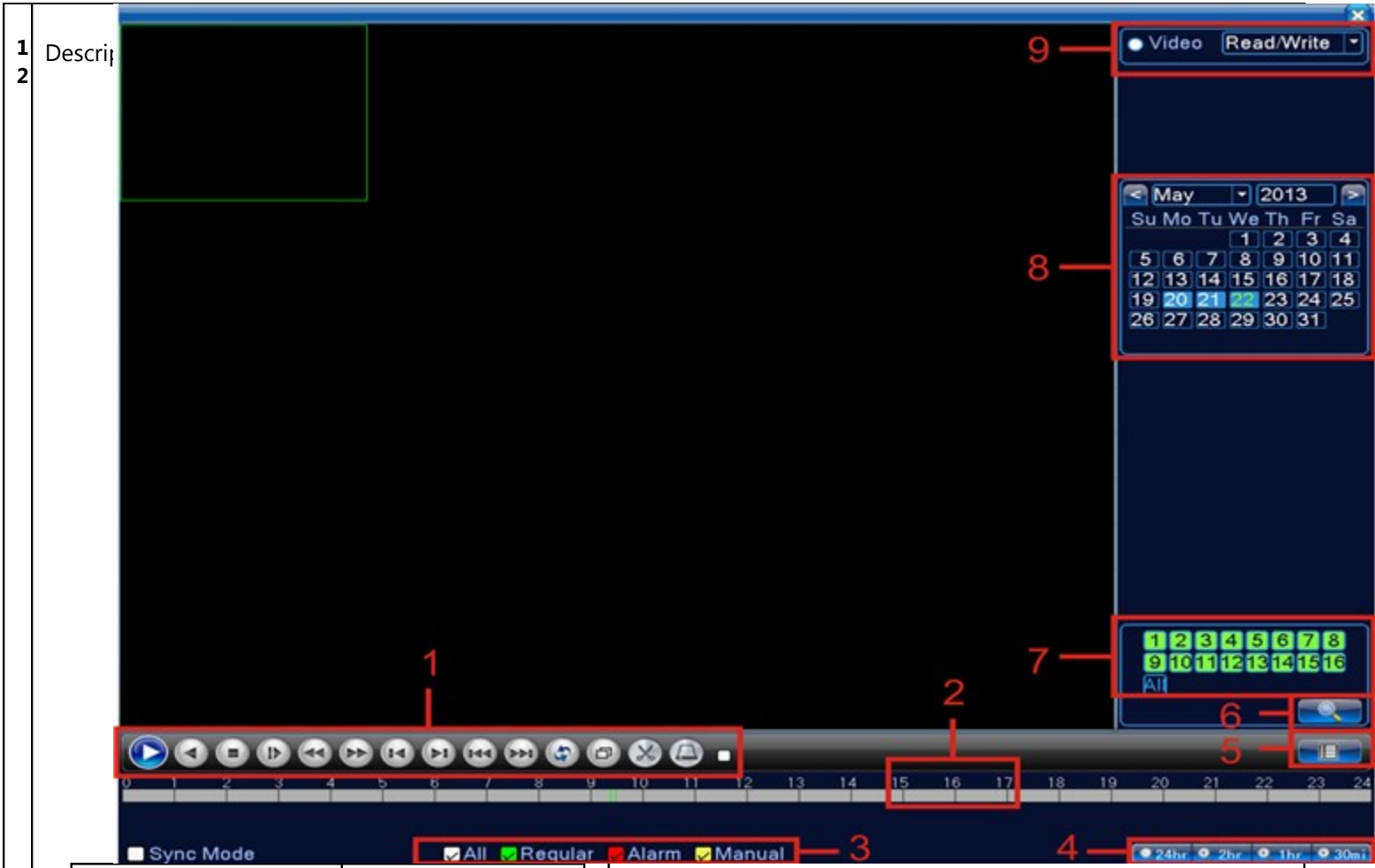
### How to Playback Video

Right Click Mouse button and enter  
**Playback**



OR,  
Right Click Mouse button and  
[Main Menu]> [Record]> [Reco





1 Descrip  
2

1.Playback control	7.Channel option
2.Operating Tips	8.Date option
3. Record type	9.Storage Device option
4.Time progress bar options	10.File information
5.Switching time or file mode	11.File Option
6.File Search	12.Time

【File information】 Start time,end time and size.  
 【File option】 Choose the file to playback/backup.  
 【 playback control 】 Refer to the following sheet for more information.

1  
3

Button	Function	Button	Function
	Play/Pause		Backward
	Stop		Slow Play
	Previous Frame		Fast Play
	Next Frame		Previous File
	Repeat Playback		Next File
	Full Screen		

Note: Frame by frame playback playback state.

**Partial enlarged:** single pictures left mouse button box to choose the left mouse button, the selected image, double click the left mouse button to enlarge images.

**Note:** If the current resolution of resolution, it will be displayed as



1  
6

### HDD Manage

Right Click Mouse b  
[Main Menu]> [Adv



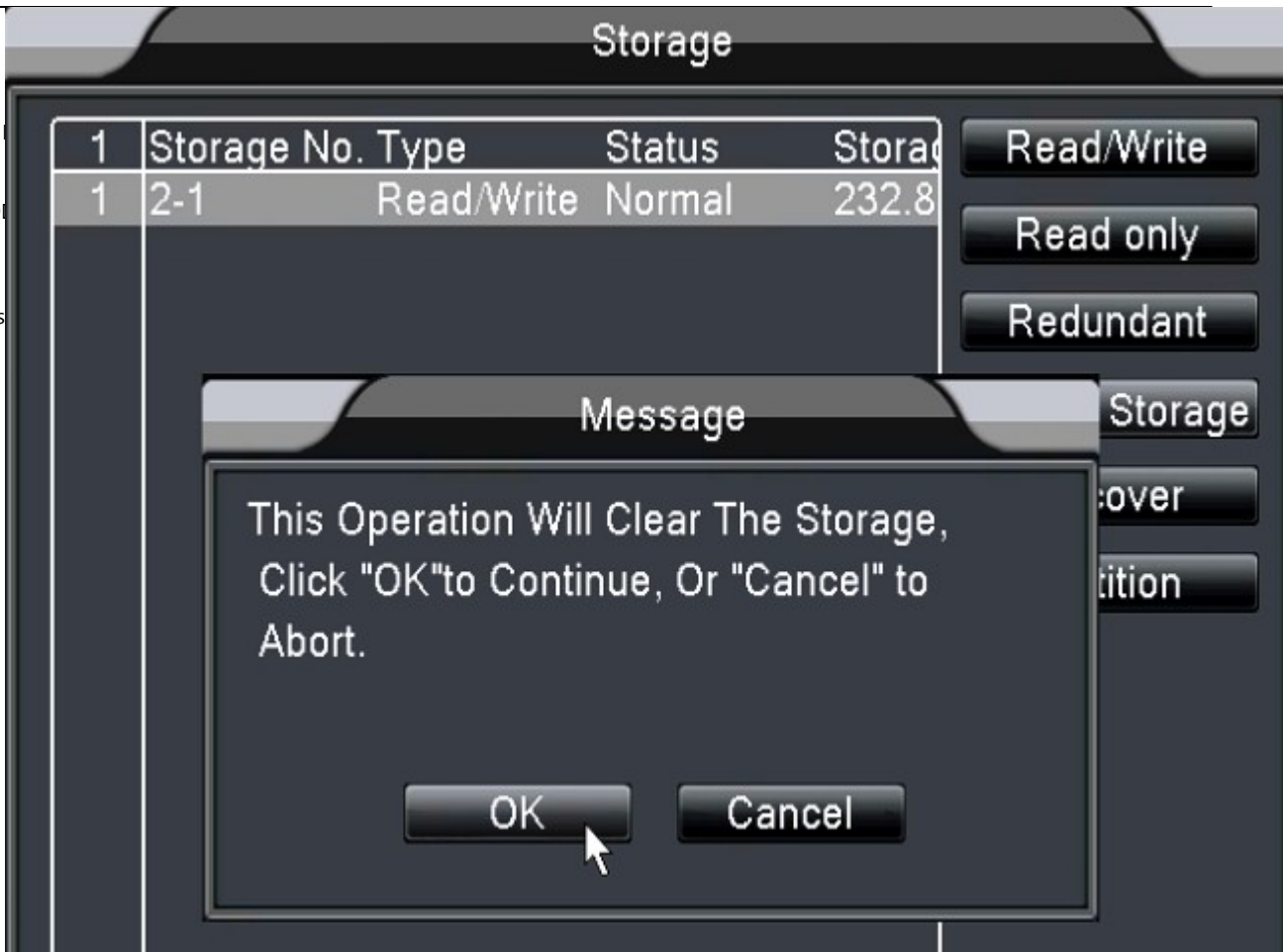
1  
7

### Storage

Select HDD, and click

It will format your HD

(More detail functions



### Network Setup

1  
8

Right Click Mouse button and enter  
[Main Menu]> [System]> [ Network ] to set.



1  
9

Picture IP address is just an example, actual IP will be different.

Please Setup correct IP Address for HVR.

**Two Important Ports:**

HTTP Port: 80  
TCP Port: 34567

Make sure Port Open and Forward in your Router Settings.

(If you have difficult about Network Setup, please check our Network Setup Example on next pages.)

Main Menu->System->NetWork

Net Card: **Wire Netcard**  DHCP Enable

IP Address: 192 . 168 . 1 . 10

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 1 . 1

Primary DNS: 0 . 0 . 0 . 0

Secondary DNS: 0 . 0 . 0 . 0

TCP Port: 34567

HTTP Port: 80

HS Download:

Transfer Policy: Quality Prefer

OK Cancel

**Hybrid Config**

2  
0

**Quick Reference:**

Hybrid is combine And

Right Click Mouse b  
[Main Menu] > [System

Main Menu

Record Alarm System Advanced Info

General Network NetService GUI Display

RS485 Device **RS232** Tour Spot Set

**Digital**

Settings for serial port function and baud rate.

## Digital

2  
1 Select **Channel Type**

**\*NOTICE\* HVR Channel Type**



2 What is Digital Channel meaning?

2 Here is the HVR channel maps.

For example,  
8 Channels HVR is select

**960H 8 Channel** as Default.

**\*NOTICE\* HVR will rel Channel Type**

### ChannelType

	Digital					Analog					IP				
	1080P	720P	960H	D1	HD1	CIF	1080P	960P	720P	960H	D1	3M	5		
<input checked="" type="checkbox"/>	.	.	8	.	.	.	.	.	.	.	.	.	.		
<input type="checkbox"/>	.	.	.	8	.	.	.	.	.	.	.	.	.		
<input type="checkbox"/>	.	.	.	4	.	.	1	.	3	.	.	.	.		
<input type="checkbox"/>	.	.	.	.	.	.	2	.	2	.	.	16	.		
<input type="checkbox"/>	.	.	.	.	.	.	1	.	1	6	.	.	.		
<input type="checkbox"/>	.	.	.	.	.	.	.	.	8	.	.	.	.		

2 For Example:

3 I can change to  
**4 Channel D1 + 1CH 1080p IP Ca**

The Channel Number in sequence or  
#1,2,3,4 is D1. #5 is 1080p IPC #6,

IPC (IP Camera)

**\*NOTICE\* HVR will rel Channel Type**

### ChannelType

	Digital					Analog					IP				
	1080P	720P	960H	D1	HD1	CIF	1080P	960P	720P	960H	D1	3M	5		
<input checked="" type="checkbox"/>	.	.	8	.	.	.	.	.	.	.	.	.	.		
<input type="checkbox"/>	.	.	.	8	.	.	.	.	.	.	.	.	.		
<input type="checkbox"/>	.	.	.	4	.	.	1	.	3	.	.	.	.		
<input type="checkbox"/>	.	.	.	.	.	.	2	.	2	.	.	16	.		
<input type="checkbox"/>	.	.	.	.	.	.	1	.	1	6	.	.	.		
<input type="checkbox"/>	.	.	.	.	.	.	.	.	8	.	.	.	.		

**2 For Example:**

**4** I can change to  
**2CH 1080p IP Camera + 2CH 720P**

The Channel Number in sequence of  
 #1,2 are 1080p IPC #3,4 are 720p IPC

IPC (IP Camera)

**\*NOTICE\* HVR will refer to  
 Channel Type**

ChannelType

	Digital			Analog			IP						
	1080P	720P	960H	D1	HD1	CIF	1080P	960P	720P	960H	D1	3M	5
<input checked="" type="checkbox"/>	.	.	8	.	.	.	.	.	.	.	.	.	.
<input type="checkbox"/>	.	.	.	8	.	.	.	.	.	.	.	.	.
<input type="checkbox"/>	.	.	.	4	.	.	1	.	3	.	.	.	.
<input type="checkbox"/>	.	.	.	.	.	.	.	.	.	.	16	.	.
<input type="checkbox"/>	.	.	.	.	.	.	2	.	2	.	.	.	.
<input type="checkbox"/>	.	.	.	.	.	.	1	.	1	6	.	.	.
<input type="checkbox"/>	.	.	.	.	.	.	.	.	8	.	.	.	.

16 Channel HVR

**2 Channel Maps Refe**

**5** Here are All Channel Maps

Digital		Analog				Network					
1080P	720P	960H	D1	HD1	CIF	1080P	720P	960H	D1	HD1	CIF
		16									
		16									
		8					8				
		8				2	2				
		4				1	7				
		4				1	1	10			
			16								
			16						8		
			8						16		
			4						20		
			4			2			10		
									24		
								20			
						4					
						1	8				
						2	4	4			

4 Channel HVR

8 Channel HVR

Digital		Anal		Digital		Analog				Network					
1080P	720P	960H	D1	1080P	720P	960H	D1	HD1	CIF	1080P	720P	960H	D1	HD1	CIF
		4				8									
			4				8								
			2				4			1	3				
													16		
										2	2				
										1	1	6			
											8				
						1									
								1		7					
						1		1		2					

How to Add IP Camera

Main Menu

2  
0  
Quick Reference:  
Hybrid is combine Ana  
Right Click Mouse b  
[Main Menu]> [Syste

The screenshot shows a 'Main Menu' interface with several icons. A red box highlights the 'Digital' icon, which is a camera with a gear. Below the icons, there is a note: 'Settings for serial port function and baud rate.'



Settings for serial port function and baud rate.

## Digital



Digital channels



Channel status



ChannelType

## Digital channels

Channel

1

Enable



Time synchronization

Decode Order Middle

Connection mode

Single conn

Network Configuration list

0	Configur. name	Device Type	IP Address	IP Channel

Add

Delete

Advanced

OK

Cancel

- 2 After Reboot,
- 3 You should see Digital C
- Select **Digital Channel**

- 2 Select **Channel** First
- 4 Click **Enable**
- Then, choose **Add**

2  
5

After click Add,

Click **Search**

It will begin to Search your

**Note:**

Sometimes, you need to click  
IP camera.

### Remote access configuration

Configur. name

Device Type  Protocol

IP Channel  Stream

Device address

Port

Username  Password

0	Device Name	MAC	IP Address	Port

Protocol

2  
6

When you found the IP C  
Select the camera from th  
\*Important\*  
**Double Click** on Ca  
It will begin to copy inform  
Our ONVIF Camera does  
But, some of the ONVIF c  
Please make sure and ent  
password protection.  
Click **OK** when finish.

### Remote access configuration

Configur. name

Device Type  Protocol

IP Channel  Stream

Device address

Port

Username  Password

1	Device Name	MAC	IP Address	Port
1	ONVIF	0013e204cc3c	192.168.5.173	80

Protocol

2  
7

Note:  
Our ONVIF Camera does  
But, some of the ONVIF c  
Please make sure and ent  
password protection.

### Remote access configuration

Configur. name

Device Type  Protocol

IP Channel  Stream

Device address

Port

Username  Password

1	Device Name	MAC	IP Address	Port
1	ONVIF	0013e204cc3c	192.168.5.173	80

Click OK when Finish

2  
8

That should Finish Setu

**Important Note:**

1080p Digital channel c  
720p Digital channel ca

If you see Red X on the



### Digital channels

Channel  Enable

Time synchronization  Decode Order

Connection mode

Network Configuration list

1	Configur. name	Device Type	IP Address	IP Channel
1	<input checked="" type="checkbox"/> chConfig01	IPC	192.168.5.173	1

## Remote Web Access:

- 1 **Check Network Connection First.**  
Before web operation,you need to connect the equipment with internet.

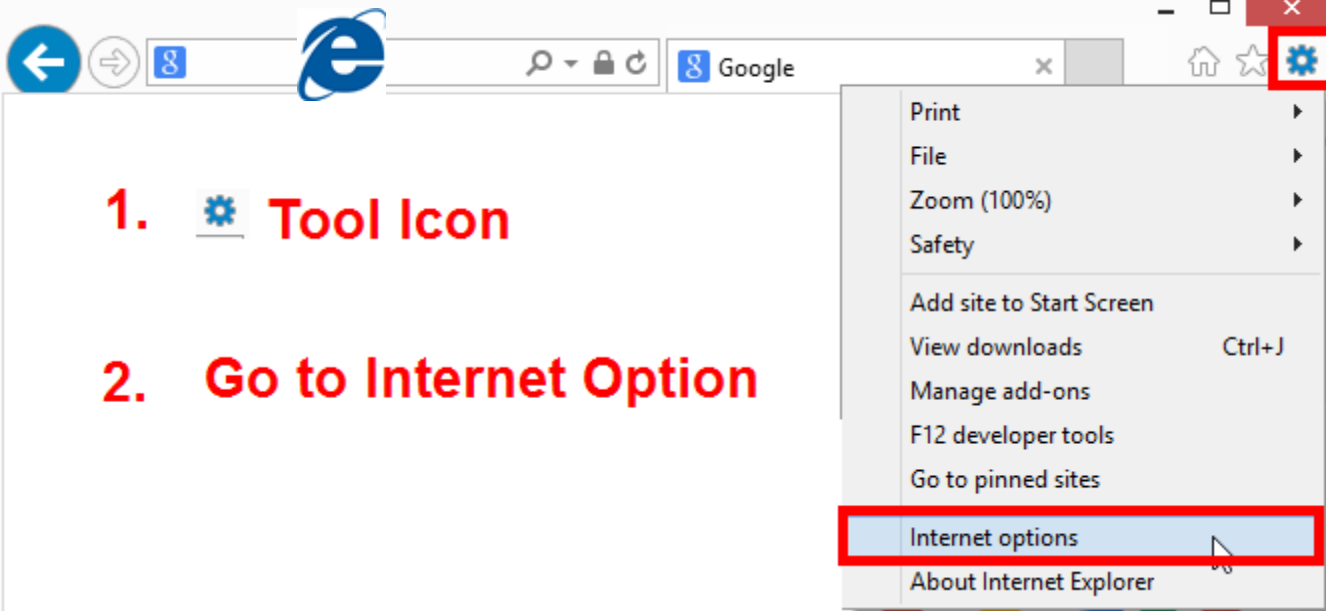



- Step1.** Connect the equipment with the internet correctly.  
**Step2.** Set LAN following to the ninth term Network Setup in reference manuals first part.  
**Step3.** when Lan is connected,it needs to set up port mapping for public network access.

**Note:**The device must be in the same network with PC,if cannot connect,pls check the device IP if it works fine.

- 2 **Open Internet**

[ For First Time  
For the first time  
Internet Explorer



1.  **Tool Icon**

2. **Go to Internet Option**

The screenshot shows the Internet Explorer browser window. The address bar contains 'Google'. The Tools menu is open, and 'Internet options' is highlighted with a red box. The gear icon in the top right corner of the browser is also highlighted with a red box.

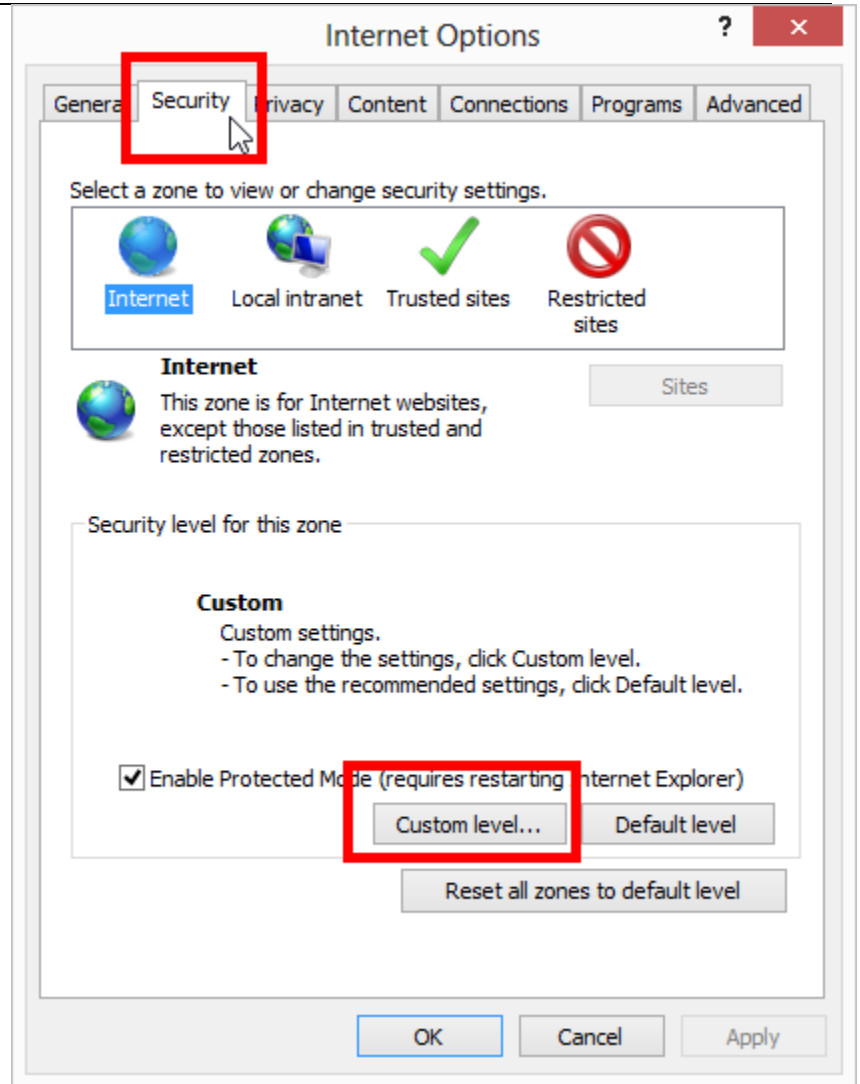
3 Internet Options

Go to **Security** tab on the top.

=> **Custom level**

**[ For First Time Use Only ]**

For the first time, we need to change Setting in the Internet Explorer for the first time use.



4

**Modify these ActiveX settings:**

**Automatic prompting** for ActiveX controls: **(Enable)**

**Download signed** ActiveX controls: **(Prompt)**

**Download unsigned** ActiveX controls: **(Prompt)**

Click **OK**

**Warning!**



Are you sure you want to change the settings for this zone?

Yes

No

Click **Yes**, then **OK** again.

**Security Settings - Internet Zone**

Settings

- Automatic prompting for ActiveX controls
  - Disable
  - Enable
- Binary and script behaviors
  - Administrator approved
  - Disable
  - Enable
- Display video and animation on a webpage that does not use ActiveX
  - Disable
  - Enable
- Download signed ActiveX controls
  - Disable
  - Enable (not secure)
  - Prompt (recommended)
- Download unsigned ActiveX controls
  - Disable (recommended)

\*Takes effect after you restart your computer

Reset custom settings

Reset to:

Medium-high (default)

Reset...

OK

Cancel



Enter Your HVR / NVR IP Address Here

+You Gmail Images

Sign in

have difficulty, See Troubleshooting Page

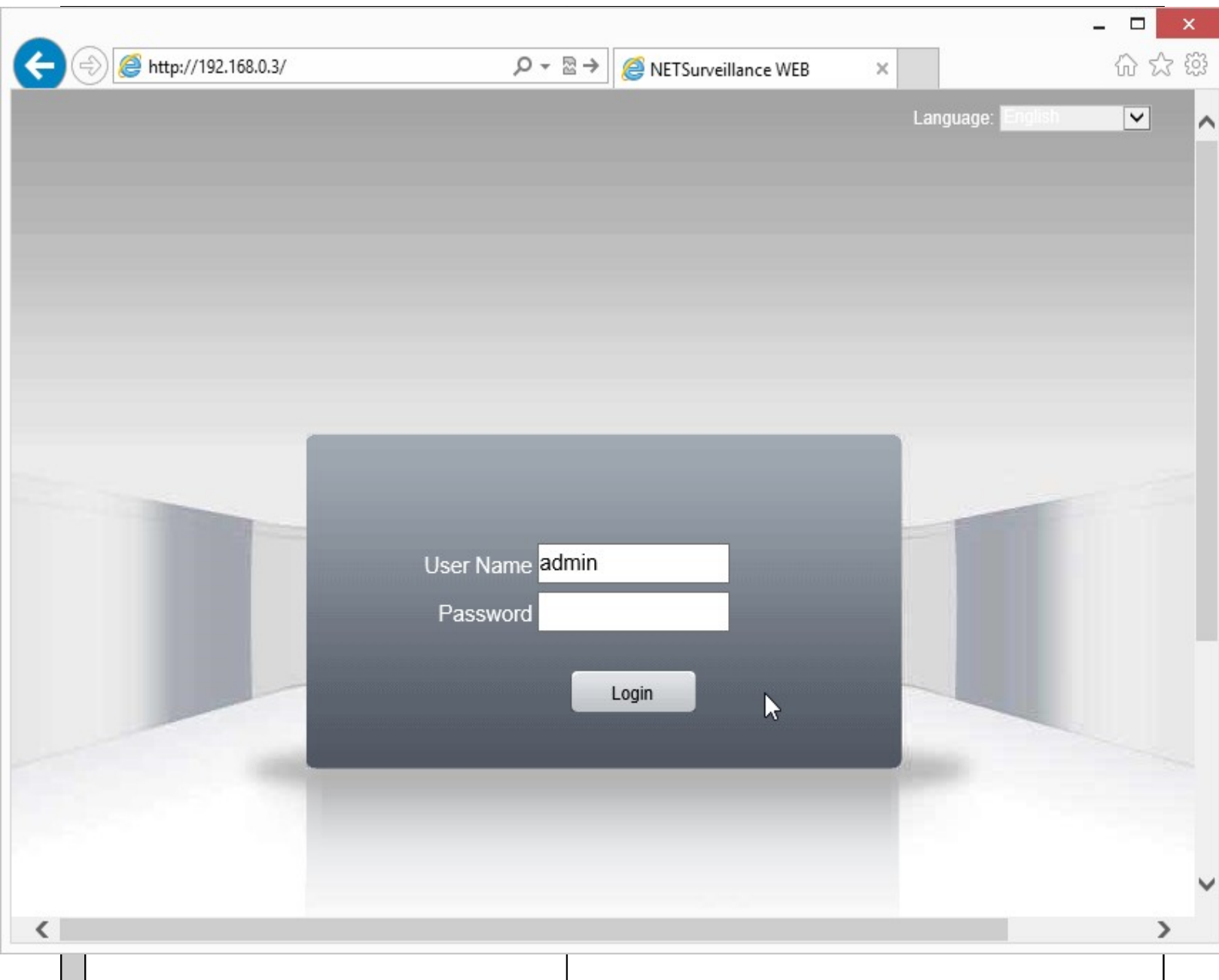


6 [ For First Time Use Only ]

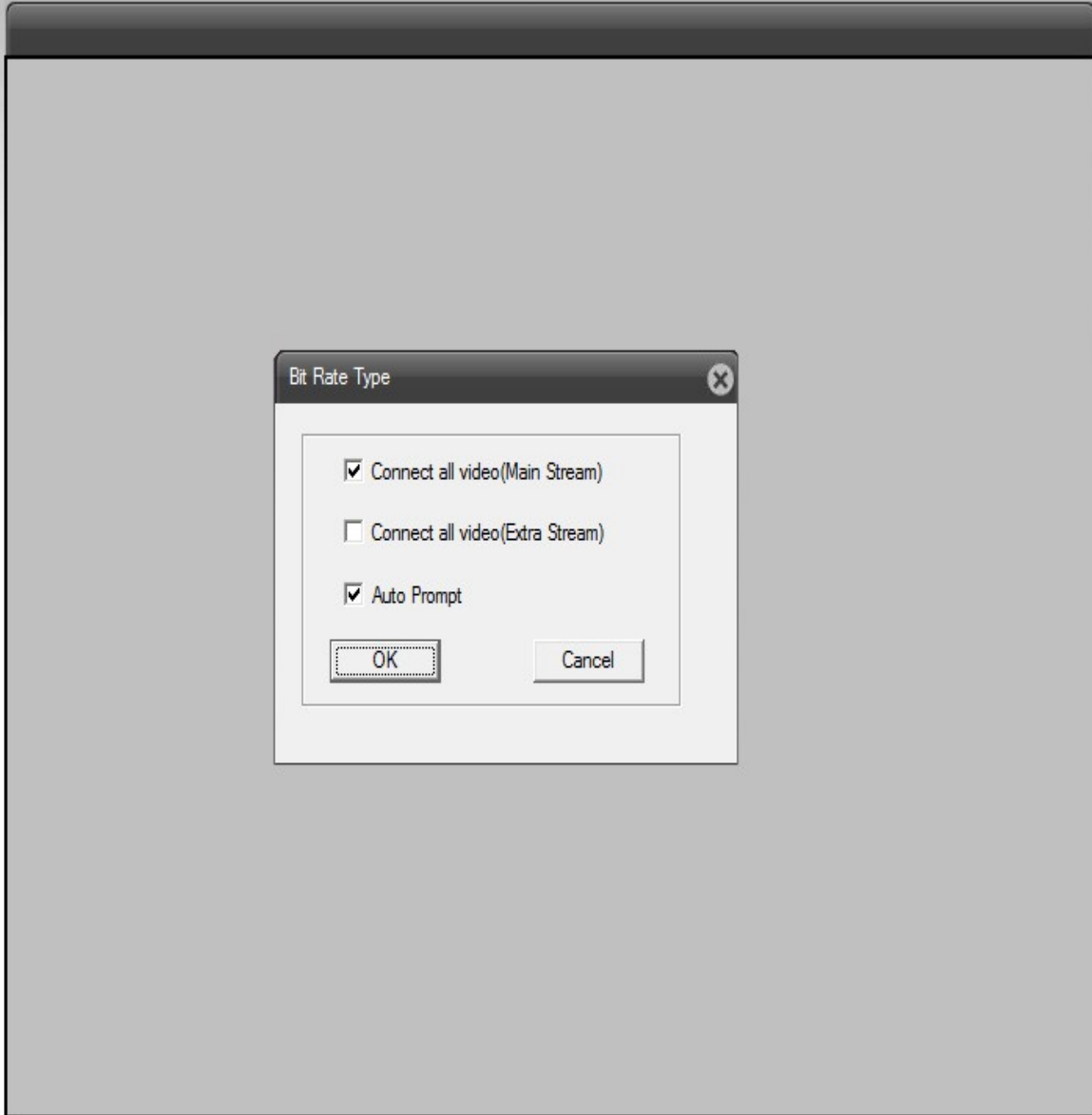
For the first time, we need to Install the ActiveX Plug

Click Install, then Login





NetSurveillance  
CAM01



**Bit Rate Type**

Connect all video(Main Stream)

Connect all video(Extra Stream)

Auto Prompt

OK Cancel



Step(1-8): 5



Preset:



Tour:



Color Other



Default



Browser window: <http://192.168.5.172/> NETSurveillance WEB


Navigation: Playback | Log | DeviceCfg | LocalCfg | Log Out

Left sidebar: NetSurveillance | CAM01

Right sidebar controls:

- Step(1-8): 5
- Zoom: + -
- Focus: + -
- Iris: + -
- Preset: [Icons]
- Tour: [Icons]
- Color: [Sliders]
- Other: [Sliders]
- Default

Bottom status bar: Copyright 2013, All Rights Reserved



1  
0

## Port Reference:

HTTP Port: 80  
Media Port: 34567

Mobile Software:  
**vMEyeSuper** for Android  
Meye for iPhone

### Notice for IE 11

Please add IP address into Compatibility List.

If you have difficulty, See Troubleshooti

Device config

Setting -> System -> Network

Net Card: Wire Netcard  DHCP Enable

IP Address: 192 . 168 . 0 . 3

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 0 . 1

Use DNS server address below-----

Primary DNS: 202 . 101 . 172 . 35

Secondary DNS: 202 . 101 . 172 . 35

Media Port: 34567 HTTP Port: 80

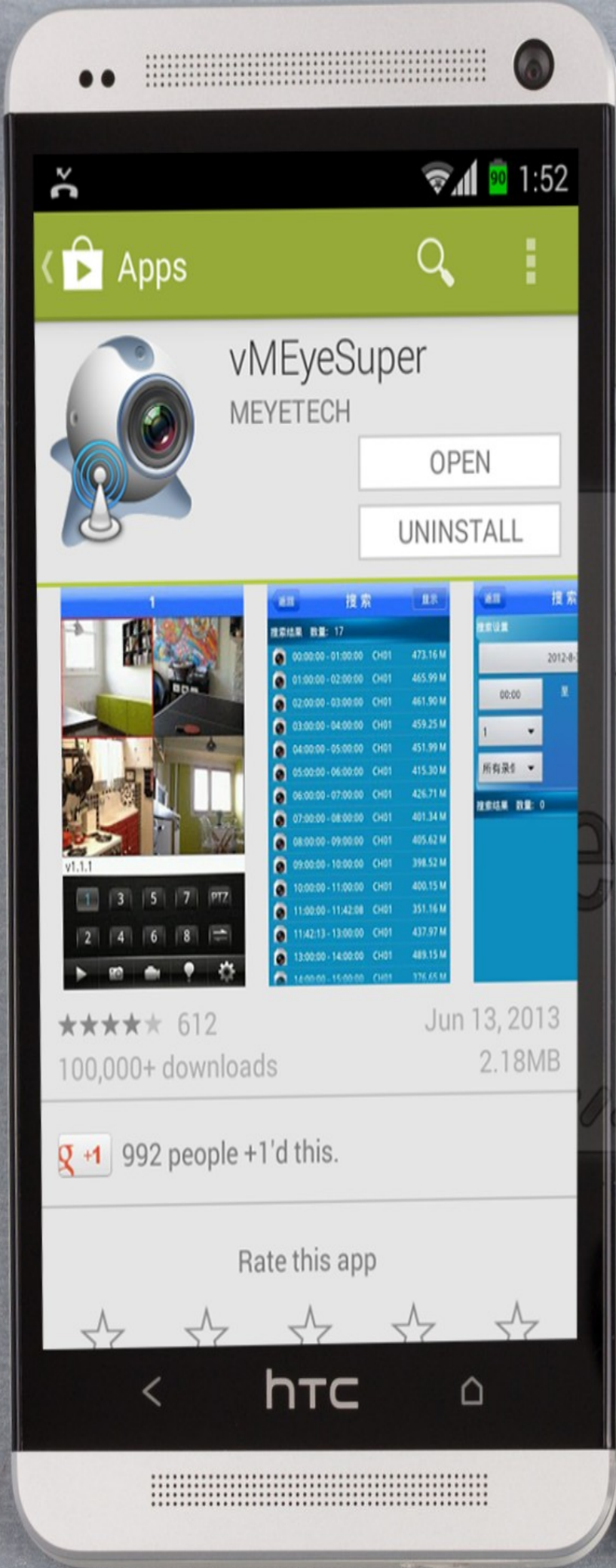
MAC: 00:3e:0b:07:72:cf

High Speed Download

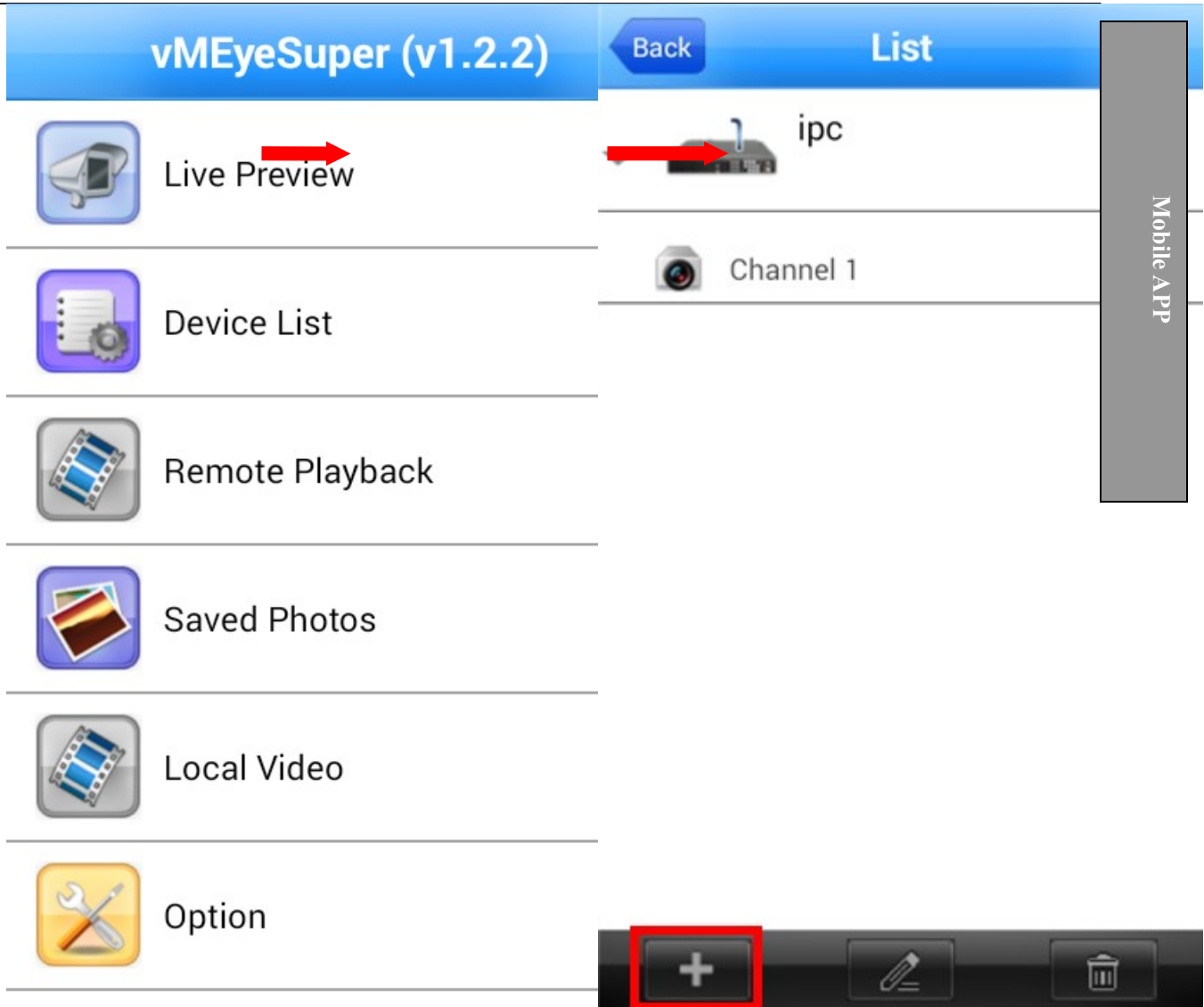
Transfer Policy: Quality Preferred

Refresh OK Cancel

## Mobile Apps



2



**Example:** Run Android App vMEyeSuper

Go to Device List  
Click [ + ] at bottom

Enter IP Camera IP address  
TCP Port: 34567

Click **OK** when Finish

Back Search **Ok**

### Device Detail

DeviceName:

Address:

TCP Port:

User Name:

Password:

Max Channel

1  4  8  16  32

3 Click Live Preview

Select IP Camera from the List

vMEyeSuper (v1.2.2)



Live Preview



Device List



Remote Playback



Saved Photos



Local Video



Option



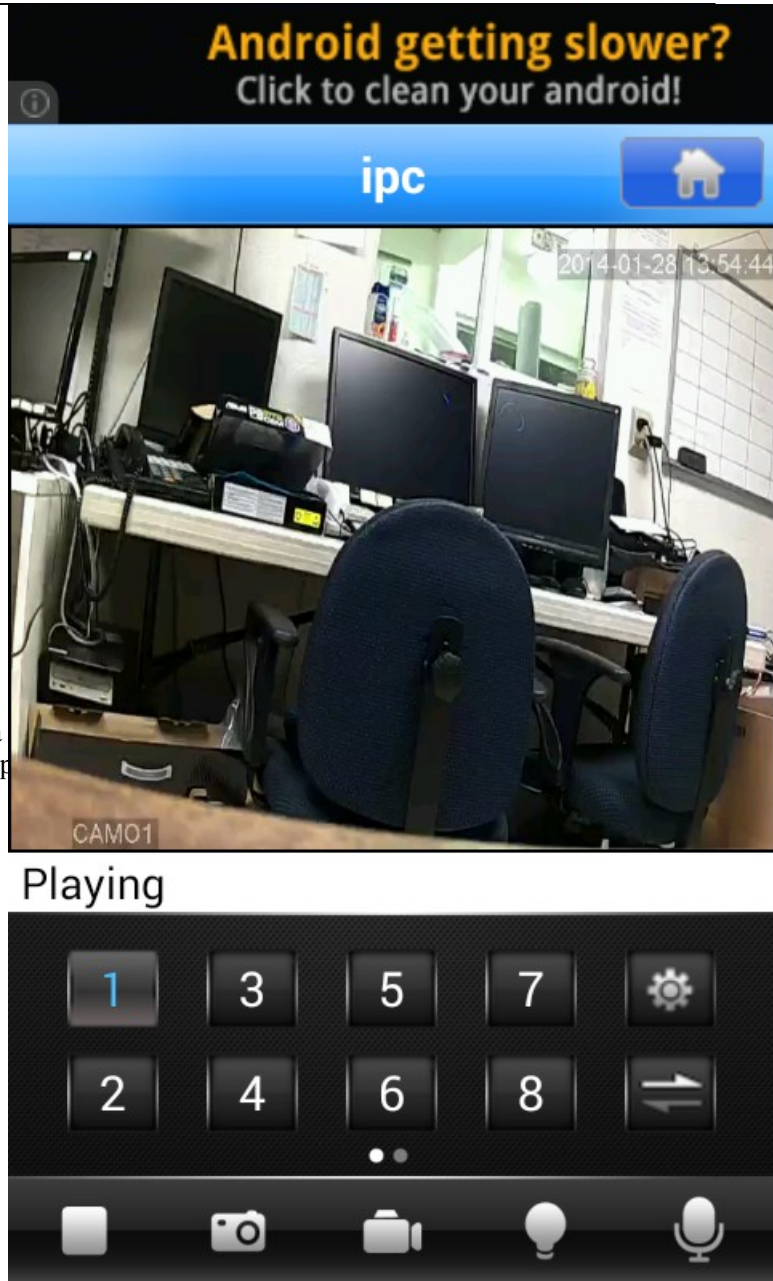
Mobile APP



Square® For Android  
Download from Google Play



4 There you go.



For All Other Details, please check IP camera User Manuals. Or check our Website for Support

# Trouble Shooting

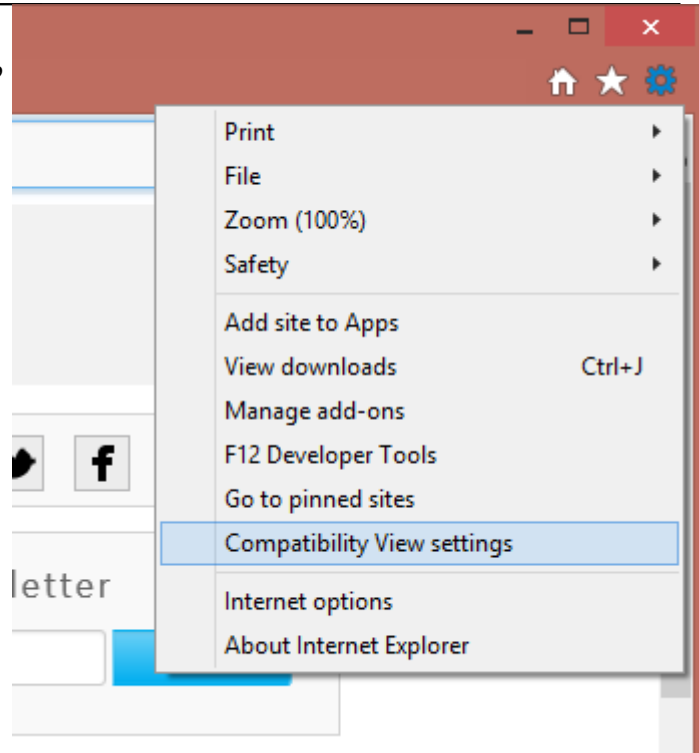
## 1 If you are using Internet Explorer 11,

You need to Add your current IP address into  
**Compatibility View Settings**



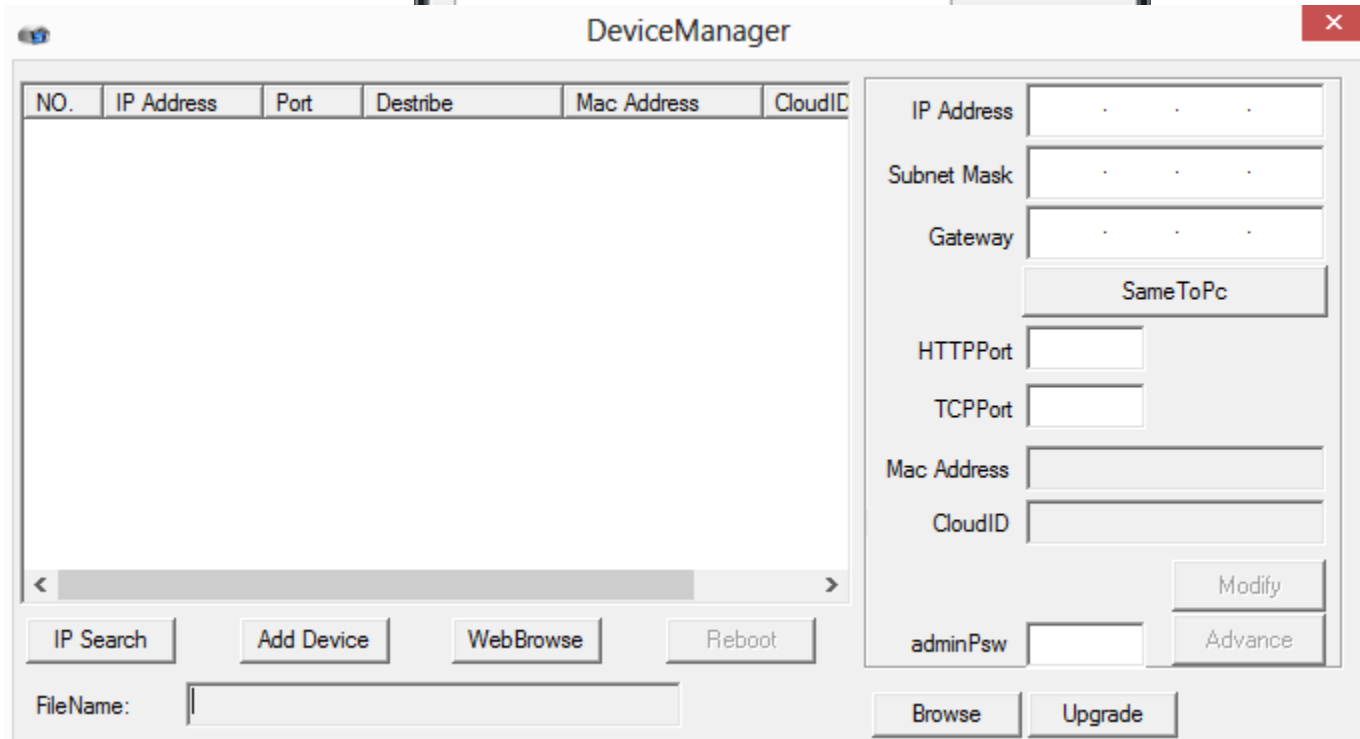
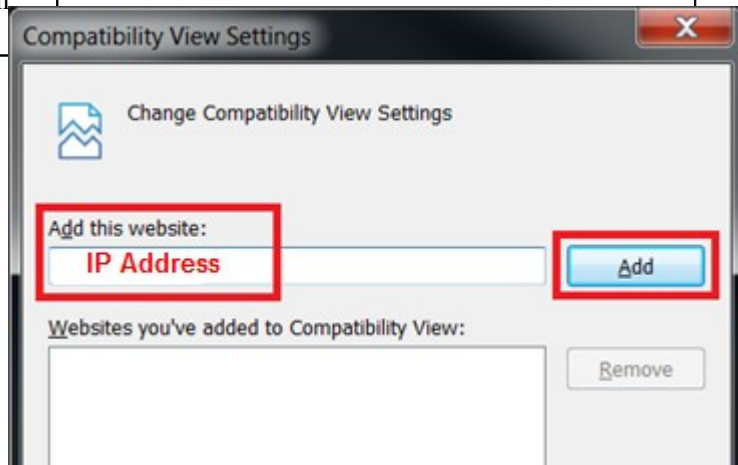
go to **Gear Icon**,

choose **Compatibility View settings**.



2	<p>Enter <b>IP Address</b> and Click <b>ADD</b></p> <p>then, <b>Close</b> it</p> <p><b>Close Internet Explorer 11</b> <b>and Try again.</b></p>	
3	<p><b>IP Search Utility cannot Find devices.</b></p> <ol style="list-style-type: none"> <li>1. Make sure connect Power Correctly.</li> <li>2. Make sure IP Search Utility is running on Main Network Card. If you have 2 network card, try disable others and make it simple first.</li> <li>3. Unblock Firewall or AntiVirus to allow search</li> </ol>	

## XMEye Cloud Net Access



1 You can use Cloud Access  
Cloud Access is pretty simple  
All you need to know is:  
Cloud Enable [v]  
And, Your HVR Cloud ID



2 To find out your Cloud

Go Main Menu -> Info



## Version

Here is Your Serial No

Record Channel	4
Extra Channel	0
Alarm In	8
Alarm Output	1
System	V4.02.R11.31152061.10001
Build Date	2013-09-14 14:58:14
MAC	001212073882
SerialNo	[REDACTED]
Status	129
Nat status	Connected
Nat status code	2:76.73.118.195



Z. Cloud FAQ



By User **By Device**

### Login And Preview

id

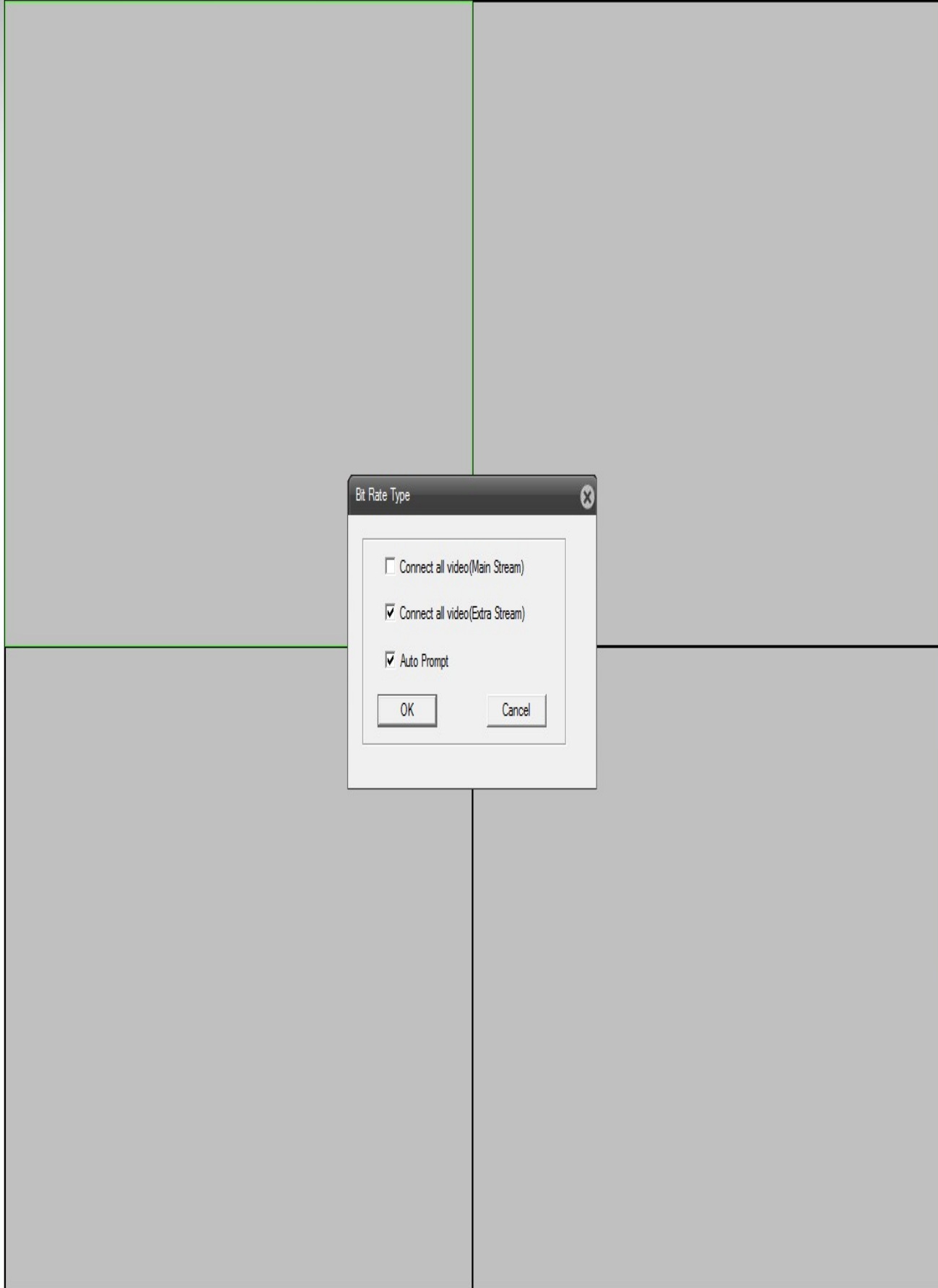
verify

**Login** **Enter Guide**

Please Click "Enter Guide" if you visit first

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- NetSuveillance
- D01
- D02
- D03
- D04



Navigation and control panel:

- Step(1-8): 5
- Zoom (+/-)
- Focus (+/-)
- Irises (+/-)
- Preset: [1] [2] [3] [4]
- Tour: [1] [2] [3] [4]
- Color: [Slider]
- Other: [Slider]
- Default

**Bit Rate Type**

Connect all video(Main Stream)

Connect all video(Extra Stream)

Auto Prompt

OK Cancel

6 **Port Reference:**

HTTP Port: 80  
Media Port: 34567

Mobile Software:  
**vMEyeSuper** for Android  
Meye for iPhone

**Notice for IE 11**

Please add IP address into Compatibility Addr

If you have difficulty, See Troubleshooting Pag

Device config

Setting -> System -> Network

Net Card: Wire Netcard  DHCP Enable

IP Address: 192 . 168 . 0 . 3

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 0 . 1

Use DNS server address below-----

Primary DNS: 202 . 101 . 172 . 35

Secondary DNS: 202 . 101 . 172 . 35

Media Port: 34567 HTTP Port: 80

MAC: 00: 3e: 0b : 07 : 72 : cf

High Speed Download

Transfer Policy: Quality Preferred

Refresh OK Cancel

System	Main processor	Technical grade embedded microprocessor
	Operating system	Embedded LINUX operating system
	System resource	Multi-channel real-time recording synchronously, multi-channel realtime playback, multi-channel multi-user network operation, USB backup.
Interface	Operation interface	16bit real color GUI interface support mouse operation
	Display screen	1/4/9/16screen (take analog channel as an example, other is base on the selected channel mode)
Video	Video standard	NTSC
	Image encode	H.264 (High Profile)
	Monitor quality	Monitor: D1 ; VGA , HDMI : High definition (Support 1920x1080, 1280x720, 1440x900, 1280x1024, 1024x768, 800x600)
	Playback quality	1080p / 720p / D1 / HD1 / CIF
	Encode capability	4ch 960H real-time   8ch D1 real-time   2ch D1 + 14ch CIF real-time
	Decode capability	4ch 960H real-time   1ch D1 real-time   2ch D1 + 6ch CIF real-time
	Multi-mode video input	Local analog input .. 4*960H 8CH*D1 16CH*D1 Local analog + network digital input .. 2*D1+(1*1080p+1*720p) Network digital input ... 8*960H / 4*720p / 2*1080p / 1*720p+7*D1 / 1*1080p+1*720p+2*D1)
	Motion detection	Each channel can set 192(16*12) detection area, can set multi-level of flexibility (for local analog channel only)
Audio	Audio compression	G711A
Record and Playback	Bidirectional talk	support
	Record Mode	Manual > alarm > motion detection> timing
	Local playback	1-8ch playback synchronously (take local analog input for example, other is depended on the selected channel mode)
Storage and backup	Space occupation	Video: CIF 4~5G/day*channel, D1 16~20G/day*channel Audio: 691.2M/day*channel
	Video storage	Local HDD, Network
	Backup mode	Network backup, USB portable HDD, USB imprint, SATA imprint
Interface	Video input	4ch CVBS/BNC (1.0Vp-p, 75ohm)
	Video output	1ch CVBS/BNC (1.0Vp-p, 75ohm), 1ch VGA, 1ch HDMI
	Loop output	optional
	Audio input	4ch RCA,   8ch RCA   4ch RCA
	Audio input	1ch RCA
	Alarm input	(available for 16ch model)
	Alarm Output	(available for 16ch model)
	Network port	RJ45 10M/100M
	PTZ control	1RS485, 1RS232 ; support most kinds of PTZ protocol
	USB port	2*USB 2.0
	HDD port	4ch model 1SATA (max to 2TB)   2SATA ports (max to 2TB each)
Other	Power	12V/2A
	Consumption	<15W (not include HDD)
	Temperature	0C ~ 55C
	Humidity	10% - 90%