

M0340

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IP Camera User Manual

For

INC-MD Series

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Introduction

ILDVR INC-MD series megapixel P camera integrates the traditional camera and network video technology. It adopts video and audio data collection, compression, transmission and storage together. It can be used alone with SD card record or used in a network environment. It can connect to network directly without any auxiliary device.

ILDVR IP cameras use H.264 video compression technology and G.711 audio compression technology, which maximally guarantee the audio and video quality.

Key features:

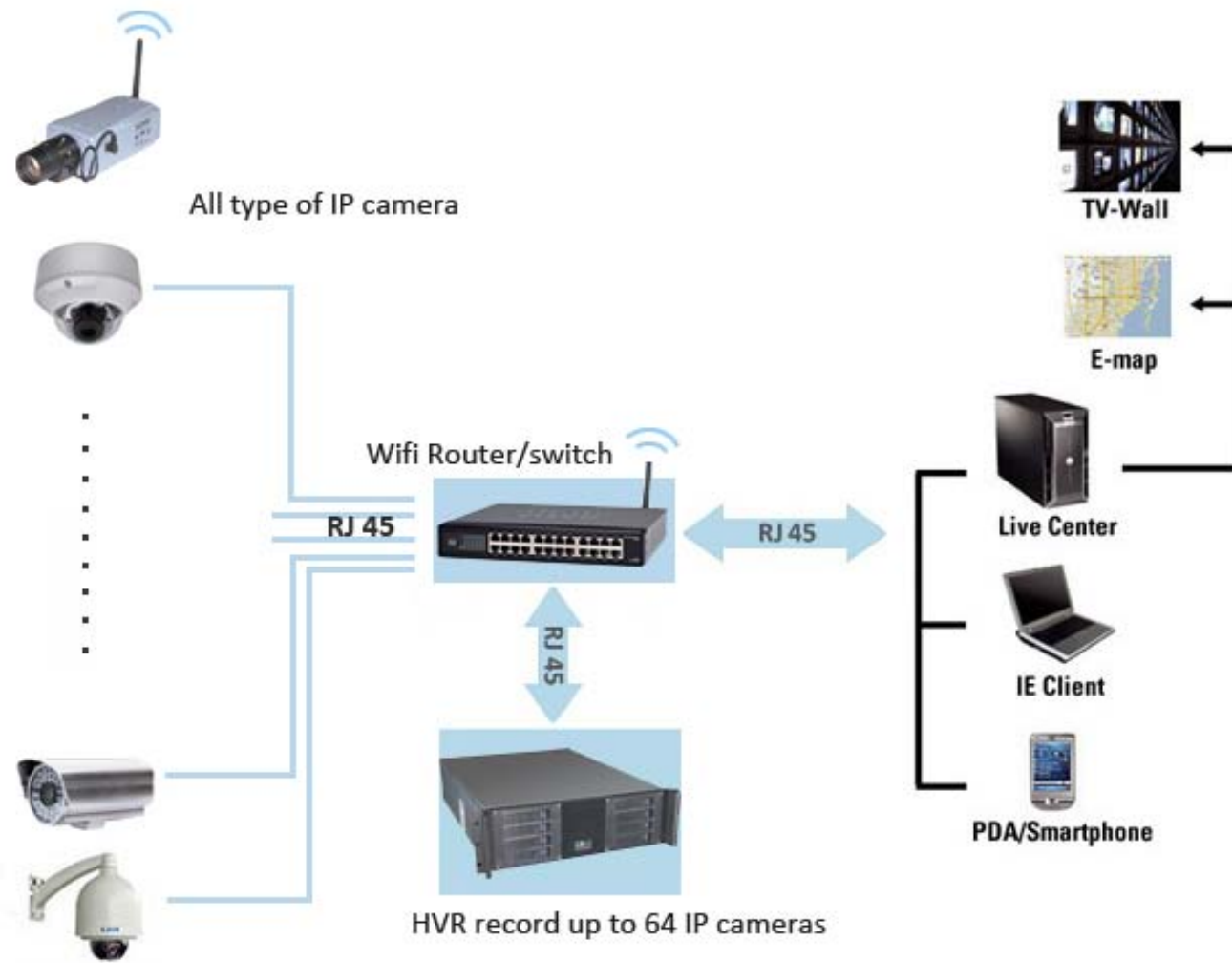
- Advanced H.264 compression with high compression ratio. Support both variable bit rate and variable frame rate.
- Real time stream full frame 1080P video 25fps@PAL/30fps@NTSC. Max. 3.0 mega pixels (2048*1536).
- Compressed video and audio are synchronous. You can select either mixed stream or only video stream.
- Support SD card local record, up to 64GB.
- Alarm Function includes sensor alarm, Motion Detection, video tampering, network offline, IP address conflict, Storage exception etc.
- Multi-level user management leads to high system safety.
- Support dynamic DNS (DDNS)
- Support Email Alarm Notification
- Remote management, maintenance and upgrade the firmware.
- Support bi-direction voice talk or one-way voice broadcast.
- Built-in web server, support IE browser preview and record.
- Multi-purpose design. Weatherproof , vandal-proof and multiple power supply: DC12V/AC24V/POE (48V)
- Wide range of product lines to meet your varied requirements.

Default settings

Default IP address is 192.168.1.200, subnet mask 255.255.255.0, gateway 192.168.1.1

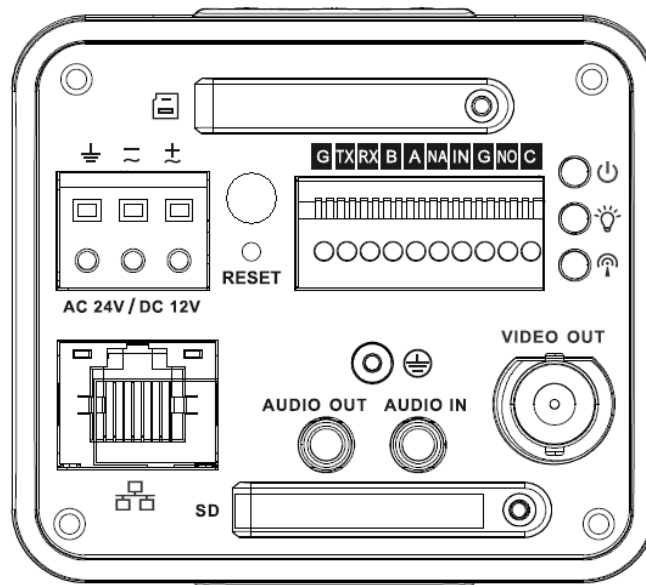
User ID is “admin”, password is “admin”, video port is “37777” and web port is “80”

Typical network connection diagram:




1 Physical Interface Description




1.1 Box Camera





Rear panel interface

Camera description for **INC-MD30P/MD30P-W/MD30N/MDN-W**

Interface Name		Connector	Function
VIDEO OUT	Video output port	BNC	Output analog video signal. Can connect to TV monitor to view video.
AC 24V/ DC 12V	Power port		<ul style="list-style-type: none"> ● Power port. ● Input 12V DC or AC 24V
STATUS Indication Light	Red light 		<ul style="list-style-type: none"> ● System boot up-red light is on ● Safe mode-red light flashes ● System upgrades-red light flashes ● System resets-red light flashes.

	Green light 		<ul style="list-style-type: none"> ● Normal working status-green light is on. ● Display record status: Record-green light flashes.
	Yellow light 		<ul style="list-style-type: none"> ● Wireless status light: ● Wireless data transmission-yellow light flashes. ● Detect the wireless device-yellow light is on.
	3G		<p>Connect to 3G card.</p> <p>Please note it is the reserved function. Current series IPC does not support this function right now.</p>
WIFI	3G/WIFI port		<p>Connect to 3G/WIFI antenna to receive the wireless signal.</p> <p>Please note this function is for some series products only.</p>
IN	Alarm input port	I/O port	Alarm input port 1. To receive the signal from the external alarm device.
NO	1-ch alarm output		Alarm output port. To output alarm signal to the alarm device.
C			<ul style="list-style-type: none"> ● NO: Normal open alarm output end. ● C: Alarm output public end.
G	GND		Alarm input ground end.
A	RS485 port		RS485_A port, control external PTZ
B			RS485_B port, control external PTZ
RX	RS232 port		RS232_RX, RS232 receive end.
TX			RS232_TX, RS232 COM send out end.

G	GND		RS232 ground end
NA	Reserved port		N/A
RESET	RESET button		Restore factory default setup. When system is running normally (power indication light is red), press the RESET button for at least 5 seconds, system can restore factory default setup.
AUDIO OUT	Audio output port	Audio output 3.5mm JACK port.	Output audio signal to the device such as sound box.
AUDIO IN	Audio input port	Audio input 3.5mm JACK port.	Input audio signal. Receive signals from devices such as pick-up.
LAN 	Network port	Ethernet port	<ul style="list-style-type: none"> ● Connect to standard Ethernet cable. ● Support PoE function.
SD	SD card port		Connect to SD card. Note <ul style="list-style-type: none"> ● When you install the SD card, please make sure current card is not in write mode and then you can install it to the camera. ● When you remove the SD card, please make sure current card is not in write mode. Otherwise it may result in data loss or card damage. ● Before hot swap, please stop record operation.
	GND		Please make sure the device is securely earthed to prevent the thunderstorm strike.

1.2 Dome Camera



Connection Cable

Camera description for **INC-MD30VP/MD30VN**

Port Name	Function	Connection	Note
VIDEO OUT	Video output port	BNC	Output analog video signal. It can connect to the TV monitor to view the video.
AUDIO IN	Audio input port	RCA	Input audio signal. It can receive the analog audio signal from the pickup.
AUDIO OUT	Audio output port	RCA	Output audio signal to the devices such as the sound box.
12V DC/AC24V	Power input port	/	Power port. Input DC 12V/AC 24V
I/O	I/O cable port	/	Connect to I/O port cable.
LAN	Network port	Ethernet port	<ul style="list-style-type: none"> ● Connect to standard Ethernet cable. ● Support PoE.

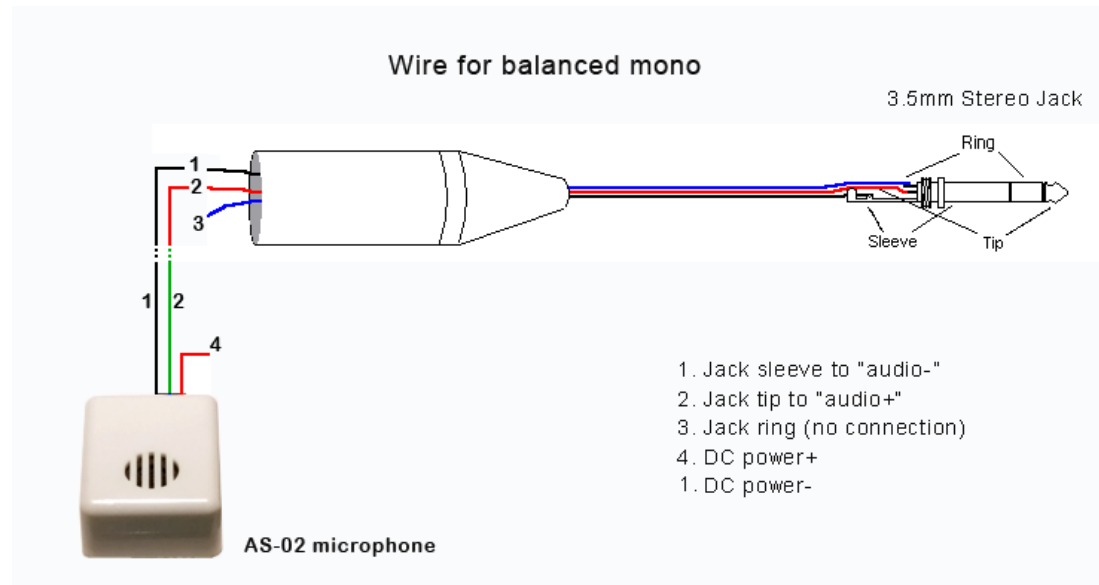
I/O data converter cable

Port Name	Cable Color	Name	Note
I/O Port Pin	Yellow	RS485_A	RS485_A port. It is to control the PTZ.
	Black	RS485_B	RS485_B port. It is to control the PTZ.
	Red	ALARM_COM	Alarm output public port.
	Brown	ALARM_IN1	Alarm input port 1. It is to receive the on-off signal from the external alarm source.
	Grey	ALARM_IN2	Alarm input port 2. It is to receive the on-off signal from the external alarm source.
	White	ALARM_NO	Alarm output port. It is to output the alarm signal to the alarm device. NO: normal open alarm output port. It works with the ALARM_COM port.
	Blue	RESET	It is to restore factory default setup. When the camera is power on, please connect the blue cable (restore default setup port) to the orange cable (GND signal) for 5 seconds, the device can resume factory default setup.
	Orange	GND	Ground port

2. Hardware Installation

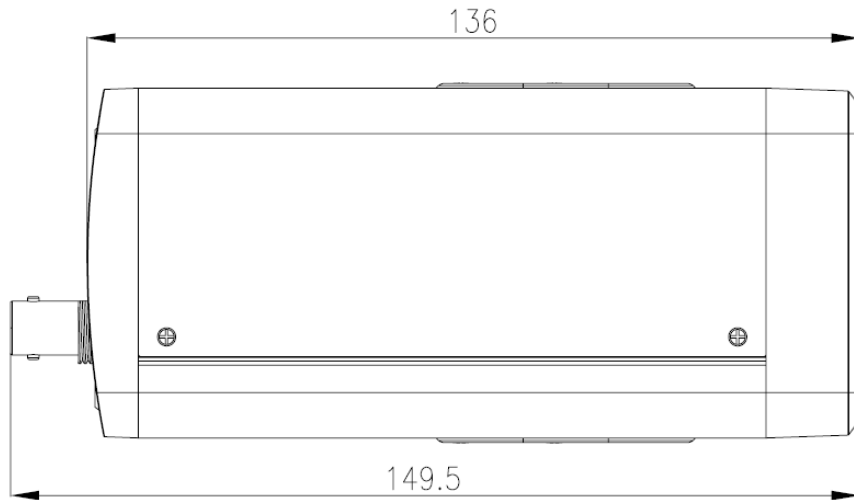
2.1 Prepare Audio Connector

The IP cameras use standard 3.5mm Stereo Jack connector but the audio type is mono audio, please refer to the right picture to make your audio connector.

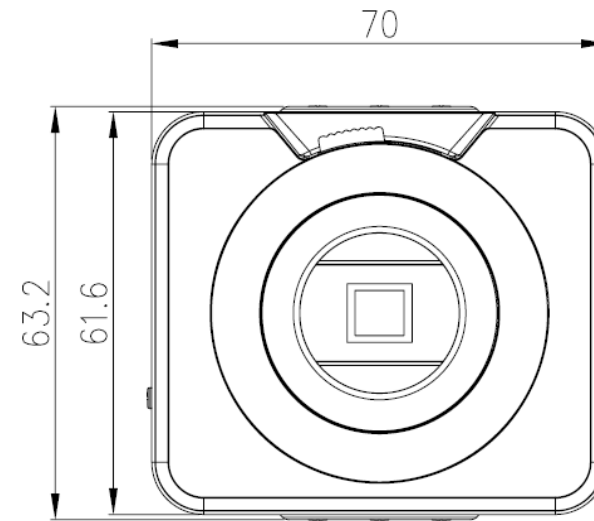


2.2 Box Camera Installation

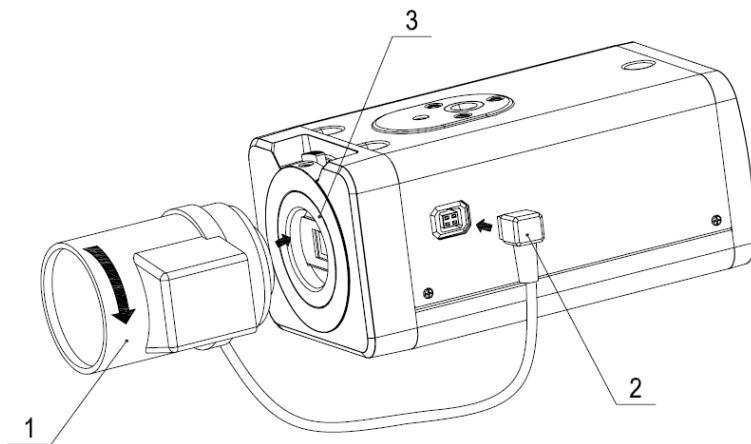
Dimensions



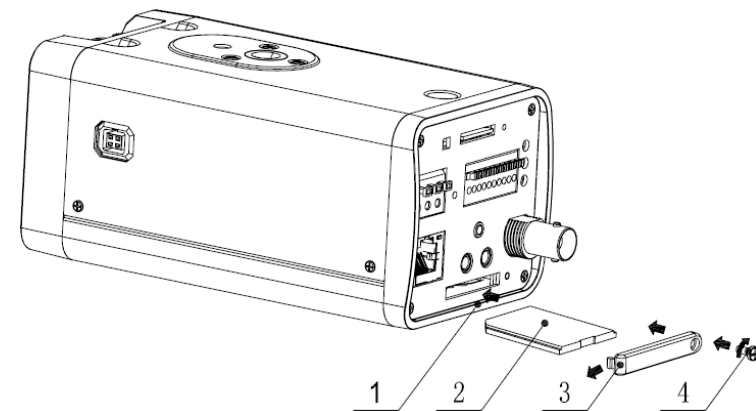
Side view



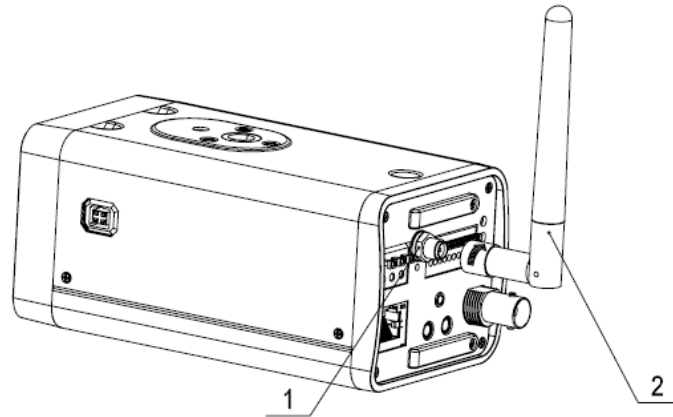
Front view



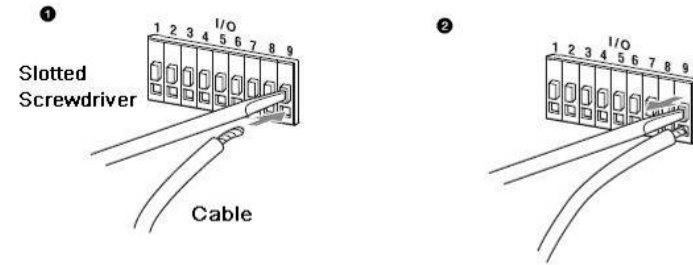
Lens Installation



SD Card Installation



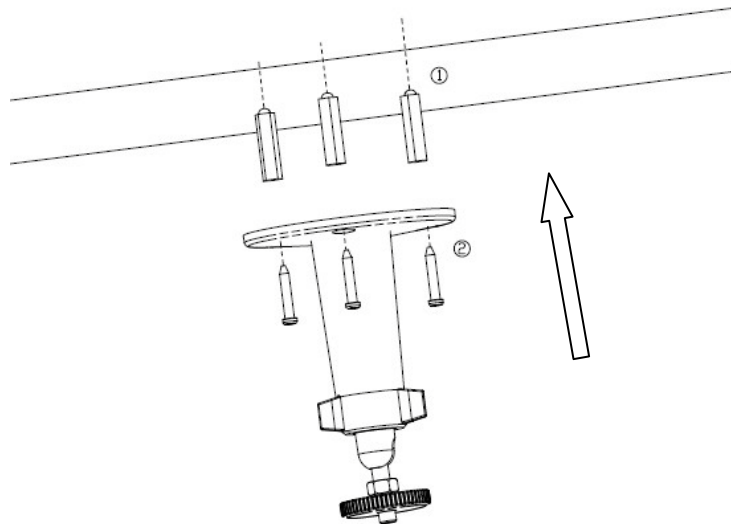
WiFi Antenna Installation



I/O Cable Connection

Box camera can be fixed in both wall and ceiling, customers can choose different ways to install the camera according to their specific needs. The following section introduces the ceiling mounting, and the wall mounting follows the same way

Step 1: Fix the mounting bracket to the ceiling.



Note:
 If it is wall, you need to fix the expand bolt (note: the mounting hole of the expand bolt should align with the bracket) before fixing the bracket, as step 1 in Figure 2.2.1. If the wall surface is wooden, the step 1 in Figure 2.2.1 can be ignored and you can use the self-tapping screw to fix the bracket directly. Please note that the wall on which the camera is fixed should be able to bear at least three times the weight of the bracket and the camera.

Figure 2.2.1 Fix camer mounting bracket

Step 2: Screw the camera's mounting holes to the mounting bracket, and then adjust the camera to the desired monitoring location and finally tighten the knob on bracket to secure the camera to the ceiling.

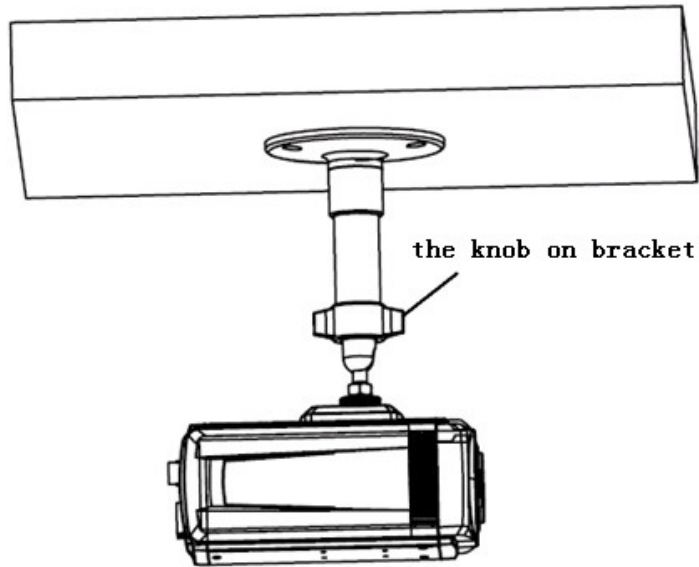


Figure 2.2.2 Fix the Camera

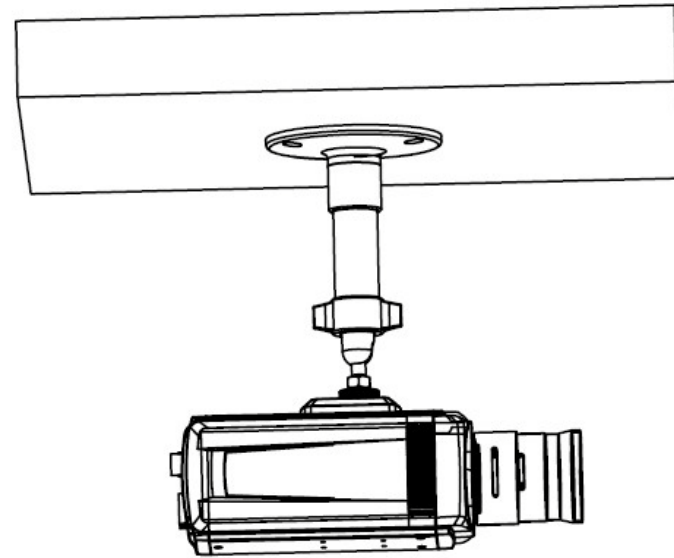


Figure 2.2.3 Mount and adjust Lens

Step 3: Mount the camera lens: connect the VIDEO OUT interface of the camera to the debugging monitor, and adjust lens focus until you have obtained the clearest video images on the monitor, and then lock the lens. If required, loosen the knob on the mounting bracket and adjust the camera lens to the desired monitoring scene, and finally tighten the knob on bracket.

2.3 Dome Camera Installation

Dimensions

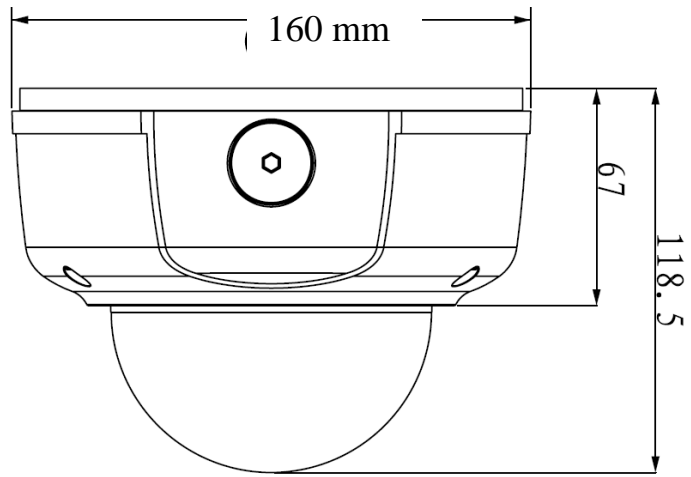


Figure 2.3.1

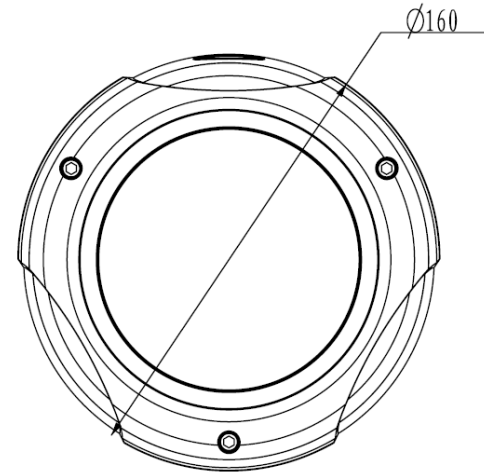


Figure 2.3.2

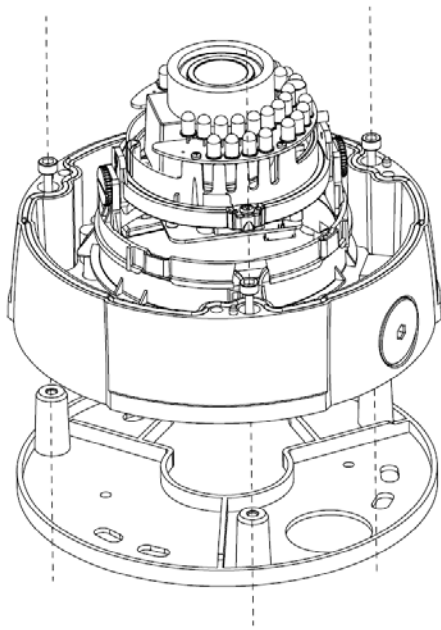


Figure 2.3.3

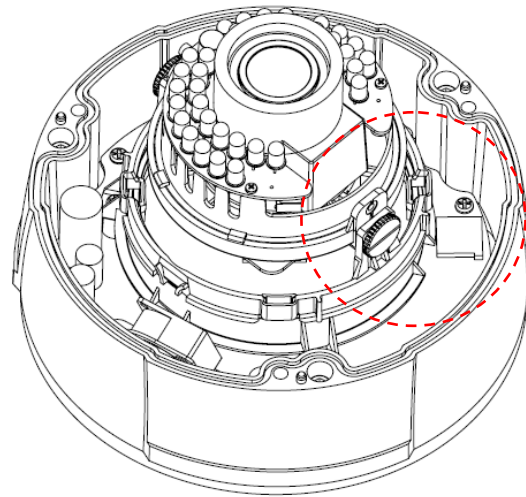


Figure 2.3.4

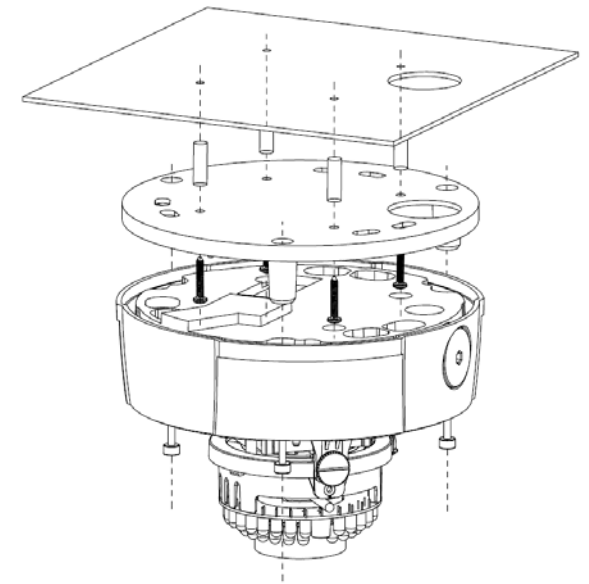


Figure 2.3.5

Step 1: Use the inner hexagonal wrench (provided) to loosen the three inner hexagon screws in the dome cover and then open the cover. Figure 2.3.3

Step 2: Please adjust the proper position to install the SD card. Figure 2.3.4

Step 3: Use the inner hexagonal wrench (provided) to loosen the three inner hexagon screws in the dome and then remove the device pedestal. Figure 2.3.5

Step 3: Draw out the cable exit and four screw holes in the installation position according to the device pedestal. Dig the four plastic expansion bolt holes and cable exit. Insert the four plastic expansion bolts into the screw holes

Step 4: Adjust the camera pedestal to the proper position and then draw the cable through the cable exit you just dug in the ceiling (wall). Line up the four screw holes in the device pedestal to the four plastic expansion bolt holes in the installation position. Put the four self-tapping screws in the device pedestal and then use the screwdriver to secure the screws in the four plastic expansion bolts firmly.

Step 5: Adjust the device position and line up the three inner hexagon screws of the device to the three holes of the installation position. Put the three inner hexagon screws into the screw holes at the bottom of the pedestal. Use the inner hexagon screwdriver to fix firmly.

Step 6: Adjust the X-Y-Z axis module to turn the device to the proper monitor angle. Please follow the steps listed below to adjust.

- a) Slightly loose the screws at the two sides of the X-Y-Z module manually, you can adjust the module tilt rotation angle ($15^{\circ}\sim 90^{\circ}$).
- b) Slightly loose the screw of the pressing slice, you can adjust the video rotation angle of the module ($0^{\circ}\sim 355^{\circ}$)
- c) Adjust the turning ring of the pedestal, you can adjust the module pan rotation angle ($0^{\circ}\sim 355^{\circ}$).

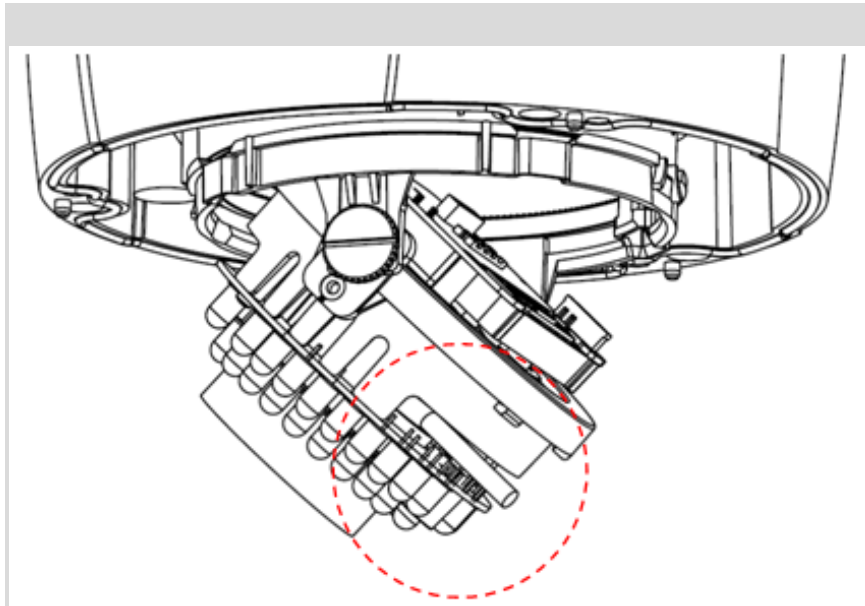


Figure 2.3.6

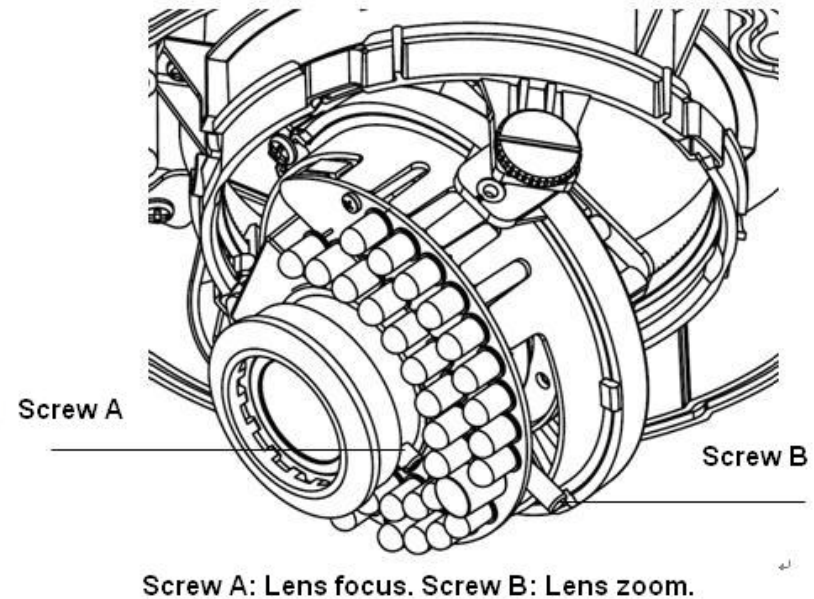


Figure 2.3.7

Please note the screws in the following figure are the optical adjustment component. Please make sure it is outward and do not allow it to touch the X-Y-Z axis module. See Figure 2.3.6

Step 7: Please follow these steps to adjust lens. Figure 2.3.7

- a) Slightly loose the screw B manually and then turn the screw B slowly. Adjust the lens focus distance to the proper position according to the monitor video.
- b) Use the flat screwdriver to loosen the screw A slightly and then turn the Screw A slowly. Adjust the lens focus to get the clear video and then use the flat screwdriver to secure the screw firmly.
- c) When you are adjusting the screw A, the video may becomes blur. Please slightly adjust the screw B manually to get the vivid video. Finally fix the screw.

Step 8: Put the dome cover back and then put the three inner hexagon screws into the holes of the device. Use the inner hexagonal wrench to fasten these three screws. Figure 2.3.8

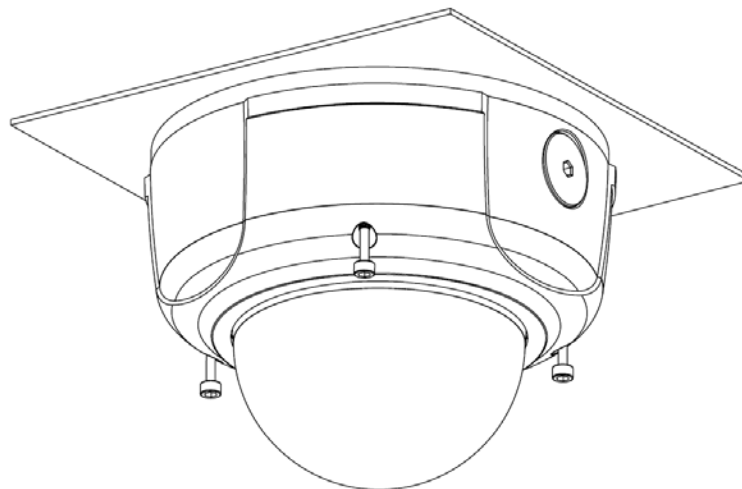


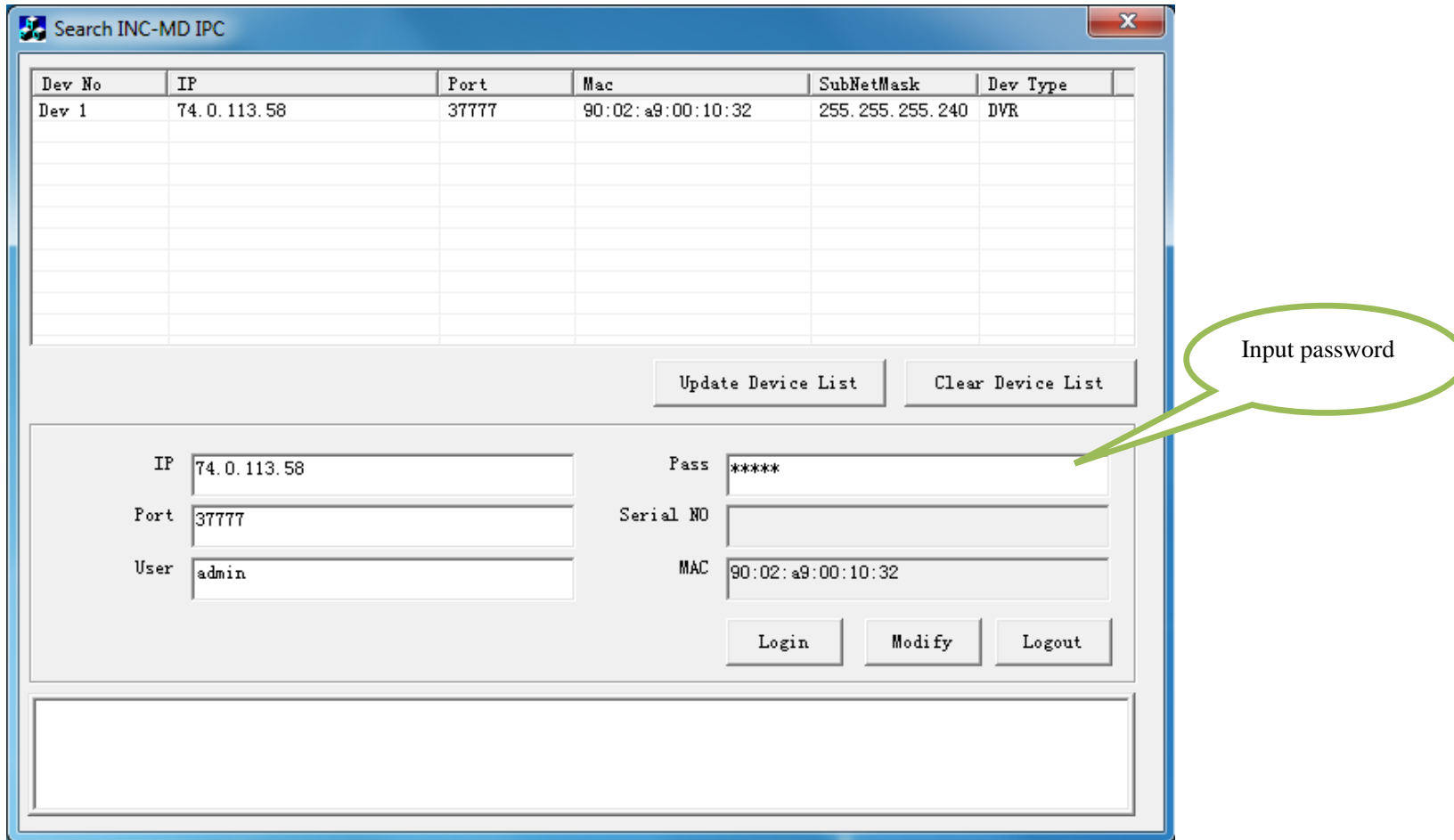
Figure 2.3.8

3. Software Installation

3.1 Search and Modify IP Address

Before using IP camera, please make sure whether the default IP address of the camera fit your local network environment. If not, please click the “Search INC-MD series IP” in HVR Server or Live Center program folder. You can see an interface is shown as below. In this interface, you can view device IP address, port number, subnet mask, default gateway, MAC address and etc. Please input password to login to device then you can modify IP address and port number. Please connect the IP camera

and the PC in same network segment.



3.2 Connect to HVR Server and Live Center

In the main interface of HVR Server, click Tools icon to expand the Tool Panel, click Add/del IP camera button to bring up "IP Camera Device List" interface. In Live Center the operation is similar but the first step is to enter Local Setup interface.

For your attention:

All IP cameras must be registered in the software then it could be recorded. If you couldn't record video, please update the license file IPEncrypt.dat for HVR Server and Live Center software. You can find the update license file in software CD or download from ILDVR web site

3
Select INC-MD series for Device Type.

2

1

Server Name	IP Address	Port	Camera NO.	Connect Status	Registered?
INC-TE288	192.168.1.201	8001	8	connect ok	Yes
INC-MP20	192.168.1.204	8004	9	connect fail	Yes
INC-MP13CD	192.168.1.207	8007	10	connect ok	Yes
INC-TE288NI	192.168.1.209	8009	11	connect ok	Yes
OutdoorPTZ	74.0.113.59	8009	12	connect ok	Yes
MP20V	74.0.113.60	8000	13	connect ok	Yes
inc-m2010	192.168.1.210	5000	14	connect ok	Yes
inc-md30	74.0.113.58	37777	15	connect ok	Yes

3.3 Camera System Configuration

The following operations need admin user rights to login IP camera. Please refer to above step. Right click IP Camera window to pop up right-click menu. Choose "IPcam_NetDVR_Setup" to bring up "IP Camera Setup" interface. In Live Center, entrance is "Remote Setup" then choose Server alias

In "Server" page, you change IP address, port number and reset the password of admin ID etc. If you install SD card in the camera, please format it in here or in IE

web client page, otherwise it cannot be used. The device serial number is necessary for register license.

Server Channel PTZ Sensor Motion IP Device Setup

Server Name User ID

Server IP Password

Listen Port Physical address

Subnet Mask Remote Manage IP

Gateway Remote Manage Port

Net Cable Type Enable

Use PPPoE DDNS Type

PPPoE Login ID DNS Server IP

Password DDNS Port

Software Ver. DDNS Domain Name

DSP software Ver. DDNS User ID

Hardware Ver. Password

PPPoE IP DDNS Alive

Serial NO

Format SD Card

IE Setup Upgrade Restart Time Adjust Save Exit

This item only available after SD Card is detected.

In “Channel” page you can modify video parameters and OSD information. If you need mask privacy area, please check-on the Privacy then draw a rectangle area on the image. That is the mask area. If you have SD card to record, please check-on “Enable Rec” then setup recording schedule.

IP Device Setup


Server Channel PTZ Sensor Motion

Camera NO. 1 Camera Name INC-MD30N Copy to [] Copy

Main Frame Rate 30 Resolution D1 Bit Rate Customized 4096 video
 Sub Quality Best Bit Rate SXGA 720 I Frame 60 audio
 Brightness 50 Contrast 1080 Saturation 50 Hue 50
 1.3M
 3M

Show OSD Position X 31 Y 0
 Show logo Position X 0 Y 31 Osd Type YYYY-MM-DD

Cover No Cover Clear



Rec Schedule
 Rec Day Sunday

Period	Start	End	Norm	Alrm	M.D.
Period1	00:00	23:59	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Period2	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period3	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period4	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period5	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Period6	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

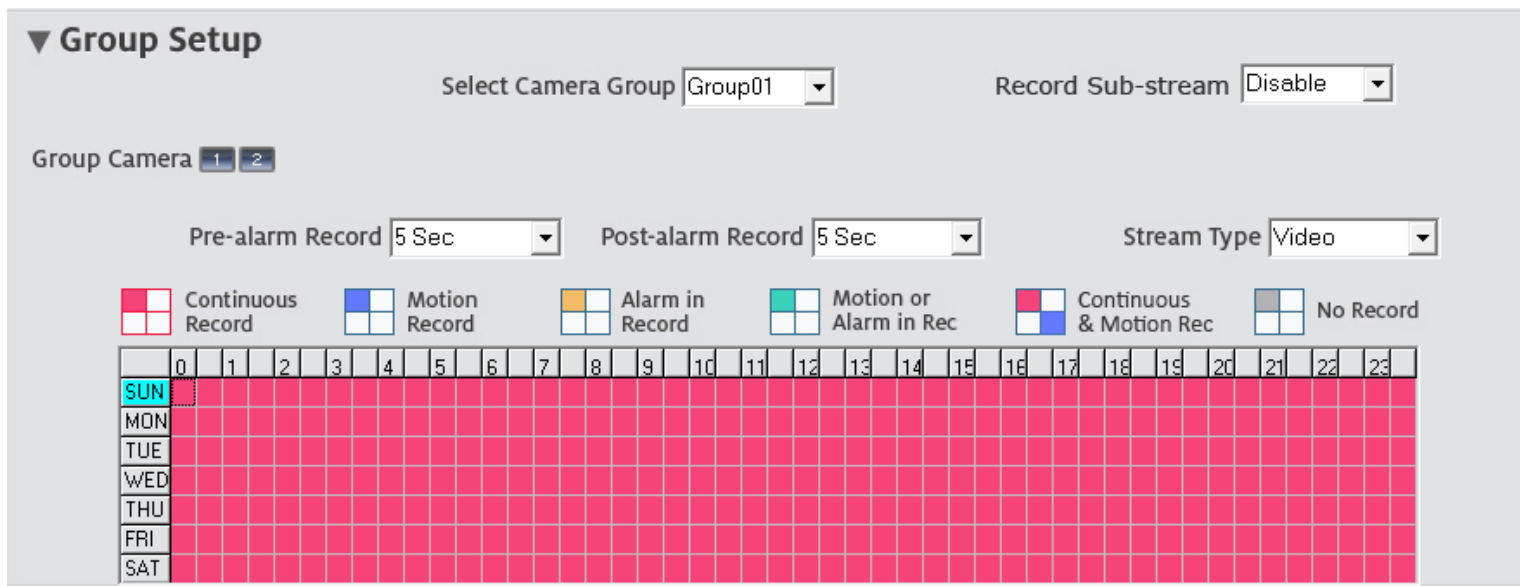
 Copy to [] Copy
 PreRec 1

IE Setup Upgrade Restart Time Adjust Save Exit

Enable audio

3.4 Continuous Record Setup

Continuous Record means always record the video, the operation is simple. You get video connection, get video record. You just enter Camera Setup page→ Group Setup, choose camera group and cameras, click the icon “Continuous Record” then slide the mouse to set time table. The operation in Live Center is similar.



3.5 Motion Detect Alarm Record Setup

Motion Detect Record is a little bit complicated than Continuous Record because HVR system need additional signal to analyze the video stream type. So you must configure 2 places. One place is Motion Record setup in HVR system “Camera Setup” page, similar to Continuous Record setup. Another place is Motion page as below,

For your attention, the key item “Upload to center” must be checked on, otherwise your settings only apply to local SD card motion record.


Server Channel PTZ Sensor **Motion** IP Device Setup

Camera NO. 1 Copy To Copy

Alarm Type Motion detect Level 5

Handling Current Alarm

Clear All Test



Policy

Audio warning

Upload to center

Trigger alarm out

1 2 3 4 5 6

Trigger rec camera

1	<input checked="" type="checkbox"/>	5	<input checked="" type="checkbox"/>	9	<input checked="" type="checkbox"/>	13	<input checked="" type="checkbox"/>
2	<input checked="" type="checkbox"/>	6	<input checked="" type="checkbox"/>	10	<input checked="" type="checkbox"/>	14	<input checked="" type="checkbox"/>
3	<input checked="" type="checkbox"/>	7	<input checked="" type="checkbox"/>	11	<input checked="" type="checkbox"/>	15	<input checked="" type="checkbox"/>
4	<input checked="" type="checkbox"/>	8	<input checked="" type="checkbox"/>	12	<input checked="" type="checkbox"/>	16	<input checked="" type="checkbox"/>

Schedule

Day Sunday

Period1 00:00 → 23:59

Period2 00:00 → 14:38

Period3 00:00 → 14:38

Period4 00:00 → 14:38

Period5 00:00 → 14:38

Period6 00:00 → 14:38

Copy To Copy

IE Setup Upgrade Restart Time Adjust Save Exit

Important:
Upload alarm signal to network

3.6 Sensor Trigger Alarm Record Setup

Sensor Record is a kind of external alarm-in trigger record. It is more complicated than Motion Record because motion detect signal is embedded in video stream, but sensor alarm signal is a kind of external signal. You must configure 3 places to execute Sensor Record. The first place is Alarm in Record setup in HVR system “Camera Setup” page, similar to Motion Record setup.

The second place is Alarm Check time table in HVR system “Alarm in & Relay out” page as below picture

Group Setup

Select Group: Group01 NC/NO Type: N/C Alarm Write to Log: Disable

Post-alarm Link Status: Stop Stay Delay: 10 sec.

Select Alarm-in Port: 1

Alarm Link Camera: 1

Alarm Link Relay out Port: 1

Alarm Check: Alarm Check No Check Email Alarm: Disable SMS Alarm: Disable

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SUN																									
MON																									
TUE																									
WED																									
THU																									
FRI																									
SAT																									

Here is the time table to check receiving alarm signal

The third place is Sensor page as below.

For your attention, the key item “Upload to center” must be checked on, otherwise your settings only apply to local SD card sensor record.

IP Device Setup

Sensor NO
 Copy To

Sensor Name
 Type

SensorAlarmHandling

Policy

Audible Warning
 Upload To Center
 Trigger Alarm Out

1 2 3 4 5 6

Trigger rec camera

1	<input checked="" type="checkbox"/>	5	<input type="checkbox"/>	9	<input type="checkbox"/>	13	<input type="checkbox"/>
2	<input type="checkbox"/>	6	<input type="checkbox"/>	10	<input type="checkbox"/>	14	<input type="checkbox"/>
3	<input type="checkbox"/>	7	<input type="checkbox"/>	11	<input type="checkbox"/>	15	<input type="checkbox"/>
4	<input type="checkbox"/>	8	<input type="checkbox"/>	12	<input type="checkbox"/>	16	<input type="checkbox"/>

Preset

Use

Camera
 Preset

Schedule

Day

Period1 00:00 → 23:59
 Period2 00:00 → 14:38
 Period3 00:00 → 14:38
 Period4 00:00 → 14:38
 Period5 00:00 → 14:38
 Period6 00:00 → 14:38

Copy To

Here is the time table to upload alarm signal

3.7 PTZ Operation

You can mount INC-MD camera on external PTZ driver by RS485 connection to make it working as an IP Speed Dome. Please setup preset position, auto-spot plan and preset tour in this page. No like analog PTZ which saves preset in camera system, the IP PTZ saves preset in local computer, so if you use another PC to control same IP PTZ, you should do same setting again in that PC. Comparing analog PTZ and IP PTZ, the setup procedure is very different, but the operations of call preset are exactly same.

The screenshot shows the 'IP Device Setup' window with the 'PTZ' tab selected. The interface includes a live video feed on the left, a 'Preset Setup' table in the center, and various control buttons and dropdown menus. Five callout boxes provide instructions:

- 1. Click Add button to save preset
- 2. Set home position for auto going back after setting time
- 3. Give a name to the position (name preset number)
- 4. Choose preset number
- 5. Press direction button and zoom/focus/iris to move the camera to aim position

IP Device Setup

Server Channel **PTZ** Sensor Motion

Camera NO. 1 Copy to Copy

Baudrate 2400 PTZ Protocol PELCO_D PTZ Address 1

Preset Setup

Name street Preset 5

Add Del Call Mode Call Preset

Preset Name	NO.	Mode
park1	1	Call
park2	2	Call
park3	3	Call
Entrance	4	Call
street	5	Call

No PTZ Action 60 Sec. Back

Home Position park3

Preset Schedule Tour

PTZ Speed 128

Focus+ Focus- U

Iris+ Iris- L R

Zoom+ Zoom- D

Save Exit

Auto Plan:

Auto Plan means HVR software automatically call the preset position by a scheduled time table. When the system time reach, the IP speed dome will auto move to preset position. You can save up to 64 moments and one preset could be used multiple times.

Tour Group:

Tour Group means you can put different preset position in a sequential group, each preset position could be defined a staying time (stay there without moving). When you execute a Tour, the IP camera will continuously move according to the sequence and time table saved in the group. You can save up to 8 groups.

In main interface of HVR Server or Live Center, click “Preset Operation” button to bring up preset menu then choose call preset or tour preset.

The image displays three panels from the HVR software interface. The left panel, titled "Auto Plan", features a "Preset" dropdown set to "5", "Add" and "Del" buttons, a "Call Time" field with "Friday", "10" H, and "0" M, and a "Copy To" dropdown set to "Monday" with a "Copy" button. Below is a table with columns "Date", "Time", and "Preset".

Date	Time	Preset
Monday	08:15	1
Tuesday	08:15	2
Wednesday	09:30	3
Thursday	09:00	4
Friday	08:00	2
Friday	10:00	5

The middle panel, titled "Tour Setup", has a "Tour Group" dropdown set to "TourGroup1", "Add" and "Del" buttons, a "Preset Name" dropdown set to "street", and a "Stay Time" dropdown set to "8" Sec. Below is a table with columns "Preset Name", "NO.", and "Time".

Preset Name	NO.	Time
park1	1	3
park2	2	5
Entrance	4	6
park3	3	4
street	5	8

The right panel shows a PTZ control interface with a "Tools" menu open. A speech bubble points to the "Preset Call" option. Below it, a "TourGroup1" menu is open, showing a list of preset names: park1, park2, park3, Entrance, and street. The "Preset Call" option is highlighted in blue.

3.8 Display on TV-wall

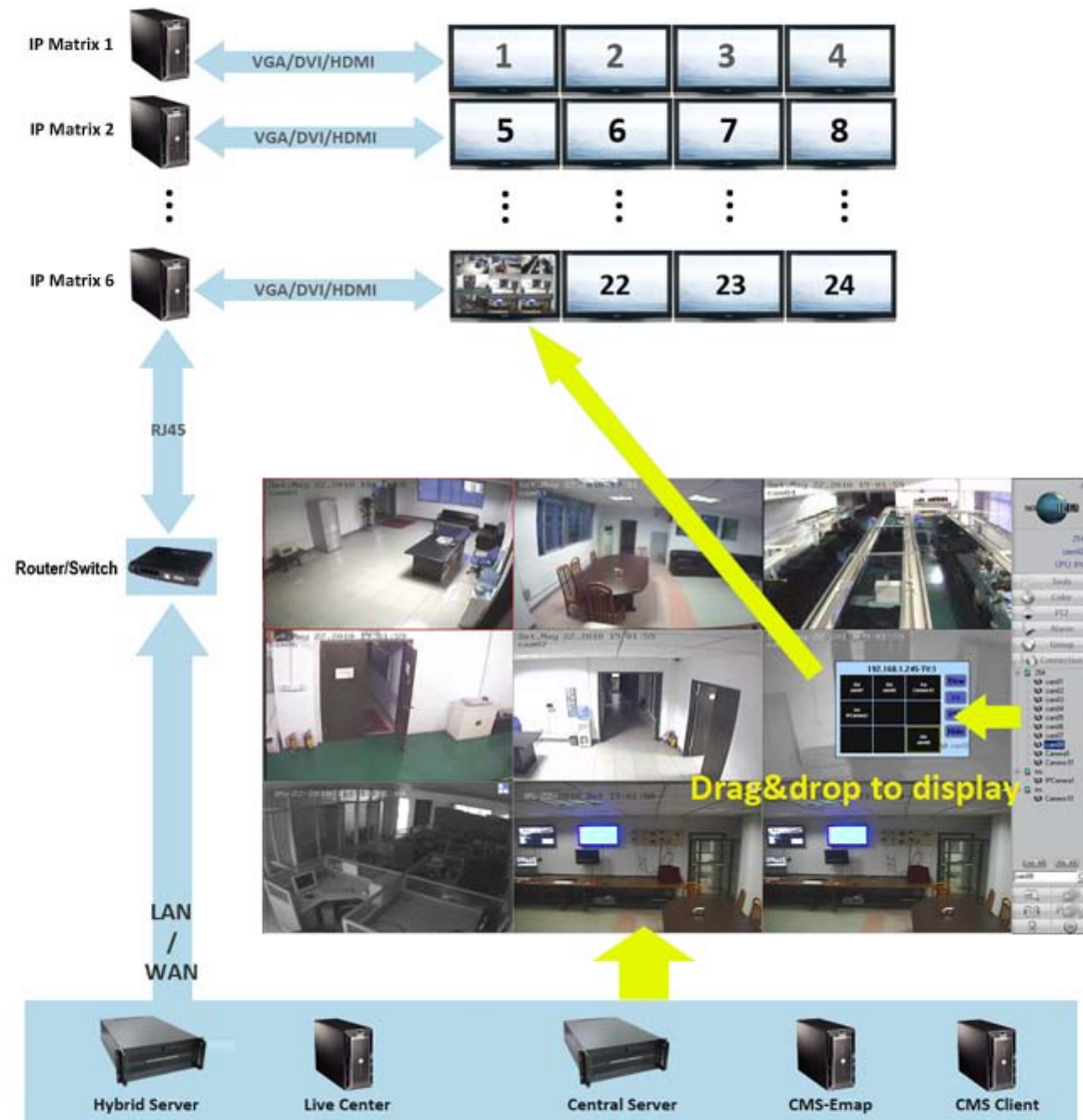
For large surveillance system the TV-wall is important and necessary. IP camera cannot be integrated into traditional matrix system. ILDVR free software IP Matrix offers innovative TV-wall solution.

All ILDVR software support IP matrix operation, one computer running HVR Server / Live Center / CMS supports up to 6 IP Matrix TV-client.

One computer running IP Matrix software supports 4 monitor outputs, each monitor can display up to 16 windows (cameras). That means one IP Matrix can display max. 64 cameras simultaneously

In IP matrix, each video window can be put multiple cameras by switch viewing.

IP Matrix TV-wall Architecture



4. Advanced Operations

4.1 SD Card Local Record Setup

If you install SD card into IP camera to record video locally, please follow these operation steps

- a. Format SD card in “Server” page. If there is no SD card, the Format button won’t be available. Refer to section 3.3
- b. Set record schedule in “Channel” page.
- c. If you want motion record, please go to “Motion” page to setup schedule
- d. If you install external sensor, please go to “Sensor” page to setup schedule.

4.2 Audio Chat to IP Camera

From right-click menu choose “Audio Chat to IP Device” to initialize a remote talk between PC to IP camera. This feature needs microphone (audio pickup) and speaker (earphone) to support in both ends. If no audio device can be detected, the “End Talk” dialog will not pop up. That means system will ignore your request.



4.3 Manually Trigger Alarm-out

Manual trigger alarm out (relay out) can be widely used to integrate other electrical device such as open a door, turn of light, etc.

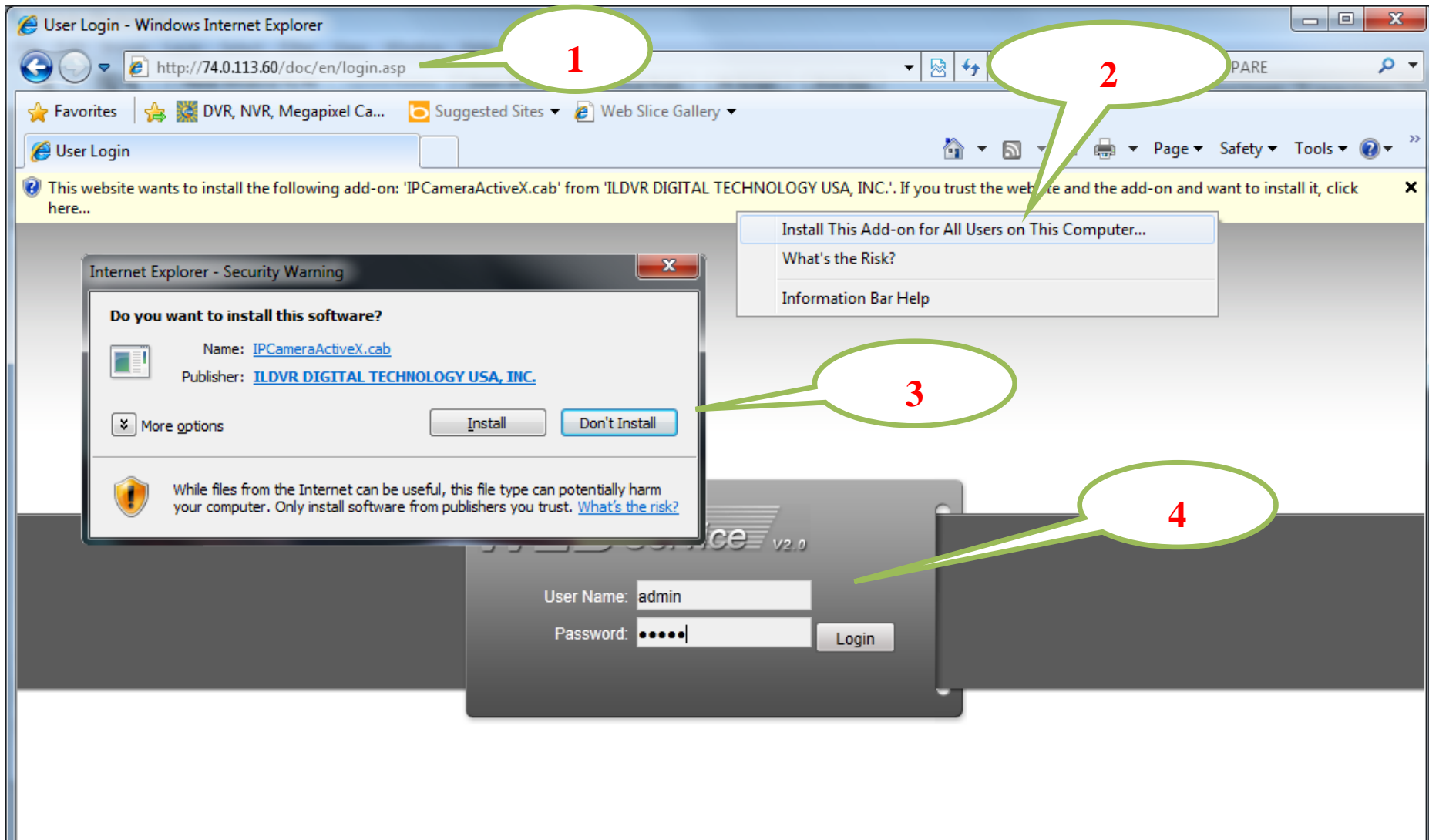
The image shows a mobile application interface for an alarm system. On the left, there are three video camera feeds. The top feed shows an outdoor parking area with cars and is labeled 'INS-350B'. The middle feed shows an indoor hallway and is labeled '11-23-2011 Wed 17:33:49 INC-TE288NI_Aisle'. The bottom feed shows a front desk area and is labeled '11-23-2011 Wed 17:33:47 INC-TE288NI_FrontDesk'. On the right, there is a control panel with the following sections: 'PTZ' (with a bell icon), 'Alarm' (with a bell icon), and 'Connection' (with a bell icon). Below these are 'Sensors' and 'Relay Out' sections, each containing a 4x4 grid of numbered buttons (1-16). A yellow highlight is under the button '17' in the Relay Out section, with the label 'inc-md30_non-name-0' below it. Three green callout bubbles are overlaid on the interface: bubble 1 points to the 'Alarm' section and contains the text '1 Open alarm panel'; bubble 2 points to the '17' button and contains the text '2 Click alarm number key'; bubble 3 points to the 'Sensor record status' text and contains the text '3 Sensor record status'.

4.4 Mobile Phone Access Viewing

After you connect IP Camera to HVR Server, you can use your mobile phone to login HVR Server to view the real time image. HVR Server support most mainstream mobile phone in the market. The operation system includes iPhone, Android, Blackberry, Windows Mobile and Symbian. For Blackberry, Windows Mobile and Symbian mobile phone, user can directly login to HVR Server to download client software and install. For iPhone, Android mobile phone user should go to online app store to download client software. Please refer to HVR user manual for more details

4.5 IE Web Client Operation

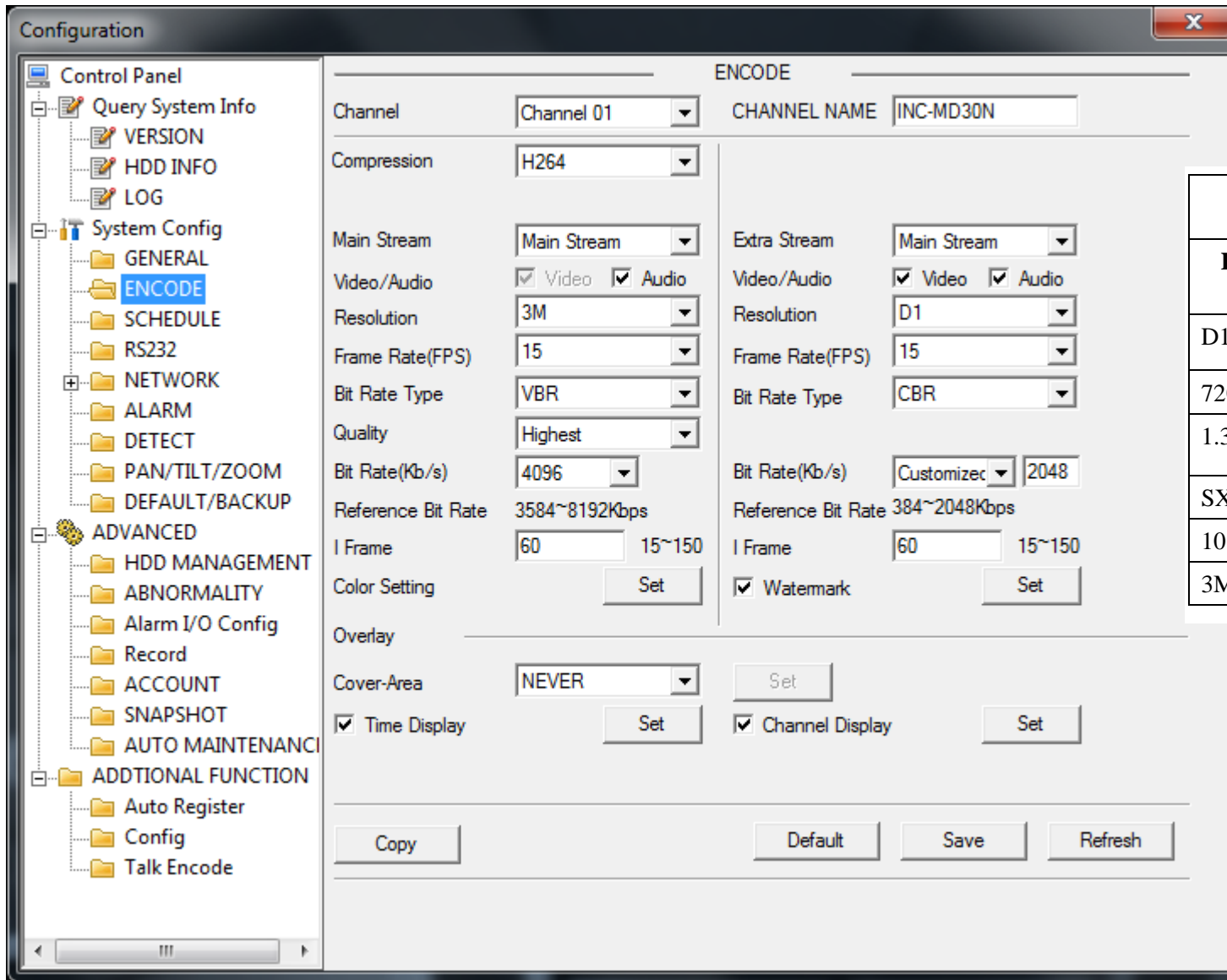
All IP cameras have built in web server. You can use Internet Explorer directly login to IP camera by input camera's IP address or domain name. At first time connecting to IP camera, you will be prompted to install ActiveX Control (Add-on). Refer to following illustration



Main interface of IE web client

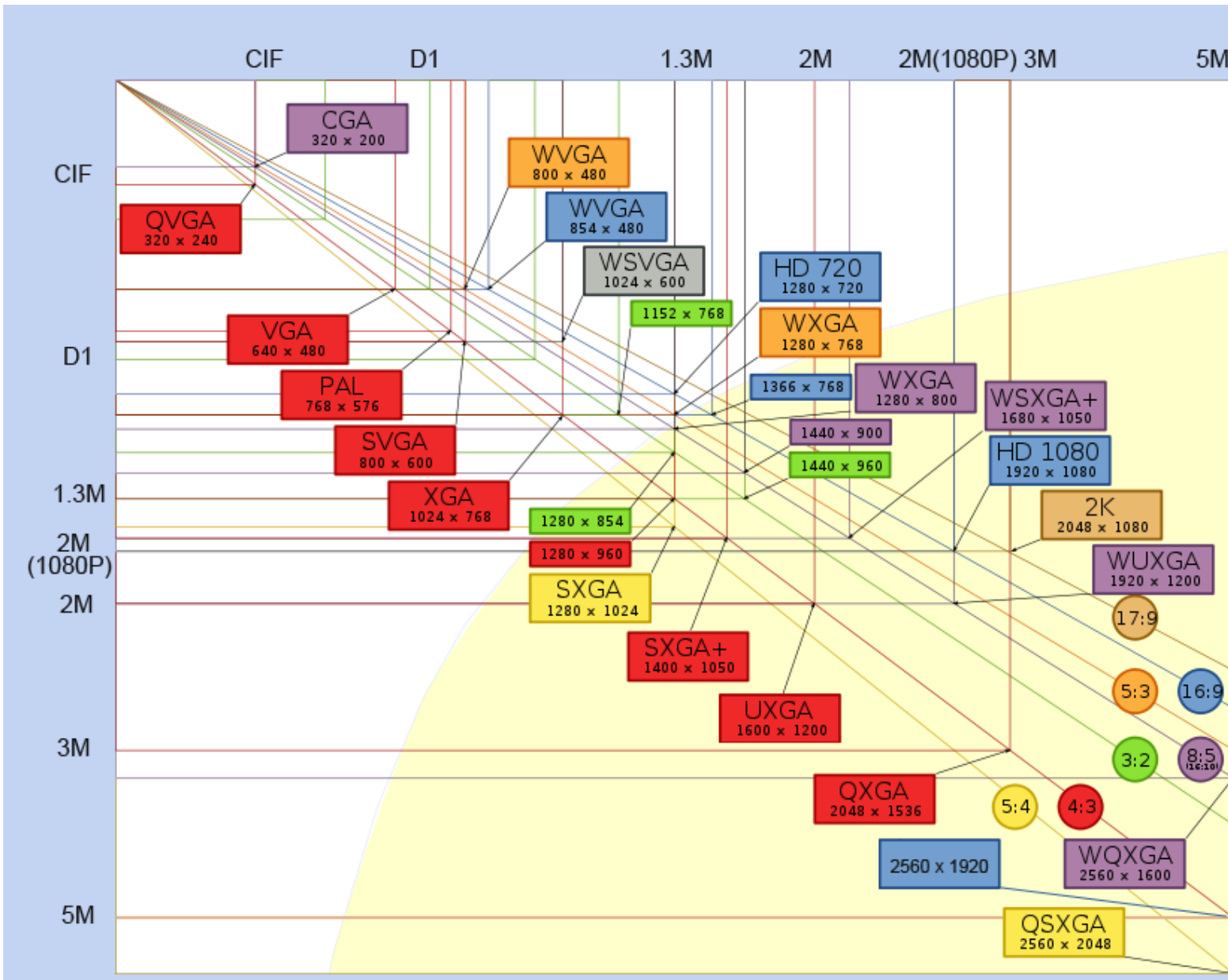


Most of the configuration jobs could be done in IL DVR software interface, but some advanced operation must be finished through IE interface. Such as User Management and Restore system to factory default settings. The following picture is a sample configuration page in IE web client.



Available resolution list	
List resolution	Effective pixels
D1	704*576
720P	1280*720
1.3M	1280*960
SXGA	1280*1024
1080P	1920*1080
3M	2048*1536

The following illustration shows the terms of different image resolutions.



Technical Support Information

Please fill in this form in order to get prompt technical service in case of emergency!

Item	Description
IP Device Model Name	
IP Device serial number	
Firmware Version	
Purchasing date	
Dealer's Contact info	Company name: Technical Engineer: Tel: Fax: Email: