B29 Teacher Tracking PTZ camera

Contents

1. Network

Mainly introduce the close-up camera network, the panoramic camera network description does not introduce.

1. Enter the web interface

● View camera IP:

The network cable is connected to the computer, and the IP of the machine can be searched by the dedicated upgrade software of our camera.

Enter the camera IP in the browser, and fill in the user name: admin and password: admin to enter the network interface.

2. There are two ways to change the camera IP:

Method 1: Click on the webpage [Network Configuration] to enter the interface and make changes, click Apply, and then restart the camera.
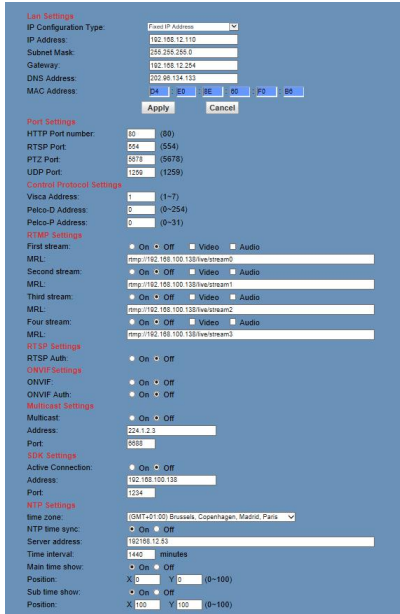
Method 2: Configure in our dedicated camera upgrade software

Edit items, then click Settings:：
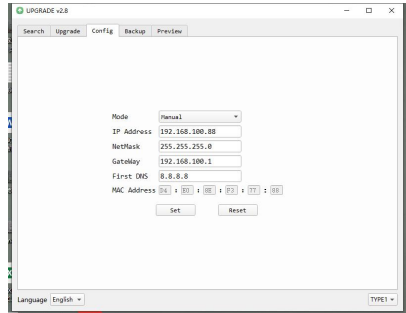
1. You need to restart the camera after changing the camera IP,

There are two methods:

Method 1: Manually power off and restart

Method 2: Click restart in the web system configuration item (applicable to remote)

4. View software version information
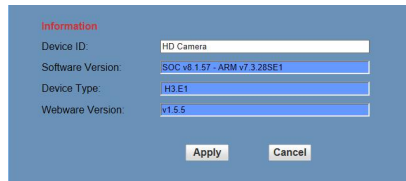
☞ **Operation tips**

The factory default IP of the teacher tracking camera:192.168.100.81/192.168.100.82

The factory default IP of the student tracking camera：192.168.100.91/192.168.100.92

If you need the camera latest firmware, please contact the manufacturer to obtain。

2. Camera Calibration

Configure by providing software 'tracking configuration tool'.
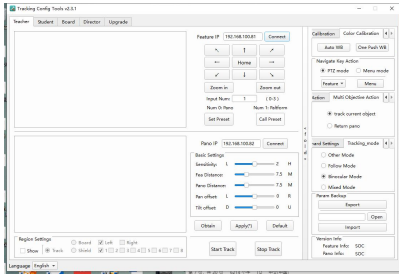
The configuration tool interface is as follows:

The setting process of teacher/student computer is shown on the left:

3. Teacher

3.1 Connection

Enter the IP address showed in Fig.1 to connect the feature camera and the panorama camera and then click "Stop Track" to start calibration. See Fig. 1.
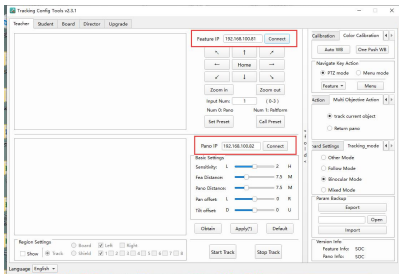
Fig. 1   Camera IP Address

3.2 Panoramic lens calibration

Check "Display check cross", the preview image of the close-up camera/panoramic camera will display the check icon. Through the pan-tilt control up and down, make sure that the center point of the close-up camera image coincides with the center point of the panoramic camera image, and then click [Verify] to Realize panoramic camera lens calibration; click [Reset] to return to the current calibration position, as shown in the figure

effectiveness of panorama scenes or feature scenes. See Fig.2.
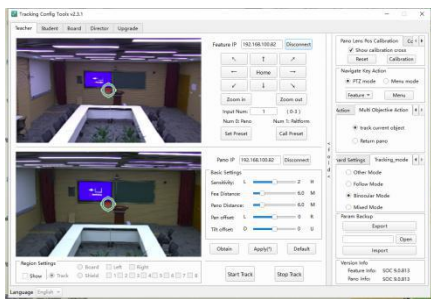
3.3 Set preset

When setting cameras, use 【↑】【↓】【←】【→】【Zoom In】【Zoom Out】 to adjust camera positions in order to test the
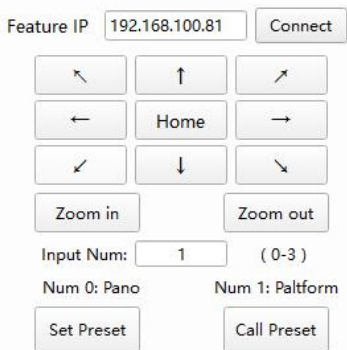
Fig. 2　　　Preset Position Settings

3.4 Tracking area and shield area settings:

3.4.1 Tracking area settings:

Tick "Show" box and select "Track". Click LMB (left mouse button) to make a start point and hold LMB to draw the tracking area.

3.4.2 Shield area settings

Shield area is used to screen interference sources in the tracking area; up to 8 shield areas are supported. Check "Show" box

and select "Shield"; click LMB (left mouse button) to make a start point and hold LMB to draw shield areas.

3.4.3 Blackboard area settings

Set the detection area for writing on the blackboard, supporting two writing areas on the left and right; check [Display], select the writing area, select the

corresponding writing area, click the starting point of the writing area to be set with the left mouse button, and hold down the left mouse button to drag, Draw a rectangular blackboard area (blue frame)
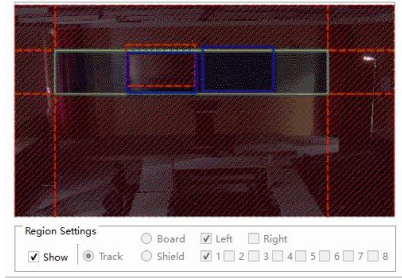
3.5 Configure basic parameters

a) Configure basic parameters and click [Apply] to take effect

b) Tracking sensitivity: Set the range of action and tracking response speed that triggers teacher tracking, the optional range is 0~4, and the default value is 2;

c) Tracking image size: Set the viewing angle range of the close-up camera tracking image, setting range: 0.5~2.0, default value 1.0;

d) Distance from the podium: the horizontal distance between the teacher's camera and the podium, setting range: 3.0~20.0, the default value is 6 meters;

e) Horizontal calibration: optional range: -200~+200 (steps), 0.069°/step; negative numbers are calibrated to the left, positive numbers are calibrated to the right, default: 0;

f) Vertical calibration: optional range: -200~+200 (steps), 0.069°/step; negative numbers are calibrated down, positive numbers are calibrated up, default: 0;
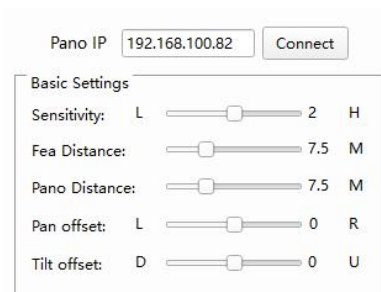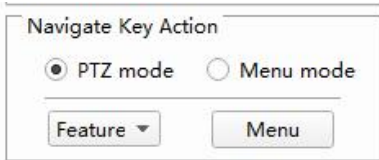

3.6 Advanced settings

Click "expand" to access advanced settings.

3.6.1 Navigate Key Action

You can choose PTZ mode or menu mode.

Select [Close-up Camera] or [Panorama Camera] in the menu mode, and click the

[Menu] button to set the camera's OSD menu, as shown in Figure 7, Figure 8. In the PTZ mode, you can manually control the [Close-up Camera] Yuntai.

3.6.2 Track settings

Set the working mode of the tracking machine, which can be selected: power-on tracking, automatic zoom, no focus during tracking, vertical movement, and full tracking; it will take effect after checking "√"
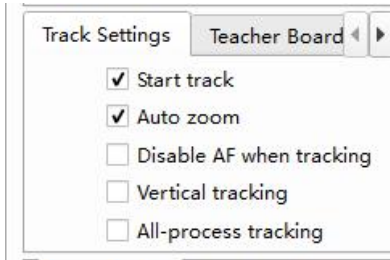

3.6.3 Blackboard function

Check to enable the writing on the blackboard function. This function needs to be used in conjunction with the writing on the writing area and the preset positions 2 and 3.

Detection time: the shortest time to respond to tracking after the writing on the writing is detected, default value: 2s

Hold time: The hold time after the close-up on the blackboard, even if the target moves out of the detection area within the holding time, the close-up on the blackboard will be kept, the default value is 5s.

Loss time: After the target is lost, the execution target is lost after a timeout period. The default value is 1s.
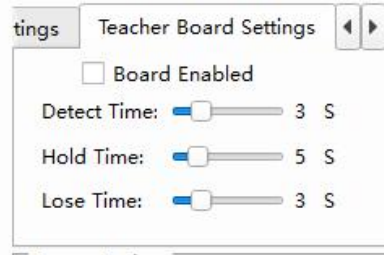

3.6.4 Track mode

Other modes: close-up pictures only give a panoramic position

Follow mode: When the teacher moves, the close-up picture will always follow the teacher; when the teacher quickly moves out of the close-up picture or reaches the edge of the close-up picture, it will switch to the teacher panorama (this mode supports the blackboard writing function)

Double-mirror mode: the teacher moves to give the teacher a panoramic view, the teacher is still to give the teacher close-up

Mixed mode: When the teacher moves within the close-up screen, keep the teacher close-up; when the teacher moves out of the close-up screen or reaches the edge of the close-up screen, the teacher's panorama will be switched (this mode supports the blackboard writing function
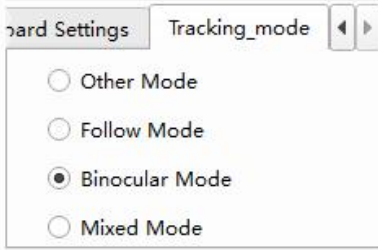
3.6.5 Target action

a) Target loss action: Set the action of the [close-up camera] after losing the target, you can choose: no action, panoramic position (preset position 0), podium position (preset position 1).

Timeout: After the target is lost, the [target loss action] will be executed after the timeout period has elapsed. Value range: 0-15s, default: 3s, as shown in Figure 9.
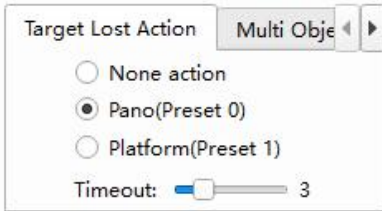
b) Multi-target action: Set the tracking status when the teacher is tracking multiple targets in the area. You can choose: track moving targets and return to the panorama; when the number of teachers' targets changes from multiple targets to single targets, a 5s delay is required to track the single target. As shown in Figure 10.
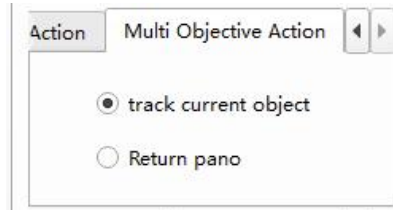
3.6.6 Parameter backup

Parameter backup: It is used to import and export the configuration parameters of the close-up camera to simplify the configuration tasks of the same scene, as shown in Figure 12.

Export: When you stop tracking, click [Export] to back up the tracking parameters, and click [Open] to see the file path;

Import: When stopping tracking, click [Open] to select the tracking parameters to be imported, and click [Import] to wait for completion;
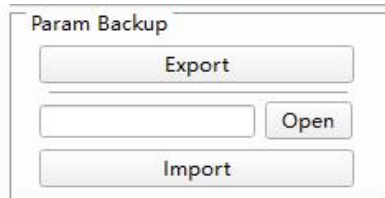
3.6.7 Firmware Information

Show version information of close-up camera and panoramic camera.

Version Info
Feature Info: SOC
Pano Info: SOC

3.7 Start Track

After completing the parameter configuration, click [Apply] to ensure that the configuration parameters are valid, and click [Enable Tracking] to enter the automatic tracking mode.

Start Track   Stop Track

4. Common problem

Q: After setting the parameters, click "Apply", it shows that the application failed.

A: 1. The version is wrong/tracking is not running; 2. The firewall is not closed; 3. Multiple configuration tools are opened; 4. The tracking program is hung up; 5. The computer ip conflicts; 6. The camera version is an old version.

Q: Teacher computer/student computer does not track

A: Confirm whether the tracking has been turned on; whether the panoramic position and close-up position (teacher machine) have been set; whether the teacher machine draws the tracking area; whether the height parameter of the student machine is measured accurately

Camera Height: 2.2 M

Q: The false tracking rate of tracking is high

A: 1. Teacher computer: draw the shielded area around the part with light source

2. Student computer: draw the shielding area on the surrounding part with light source; turn on face detection (if you need to turn on interlace mode, do not turn on face detection)

Q: The version information of the close-up machine in the lower right corner of the tracking configuration tool is 0.0.00

A: 1. The protocol/address of the close-up camera is different from that of the panoramic camera; 2. The tracking program is abnormal and needs to be upgraded again; 3. The serial port between the panoramic camera and the close-up camera needs to be returned to the factory for repair

Q: During the tracking process of the teacher computer, the movement of people will be blurred and there will be smear
A: Enter the menu, select exposure, change the exposure mode to shutter priority, and change the shutter speed to 1/100S

Q: The configuration tool prompts that the connection type does not match
A: Confirm that the student terminal is connected to the student computer; the teacher terminal is connected to the teacher computer