EZTools
User Manual

Manual Version: V1.24

Thank you for purchasing our product. If there are any questions, or requests, please do not hesitate to contact the dealer.

Notice

- The contents of this document are subject to change without prior notice.
- Best effort has been made to verify the integrity and correctness of the contents in this document, but no statement, information, or recommendation in this manual shall constitute formal guarantee of any kind, express or implied.
- The product appearance shown in this manual is for reference only and may be different from the actual appearance of your device.
- The illustrations in this manual are for reference only and may vary depending on version or model.
- This manual is a guide for multiple product models and so it is not intended for any specific product.
- Due to uncertainties such as physical environment, discrepancy may exist between the actual values and reference values provided in this manual. The ultimate right to interpretation resides in our company.
- Use of this document and the subsequent results shall be entirely on the user's own responsibility.

Conventions

The following conventions apply in this manual:

- EZTools is referred to as the software for short.
- Devices that the software manages, such as IP camera (IPC) and network video recorder (NVR), are referred to as device.

Convention	Description
Boldface font	Commands, keywords, parameters and GUI elements such as window, tab, dialog box, menu, button, etc.
Italic font	Variables for which you supply values.
>	Separate a series of menu items, for example, **Device Management** > **Add Device**.

Symbol	Description
⚠️ **WARNING!**	Contains important safety instructions and indicates situations that could cause bodily injury.
ⓘ **CAUTION!**	Means reader be careful and improper operations may cause damage or malfunction to product.
📝 **NOTE!**	Means useful or supplemental information about the use of product.

Contents

1 Introduction

This software is a tool used to manage and configure IPC, NVR, and display & control devices on a local area network (LAN). Major functions include:

> **NOTE!**
>
> For display & control devices, you can only perform login, password/IP change, local upgrade, and channel configuration (for EC only) operations.

Item	Function
Basic Configuration	Configure the device name, system time, DST, network, DNS, port and UNP. Besides, Change Device Password and Change Device IP Address are also included.
Advanced Configuration	Configure channel settings including image, encoding, OSD, audio, and motion detection.
Upgrade Device	• Local Upgrade: Upgrade devices using upgrade files on your computer. • Online Upgrade: Upgrade devices with Internet connection.
Maintenance	Import/Export Configuration, Export Diagnosis Info, Restart Device, and Restore Default Settings.
NVR Channel Management	Add/delete NVR channels.
Calculation	Calculate disk space and recording time required.
APP Center	Download, install and upgrade apps.

Before you start, make sure the computer on which this software runs and the devices to manage are connected by network.

2 Upgrade

Check for updates, download and install the latest version.

2. A "New Version" prompt appears in the upper right corner if a new version is detected.

Click **New Version** to view details and download the new version.

You can choose to install immediately or later when the new version is downloaded. Clicking in the upper right corner will cancel the installation.

- **Install Now:** Close the software and start installation immediately.
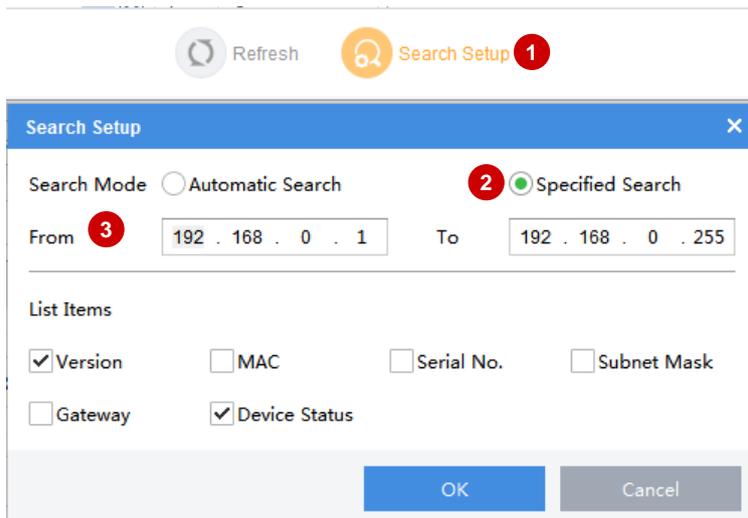- **Install Later**: The installation will start after the user closes the software.

3.

# 3 Functions

Preparation

Search Devices

The software automatically searches for devices on the LAN where the PC resides and lists the discovered. To search a specified network, follow the steps as shown below:

Log in to Devices

You need to log in to a device before you can manage, configure, upgrade, maintain or restart a device. Choose the following methods to log in to your device:

- Log in to device in the list: Select the device(s) in the list and then click the **Login** button on the top.
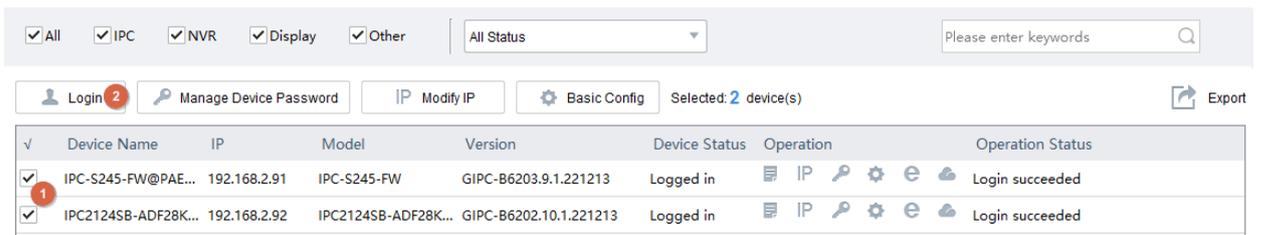
- Log in to device not in the list: Click **Login**, and then enter the IP, port, username and password of the device you want to log in to.
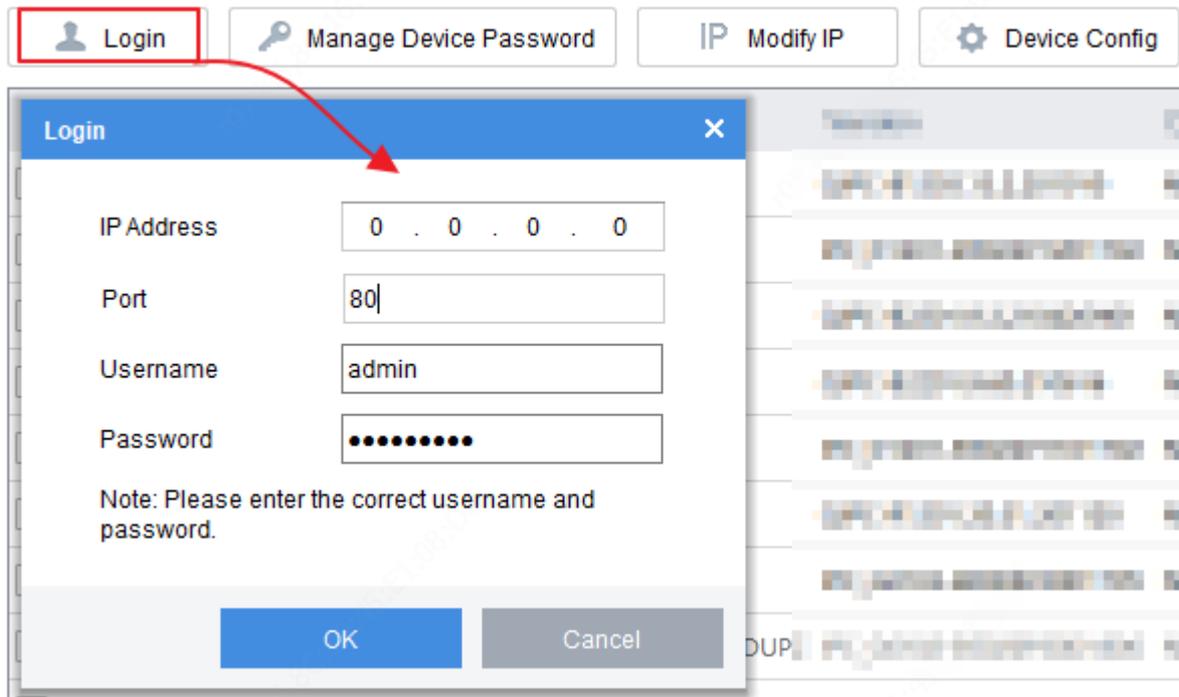
Management and Configuration

Manage Device Password

The default password is only intended for the first login. For security, please change the password when logged in. You can only change the admin's password.

1. Click **Basic Config** on the main menu.

2. Choose the following methods to change device password:

   ➢ For a single device: Click 🔑 in the **Operation** column.

   ➢ For multiple devices: Select devices, then click **Manage Device Password**.
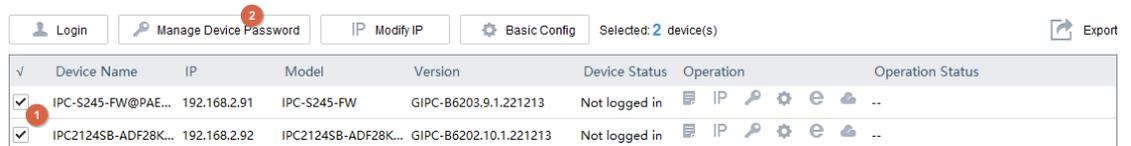
3.

   In the pop-up window, enter the username, old password, new password, and confirm the password.

(Optional) Enter the email in case you need to retrieve the device password.

Click **OK**.

4.

Change Device IP Address

Click **Basic Config** on the main menu.

1.

Choose the following methods to change device IP:

2.

- For a single device: Click IP in the **Operation** column.

- For multiple devices: Select the devices, and then click **Modify IP** on the top toolbar. Set the start IP in the **IP Range** box, and the software will automatically fill in other parameters according to the number of devices. Please make sure the username and password are correct.

1.

Configure Device

Configure the device name, system time, DST, network, DNS, port, UNP, SNMP, and ONVIF.

Click **Basic Config** on the main menu.
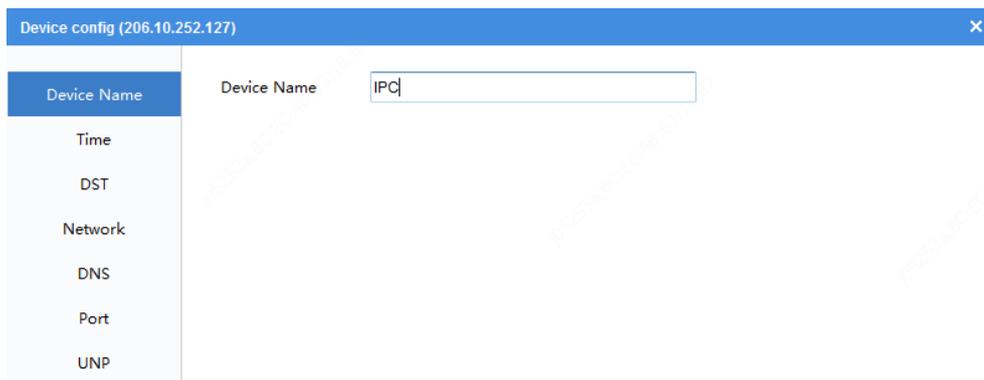
Click ⚙ in the **Operation** column.

> 📝 **NOTE!**
>
> You may select multiple devices to configure device system time, DST, DNS, port, UNP and ONVIF in batches. Device name and network settings cannot be configured in batches.

2. Configure device name, system time, DST, network, DNS, port, UNP, SNMP, and ONVIF as needed.
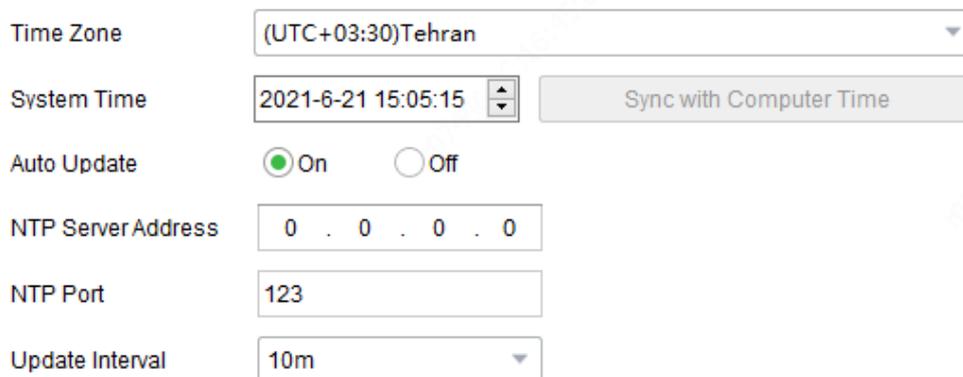
   - Configure device name.

3.

   - Configure the time.

     Synchronize the time of the computer or NTP server to the device.

     ➢ Turn off **Auto Update**: Click **Sync with Computer Time** to synchronize the computer's time to the device.

     ➢ Turn on **Auto Update**: Set the NTP server address, NTP port and update interval, then the device will synchronize time with the NTP server at set intervals.

   - Configure Daylight Saving Time (DST).

- Configure network settings.

- Configure the DNS.

- Configure ports.

- Configure UNP.

  For a network with firewalls or NAT devices, you may use Universal Network Passport (UNP) to interconnect the network. To use this service, you need to configure on a UNP server first.

UNP Service	○ On ◉ Off
Server Address	0 . 0 . 0 . 0
Authenticate	◉ Yes ○ No
Username	
Password	

- Configure SNMP.

Use this function to interconnect with the server so as to monitor device status remotely from the server and troubleshoot device failures in time.

  o (Recommended) SNMPv3

SNMPv3 is recommended when your network is less secure. It requires username and password for authentication and uses DES (Data Encryption Standard) for encryption, providing higher security.

SNMP	◉ On ○ Off
SNMP Type	SNMPv3 ▼
Username	admin
Authentication Mode	MD5 ▼
Authentication Password	
Confirm Authentication Password	
Encryption Mode	DES ▼
Encryption Password	
Confirm Encryption Password	

Item	Description
SNMP Type	The default SNMP type is SNMPv3.
Authentication Password	Set the authentication password, which is used by the server to receive data sent from devices.
Confirm Authentication Password	Confirm the authentication password you entered.
Encryption Password	Set the encryption password, which is used to encrypt data sent from devices to the server.
Confirm Encryption Password	Confirm the encryption password you entered.

o SNMPv2

Use SNMPv2 for communication when the network is secure enough. SNMPv2 uses community name for authentication, which is less secure.

SNMP   ⦿ On   ◯ Off

SNMP Type   SNMPv2   ▼

Read Community [   ]

Item	Description
SNMP Type	Select **SNMPv2**. After you select SNMPv2, a message pops up to remind you of potential risks and ask if you want to continue. Click **OK**.
Read Community	Set the read community. It is used for the server to confirm whether the data sent by the community, and receive the data after successful authentication.

● Configure ONVIF.

Configure IPC authentication mode.

o Standard: Use the authentication mode recommended by ONVIF.

o Compatible: Use the device's current authentication mode.

Authentication Mode   ⦿ Standard   ◯ Compatible

Configure Channel

Configure channel settings including image, encoding, OSD, audio, motion detection, and intelligent server. The parameters displayed may vary with device model.

1. Click **Advanced Config** on the main menu.

2. Click ⚙ in the **Operation** column.

📝 **NOTE!**

● You can configure IPC or EC of the same model in batches. Select the devices and click **Advanced Config**.

3. ● You can only configure image and OSD settings for EC channel.

Configure image, encoding, OSD, audio, motion detection, and intelligent server as needed.

● Configure image settings, including image enhancement, scenes, exposure, smart illumination, and white balance.

NOTE!

- A double-click on the image will display it in full screen; another double-click will restore the image.
- Clicking **Restore Default** will restore all the default image settings. After restoration, click **Get Parameters** to obtain the default settings.
- To enable multiple scene schedules, select **Multiple Scenes** from the **Mode** drop-down list, select scenes and set the corresponding schedules, illumination ranges, and elevation ranges. Select the check box for the scenes that you have set, and then select the **Enable Scene Schedule** check box at the bottom to make the schedules effective. When conditions are met for a scene, the camera will switch to this scene; otherwise, the camera uses the default scene (shows ✔ in the **Operation** column). You can click 🖐 to specify the default scene.
- You may copy image, encoding, OSD and motion detection configurations of an NVR channel and apply them to other channel(s) of the same NVR. See Copy NVR Channel Configurations for details.
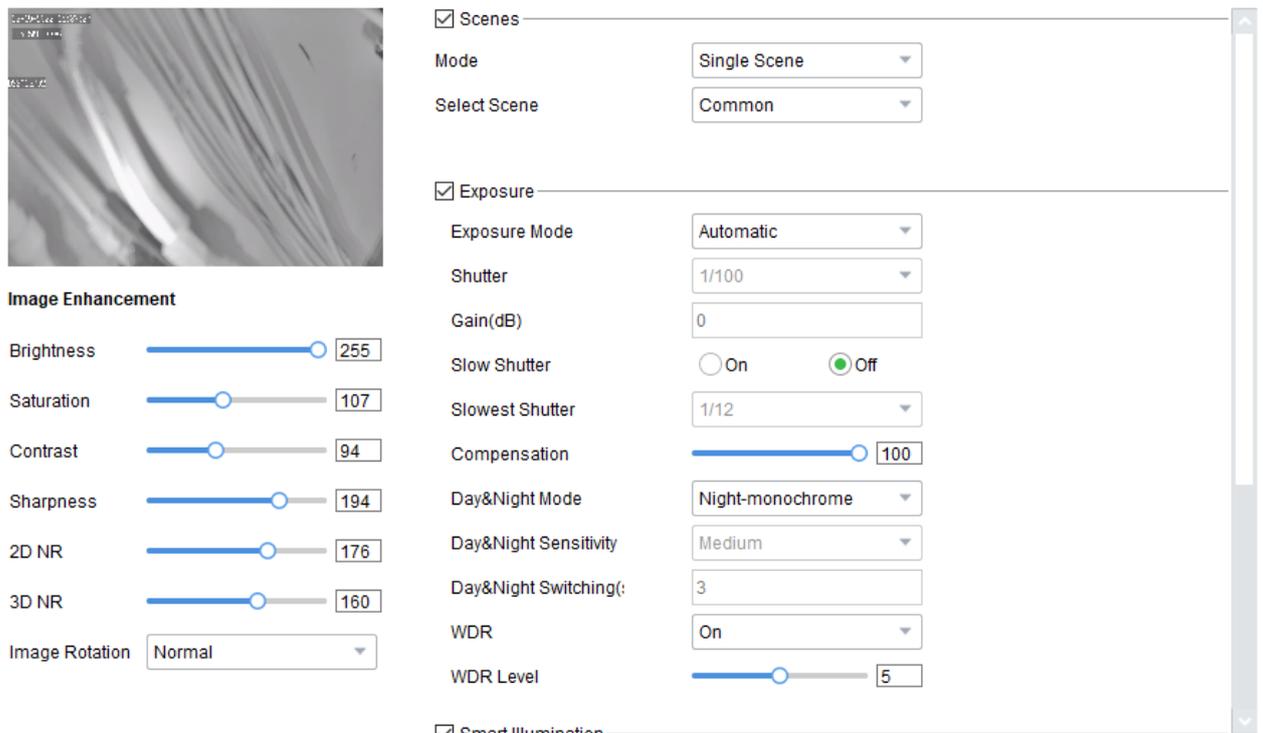
Image Enhancement

Brightness		255
Saturation		107
Contrast		94
Sharpness		194
2D NR		176
3D NR		160
Image Rotation	Normal	

☑ Scenes	
Mode	Single Scene
Select Scene	Common
☑ Exposure	
Exposure Mode	Automatic
Shutter	1/100
Gain(dB)	0
Slow Shutter	○ On ◉ Off
Slowest Shutter	1/12
Compensation	100
Day&Night Mode	Night-monochrome
Day&Night Sensitivity	Medium
Day&Night Switching(:	3
WDR	On
WDR Level	5
☑ Smart Illumination	

- Configure encoding parameters.

10

Current Channel	Channel 001 ▼			
Capture Mode	1920×1080@25 ▼			

Main **Enable Sub**

Compression	H.264 ▼	Compression	H.264 ▼
Resolution	1920×1080(1080P) ▼	Resolution	720×576(D1) ▼
Frame Rate(fps)	25 ▼	Frame Rate(fps)	25 ▼
Bit Rate(Kbps)	4096 [128 ~ 16384]	Bit Rate(Kbps)	1024 [128 ~ 16384]
Bit Rate Type	CBR ▼	Bit Rate Type	CBR ▼
Image Quality	Bit Rate ——— Quality 5	Image Quality	Bit Rate ——— Quality 5
I Frame Interval	50 [5 ~ 250]	I Frame Interval	50 [5 ~ 250]
GOP	IP ▼	GOP	IP ▼
Smoothing	Clear ——— Smooth	Smoothing	Clear ——— Smooth
U-Code	Off ▼	U-Code	Off ▼

[Copy To]

📝 **NOTE!**

The copy function is not available for EC channels.

- Configure OSD parameters.

Current Channel	Channel 001 ▼

Display Style

Font Size	Large ▼
Font Color	#ff0000 🟥
Date Format	yyyy-MM-dd ▼
Time Format	HH:mm:ss ▼

Channel Name	Test OSD121111

√	No.	Position	Overlay OSD Content	
✔	1	Area1 ▼	<Name>	▼
✔	2	Area2 ▼	<Date & Time>	▼
☐	3	Area3 ▼		▼
☐	4	Area4 ▼		▼
☐	5	Area5 ▼		▼
☐	6	Area6 ▼		▼
☐	7	Area7 ▼		▼
☐	8	Area8 ▼		▼

Overlay Area1

X 24   Y 26

[Copy To]

● For EC channels, the channel name is not displayed, and the copy function is not available.

● You can export and import OSD configurations of IPCs and EC devices with one channel. See Export and Import OSD Configurations of an IPC for details.

● Configure audio parameters.

Currently this function is not available for NVR channels.

Audio Input	● On　○ Off	
Audio Input Gain	128	[0 ~ 255]
Encoding Format	G.711U ▼	
Sampling Rate(KHz)	8 ▼	

● Configure motion detection.

Motion detection detects object motion in the detection area during the set period. The motion detection settings may vary with device. The following takes NVR channel as an example:

Current Channel	Channel 002 ▼
Motion Detection	● On　○ Off

Detection Area | Arming Schedule | Trigger Actions

Sensitivity　Low ━━━━━━○ High 98

✎ Draw Area

☒ Clear All

Item	Description
Detection Area	Click **Draw Area** to draw detection area in the left live view window.
Sensitivity	The higher the value, the easier a moving object will be detected.
Trigger Actions	Set the actions to trigger after a motion detection alarm occurs.

Item	Description
Arming Schedule	Set the start and end time during which motion detection takes effect. ● Click or drag on the green area to set arming periods. ● Click **Edit** to enter time periods manually. After you complete the settings for a day, you may copy the settings to other days.

● Configure intelligent server parameters so you can manage devices on the server.
  o UNV

Item	Description
Camera No.	Camera number used to identify the device.
Device No.	Device number used to identify the device on the server.

  o Video&Image Database

Intelligent Server

Server IP	0 . 0 . 0 . 0
Server Port	5196
Platform Communication Type	Video&Image Database ▾
Device ID	001
Username	
Platform Access Code	

Video&Image Database Settings

Coordinate Mode	Percentage Mode ▾
Connection Mode	Short Connection ▾
Report Data Type	☑ Motor Vehicle ☑ Non-Motor Vehicle ☑ Person ☑ Face

Item	Description
Device ID	Make sure the entered device ID conforms to the VIID protocol, and digits 11-13 must be 119.
Username	Username used to connect to the VIID platform.
Platform Access Code	Password used to connect to the VIID platform.
Coordinate Mode	Select the coordinate system used to determine the location of detected objects on the image. It's recommended to use the default. • Percentage Mode (default): Use a coordinate system with x-axis and y-axis ranging from 0 to 10000. • Pixel Mode: Use a pixel coordinate system. • Normalized Mode: Use a coordinate system with x-axis and y-axis ranging from 0 to 1.
Connection Mode	• Short Connection: This mode is implemented based on the standard HTTP protocol, and the server decides the connection mode. • Standard: This mode is applicable only when the device connects to a Uniview server.
Report Data Type	Select the types of data to be reported, including **Motor Vehicle**, **Non-Motor Vehicle**, **Person**, and **Face**.

View Device Info

View device information, including device name, model, IP, port, serial number, version info, etc.

Click **Basic Config** or **Advanced Config** or **Maintenance** on the main menu.

Click ▤ in the **Operation** column.

📝 **NOTE!**

Device info is also displayed for devices not logged in, but subnet mask and gateway will not be
displayed.

1.

2.

Export Device Info

Export information including name, IP, model, version, MAC address and serial number of device(s) to
a CSV file.

Click **Basic Config** or **Advanced Config** on the main menu.

Select the device(s) in the list, and then click the **Export** button in the upper right corner.

1.
2.
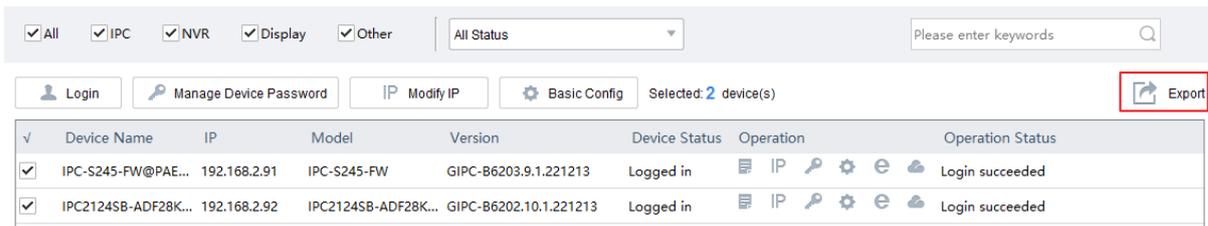
√	All	✓ IPC	✓ NVR	✓ Display	✓ Other	All Status ▼			Please enter keywords	🔍

👤 Login	🔑 Manage Device Password	IP Modify IP	⚙ Basic Config	Selected: 2 device(s)						↗ Export

√	Device Name	IP	Model	Version	Device Status	Operation					Operation Status
✓	IPC-S245-FW@PAE...	192.168.2.91	IPC-S245-FW	GIPC-B6203.9.1.221213	Logged in	▤ IP 🔑 ⚙ e ☁					Login succeeded
✓	IPC2124SB-ADF28K...	192.168.2.92	IPC2124SB-ADF28K...	GIPC-B6202.10.1.221213	Logged in	▤ IP 🔑 ⚙ e ☁					Login succeeded

Export Diagnosis Info

Diagnosis information includes logs and system configurations. You can export diagnosis info of
device(s) to PC.

1.

Click **Maintenance** on the main menu.

2.

3.

Click 🔧 in the **Operation** column.

Select the destination folder, and then click **Export**.

Maintenance (206.10.252.127)	✕

Diagnosis Info

Storage Path [   ] 📁 [Export]

Config Management

Import Settings [   ] 📁 [Import]

Export Settings [   ] 📁 [Export]
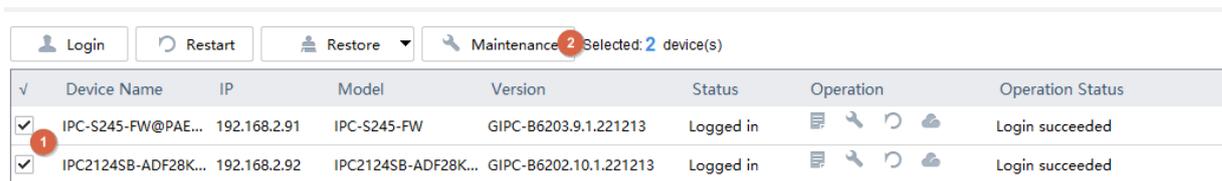
Import/Export Configuration

Configuration import allows you to import a configuration file from your computer to a device and change the current settings of the device.

Configuration export allows you to export current configurations of the device and save them as a file for backup.

Click **Maintenance** on the main menu.

Choose the following methods as needed:

- For a single device: Click ⚲ in the **Operation** column.

- For multiple devices: Select the devices, and then click **Maintenance** on the top toolbar.

1.
2.

√	Device Name	IP	Model	Version	Status	Operation	Operation Status
✓	IPC-S245-FW@PAE...	192.168.2.91	IPC-S245-FW	GIPC-B6203.9.1.221213	Logged in	📄 ⚲ ↺ ☁	Login succeeded
✓	IPC2124SB-ADF28K...	192.168.2.92	IPC2124SB-ADF28K...	GIPC-B6202.10.1.221213	Logged in	📄 ⚲ ↺ ☁	Login succeeded

Click 🗁 next to the **Import/Export** button, and select the configuration file.

Click **Import/Export**.

3.

> 📝 **NOTE!**
>
> For some devices, a password is required for encryption when you export a configuration file, and when you import an encrypted configuration file, you also need to decrypt it with the password.

Restore Default Settings

Restoring default settings includes restore defaults and restore factory defaults.

Restore defaults: Restore factory default settings except network, user and time settings.

1.
2.

Restore factory defaults: Restore all factory default settings.

3.

Click **Maintenance** on the main menu.

Select the device(s).

Click **Restore** on the top toolbar and then choose **Restore Defaults** or **Restore Factory Defaults**.

1.

Restart Device

Click **Maintenance** on the main menu.

Choose the following methods as needed:

- For a single device: Click ⟳ in the **Operation** column.

- For multiple devices: Select the devices, and then click **Restart** on the top toolbar.

2.

Log in to the Web of a Device

Click **Basic Config** or **Advanced Config** on the main menu.

Click e in the **Operation** column.

1.

Upgrade Device

2.

Device upgrade includes local upgrade and online upgrade. Upgrade progress is displayed in real time during the upgrade.

Local upgrade: Upgrade device(s) using an upgrade file on your computer.

Online upgrade: With Internet connection, online upgrade will check the device firmware version, download upgrade files and upgrade the device. You need to log in first.

NOTE!

- The upgrade version must be correct for the device. Otherwise, exceptions may occur.
- For an IPC, the upgrade package (ZIP file) must contain the complete upgrade files.
- For an NVR, the upgrade file is in .BIN format.
- For a display & control device, the upgrade file is in .tgz format.
- You can upgrade NVR channels in batches.
- Please maintain a proper power supply during upgrade. The device will restart after the upgrade is completed.

Upgrade a device using a local upgrade version file

1. Click **Upgrade** on the main menu.

2. Under **Local Upgrade**, select the device(s) and then click **Upgrade**. A dialog box is displayed (take NVR as an example).

Local Upgrade (206.10.251.130)				
All	IP/Channel	Device/Channel Na	Model	Current Version
☑	206.10.251.130	NVR3	NVR3	B3
☐	206.10.251.130_C...	F Zone	IPC2	IPC_2
☐	206.10.251.130_C...	D Zone	IPC2	IPC_2
☐	206.10.251.130_C...	C Zone	IPC2	IPC_D1

Upgrade File [_____] 📁 Please choose the correct upgrade file.

OK   Cancel
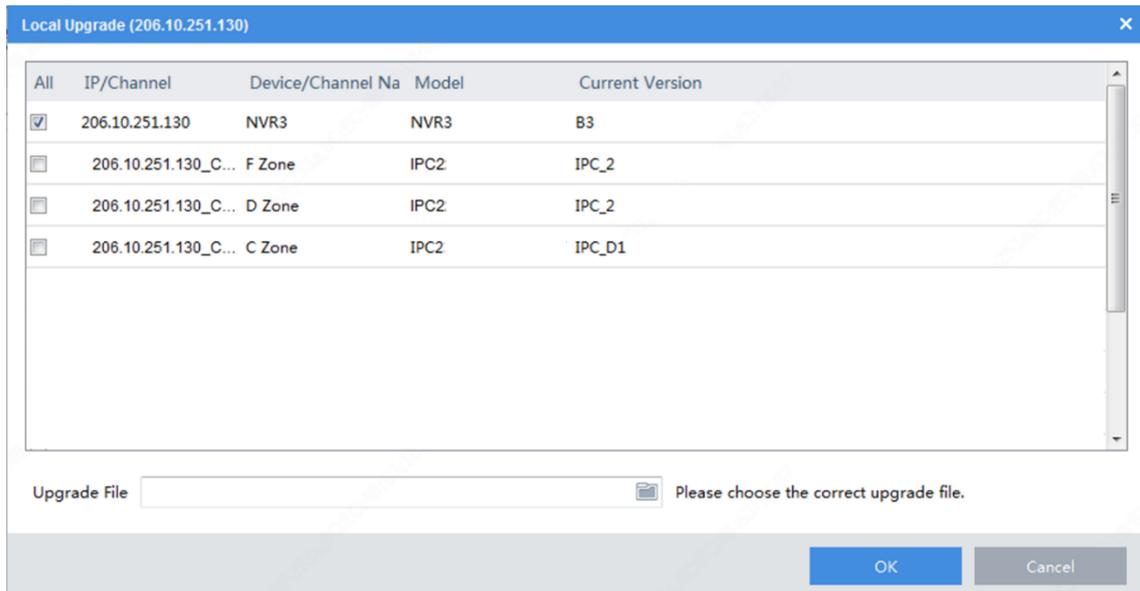
3. Select the upgrade version file. Click **OK**.

Online Upgrade

1. Click **Upgrade** on the main menu.

2. Under **Online Upgrade**, select the device(s) and then click **Upgrade**.
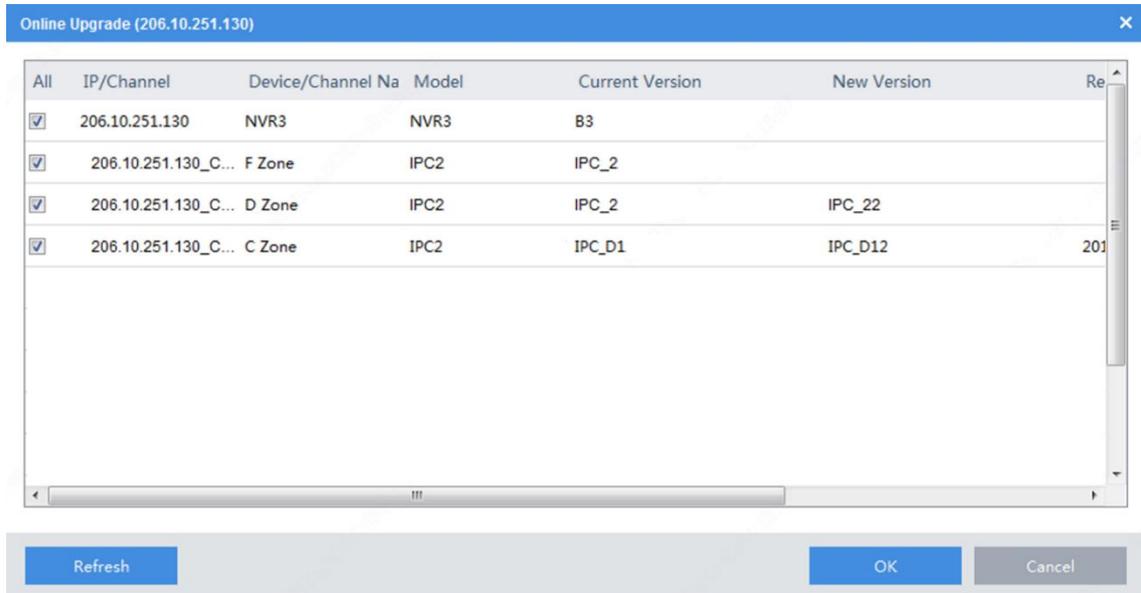
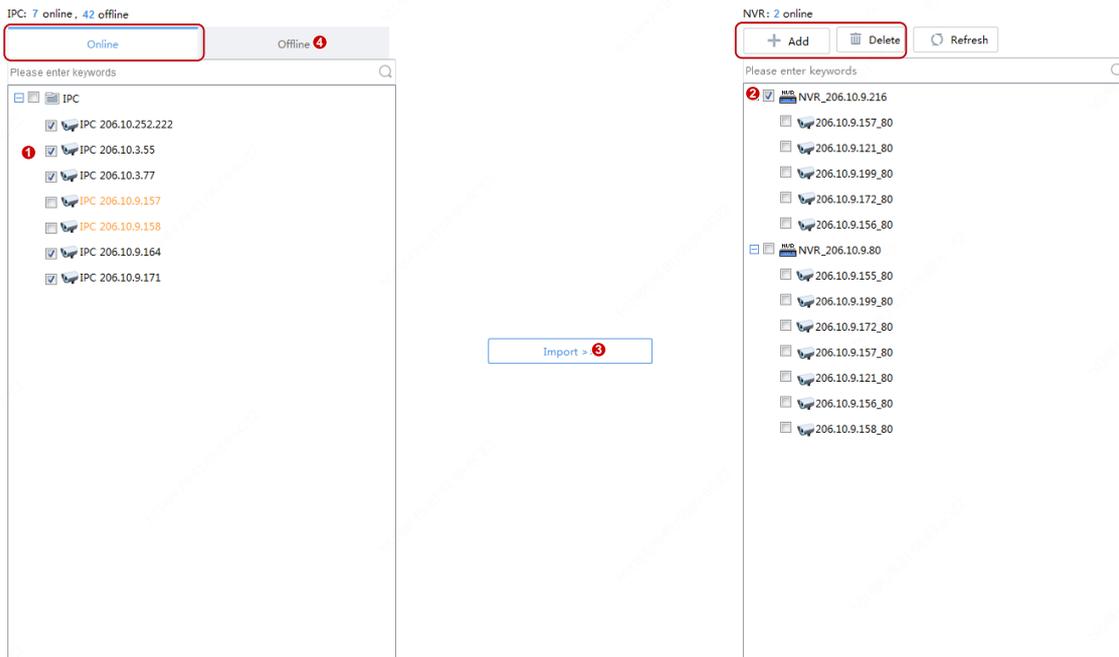Click **Refresh** to check for available upgrades.

Click **OK**.

NVR Channel Management

NVR channel management includes adding NVR channel and deleting NVR channel.

Click **NVR** on the main menu.

1. On the **Online** tab, select the IPC(s) to import, select the target NVR, and then click **Import**.
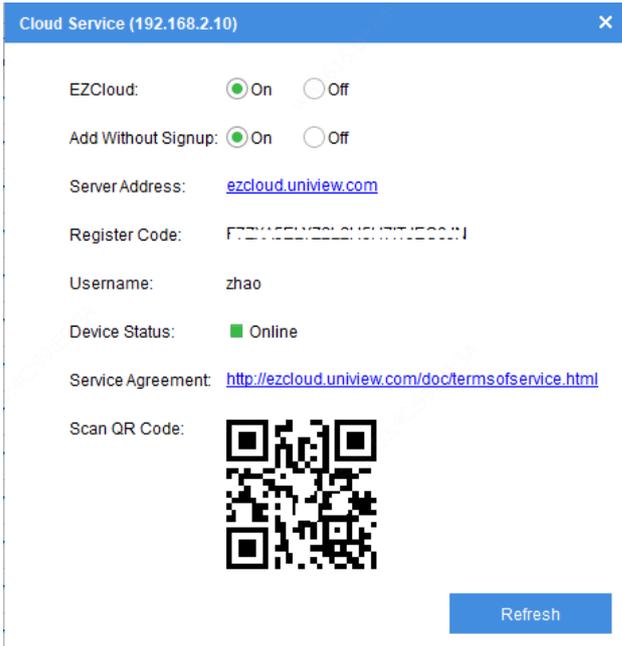
2.

Cloud Service

Enable or disable the cloud service and the **Add Without Signup** feature on the device; delete a cloud device from the current cloud account.

1. Log in to the device.

2. Click **Basic Config** or **Maintenance** on the main menu.

3. Click ☁ in the **Operation** column. A dialog box is displayed.

4.

Cloud Service (192.168.2.10)　✕

EZCloud: ⦿ On ○ Off

Add Without Signup: ⦿ On ○ Off

Server Address: ezcloud.uniview.com

Register Code: ⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷⌷

Username: zhao

Device Status: ■ Online

Service Agreement: http://ezcloud.uniview.com/doc/termsofservice.html

Scan QR Code:

Refresh

5. Enable or disable the cloud service (EZCloud) as needed. When the cloud service is enabled, you can use the APP to scan the QR code below to add the device.

Note: Please click **Refresh** to update device status after you enable or disable the cloud service.

Enable or disable the **Add Without Signup** feature, which, when enabled, allows you to add the device by scanning the QR code using the APP without signing up for a cloud account.

20

Note: The **Add Without Signup** feature requires the cloud service be enabled on the device and a strong password be set on the device.

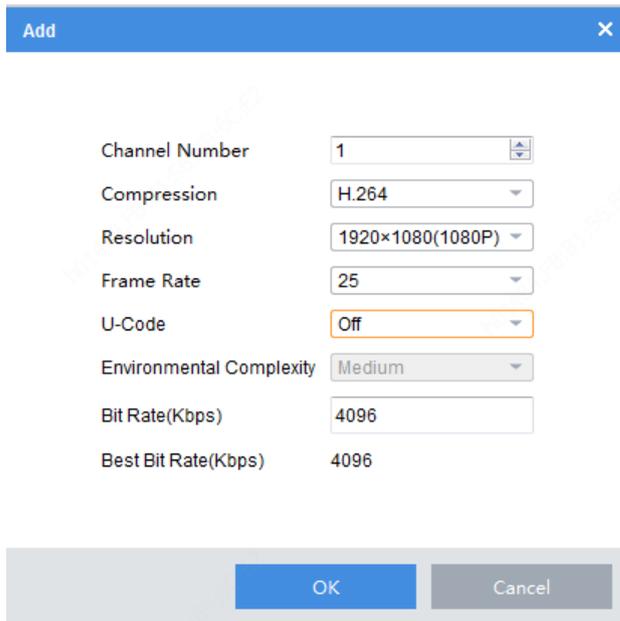For a cloud device, you can remove it from the current cloud account by clicking **Delete**.

Calculation

Calculate recording time allowed or disks needed.

6. Click **Calculation** on the main menu.

Click **Add** on the top toolbar.

1.
2.

Note: You may also click **Search to Add** and select discovered devices for space calculation based on their actual video settings.

3.
4. Complete the settings. Click **OK**.

Repeat the above steps as needed.

5. Select devices in the device list.

Calculate days in disk mode

Calculate how many days recordings can be saved based on the daily recording time (hours) and disk capacity available.

Calculate days in RAID mode

Calculate how many days recordings can be saved based on the daily recording time (hours), configured RAID type (0/1/5/6), RAID disk capacity, and the number of disks available.

Calculate disks in disk mode

Calculate how many disks are needed based on the daily recording time (hours), recording retention period (days), and disk capacity available.

Calculate disks in RAID mode

Calculate how many RAID disks are needed based on the daily recording period (hours), recording retention period (days), RAID disk capacity available, and configured RAID type.

Tips for Usage

Select Devices

Select device(s) by selecting the check box in the first column of the list. When selected, you may view the number of selected devices. You may also select multiple devices using the following methods:

- Click **All** to select all.
- Click to select devices while holding down **<Ctrl>** or **<Shift>**.
- Drag the mouse while holding down the left button.

Filter Device List

Filter the list by entering a keyword contained in the IP, model, version, and name of the desired devices.
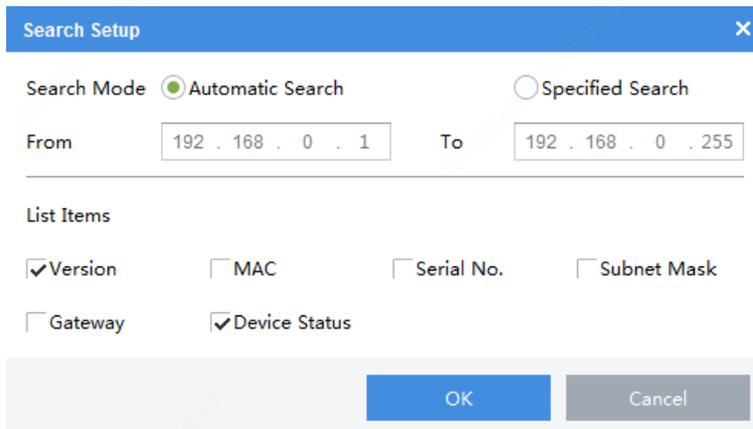
Click to clear entered keywords.

Sort Device List

In the device list, click a column title, for example, device name, IP, or status, to sort the listed devices in ascending or descending order.

Customize Device List

Click **Search Setup** on the top, then select titles to display on the device list.

Copy NVR Channel Configurations

You can copy image, encoding, OSD and motion detection configurations of an NVR channel to other channels of the NVR.

> **NOTE!**
>
> This feature only supports NVR channels that are connected via Uniview private protocol.

- Image parameters: Include settings of image enhancement, exposure, smart illumination and white balance.
- Encoding parameters: Depending on the stream type that the device supports, you can choose to copy encoding parameters of the main and/or sub streams.
- OSD parameters: OSD style.
- Motion detection parameters: Detection area, arming schedule.

The following describes how to copy encoding configurations. Copying image, OSD and motion detection configurations are similar.

First, complete the configuration of the channel to copy from (e.g., Channel 001) and save the settings. And then follow the steps as illustrated:
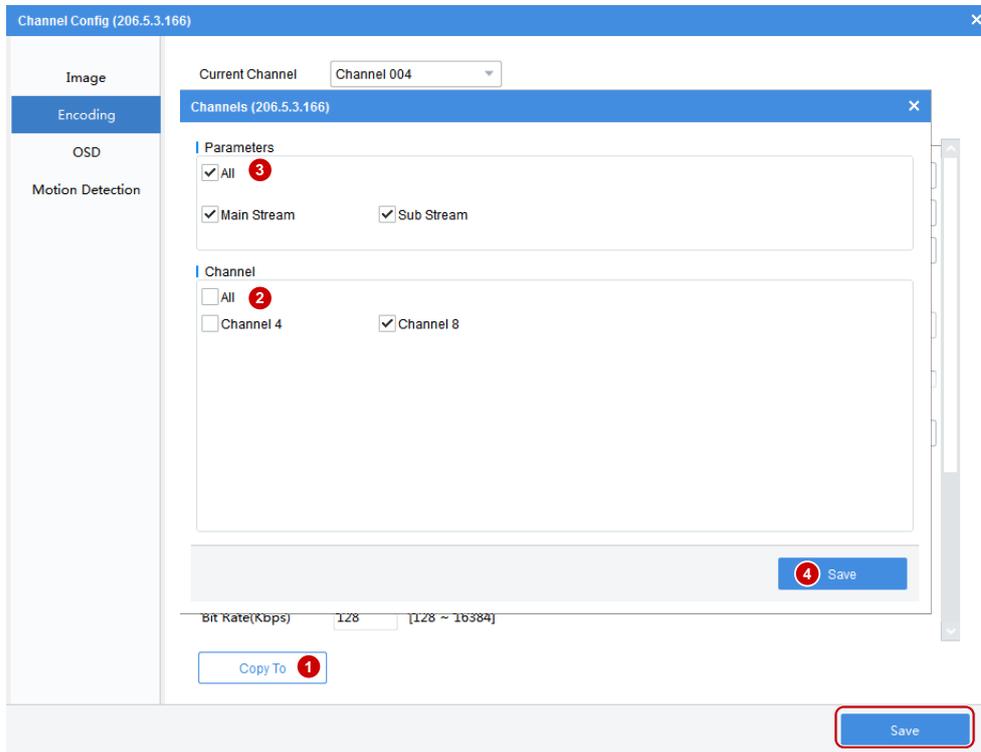
Export and Import OSD Configurations of an IPC

You can export OSD configurations of an IPC to a CSV file for backup, and apply the same configurations to other IPCs by importing the CSV file. The OSD configurations include effect, font size, font color, minimum margin, date & time format, OSD area settings, types and OSD contents.

> 📝 **NOTE!**
>
> When importing a CSV file, make sure the IP addresses and serial numbers in the file match that of the target IPCs; otherwise, import will fail.