NETWORK KEYBOARD

User Manual



Please read this instruction carefully before operating the unit and keep it for further reference

Thank you for purchasing our product. There may be several technically incorrect places or printing errors in this manual. We will readily improve or update the products or procedures described in the manual. The content is subject to change without notice.

Note

- LCD display can be easily damaged. Please do not press or exposure in sunshine for a long time.
- The joystick can be easily damaged. If it needs to be repaired, please wrap and ship it by using original or safety packaging.
- This keyboard should be used in certain range of temperature and humidity, referring the specifications.
- Please connect the keyboard correctly as this manual requires.

Items	quantity	Note
Network keyboard	1	/
DC12V2A power adapter	1	Input ： AC100-240V
Power cable	1	/

Contents

1 Introduction 1

1.1 Introduction 1

1.2 Rear Panel Instruction 1

1.3 Front Panel Instruction 2

1.4 Rules of Key Press 3

1.5 Joystick and Knob Control 3

2 Login 4

2.1 Start the Keyboard 4

2.2 Login 4

3 System Settings 5

3.1 Network Settings 5

3.2 User Management 6

3.3 Language Setting 7

3.4 Date and Time Setting 7

3.5 Enable/Disable Key-Touch Sound 7

3.6 System Update 7

3.7 Restore to Factory Default Settings 7

3.8 View Version Information 7

4 PTZ Mode 8

5 Platform Mode 13

5.1 Call Plan 13

5.2 Screen Display Mode 14

5.3 Camera->Monitor 14

5.4 PTZ Control 14

5.4.1 Move / Stop 14

5.4.2 Set or Call Preset 15

5.4.3 Set, Call or Stop Cruise 15

5.4.4 Set, Call or Stop Track 16

5.4.5 Start or Stop Auto Scan 16

5.5 Record Playback 16

5.5.1 Start Playback 16

5.5.2 Pause 16

5.5.3 Play the Previous 30s 17

5.5.4 Play the Next 30s 17

5.5.5 Play by Frame 17

5.5.6 Stop Playback 17

5.5.7 Stop Auto-Switch 17

5.6 Screen Display 17
5.6.1 Display Connection Status 17
5.6.2 Display the Real Time Image of the Designated Window 17
6 Specifications 19

1 Introduction

1.1 Introduction

This keyboard is a new generation of Android system network touch keyboard which is designed and manufactured by our company, built in 10.1 inch capacitive touch screen, simple and friendly UI design. The real-time image can be viewed on the keyboard screen and the image can be displayed on the external monitor through the HDMI Interface. In platform mode, it supports H.265 1 CH 1080P@30fps decoding. In PTZ mode, it supports H.265 1CH 4K@30fps, H.264 1 CH 1080P@60fp or 4 CH 720P@30fps decoding and its 4D Joystick can be used for PTZ control and fast positioning target.

It can be connected to the surveillance management platform to control a TV Wall, such as viewing plan, video playback, screen display mode switch, decoding on TV wall, etc. It also can be used in various places where multiple network PTZ cameras are installed, such as schools, hospitals, hotels, residential areas, factories, workshops, etc., to achieve a unified control for network PTZ cameras with onvif protocol via LAN.

1.2 Rear Panel Instruction

The interfaces of the rear panel are for reference only.



NO.	Name	Description
1	Power Switch	Power switch
2	Power Interface	Standard 5.5/2.1 Power Interface, DC 12V2A ±10%
3	Network Interface	RJ45 Ethernet connector
4	Audio	Audio input (currently no function)
5	USB2.0	Connector for USB mouse or USB storage device for upgrade

6	HDMI OUT	Connector for a monitor used to display the image of LCD, , synchronized display with 10.1-inch screen
7	HDMI IN	HDMI input (currently no function)
8	RS232	Internal testing port (currently no function)
9	RS485	Connect speed dome or the RS485 port of the DVR; A connects to RS485+; B connects to RS485- (currently no function)

1.3 Front Panel Instruction

The following picture is for reference only.



Name	Function
CALL PRE	Call preset
SET PRE	Set preset
CALL CRU	Call/Stop cruise
SCAN	Start/stop auto scan
Address	（unavailable）
Inquire	In PTZ mode, press this button to view the device list
0-9	Input the number/symbol
Delete	Cancel the number/letter/symbol

Left button control area: Preset, cruise, scan and other functions quickly set and call
Large middle screen display area: 10.1 inch capacitive touch screen, operation and display area
Right-side joystick control zone: PTZ control for joystick, shuttle can customizable function in Platform mode.

1.4 Rules of Key Press

Tap the input box to display a soft keyboard. Enter number/letter/symbol, tap  to confirm the input.

When selecting or switching the operating object, it usually starts with the corresponding digital number and ends with the functional button. For example:

1+MON (Press/Tap 1 on the keyboard or on the screen, and then tap MON on the screen)—select NO.1 TV Wall.

1.5 Joystick and Knob Control

Joystick/Knob	Operation	Function
	Up	Control the speed dome to move up.
	Down	Control the speed dome to move down.
	Left	Control the speed dome to move left.
	Right	Control the speed dome to move right.
	Rotate left	Zoom out
	Rotate right	Zoom in
	Rotate left	Focus-
	Rotate right	Focus+
	Rotate left	IRIS-
	Rotate right	IRIS+

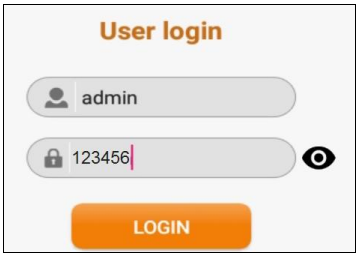
2 Login

2.1 Start the Keyboard

Connect network cable and power supply and then start the keyboard. Turn on the power switch.

2.2 Login

After the device is started, it will enter the login interface as shown below.

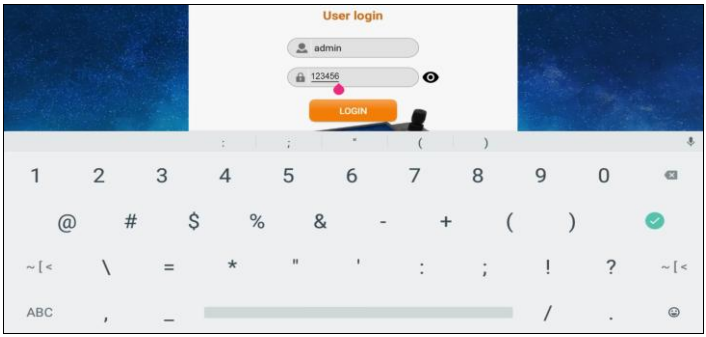


The default username is "**admin**" and the default password is "**123456**".

If you forget your password, you can reset the password of admin to the factory default password. The setting steps are as follows:

1. Reboot your keyboard. After the above-mentioned user login interface is displayed, press 1, 2, 3, 4, 5, 6 in sequence on the digital number area of the keyboard (note that the interval time of each inputting is not allowed to exceed 2 seconds).
2. Select "OK" in the pop-up window.

Tap the grey box and then tap the corresponding characters on the soft keyboard.



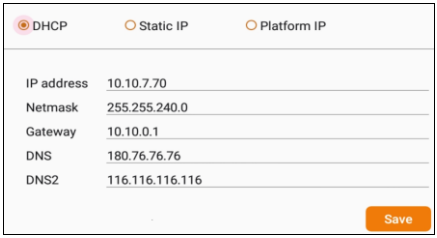
After that, tap  to confirm. Then tap "LOGIN" to go to the main menu interface.

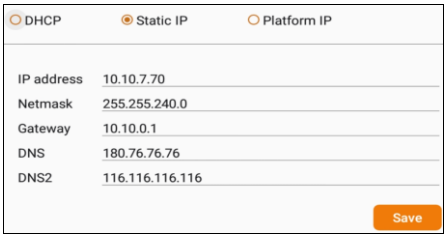
Tap "Logout" to exit.

3 System Settings

3.1 Network Settings

Tap “System Setting”→“Network Setting” to go to the following interface.





❖ **Type**: Static IP, DHCP and platform are optional. You can set static IP or DHCP for the keyboard. It is recommended to choose “Static IP”.

❖ The default network type is DHCP. It is recommended to choose “Static IP”.

❖ **Static IP**: Manually enter the IP address, netmask, gateway and DNS. The IP address of the keyboard must be in the same local network segment as that of the authentication/management server of the platform.

Platform IP：

Select “Platform IP” to go to the following interface. Fill out the IP address, port, username and password of the authentication/management server.



❖ IP： Enter the IP address of the authentication/management server of the platform.

❖ Port： This port must be the same as the port of authentication/management server of the platform.

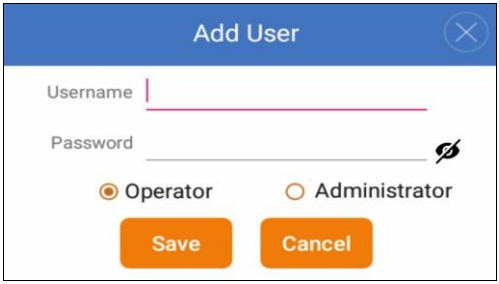
❖ Username and password: The username and password must be the same as the username and password of the platform.

3.2 User Management

Go to “System Setting”→ “User Management” interface as shown below.



Tap “Add” to add users.



In the user management interface, the super administrator has all user management permissions, but it cannot be deleted; the administrator user can create, add or delete administrator or operator user; the operator user only can modify its password.



Select the added user and tap “Delete” to delete this user. The default admin cannot be deleted.

3.3 Language Setting

You can switch the UI language in the Language Setting interface (System Setting→Language Setting). There are three languages can be switched: English, Chinese and traditional Chinese.

3.4 Date and Time Setting

Tap “System Setting” → “Date and Time” to go to the following interface.
In this interface, you can set the date and time as needed. If “Auto setting” is enabled, the system will automatically match the current time and zone.



3.5 Enable/Disable Key-Touch Sound

Go to “System Setting” → “Hardware Setting” interface. In this interface, you can enable or disable key-touch sound.

3.6 System Update

The setting steps are as follows.

① Save the upgrade file into the USB storage device.

② Insert the USB storage device into the keyboard. Then go to “System Setting”→ “System Update” interface and tap “System Update”. If the upgrade file can be recognized normally, tap “Install” and then the system will automatically install the software. After that, tap “Open” to open the login interface. Use the username and password set before the upgrade to log in.

3.7 Restore to Factory Default Settings

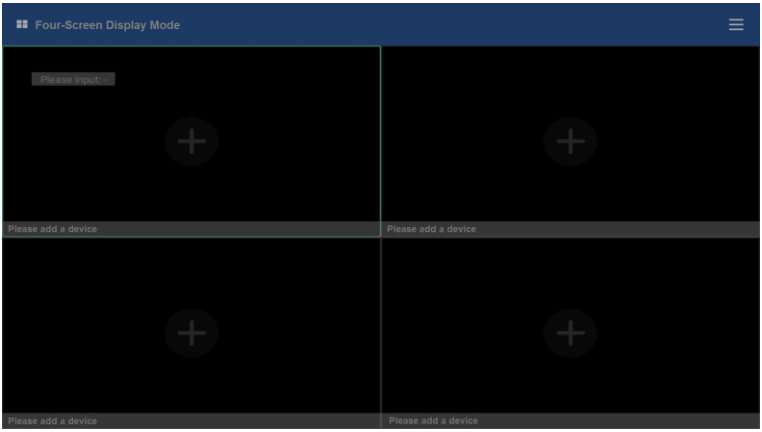
Go to “System Setting” → “Factory Default” interface. Tap “Factory Default” to restore the configuration to the factory default settings. All added users, network configuration and devices in PTZ mode will be cleared. In addition, the date and time restore to the auto status.
Note: Only the super administrator has permission to restore the system to factory default settings.

3.8 View Version Information

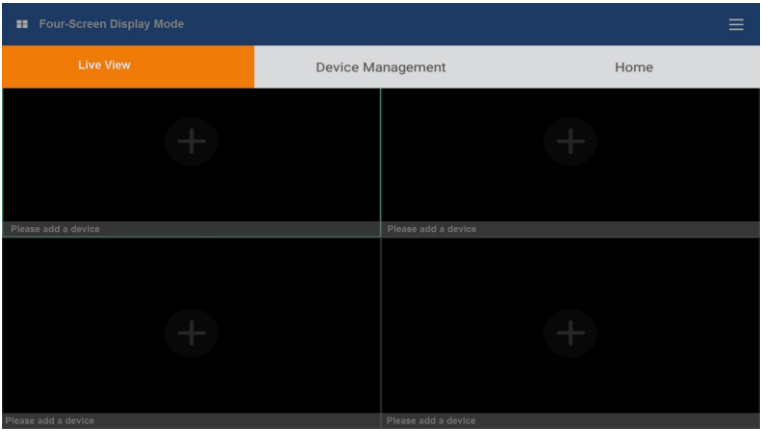
Tap “System Setting”→ “Version”. Software version, hardware version and model can be viewed in this interface.

4 PTZ Mode

In the main menu interface, tap “PTZ Mode” to go to the following interface.

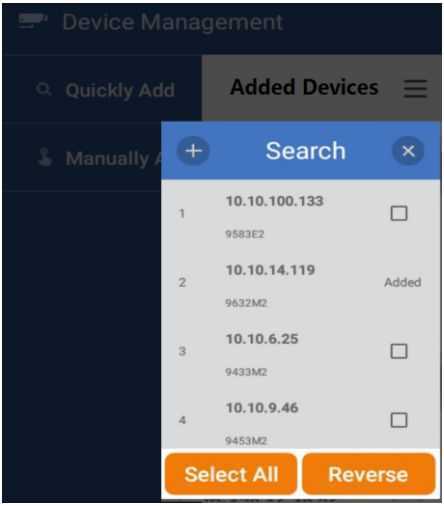


Tap  to extend the menu.



- **Quickly Add Devices**

Tap “Device Management” to go to the following interface. Then tap “Quickly Add” to quickly search and add devices in the same local network.



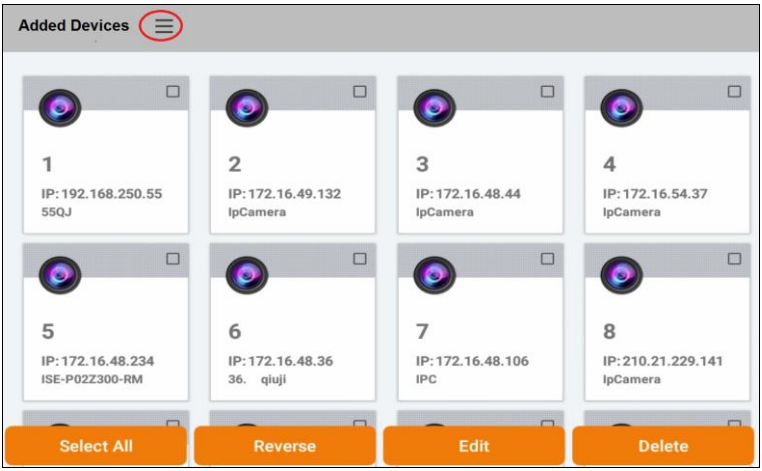
Select the desired device and tap  to add this device. Then enter its username and password.

- **Manually Add**

In the device management interface, tap “Manually Add” to appear the following interface. Manually enter the IP address, port, username and password. Then tap  to save the settings.
Note: In PTZ mode, only Onvif protocol is supported.



After the devices are added, you can view the device list.

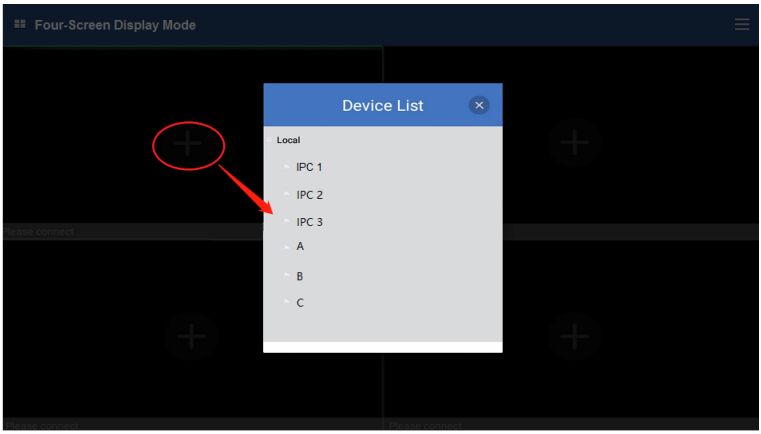


Tap  to display the buttons as shown above. Select the device and then tap “Edit” to modify the username and password of the added device; tap “Delete” to delete the device.

Tap  to extend the menu. Then tap “Live View”

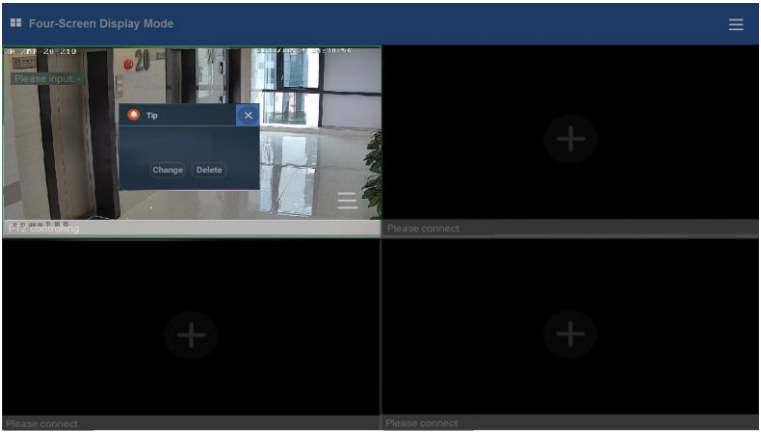


Tap “+” as shown in the following picture or tap “Inquire” on the keyboard. Then this will bring up the device list. Select “Local” to show local device list.



Press and hold a device name or double tap a device name to view the video of this device as shown below. Tap ☰ at the lower right corner of the playing window and then tap “Change” to change another device; tap “Delete” to stop playing.

Double tap a window to switch to single channel display mode. Double tap again to switch to four-screen display mode. In single channel display mode, you can move your finger on the screen to change the direction of the PTZ and zoom in/out the image.



Note: Only when the device you added is PTZ camera, can you do the following relevant operation.

PTZ control:

To call preset:

Select the PTZ camera, press the digital number on the keyboard and then press “CALL PRE”. For example: press “3” and “CALL PRE” to call preset 3.

PTZ Mode

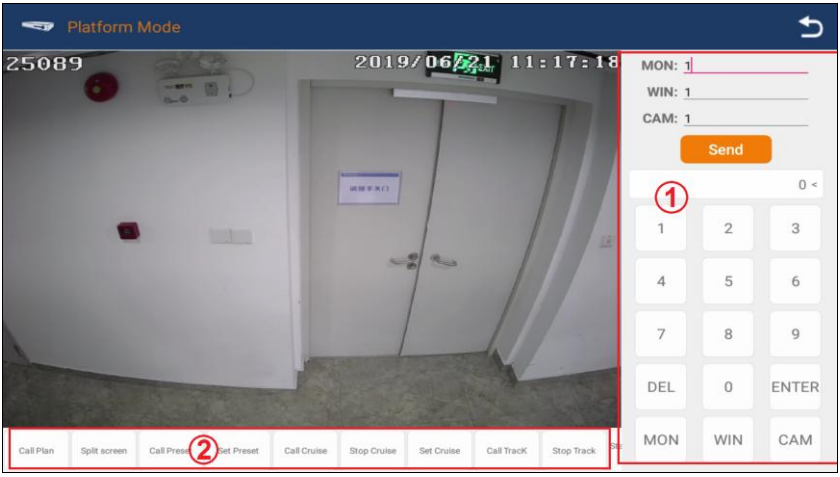
To set preset:
Select the PTZ camera, move the joystick to set the position of the preset, press the digital number and then press “SET PRE”. For example, press “3” and “ SET PRE” to save preset 3.

To call cruise
Select the PTZ camera, press the digital number on the keyboard and then press “CALL CRU”. For example: press “3” and “CALL CRU” to call NO.3 cruise line. Press “Call CRU” again to stop cruise.

5 Platform Mode

Before using the network keyboard to control video output of the decoder, please make sure the authentication server, media transfer server, storage server, TV wall server and monitor client of the ECMS/NVMS all start and they are all connected well with the decoder.

Notes: Only one channel image can be displayed on the LCD display screen. Move your finger on the screen to zoom in/out the image.



Area ①: call TV wall/window/camera.

Area②: functional area. Move your finger left or right to choose the relevant functions.

5.1 Call Plan

You may set the plan in advance and then call it through network keyboard. The operation steps are as follows.

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a plan. For example: tap “1” and then tap “Call Plan” to call NO.1 plan.

How to set the TV wall and the plan in the NVMS2.0

To set a TV wall: Go to Home→TV Wall Management→TV Wall Setting interface to create a TV wall. Then double click this TV wall name to bring up a TV wall window. Click “Initialize” to create TV wall layout. Then drag the output to the window. You can change the TV wall number in the TV wall setting interface. Click the TV wall name and then click  to modify.

To set a plan: Go to the TV wall view interface and then select the plan tag to add a plan. Double click the plan name to show the plan. Then drag the monitoring points to the corresponding window respectively to decode images. After that, click “Save” or “Save As” to save this plan. When controlling plans, the number of the plan can be viewed through clicking TV Wall Management→TV Wall View→TV Wall Plan. You can also edit this plan in this interface. The setting steps are as follows: In the TV Wall Plan interface, click  beside the plan name to edit it.

5.2 Screen Display Mode

At present, it is only to support 1/4/9/16/25/36 screen display mode.

To set the screen display mode

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Select the screen display mode. For example: tap “4” and then tap “Split Screen” to select the screen display mode.

Note: The maximum number of the screen display mode of the platform is 36 screens. As a result, the maximum of 36 screens can be called when controlling TV wall.

5.3 Camera->Monitor

Select the input signal (camera) to the designated TV wall and window.

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Select a camera. For example: tap “2” and then tap “CAM”, and finally tap “Send” to select No.2 camera.

You can view and change the relationship between camera number and channel from ECMS/NVMS (go to TV Wall Management→TV wall System Setting→Channel Number Setting).

Note: The effective number ranges of camera from 1 to 999999. When entering “0”, it means stopping playing in the specific window.

5.4 PTZ Control

Only when the PTZ is input to the window and the live images are not displayed in sequence in this window, can the PTZ control be effective—that is, the camera input to this window must be a PTZ device (or speed dome).

5.4.1 Move / Stop

The setting steps are as follow.

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Select a PTZ camera. For example: tap “2” and then tap “CAM”, and finally tap “Send” to select

No.2 PTZ camera.
4. Control the PTZ camera by moving the joystick. When moving the joystick back to the original place, the speed dome stops moving.

5.4.2 Set or Call Preset

To set preset
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Set the position of the preset by moving joystick.
4. Input the digital number and then tap “Set Preset” on the screen or press the digital number and then push “SET PRE” on the keyboard.

To call preset
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Input the digital number and then tap “Call Preset” on the screen or press the digital number and then push “CALL PRE” on the keyboard.

Note: The effective number of the preset ranges from 1 to 255; the effective number of the cruise line ranges from 1~8; the effective number of track ranges from 1~4.

5.4.3 Set, Call or Stop Cruise

To set cruise
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Input the digital number and then tap “Set Cruise” on the screen. Then the cruise line number will be displayed and you shall add presets to this cruise line.
4. Add presets: tap the digital number and then tap “ENTER” to add preset. Repeat this step to add more presets. Click “Cancel Cruise” to cancel the current cruise setting.
5. Tap “Save Cruise” to complete the settings.

To call cruise
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Input the digital number and then tap “Call Cruise” on the screen or press the digital number and push “CALL CRU” on the keyboard.

To stop cruise
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Tap “Stop Cruise” or push “CALL CRU” on the keyboard.

5.4.4 Set, Call or Stop Track

To record track

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Input the track number and then tap “Start Recording Track”.
4. Control the PTZ moving track by moving the joystick. Click “Cancel Track” to cancel the current track setting.
5. Tap “Save Track” to complete the settings.

To call track

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Input the track number and then tap “Call Track”.

To stop track

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Tap “Cancel Track”.

5.4.5 Start or Stop Auto Scan

To start or stop auto scan

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Tap “Start Auto Scan” or push “CALL SCAN” on the keyboard to start auto scan.
4. Tap “Stop Auto Scan” or push “CALL SCAN” on the keyboard to stop auto scan.

5.5 Record Playback

5.5.1 Start Playback

You can play back the record saved in the storage server of the ECMS/NVMS.

To play the record

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Tap “Start Playback” to play the record.

When the record playback of the current window is paused, tap “Start Play” to continue playing.

5.5.2 Pause

When the record is in playing mode in the current window, tap the pause key to pause.

1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Tap “Pause Playback” to suspend the playback.

5.5.3 Play the Previous 30s

You may play the record of the previous 30 seconds. The setting steps are as follow.
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Select “4” and then tap “Change Playback Position” to play the previous 30 seconds.

5.5.4 Play the Next 30s

When the record is in playing mode in the current window, you can play the record of the next 30 seconds. The setting steps are as follow.
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Select “6” and then tap “Change Playback Position” to play the next 30 seconds.

5.5.5 Play by Frame

When the record is in pause mode in the current window, you can play the next frame.
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Select “6” and then tap “Change Playback Position” to play the next frame.

5.5.6 Stop Playback

When the record is in playing or pause mode, you can stop playback. The setting steps are as follow.
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Select a window. For example: tap “3” and then tap “WIN” to choose NO.3 window.
3. Tap “Stop Playback” to stop playback

5.5.7 Stop Auto-Switch

When the camera group is switching automatically, you can stop the auto switch as follows.
1. Select a TV wall. For example: tap “1” and then tap “MON” to choose NO.1 TV wall.
2. Click “Stop Auto-Switch” to stop the auto switch.

5.6 Screen Display

5.6.1 Display Connection Status

1. After switching to platform mode, the system will automatically connect the platform (NVMS) and display the connection status on the screen.
2. Having successfully configured the IP address of the keyboard and platform, you can see the corresponding connection status displayed on the screen.

5.6.2 Display the Real Time Image of the Designated Window

The LED screen of the keyboard supports H.264/H.265 real-time decoding with private protocol or onvif protocol.

Platform Mode

1. Call a camera on a window for real time decoding: “Live view” will be shown on the screen and the real time video in conformity with the real time decoding requirement will be shown (See 3 Decoding).
2. Call a camera on a window for playback: “Playback” will be shown on the screen but the screen is black and no video can be played.
3. When the pan is being automatically switched in the selected window, “Live View” will display on the window and the videos in the camera group will automatically switch.
4. When the plan of the TV wall in the window is changed, the system will acquire the window status of the current plan.
5. When changing a TV wall or window by the keyboard, the system will acquire the window status of the current TV wall and window.

6 Specifications

Screen size	IPS 10.1 inch touch screen
Display	HDMI 4K@30fps
Decoding capability	Platform mode: Max. 1CH H.2651080p@30fps PTZ mode: Max.1CH H264 1080P@60fps/ 4CH 720p@30fps Max.H.265 1CH 4k@30fps
Protocol	ONVIF 2.4
Control Mode	Platform mode, PTZ mode
Power	DC 12V2A±10%
Interfaces	1 RJ45 Ethernet port; 1 RS485; 1 RS232; 1 HDMI output(V 1.3); 1 USB2.0 port; 1 standard 3.5mm headphone jack
Operation interface	4D Joystick, Knob, Buttons
Power consumption	＜15W
Working humidity	10%-90%(RH)
Working temperature	-10℃-40℃
Storage temperature	-40℃-60℃
Dimensions(mm)	445×179×118
Net weight（kg）	Approx. 1.388


safire
SMART