



Network touch keyboard



**USER MANUAL** 

#### 1.1 summary

Is a new generation network touch keyboard. 10.1-inch capacitive touch screen, simple and friendly UI design. The real-time preview can be enabled on the keyboard touch screen, and the image can be projected to the external display through the HDMI.

interface. Support H.265 single channel 4K@60fps ; H. 264 four way 1080P@60fps ; 16 routes 720P@30fps Decoding, 4-dimensional control rocker is used for ball machine PTZ control to quickly locate the target. It can be applied to places where multiple network ball machines are installed, such as streets, schools, hospitals, hotels, residential areas, factories, workshops, etc., to achieve unified control of network cameras (IPC) supporting the onvif protocol in the LAN, and support our private HTTP protocol.

### 1.2 Runtime Environment

#### -, Login interface

Open the APP startup interface, the login interface shown in Figure 1 appears, enter the account password, and click Login. The user name is admin, and the default initial user password is admin. See Figure 1 for details.

Matrix keyboard

Figure 1

1.1 The user can click the button on the right side of the password bar to display or hide the password and clear the password;

1.2 The user can click the button on the right side of the user bar to select the historical login record account to log in;

#### 二、Home interface

Click User Login to enter the main interface. The home page module is displayed by default, and the following interface is displayed, mainly including **[**PTZ Mode**]**, **[**TV Wall**]**, **[**AI Platform**]**, **[**Setting**]**, **[**EXIT**]**. See Figure 2 for details

Decode Matrix Keyboard EXIT							
PTZ Mode	TV Wall	Al Platform	Setting				
0	Ţ	AI)	\$				
		1					

Figure 2

# $\Xi_{s}$ Introduction to main functional modules

## 3.1、PTZ mode module

The [PTZ Mode] function module is mainly used to preview and control cameras bound to the LAN, including window operations such as [Play], [Pause], [Stop], [Photo], [record], [clarity], [Audio], [Preset], [PTZ], [Scene], [traction], [Color], [Channel], [WebGUI], [AI Model], etc; TV wall operations include [Unbind], [Specs], [Save], [HDMI Set], [UART], [Setting], [Reset], [Lock] and [Help]. See Figure 3-10 for details.



## 3.1.1 Left list

For IPC, NVR, round robin resource, serial port device, camera icon (the first) represents NVR or IPC device, serial port icon (the fifth) represents serial port protocol device, and round robin icon (the sixth) represents round robin resource;

### 3.1.2 Right TV wall

TV wall window interface;

### 3.1.3, TV wall binding and selection

3.1.3.1 Drag the left camera and bind it to the right window;

3.1.3.2 Select the camera and click the corresponding camera control button in the lower right corner;

### 3.1.4 TV wall control

3.1.4.1 [Unbind] Unbind the video source from the window;

3.1.4.2 [Specs] (Specification) Switch the number of TV wall windows, including 1 \* 1,

2 \* 2 and 3 \* 3. The default is 2 \* 2;

3.1.4.3 [Save] Permanently save the binding relationship between the video source and the window, and it will be automatically associated after the device is powered off and restarted;

3.1.4.4 [HDMI set] The current TV wall or window is projected through the HDMI interface, as shown in Figure 4, and Figure 5 shows the preview of the HDMI display;



Figure 4



Figure 5

3.1.4.5 [UART] (Serial port) Click the [UART] button to expand the serial port editing interface on the left. You can select serial port protocols Pelco-D, Pelco-P, Visca, enter address code, enter RTSP connection and other operations, as shown in Figure 6



Figure 6



3.1.4.6 [Setting] Jumps to the setting interface. The specific functions of the setting interface will be described separately, as shown in Figure 7

Figure 7

3.1.4.7 [Reset] Restore the data saved on the current TV wall once;

3.1.4.8 [Lock] The program enters the screen protection state, and can only be operated after long press and unlock, but HDMI screen projection will not be affected;

3.1.4.9 [Help] displays help prompts or jumps to the help interface;

#### 3.1.5, TV wall window control

First, the user needs to bind and select the window to see the window related operation buttons, as shown in Figure 3, which means that the window with No. 1 in the upper left corner has been bound and selected;

3.1.5.1 [Play] Play the video screen of the selected window. The camera needs to support RTSP protocol;

3.1.5.2 [Pause] Pause the playback, the screen will be paused and will not be closed;

3.1.5.3 [Stop] Stop playing and the screen will be closed;

3.1.5.4 [Photo] Take a picture of the current window screen and save it locally. The window video can only be taken when it is playing or paused;

3.1.5.5 [record] Record the current window screen and save it locally. The window video needs to be in play status can be recorded;

3.1.5.6 [clarity] (Resolution) Switch the current window screen to play the code stream, main code stream (HD), sub code stream (SD);

3.1.5.7 [Audio] To turn on or off the video sound in the current window, the keyboard hardware must support audio input. The RTSP video source contains audio formats (ACC, MP3);

3.1.5.8 [Preset] Edit the device preset information of the current window, and support adding, deleting, and calling operations, as shown in Figure 8;



3.1.5.9 [PTZ] Control the current window device through PTZ protocol, including

direction, zoom, focus, aperture, exposure, scanning, cruise, etc., as shown in Figure 9;



3.1.5.10 [Scene] Edit the current window device scenario information, and support adding, deleting, calling, etc;

3.1.5.11 [traction] (Full screen) The current window plays full screen (the whole TV wall), and supports full screen and restoration, as shown in Figure 10;



3.1.5.12 [Color] controls the image parameters of the current window device, and supports brightness, gain, exposure and other operations, as shown in Figure 11;



3.1.5.13 [Channel] Obtain and switch the current window device channel. Only multi-channel IPC or NVR devices are supported, Only the onvif protocol is supported. After switching channels, click Save to bind the channel to the window one-to-one. If you want to permanently save, you need to save the TV wall information, as shown in Figure 12;

Channel	$\times$	wall name	temp_0			Wall	specification	5 2	2 X	2 🖉	
Edit channel informatio	on		Camera Na	me: nvr-0	Operc	ation: *****	Preset: ***	** 1	(ey Input:	****	
alias nvrc0	R					2					
0 nvrc0	$\bigcirc$		192.168.1.1 nvr onvif	9					2.168.1.19 nvr onvif		
1 nvrc1	$\bigcirc$		Channel 0   n	vrc0				Char	inel 1   nvrc1		
3 nvrc2	$\bigcirc$										
		3				⊗ ⁴					
			192.168.1.1 nvr onvif Channel 3   n					No	ot Bound		
Save Rese	t	Diay pause play pause Dunbind Delete	C +	record Save	1080P clarity C Save as H	audio pre	eset PTZ () ART Setting	scene Lock	traction C Reset	Color i Help	Channel WebG

Figure 12

3.1.5.14 [WebGUI] Enter the device WEB management platform, that is, the IP address. The default port is 80, as shown in Figures 13 and 14;

<	网页   Camera Name:TP-IPC IP:192.168.1.146 user:admin password:admin	
TP-LINK   IPC		
	欢迎使用	
	用户名	
	🚨 admin	
	密码	
	☐ 请输入任意字符登录	
	登录	

Figure 13



Figure 14



3.1.5.15 [AI Model] AI model loading. This function is still in the trial stage, as shown in Figure 15;

Figure 15

## 3.2、TV wall module

The [TV Wall] function module is mainly used to edit the TV wall. On the basis of [PTZ Mode], the functions of adding, saving, editing and switching the TV wall are added. The [HDMI Setting] item also adds the ability to select different TV walls for screen projection. Other operations are the same as those of [PTZ Mode], as shown in Figure 16;



Figure 16

## 3.3、Setting module

The [Setting] function module includes [Camera List], [Sequence], [System Setting], [Factory Debug], [Local Camera], [Camera Record], [Version], [Accountt], as shown in Figure 17;



Figure 17

3.3.1 [Camera List] This interface is mainly used to display and edit devices. Users can find and add devices by clicking [Auto Search], as shown in Figure 18;



Figure 18

$\leftarrow$	CUSTOM SETTINGS	
🧕 Camera List		Add
C Sequence	fedf     Number of Devices:3 Seq time:30	Z ×
🎁 System Setting		
Factory Debug		
්රි Local Camera		
ා Camera Record		
Version		
Accounts		
		i

3.3.2 [Sequence] View and edit sequence resources, as shown in Figures 19 and 20;

Figure 19



Figure 20

3.3.3 [System Setting] system equipment module, users can configure the system, as shown in Figure 21;



Figure 21

3.3.4 [Factory Debug] Factory debugging mode, the user can test whether the functions of the keyboard hardware are normal (for example, it is correct to enter the numerical key value), as shown in Figure 22;

¢		CUSTOM SETTINGS	
0	Camera List	Test keyboard	
Ċ	Sequence	10:30:17 receive: cmd= 物理按键 Key:14 Name:KEY_14 HEX:ff010e00000f 10:30:17 receive: cmd= 物理按键 Key:0 Name:NULL HEX:ff0100000001	
Ŷ	System Setting	10:30:19 receive: cmd= 掘杆方向 右 Key:70 Name:JOYSTICK_RIGHT_1 HEX:ff0202010005 10:30:19 receive: cmd= 掘杆方向 右 Key:71 Name:JOYSTICK_RIGHT_2 HEX:ff0202020006 . 10:30:19 receive: cmd= 掘杆方向 右 Key:72 Name:JOYSTICK_RIGHT_3 HEX:ff0202030007	
Ŵ	Factory Debug	10:30:19 receive: cmd= 播杆方向 右 Key:73 Name:JOYSTICK_RIGHT_4 HEX:ff0202040008 10:30:19 receive: cmd= 播杆方向 右 Key:72 Name:JOYSTICK_RIGHT_3 HEX:ff0202030007 10:30:19 receive: cmd= 播杆方向 右 Key:71 Name:JOYSTICK_RIGHT_2 HEX:ff0202020006	
0	Local Camera	10:30:19 receive: cmd= 摇杆方向 右 Key:70 Name:JOYSTICK_RIGHT_1 HEX:ff0202010005 10:30:19 receive: cmd= 摇杆方向 停止 Key:29 Name:JOYSTICK_STOP HEX:ff0200000002 10:30:22 receive: cmd= 物理按键 Key:10 Name:KEY_10 HEX:ff010a00000b	
0)	Camera Record	10:30:22 receive: cmd= 物理按键 Key:0 Name:NULL HEX:ff0100000001 10:30:22 receive: cmd= 物理按键 Key:11 Name:KEY_11 HEX:ff010b00000c	
Y	Version	10:30:23 receive: cmd= 物理按键 Key:0 Name:NULL HEX:ff0100000001	
ద్రి	Accounts	ENABLE BUZZER SOUND DISABLE BUZZER SOUND CLEAR TEXT BUZZER UDPATE MCU	
			i

Figure 22

3.3.5 [Local camera] Local camera module, the user can preview the local USB camera screen successfully accessed, as shown in Figure 23;

$\leftarrow$	CUSTOM SETTINGS	
🧕 Camera List	Local Camera	
C Sequence		
🍸 System Setting		
🟦 Factory Debug		
ලි Local Camera		
🗿 Camera Record		
Version		
옷 Accounts		
	Note, please connect and put the USB camera or HDMI-IN first	
	START STOP PHOTO CONTROL	i
	Figure 23	

3.3.6 [Camera record] Camera video recording module, where users can play recorded videos and take photos, and can collect, delete and import them, as shown in Figure 24;



Figure 24

3.3.7 [Version] The user can upgrade the application version by clicking [APP UPDATE]. First, the user needs to put the APK file in the root directory of the U disk and connect it to the USB port of the device, as shown in Figure 25;

$\leftarrow$	CUSTOM SETTINGS	
🧕 Camera List	Version	
Sequence	Software Info: 1.2.3	
🎁 System Setting		
🟦 Factory Debug	Hardware Info: tulip_p1-eng 6.0.1 MOB30J 20221025 test-keys	
ිරි Local Camera	Serial Number: 24307901c41014020690	
িয় Camera Record		
Version		
Accounts		
		i

Figure 25

3.3.8 [Account] User information management, logout or change password,

	as shown in Figure 2	6;		
$\leftarrow$		CUSTOM SETTINGS		
<ul> <li>Camera List</li> <li>Sequence</li> <li>System Setting</li> </ul>	User info	admin Number of Devices:5		Admin
Factory Debug		Modify Password	>	
ি Local Camera ০িঃ Camera Record		logout		
Version				
င္တိုိ Accounts				
				i
		Figure 26		

# 3.4、Al Platform

The [AI Platform] function module supports two types of algorithm models, including [OpenCV] and [Paddle]. This function is still in the testing stage. See Figure 27 for details.

		AI Platfo	orm Manage	ment		
openCV face download	cat download					
Paddle Gace download	human download	car download	bicycle download	animal download	OCR download	Asr download
		Intel	ligent Analysis Repoi			

Figure 27

## 3.5、EXIT

The user can click [EXIT] on the main interface to exit the application.