

User Manual 8000 Series Network Camera

Version: 1.2

Date: July 2019

Statement

- The user manual is for reference only. Detailed information is subject to the actual products.
- The product and description in this document are subject to change at any time without prior notice.
- Screenshots included in the manual are extracted from other machines and are for reference only.
- Should you have any questions, or if you need the latest firmware and additional information,
 please contact with the after-sales service department.

Precautions

- The following describes proper use of the device and precautions against risks as well as measures that need to be strictly followed to avoid property damage.
- Please use the cameras in an environment where the temperature and humidity are within the recommended range. Check if the power supply works normally before operation.
- Do not hit or drop the product.
- Do not install the product at a dusty or moist location, or a place covered by strong electromagnetic radiation.
- Do not allow liquid leaking into the device. When you do not use the product, please place a
 dust cover on the image sensor.
- Do not disassemble the product without authorization

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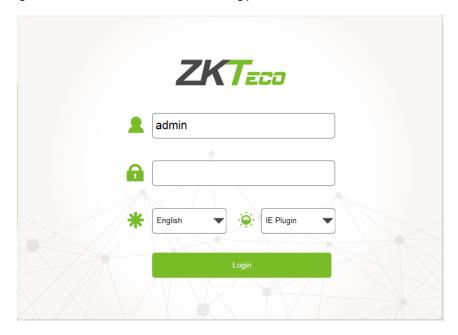
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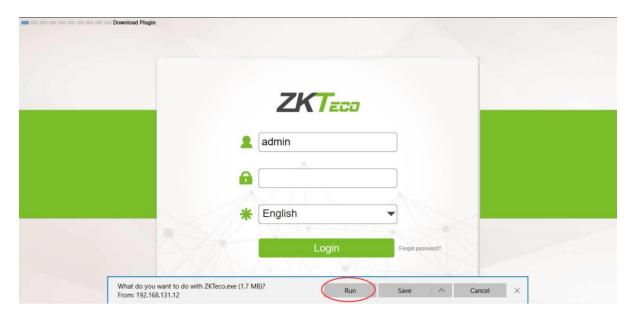
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1 Login Interface

Input the IP address of the front-end device in the IE browser (the default IP address is 192.168.1.86) to access the login interface as shown in the following picture:



When using the IP camera for the first time, you must install the Active X in advance. Click on the "Download Plugin" on the upper left corner of the login interface as shown in the figure below to download and install Active X; the system will then pop up an installation control message. Click on "Run" and install ActiveX according to prompts.



After installing Active X, click on "Login", then the system will prompt a message asking whether or not to change the password, as shown in the following figure:



User Name: admin (default setting).

Password: 123456 (default setting); users may modify the password according to the instructions.

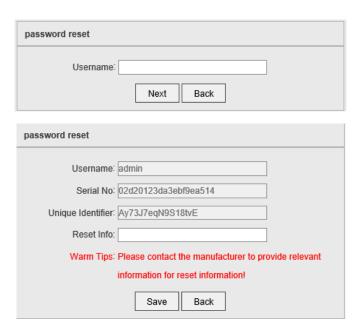
Plugin Type: IE plugin or Flash plugin. If you use IE browser, please select IE Plugin. If you use other browsers, select Flash plugin. (② **Note:** Select Flash plugin without installing Active X).

Language: English, simplified Chinese.

©Note: For account security, users will be prompted to reset the password when they first login.



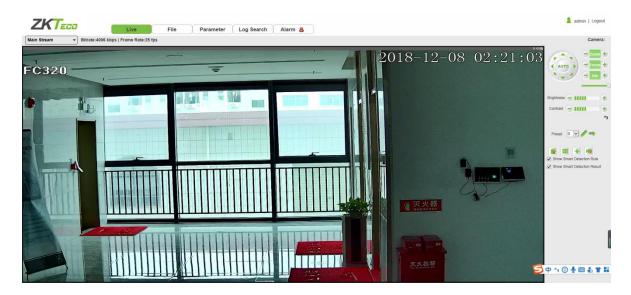
© **Note:** if a user forgets his/her password, one may click on "Next" to restore the password to factory settings according to the prompt.



2 Live Videos

After logging in, you will enter the live video interface, as shown in the following figure.

Note: You have to insert a TF card first to access the full function display interface; otherwise, the system will only show you the simplified version.

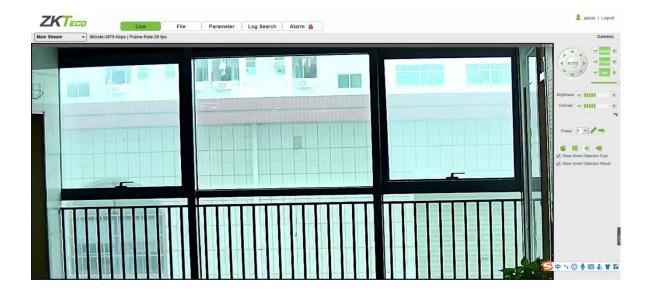


2.1 Full-screen Preview

Click on the full-screen icon in the lower right corner to get a full-screen preview. Or, you may right-click to access (and exit) the full screen display on the preview interface

2.2 Electronic Zoom-in

You may zoom in the preview image by scrolling the mouse wheel, as shown in the following figure:



2.3 PTZ control



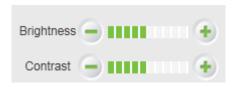
PTZ Control: To use eight directional keys to change the image orientation or click on the "AUTO" button to allow auto-rotation.

Zoom In/ Out: To adjust the extent of zooming in or out.

Focus: To adjust the size of focus.

Iris: To adjust the size of aperture.

Speed: To use the slider to regulate the PTZ speed.



Brightness: To adjust the brightness of the screen.

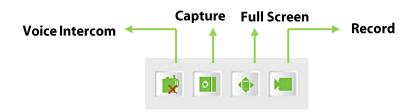
Contrast: To adjust the contrast of the screen.

The arrow is used to restore factory settings



Set a Pre-set Point: Set a pre-set point by using directional keys on the PTZ control to rotate the camera to the desired location, then select a pre-set value from the pre-set point drop-down list, and then press the button.

Call a Pre-set Point: Call a pre-set point by selecting a pre-set number to be called from the pre-set point drop-down list, and then press the button.



Voice Intercom: To enable or disable voice intercom.

Capture: To take screenshots. Click on the icon, the system will pop up a storage path automatically.

Full Screen: To display full-screen video preview.

Record: To allow or disallow previewing records.

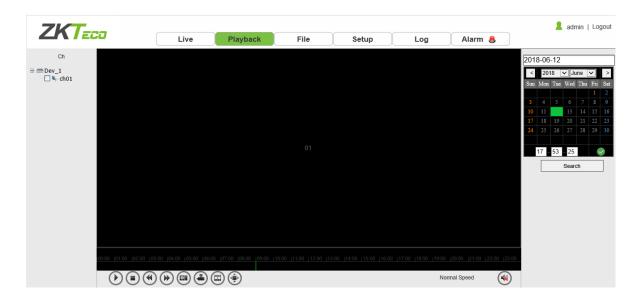
② Note: X indicates the function is off or disabled.

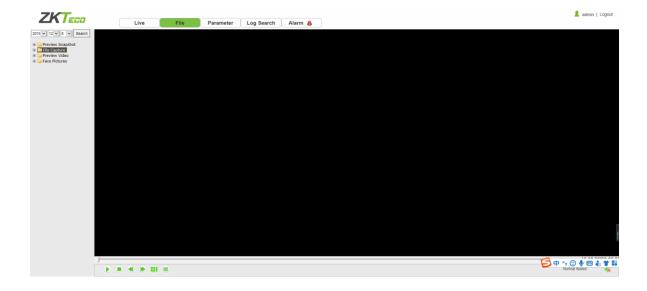
3 Playback

(The function is subject to the actual products.)

Note: You have to insert a TF card first to access the full function display interface; otherwise, the system will only show you the simplified version.

Click on "Playback" to access the playback interface; click on the icon select the date and time of videos to be retrieved, then click on the icon search, the system will then search for the corresponding videos automatically, as shown in the following figure:





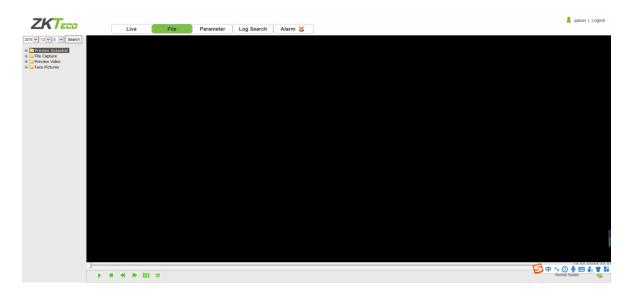
Start: Start the playback.

- Stop: Stop the playback.
- **Slow:** Slow down the playback speed (1/2, 1/4, 1/8, 1/16 times).
- Fast: Speed up the playback speed (2, 4, 8, 16 times).
- Snapshot: Take snapshots in a playback channel.
- Backup: Back up videos in a playback channel.
- Frame Play: Play by single frame.
- Full Screen: Play videos back in fullscreen.
- Woice: Adjust the volume of playback audio.

Double-click on the slider to play the video, or you may click the "Start" button to start playing the videos back.

4 File Management

Note: You have to insert a TF card first to access the full function display interface; otherwise, the system will only show you the simplified version.



4.1 Search

Input a concrete time, and click on the Search button, the lower part of the screen will display the searched images and videos. You may double-click on the searched results to access files you need.



4.2 Preview Snapshot

To review captured images from video preview; you may search for and double click to obtain images you need.

4.3 Playback Capture

To review captured images from video playback; you may search for and double click to obtain images you need.

4.4 Playback Backup

To retrieve video files; you may search for and view videos files.

4.5 File Capture

To review captured images from the file management interface; you may search for and double click to obtain the images you need.

4.6 Preview Videos

To preview videos recorded; you may search for and double click to access the videosyou need.

4.7 SD Card Link Capture

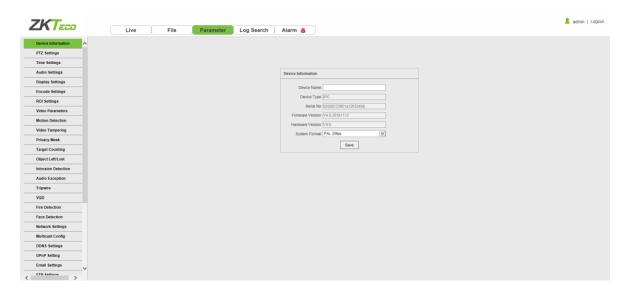
To review snapshots from a SD card; you may search for and double click to access the videos you need.

4.8 Backup Video Play

- Start: Click on the D button to play a selected backup video.
- **Stop:** Click on the button to stop playing the video.
- Slow: Click on the button to slowly play the video back.
- Fast: Click on the Dutton to fast-forward the video.
- Frame: Click on the button to play the video by frame.
- Capture: Click on the button to take a snapshot of the display during playback.

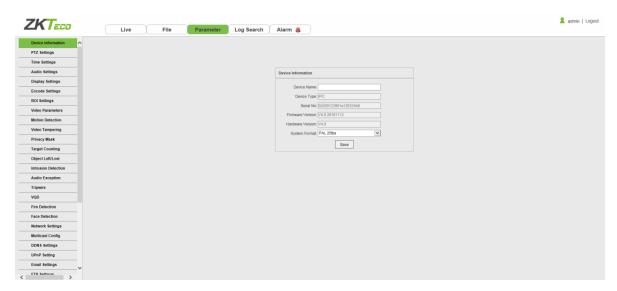
5 Parameter

Note: You have to insert a TF card first to access the full function display interface; otherwise, the system will only show you the simplified version.



5.1 Device Information

Below is the Device Information interface of the IP camera:



- Device Name: Edit the camera name.
- **Device Type:** Display the device type.
- Serial No: Display the product serial number.
- Firmware Version: Display information about the firmware version.
- Hardware Version: Display the version number of the hardware.
- Format System: Select between PAL and NTSC image scanning system.

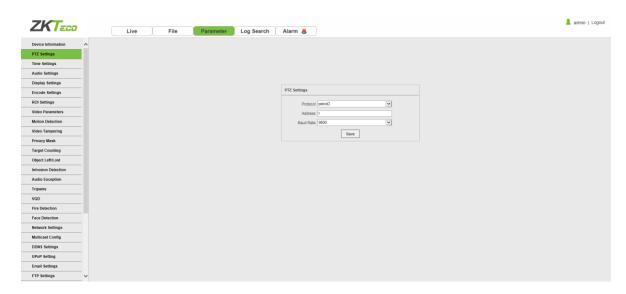
5.2 QR Code

IPC with P2P function can be remotely connected to the mobile APP by scanning the QR Code on this page.



5.3 PTZ Settings

Below is the PTZ Settings interface of the IP camera:



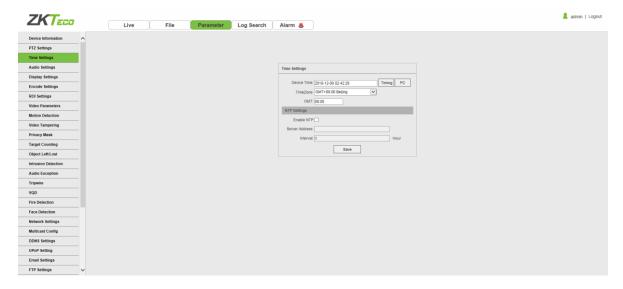
- **Protocol:** multiple protocols available.
- Address: 0-255 address codes available.
- Baud Rate: diverse baud available

Operation Method: Connect the IP high speed dome at the A/B port; set a protocol and baud;
 then control the high-speed dome on the IPC preview interface.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.4 Time Settings

Below is the Time Settings interface of the IP camera:

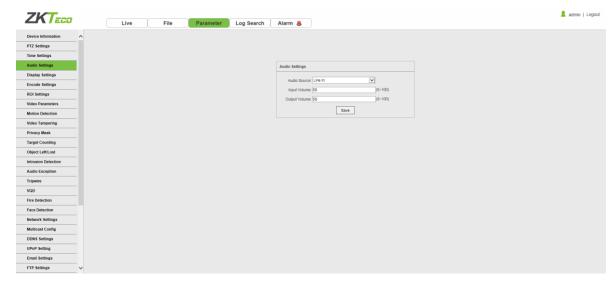


- **Device Time:** Set and display the current time of the camera.
- **Time Zone:** Different time zones are available.
- **GMT:** Fine-tune the time.
- **Enable NTP:** Click to enable or disable NTP.
- **Server Address:** Input the IP address of the NTP server.
- Interval: Input the interval of time.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.5 Audio Settings

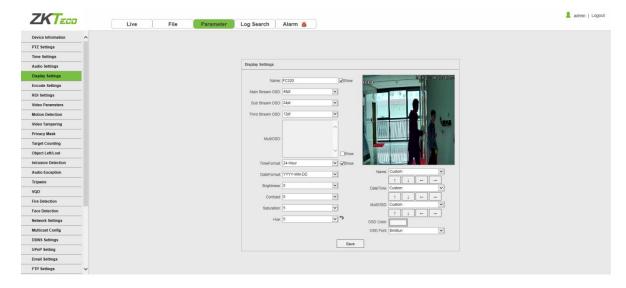
Below is the Audio Settings interface of the IP camera:



- Audio Source: Select the audio input mode between LineIn and MicIn.
- Input Volume: Set the input volume which ranges from 0 to 100; the default settings is 50.
- Output Volume: Set the output volume which ranges from 0 to 100; the default settings is 50.

5.6 Display Settings

Below is the Display Settings interface of the IP camera:

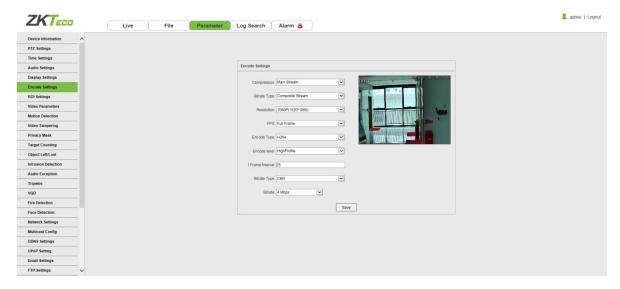


- Name: Modify the appointed channel name.
- Main Stream OSD: Modify the appointed font of the OSD in main stream preview channel.
- **Sub Stream OSD:** Modify the appointed font of the OSD in sub stream preview channel.
- Multi OSD: Add a multi-user-defined OSD, which you may choose whether to display.
- **Time Format:** Select different time format for the appointed channel.

- Date Format: Select different date format for the appointed channel.
- **Brightness:** Adjust the brightness for the appointed channel.
- Contrast: Adjust the contrast for the appointed channel.
- **Saturation:** Adjust the saturation for the appointed channel.
- Hue: Adjust the hue for the appointed channel.
- Name: Set the location of the title for the appointed channel.
- **Date Time:** Set the location of the date for the appointed channel.
- **Multi OSD:** Set the position of multi OSD.
- **OSD Color:** Set the color of the OSD font.
- **OSD Font:** Select OSD font.

5.7 Streams

Below is the Streams setting interface of the IP camera:

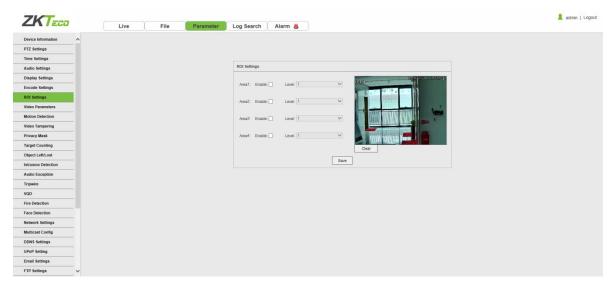


- Compression: Main stream/ Sub-stream/Third Stream
- Bitrate Type: Complex stream/ video stream.
- **Resolution:** Several resolutions available (Note: Based on the defaulted resolution of different products).
- **FPS:** Select different frame rates from the drop-down list; the default settings is "Full Frame".
- **Encode Type :** H.264/ H.265.
- **Encode level:** Main profile/ Baseline/ High Profile.
- I Frame Interval: Set the interval size of I frame.

- **Bitrate Type:** Constant/ variable.
- **Bitrate:** Set different bitrates for different channels (**® Note:** Based on the defaulted resolution of different products)

5.8 ROI Settings

Below is the ROI Settings interface of the IP camera:



• ROI Settings: On the preview window, hold the left mouse button and drag to set the ROI area.

There are a total of four ROI areas available. Click on to set the corresponding ROI region coding level; the higher level the coding, the stronger the ROI region encoding.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.9 Image Parameters

Below is the Image Parameters interface of the IP camera:

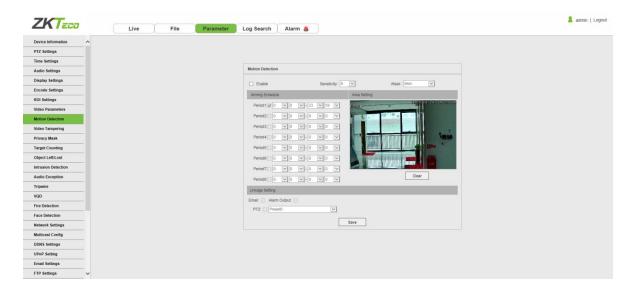


- Day/Night Mode: Outside Trigger/ Auto/ Color/ Black White. The default setting of non-infrared IP cameras is "Auto", and the default setting of infrared IP cameras is "Outside Trigger". Users may set the Day/Night mode as needed according to the type of the IP camera and the actual application environment.
- **Switching Time:** Day & Night switch delay time which ranges from 0-30s; the default setting is 3s.
- Day/Night: ranges from 0 to 255. Users may set the value as needed; the default setting is 20.
- **Night/Day:** ranges from 0 to 255. Users may set the value as needed; the default setting is 35.
- Color Mode: Normal/ Bright/ Nature; the default setting is "Normal"
- **Mirror:** Off Horizontal Mirror/ Vertical Mirror/ 180° Rotation/90° Rotation/270° Rotation; the default setting is "Off".
- **WDR Mode:** Off/ BLC/ WDR; the default setting is "Off".
- **3DNR:** Off/ Low/ Mid/ Mid-High/ High; the default setting is "Low".
- **Sharpness:** ranges from 0 to 255; the default setting is 128.
- Defogging: Off/ Low/ Mid/ High; the default setting is "Off".
- **Slow Shutter:** Off/On; the default setting is "Off".
- White Balance: Users may set the value of white balance. "Auto white balance" is suitable for normal light environment. Users may adjust the white balance mode from the drop-down list.
- **Exposure Control:** Auto/ manual; the default setting is "Auto".
- **AE algorithms:** Shutter first/ gain first; the default setting is "Shutter first".
- **AGC:** AGC can be set when the camera is automatically exposed. You may select from Low/ Mid-Low/ Mid-High/ High; the default settings is "Mid-High". The larger the "Auto Gain" value, the better the sensitivity under low illumination, and the more obvious the noise will be.
- Shutter: You may set manual exposure; the value ranges from 1/25(30) to 1/10000.

- **Aperture:** Depending on the type of IPC lens, the aperture can be divided into manual aperture and auto aperture (**®Note:** based on the defaulted aperture of different products); and the lens can be divided into manual focus and vari-focus.
- **Gamma:** A total of four modules: CURVE_1_6, CURVE_1_8, CURVE_2_0, CsURVE_2_2; the default setting is CURVE_2_0.
- **Power Frequency:** There are three options: off, 50hz, 60hz; the default setting is "off".
- **Light board control mode:** There are three LED board control modes: off, manual, auto; the default setting is "auto".
- Off mode: The IR LED will not be turned on.
- Manual mode: The brightness of the LED board can be adjusted by manually changing the related parameters, and the value ranges from 1 to 100. The larger the parameter value, the brighter the IR LED.
- **Auto mode:** The brightness of the LED board can be adjusted automatically.
- Brightness: The brightness of the LED board can be set when the LED board control is under "Manual" mode. The value ranges from 1 to 100.

5.10 Motion Detection

Below is the Motion Detection setting interface of the IP camera:

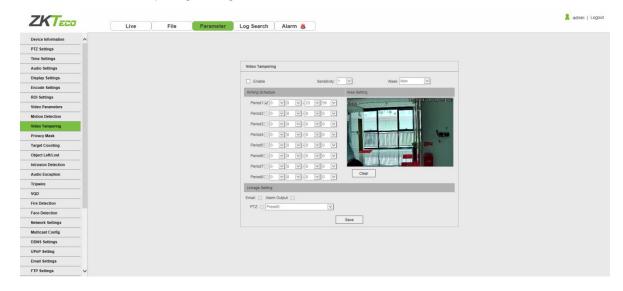


- **Enable:** Select whether to enable the Motion Detection function.
- **Sensitivity:** The higher the sensitivity, the more obvious the motion detective effect will be.
- Week: The protection time can be set from Monday to Sunday.

- Arming Schedule: Set up an arming period; you may set up to 8 time periods for a day.
- Area Setting: On the "Area Setting" preview interface, left-click and drag the mouse to set the area to be monitored.
- Clear: Click on "Clear" to clear the current controlled areas.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Snap:** Click on "Snap". Once an alarm is triggered, a signal will instantly be sent to the camera to take a snapshot and store it in the TF card.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card.
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.
- **Preset:** When motion detection triggers an alarm, the alarm will link with the preset point.
- **Snap Interval:** Set the time intervals for taking snapshots.
- **Snap Number:** Set the number of snapshots taken each time.

5.11 Video Tampering

Below is the Video Tampering setting interface of the IP camera:

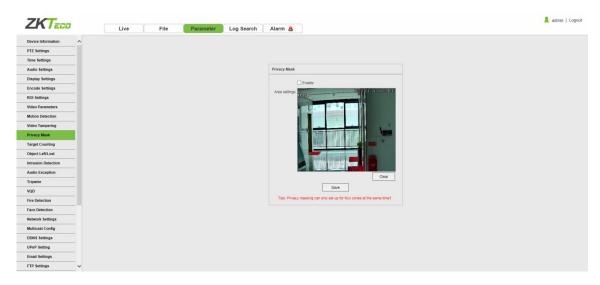


- **Enable:** Select whether to enable the video tampering function.
- Sensitivity: The higher the sensitivity, the easier to trigger the video tampering alarm.

- Week: The protection time can be set from Monday to Sunday.
- Arming Schedule: Set up a protection period; you may set up to 8 time periods for a day.
- Area Setting: On the "Area Setting" preview interface, left-click and drag the mouse to set the area to be monitored.
- Clear: Click on "Clear" to clear the current controlled areas.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Snap:** Click on "Snap". Once an alarm is triggered, a signal will instantly be sent to the camera to take a snapshot and store it in the TF card.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card.
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.
- **Preset:** When video tampering triggers an alarm, the alarm will link with the preset points.
- **Snap Interval:** Set the time intervals for taking snapshots.
- **Snap Number:** Set the number of snapshots taken each time.

5.12 Privacy Mask

Below is the Privacy Mask setting interface of the IP camera:

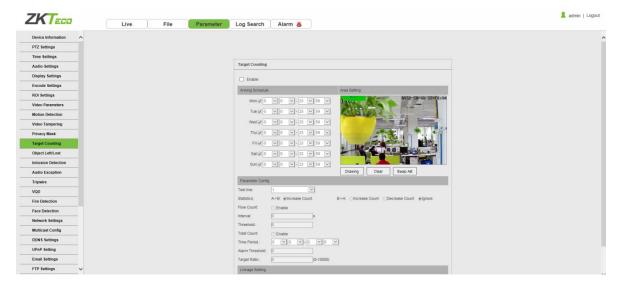


• **Enable:** Enable or disable the Privacy Mask feature.

- Area Settings: Left-click and drag the mouse on the Area Settings preview interface for setting the mask area.
- Clear: Click on "Clear" to delete the current controlled area.

5.13 Target Counting

Below is the Target Count setting interface of the IP camera:

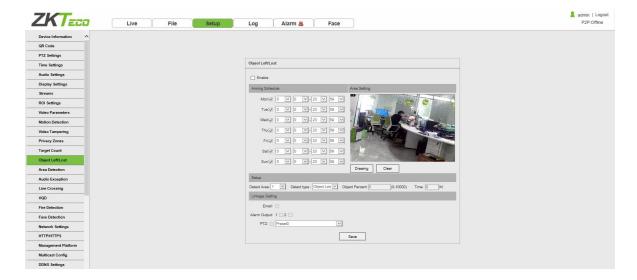


- **Enable:** Enable or disable the target counting function.
- **Arming Schedule:** Arm schedule can be set from Monday to Sunday.
- Area Setting: Click on "Drawing", then left-click and drag the mouse button to set the test line on
 the Area Settings preview interface. Click on "Stopping" to complete the setting, then the system
 will count the number of targets passing through the line.
- Clear: Click on "Clear" to delete all the test lines.
- **Swap AB:** Click on "Swap AB" to exchange position between A and B.
- **Test Line:** Add test lines (max. 4 test lines).
- **Statistics:** Set the test lines for targets passing through. There are two statistical methods: $A \rightarrow B$ and $B \rightarrow A$.
- Flow Count: Enable or disable the Flow Counter feature.
- **Interval:** Set the counting time interval. When the counting time exceeds the time interval set, the flow counter will reset and enter next counting period automatically.
- **Threshold:** Set the upper count limit. When the value exceeds the set value, the system will automatically trigger the alarm.

- Total Count: Enable or disable the Total Counter function.
- **Time Period:** Set the effective time period for the day's total counter.
- **Alarm Threshold:** Set the upper limit of the total flow on a day. When the value exceeds the set value, the system will automatically trigger the alarm.
- Target Ratio: Set the size of an object which triggers the alarm. If there is an object, such as a
 mosquito or a leaf, whose size is smaller than the preset value enters the designated monitored
 area set by the user, no alarm will be triggered.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Snap:** Click on "Snap". Once an alarm is triggered, a signal will instantly be sent to the camera to take a snapshot and store it in the TF card.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card (for cameras which support TF cards only).
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.
- **Preset:** When target counting triggers an alarm, it will link the pre-sets.
- **Snap Interval:** Set the time intervals for taking snapshots.
- **Snap Number:** Set the number of snapshots taken each time.

5.14 Object Left / Lost

Below is the Object Left/Lost setting interface of the IP camera:



- **Enable:** Enable or disable the object detection function.
- **Arming Schedule:** Arming schedule can be set from Monday to Sunday.
- Area Setting: Click on "Drawing", then left-click and drag the mouse button to set the detect zone
 on the Area Settings preview interface. Click on" Stopping" to complete the setting, then the
 system will detect, and monitor objects appeared in the selected area.
- **Clear:** Click on "Clear" to delete all zones.
- **Detect Area:** Add controlled zones (max. 4).
- **Detect Type:** Set the object detection type. There are three detection types, all of them are able to trigger the alarm. "Item lost" represents that the camera will trigger the alarm once it detects that an item originally in the monitored area is missing; "Item left" represents that the camera will trigger the alarm once it detects a new item in the detection area; "Item lost or left" represents that the camera will trigger the alarm once it detects that an item is missing and/or a new item in the controlled area.
- Object Ratio: Set the size of an object which triggers the alarm. If there is an object, such as a
 mosquito or a leaf, whose size is smaller than the preset value enters the designated monitored
 area set by the user, no alarm will be triggered.
- Detect Time: Set the upper limit of item lost and item left. When it exceeds the set value, the system will trigger the alarm automatically
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Snap:** Click on "Snap". Once an alarm is triggered, a signal will instantly be sent to the camera to take a snapshot and store it in the TF card.
- Record: Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera

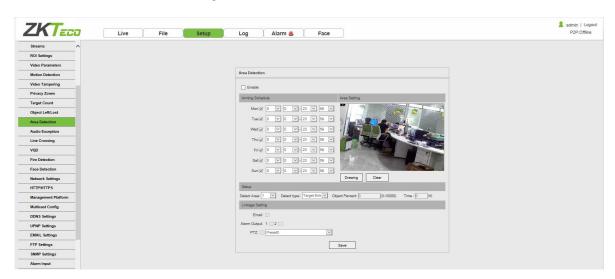
to record a video and store it in the TF card. (Only effect on camera which supports TF Card)

- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- PTZ: Enable or disable PTZ function.
- **Preset:** When object detection triggers an alarm, it will link with the preset points.
- **Snap Interval:** Set the time intervals for taking snapshots.
- **Snap Number:** Set the number of snapshots taken each time.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.15 Area Detection (Intrusion Detection)

Below is the Area Detection setting interface of the IP camera:



- **Enable:** Enable or disable the area detection function.
- **Arming Schedule:** Arming schedule can be set from Monday to Sunday.
- Area Setting: Click on "Drawing", then left-click and drag the mouse button to set the detect zone
 on the area settings preview interface. Click on "Stopping" to complete the setting, then the
 system will detect, and monitor objects appeared in the selected area.
- Clear: Click on "Clear" to delete all zones.
- **Detect Area:** Add controlled zones (max. 4).
- Detect Type: Set the target detect type. There are four detection types, all of them will trigger the alarm. "Target enter" represents that the camera will trigger the alarm once it detects that a target enters the monitored zone; "Target leave" represents that the camera will trigger the alarm once it detects that a target leave the zone; "Target enter or leave" represents that the camera will

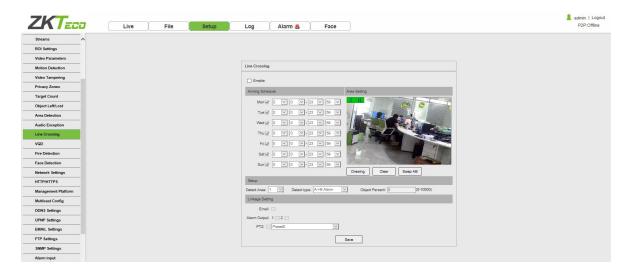
trigger the alarm once it detects that a target enters and/or leave the zone. The last type is that the camera will trigger the alarm once it finds that the time that a target staying in the controlled area exceeds the upper limit of the set and allowed duration.

- **Object Ratio:** Set the size of an object which triggers the alarm. If there is an object, such as a mosquito or a leaf, whose size is smaller than the preset value enters the designated monitored area set by the user, no alarm will be triggered.
- **Detect Time:** When the staying time of the set target in the monitored area exceeds the set duration, the system will trigger the alarm.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Snap:** Click on "Snap". Once an alarm is triggered, a signal will instantly be sent to the camera to take a snapshot and store it in the TF card.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card (for cameras which support TF cards only).
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.16 Line Crossing (Tripwire)

Below is the Line Crossing setting interface of the IP camera:



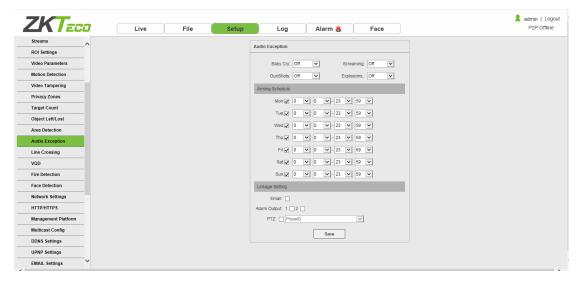
- **Enable:** Enable or disable the virtual guard function.
- **Arming Schedule:** Arm schedule can be set from Monday to Sunday.
- **Area Setting:** Click on "Drawing", then left-click and drag the mouse to set guard lines on the area settings preview interface. Click on "Stopping" to complete the setting. When a target passes through the guard line, the system will trigger the alarm.
- Clear: Click on "Clear" to delete all zones.
- **Swap AB:** Click on "Swap AB" to swap the positions of A/B ports.
- **Detect Area:** To add new guard lines (max. 4 guard lines).
- Detect Type: Set the guard lines to trigger the alarm. "A→B" refers to targets passing through the guard lines from area A to area B will trigger the alarm. "A←→B" refers to targets passing through the guard lines either from area A to area B or from area B to area A will trigger the alarm.
- **Object Ratio:** Set the size of an object which triggers the alarm. If there is an object, such as a mosquito or a leaf, whose size is smaller than the preset value enters the designated monitored area set by the user, no alarm will be triggered.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card.

- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.

5.17 Audio Exception

This function is subject to the actual products.

When the device detects abnormal sound including screaming, gunshots, explosions, baby crying, it will trigger alarm linkage. Below is the Audio Exception setting interface of the IP camera:



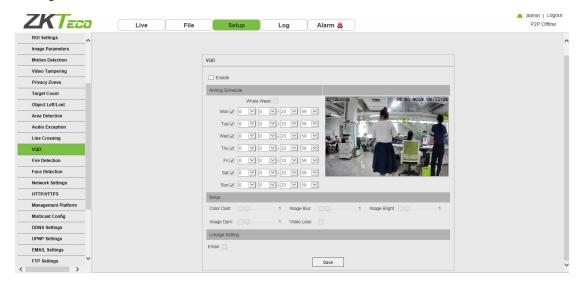
- **Enable:** Enable or disable the audio detection function and set up the sensitivity level.
- Arming Schedule: Arming schedule can be set from Monday to Sunday.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card (for cameras which support TF cards only).
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.

After completing all parameters settings, click on "Save", then the settings will take effect.

5.18 VQD

The function is subject to the actual products.

VQD stands for Video Quality Detection, which detects abnormal video images including Color Cast, Image Blur, Image Bright, Image Dark and Video Loss, and triggers alarm linkage. Below is the VQD setting interface of the IP camera:



- **Enable:** Enable or disable the VOD function.
- Arming Schedule: Arming schedule can be set from Monday to Sunday.
- **Setup:** Enable the specific VQD type and set up sensitivity level. The higher the sensitivity level, the easier the alarm will be triggered.
- Email: Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card (for cameras which support TF cards only).
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.

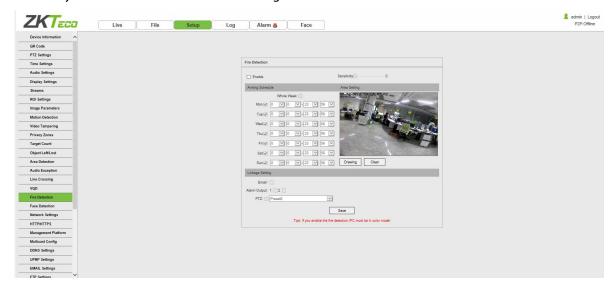
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.

After completing all parameters settings, click on "Save", then the settings will take effect.

5.19 Fire Detection

The function is subject to the actual products.

With this function, the device will automatically detect flames and deliver alarm notification as necessary. Below is the Fire Detection setting interface of the IP camera:



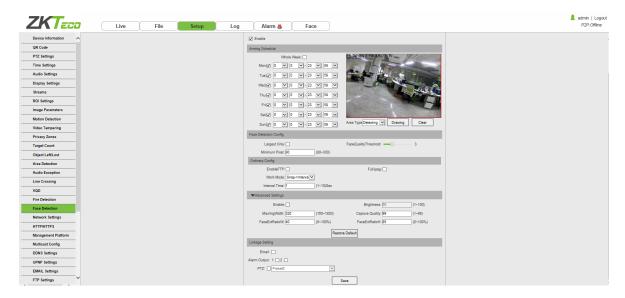
- **Enable:** Enable or disable the Fire Detection function
- Arming Schedule: Arming schedule can be set from Monday to Sunday.
- Area Setting: Click on "Draw", then left-click and drag the cursor to set the detect zone on the area settings preview interface. Click on "Stop" to complete the setting, then the system will detect flame appeared in the selected area.
- Clear: Click on "Clear" to delete all the test lines.
- **Sensitivity:** Set up detection sensitivity level, the range is 0-100. The higher the sensitivity level, the easier the alarm will be triggered.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card (for cameras which support TF cards only).
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **PTZ:** Enable or disable PTZ function.

After completing all parameters settings, click on "Save", then the settings will take effect.

5.20 Face Detection

The function is subject to the actual products.

System will identify human faces and captures face images. Below is the Face Detection setting interface of the IP camera:



- **Enable:** Enable or disable the Face Detection function.
- **Arming Schedule:** Arming schedule can be set from Monday to Sunday.
- Area Type:

 Setup Face Detection Area and Shield Area.

 Click "Draw", then left-click and drag the cursor to set the detect/shield zone on the area settings preview interface. Click "Stop" to complete the setting, then the system will detect/shield objects appeared in the selected area.
- Clear: Click on "Clear" to delete all zones.
- Face Detection Config

Largest Only: Only detect the largest face in the real-time image.

Face Quality Threshold: Set the quality threshold for face detection. The camera will detect human faces based on this threshold for further analysis. The value ranges from 0 to 10.

Minimum Pixel: The minimum resolution of face images which can be detected by the device. The value ranges from 60 to 300 pixels. The default setting is 80 pixels.

Ordinary Config

Enable FTP: Upload captured face images to the FTP server. Please set up a FTP server in advance.

Full JPEG: Enable full snapshot uploading, which means to upload the whole snapshot when a face has been detected.

Work Mode: Five work modes available: Snap->Interval Mode, Snap->Entry Mode, Snap->Leave Mode, Snap->Entry and Leave Mode, Snap->Comparison Mode.

1. Snap->Interval Mode

Take snapshots according to the set Interval Time once a person appeared in the designated special area.



2. Snap->Entry Mode

Take snapshots when a person enters the designated special area.



Entry Time: Take snapshots after the set during of entry.

Capture Number: The number of Continuous captures.

3. Snap->Leave Mode

Take snapshots when a person leaves the designated special area.



4. Snap->Entry and Leave Mode

Take a snapshot whenever someone enters or leaves the designated area.



5. Snap->Comparison Mode

Change to Comparison Mode if you want to display the comparison results on Face View.



Comparison Frequency: Set up the frequency of face comparison.

Advanced Settings

Enable: Enable or disable the face-exposure-related feature of the camera, which helps increase brightness of a face under low light environment.

Brightness: Set up facial brightness values.

Max Img Width: Set up the max. width for captured face images.

Capture Quality: Set up the definition level for face snapshots.

Face Ext Ratio W: Set the horizontal distance between the face contour (the face outline) and other face image features such as the outline of hair and neck, not the eyebrows, eyes, nose, mouth and ear.

Face Ext Ratio H: Set the vertical distance between the face contour (the face outline) and other face image features such as the outline of hair and neck, not the eyebrows, eyes, nose, mouth and ear.

Restore Default: Restore all configuration to default values.

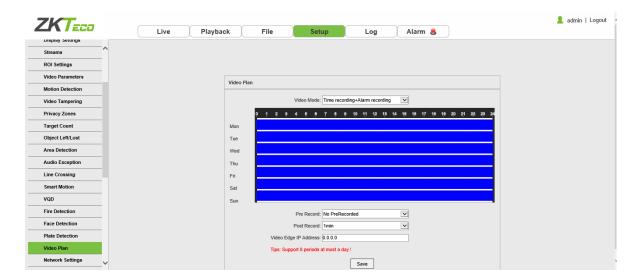
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will instantly be sent to the camera to record a video and store it in the TF card (for cameras which support TF cards only).
- Alarm Output: There should be an active alarm device inserted into the IPC alarm output port.
 Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- PTZ: Enable or disable PTZ function.

After completing all parameters settings, click on "Save", then the settings will take effect.

5.21 Video Plan

Only displayed on TF Card supported camera.

Below is the Video Plan setting interface of the IP camera:

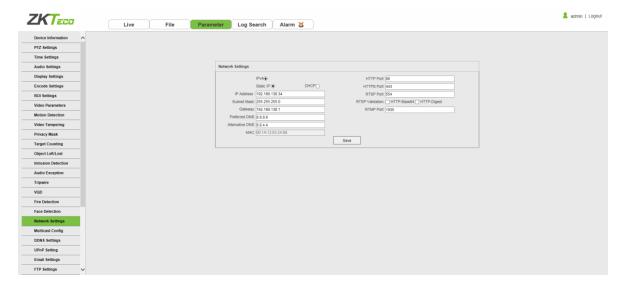


- **Video Mode:** Select a video mode. There are four modes available: Time recording + Alarm recording, Time recording, Alarm recording, No video.
- **Week:** Set the recording time from Monday to Sunday.
- **Pre Record:** Set pre-recording time.
- **Post Record:** Set the recording delay time.
- Video Edge IP Address: Enter the IP address of NVR or the server.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.22 Network Settings

Below is the Network Settings interface of the IP camera:



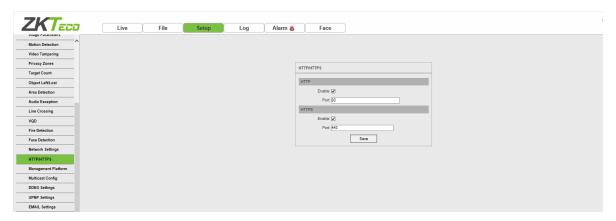
- **IPV4:** IP protocol version No. is 4.
- **Static IP:** The device IP address is permanent.

- DHCP: Enable DHCP, then the IP camera will obtain the IP address from the router automatically.
- IP Address: Input the corresponding numbers to change the IP address.
- Subnet Mask: Input the corresponding IP subnet mask.
- Gateway: Input the corresponding gateway address.
- **DNS 1:** IP address of the DNS server.
- DNS 2: Another IP address of the DNS server.
- **RTSP Port:** Access the device which needs to map RTSP with a domain name; the default port is 554.
- RTSP Validation: Choose a RTSP verification mode from Http-Base64, Http-Digest. After choosing
 and activating the corresponding RTSP verification mode, during playing RTSP real-time stream,
 RTSP validation operations need the user name and password for verification.
- RTMP Port: Domain name, which is used to access the device which needs to map RTMP; the
 default port is 1935.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.23 HTTP/HTTPS

In the HTTP/HTTPS setting interface, users can make PC log in normally via HTTP/HTTPs.



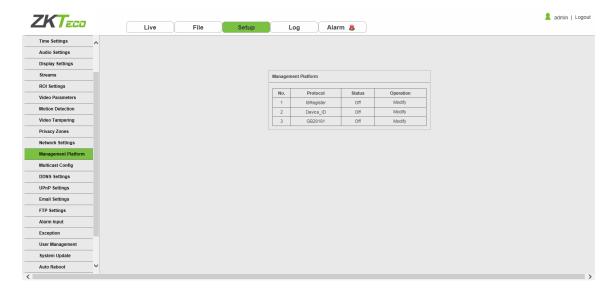
Enable: Enable or disable HTTP/HTTPS function.

HTTP port: Port range is 1~65524. The default value is 80.

HTTPs Port: HTTPs communication port, range is 1~65534, default is 443.

5.24 Management Platform

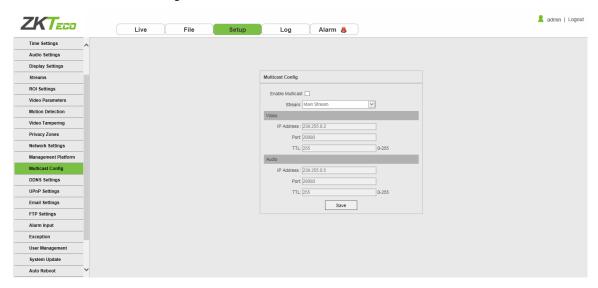
Below is the Management Platform interface of the IP camera:



Users may activate or deactivate a protocol and modify the protocol information here.

5.25 Multicast Configuration

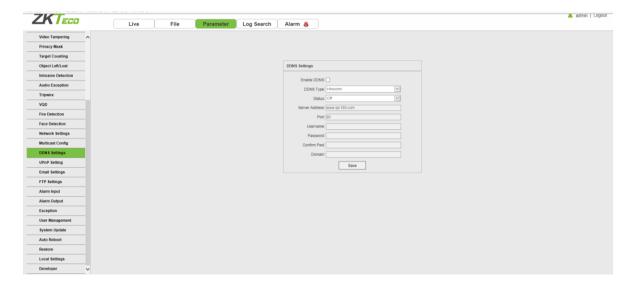
Below is the Multicast Config interface of the IP camera:



Multicast configuration is disabled by default. By clicking on "Enable Multicast", users may set the IP address, port and TTL of main stream video/audio, sub stream video/audio.

5.26 DDNS Settings

DDNS is implemented through a dynamic domain resolution server. It requires a fixed IP address on of the device running on the server. The DDNS setting interface of the IP camera is as shown below:

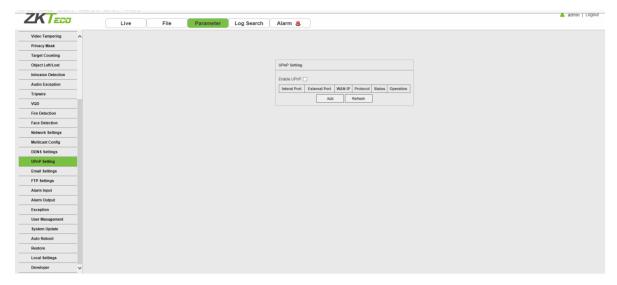


- **Enable DDNS:** Enable or disable DDNS function.
- **DDNS Type:** Select a DDNS server type from Dyndns, PeanutHull, NO-IP, 3322, and DnsDynamic.
- **Status:** Turn on or off the DDNS.
- **Server Address:** Input a server name, for example, dynupdate.no-ip.com.
- Port: Input a port. The default port is 80.
- User Name: Input a user name.
- **Password:** Input a password.
- **Confirm Pwd:** Input the password again to confirm.
- **Domain:** Input the second domain.

After completing the parameters settings, click on "Save", then the settings will take effectimmediately.

5.27 UPnP Settings

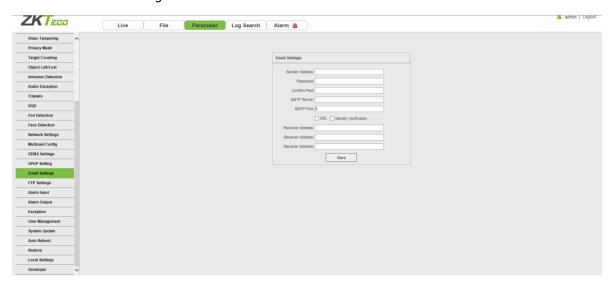
Below is the UPnP Settings interface of the IP camera:



- **Enable UPnP:** Activate or deactivate the UPnP function. When it is enabled, the device can port mapping through the router.
- Add: User may add TCP/UDP protocol, set internal and external port.

5.28 Email Settings

Below is the Email Settings interface of the IP camera:



- Sender Address: Input the email address of the sender.
- Password: Input the password of the outbox.
- Confirm Pwd: Input the password again to confirm.
- **SMTP Server:** Input the SMTP server address of the outbox.
- **SMTP Port:** Input the SMTP server port of the outbox.
- SSL/Identity verification: Tick SSL and Identity Verification to send the email correctly

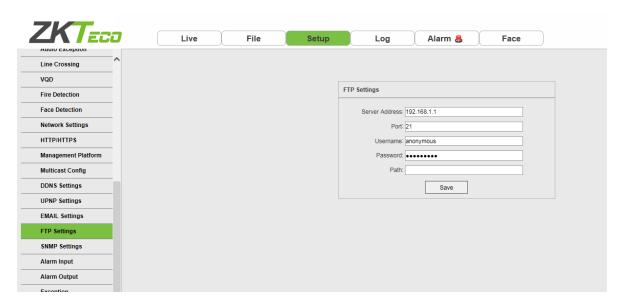
and safely.

Receiver's Address: Input the address of the inbox, fill in the address of the receiving email; you
may fill in 3 other receivers' addresses.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.29 FTP Settings

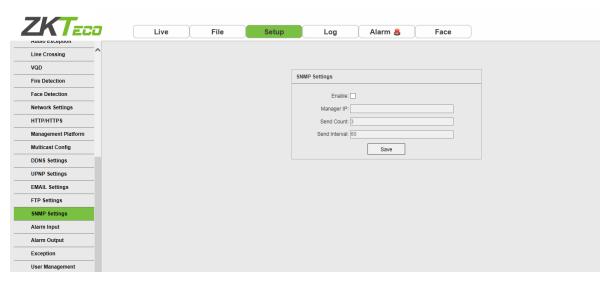
Below is the FTP Settings interface of the IP camera:



- Server Address: Input the FTP Server address.
- **Port:** Input the FTP server port.
- **Username:** Input the FTP server username.
- **Password:** Input the FPT server password.
- Path: Input the file upload path.

5.30 SNMP Settings

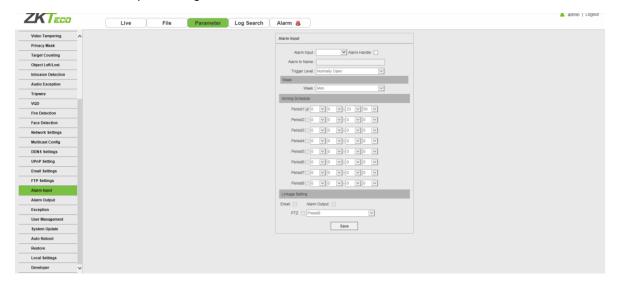
Below is the SNMP Settings interface of the IP camera:



- Enable: Enable or disable SNMP service.
- Manager IP: Messages will be sent to this manager IP address.
- **Send Count:** The maximum number of messages to be delivered when an alarm is triggered. The value ranges from 1 to 5.
- **Send Interval:** Interval between messages sending. The range is 60-250s.

5.31 Alarm Input

Below is the Alarm Input setting interface of the IP camera:

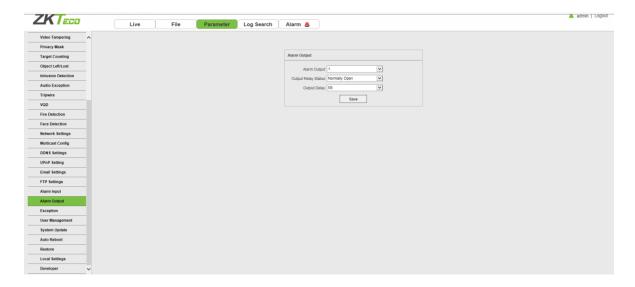


- **Alarm Input:** Select the alarm input port, then check the box Handle: to implement the following parameters settings.
- Alarm In Name: Input a name of an alarm.
- Trigger Level: Select the alarm status: Normally Open/ Normally Close.
- Arming Schedule: Arming schedule can be set from Monday to Sunday. You may set up to 8 schedules for a day.
- **Email:** Click on "Email". Once an alarm is triggered, an email will be automatically sent to the appointed mailbox.
- **Snap:** Click on "Snap". Once an alarm is triggered, a signal will instantly be sent to the camera to take a snapshot and store it in the TF card.
- **Record:** Click on "Record". Once an alarm is triggered, a signal will be transmitted to the camera to record a video and restore it in the TF card.
- Alarm Output: Click on "Alarm Output". There should be an active alarm device inserted into the IPC alarm output port. Once an alarm event is triggered, the IPC and alarm device will set off the alarm.
- **Snap Number:** Set the number of snapshots taken each time.
- **Snap Interval:** Set the time intervals for taking snapshots.
- **PTZ:** Enable or disable PTZ function.
- Preset: When a signal triggers the alarm, it will link with the preset points.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.32 Alarm Output

Below is the Alarm Output setting interface of the IP camera:

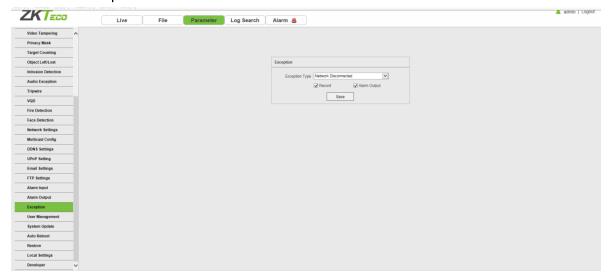


- Output Relay Status: Normally Open/ Normally Close.
- **Output Delay:** Select alarm output delay time, which represents the corresponding output alarm delay time after the alarm stops triggering.

After completing all parameters settings, click on "Save", then the settings will take effectimmediately.

5.33 Exception

Below is the Exception interface of the IP camera:



- Exception Type: Network Disconnected/ IP Address Conflict.
- **Record:** Click on "Record"; when there is an abnormal event which triggers an alarm, the camera will start recording.
- Alarm Output: Click on "Alarm Output"; the system will link with other alarm devices when there is an abnormal event which triggers an alarm.

After completing all parameters settings, click on "Save", then the settings will take effect immediately.

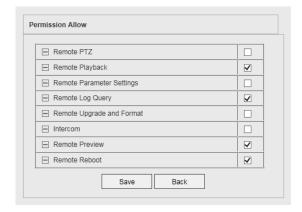
5.34 User Management

Below is the User Management setting interface of the IP camera. "admin" represents the administrator (default); "default" represents standard users.



- Modify: Admin may modify the login password; the default guest user may modify user type.
 New users may modify their user names, passwords and user types. New users may select a "Guest" or "Operator" account, and set different permission.
- **Del:** Delete a new user.
- **Rights Permission:** Permission assignment for default guest users and new users.
- Add User: Add a new user.

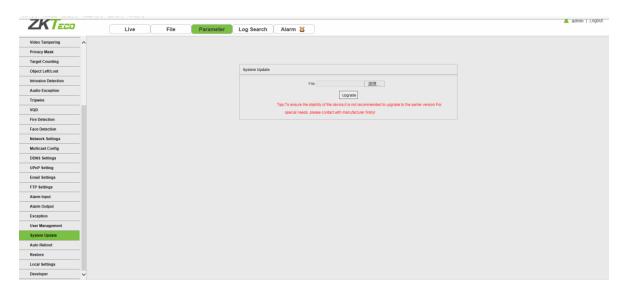
Log in with admin account, add a new user and assign permission, as shown in the following figure:



After completing all parameters settings, click on "Save", then the settings will take effect immediately.

5.35 System Update

Below is the System Update setting interface of the IP camera:



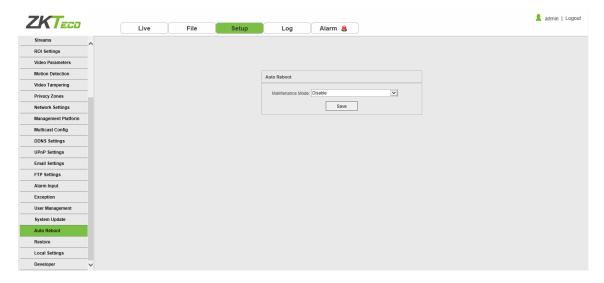
• File: Click on "Browse" to find and select an upgrade kit, then click "Update".



Do not disconnect the power supply during upgrade.

5.36 Auto Reboot

Below is the Auto Reboot setting interface of the IP camera. You may choose a maintenance mode from Disable/ Every Day/ Every Week/ Once/ Every Month, then the IPC will reboot as set.

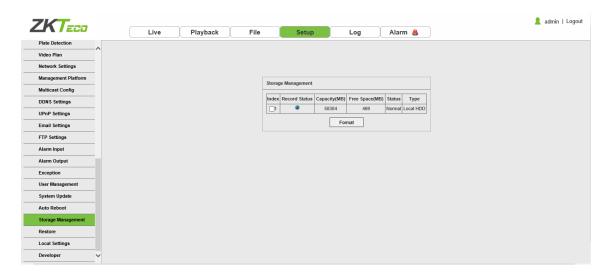


5.37 Storage Management

(Only displayed on TF Card supported camera)

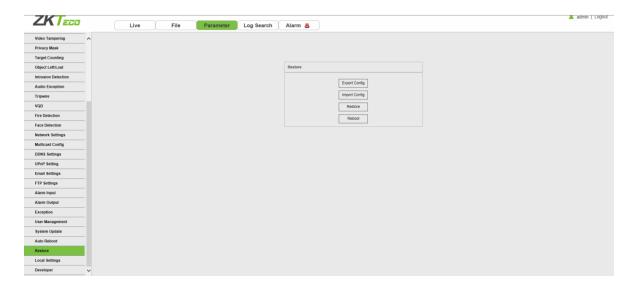
Below is the Storage Management setting interface of the IP camera. You may view the capacity (MB), free spare (MB), status of the current TF card, and format the TF card.

© Note: Please disconnect the power supply before you insert or remove the TF card.



5.38 Restore

Below is the Restore interface of the IP camera:

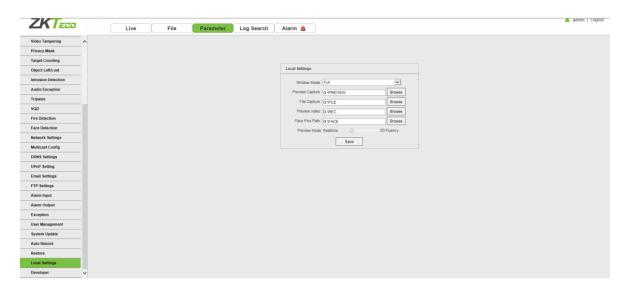


- Export Config: Export all configurations to PC or a USB.
- Import Config: Import selected configuration to the system.

- Restore: Restore the device to factory settings.
- **Reboot:** Reboot the device.

5.39 Local Settings

Below is the Local Settings interface of the IP camera:

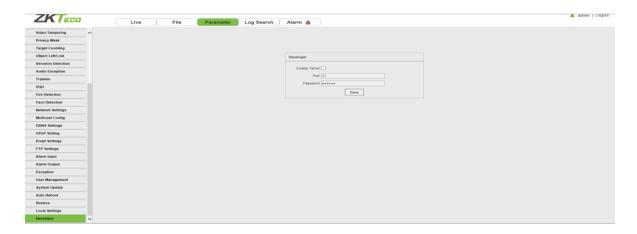


- Window Mode: Set the preview window mode (Full/ 4:3/ 16:9/ Original Image).
- **Preview Capture:** Select and modify the storage path of captured files.
- **File Capture:** Select and modify the storage path of captured files.
- Preview Video: Select and modify the storage path of the video record file.
- Face Pics Path: Select and modify the storage path of the video record file.
- **Preview Mode:** Realtime/ Fluency. The value is adjustable.

After completing all parameters settings, click on "Save", then the settings will take effectimmediately.

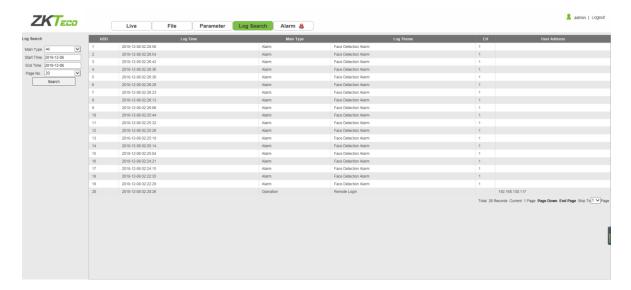
5.40 Developer

Below is the Developer interface of the IP camera:



6. Log Search

Click Search on the Log interface, check device log according to the video type and date time, as shown in the below figure:

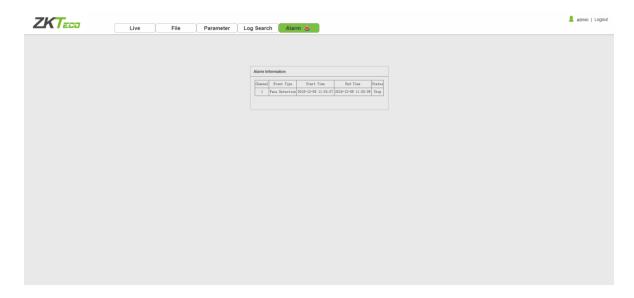


- Main Type: Select the type of logs to search for. You may choose among All/ Alarm/ Exception /
 Operation/Parameter or click "All" to search all types of logs.
- **Start Time/ End Time:** Select the time period of logs to check.
- Page No.: Select the number of logs to display on each page.

After completing all settings, click on "Search", then the log information will display on the left.

7 Alarm

Below is the Alarm interface of the IP camera. Information about alarms will be shown as follows.



8 Face

This module is only available for cameras supporting face detection.

Before applying the face comparison function, please select "**Comparison Mode**" by choosing "Setup->Face Detection-> Ordinary Config->Work Mode"



8.1 Face View

Face records will be shown on the following interface.



Capture Record: Show the captured face image record.

Comparison Record: Show the comparison results; only compare faces which have been stored in the database.

8.2 Face Database

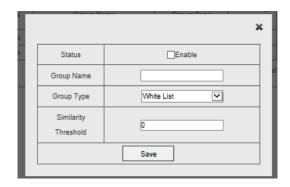
Manage face groups and templates on the following interface.



How to set up a Face Group?

Step 1: Click on Add to add a new group.

Step 2: Fill in information about the new group, then save it. Check the "Enable" box ask the system to use such information during face comparison.



Step 3: Modify or delete a face group when you needed.

How to set up a Face Model?

Step 1: Click on the button Details to enter the face import module.

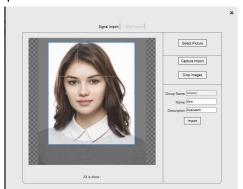
Step 2: Click on Face Import to start importing face models.



Step 3: Import a face image to the database.

Signal Import: Import one picture at a time. Make sure the face is facing the front, and the picture is clear enough. Fill in the personal information and save it to import.

- Select Picture: Import a picture selected from PC.
- Capture Import: Capture a face from the camera.

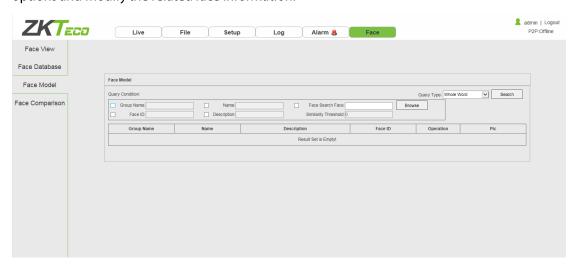


Multi-Import: Import face images by batches from PC. Format of the pictures' names should be "Name_Description_ Face ID", for example "Ann_Assistant_001". Then, the personal information will be filled in automatically.



8.3 Face Model

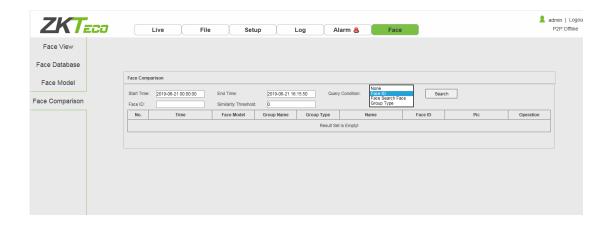
Show the uploaded face templates on the following interface. Users can search for faces by related options and modify the related face information.



8.4 Face Comparison

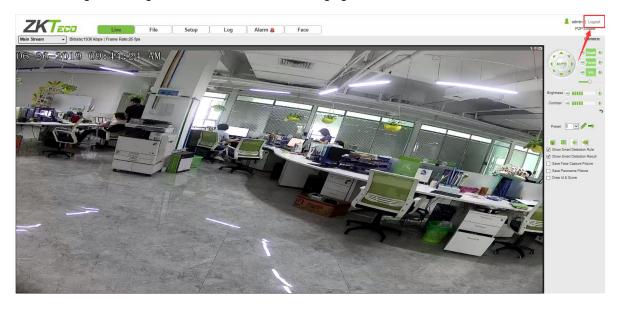
Show the face comparison record. Users can search for records by related options.

Note: A TF card must be pre-installed for storing record.



9 Exit

Click on "Logout" to log out, as shown in the following figure:



10 FAQ

Question 1: No video output on the IE browser.

Possible reason: The web plugin was not installed.

Solution: Download and install the web plugin according to the webpage prompt when it is the first visit. We only support IE browser currently.

Question 2: Failed to log in after upgrading the program.

Solution: Delete IE Caches, and re-install the web plugin.

Specific steps: Open IE browser, choose "Tool" -> "Internet Options", then, "General"-> "Browsing history", and click on "Delete". After that, select "Temporary Internet files" and confirm by choosing "Delete". Then back to the login page.



Question 3: The playback of video is not smooth.

Possible reason 1: The IP Camera frame rate is too low.

Solution: Set a higher frame rate on the respective interface by choosing "Setup->Streams->Frame Rate".

Possible reason 2: There are too many users connected to the device.

Solution: Disable some of the clients or set a lower frame rate for the IP camera.

Possible reason 3: The transmission data is large while the bandwidth is small, which leads to loss of data packets.

Solution: Set a lower frame rate or resolution.

Question 4: Can't access the IP camera on IE Browser?

Possible reason 1: The network is down.

Solution: Test the network on PC to confirm if the network works normally. Please make sure the network cable is available and all RJ45 jacks are connected properly. Also, ensure that there is no computer virus which may cause network issue as well.

If the PCs can ping each other, the network cable environment is normal. In this case, please check the possible reasons below which may lead to the issue:

Possible reason 2: The IP address is in use by another device.

Solution: Disconnect with the IP camera network port, and directly connect the device with the PC, then set up a new IP address for the camera.

Possible reason 3: The IP address is set up in another subnet.

Solution: Check the server's IP address, subnet and gateway parameter, then set up the IP camera in the same network.

Possible reason 4: The MAC address conflicted.

Solution: Modify the MAC address for IP camera.

Possible reason 5: The Web Port has been changed.

Solution: Connect with network administrator to get the correct port.

Question 5: No audio output.

Possible reason 1: The audio interface was not connected.

Solution: Please check the device audio interface and make sure the cables are connected property.

Possible reason 2: The audio function was not enabled on the IP Camera.

Solution: Please check if the audio configuration is enabled or not and select a desired mode.

Question 6: Search NVS can't find the device.

Possible reason: The Search NVS software uses the multicast protocol to search for device network information across network segments, and the firewall does not allow multicast data packets to pass,

so the software may not find the device.

Solution: Turn off the firewall.

Question 7: The face recognition camera does not show the comparison result.

Possible reason 1: There is no relevant face information in the face database.

Solution: Add a face model. For details, please refer to Chapter 8.2 Face Database.

Possible reason 2: The corresponding face group is not enabled.

Solution: Enable the corresponding Group status. For details, please refer to Chapter <u>8.2 Face</u> Database.

Possible reason 3: The "Work Mode" does not change to "Comparison Mode".

Solution: The working mode needs to be changed to the Comparison Mode from the face detection menu to display the comparison result. For details, please refer to Chapter <u>5.20 Face Detection</u>.

Question 8: Image is not clear enough.

Solution: Try adjusting the parameters for images to reasonable values. For details, please refer to Chapter <u>5.9 Image Parameters.</u>

