# Tiandy

# Easy7 Smart Client Express (MacOS)

# **User Manual**



ISO 9001:2008 ISO 14001:2004

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## Statement

• Our company will update this manual according to the reinforcement and change of product functions, also regularly improve and update the software and hardware products described in this manual. The updated information will be reflected in the latest version of the manual without further notice.

• The change of product parameters will not be further notified as our company continues to adopt new technologies.

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# 1. Preface

## **1.1. Preparation purpose**

This user manual is prepared based on Easy7 video monitoring system. In order to provide brief function instruction of the system and help users to systematically understand operation process, this user manual is prepared for reference.

[Note] Product real-time update will not be further notified.

## 1.2. Terms and abbreviations

N/A

# 1. 3. Usage Attentions

1. Current monthly largest quantity of human face pictures received from single channel is 1 million. The current upper limit of quantity of human face pictures received from all channels is 5 million. If the quantity exceeds the upper limit, result of intelligent retrieval cannot be acquired.

2. Standalone version can support 500 point locations at most at present.

3. It only adapts to screen of resolution 1080P at present. If resolution of screen exceeds 1080P, a window in size 1080P can be shown.

4. This platform is not compatible with cameras in sky-eye series cameras at present.

5. MAC AIO only supports external microphones.

6. As for the equipment added in P2P account number way, audio sampling frequency shall be set to be 8kHz. Other sampling frequency may cause program failure on standalone version, so please use it cautiously.

7. As for the same NVR and IPC, video playback and video download exist at the same time. 5 channels at most are supported at present. Otherwise, download failure or equipment overload will be reminder in download process and video playback will fail.

8. MAC system authorizes standalone version, such as microphone authority.

Restart the standalone version.

9. As for MAC version, the real-time preview in full screen cannot quit from full screen by pressing ESC (unless equipment list is closed).

10. Firewall of computer may influence some normal functions of standalone version. Please add white list or close firewall.

# 2. Software overview

# 2.1. Software usage

Easy7 Smart Client Express is an application based on MacOS and Windows operation system, which is specially used for managing, previewing and operating network monitoring equipment, suitable for all series of Tiandy NVR, IPC and other devices. The software can realize grouping management of watch points according to different scenarios and customize the group name. It can carry out real-time video browsing, audio preview, voice intercom and other operations based on the device. It can control the equipment PTZ, set preset position and call. It can switch video playback between user-defined groups, support front-end and local video playback, control playback through time axis, and download video files to the client-side. The rich video monitoring business functions of the software are really suitable for the application of various video monitoring scenarios.

### 2.2. Software operation

Easy7 Smart Client Express Mac64 V8.4.dmg can install and operate individually and support Tiandy full series of hard disk video equipment and network video equipment.

# 2.3. System configuration

CPU: 1.6 GHz Intel Core i5 or above Memory: 8GB or above Version: MacOS 10.12.0-10.14.4

# 3. Software installation and uninstallation

# 3.1. Software installation

below:

Take the installation of "Easy7 Smart Client Express Mac64 v8.4.dmg" in MacOS10.14.4 version as an example, the installation of other versions is the same.

1) Find the installation file "Easy7 Smart Client Express Mac64

v8.4.dmg" in installation disk, as shown in the figure below:

Easy7 Smart Client Express Mac64 V8.4.dmg

Figure 3.1.1

2) Double click and enter installation program, as shown in the figure

•••	untitled		
Easy7 Smart Client Express Mac64 V8.4		Applications	

Figure 3.1.2

**3**) Drag the App to Application to complete installation, as shown in below figure:



#### Figure 3.1.3

**4**) The software can be checked in Application after installation, as shown in below figure:



Figure 3.1.5

# 3.2. Upgrade package installation

Temporarily not available.

# 3. 3. Software uninstallation

Take the uninstallation of "Easy7 Smart Client Express Mac64 v8.4" in MacOS10.14.4 version as an example, the uninstallation of other versions is the same.

1) Select Finder -> Applications -> Easy7 Smart Client Express Mac64

v8.4, right click to move it to Trash to complete uninstallation, as shown in below figure:



Figure 3.2.1

# 4. Software login and framework setting

# 4.1. Software login



on the desktop to enter system login

interface, an initial password is required to be set for the first-time log in, as shown in below figure:

Initial password set	ing	×
	Tiandy	
	admin	
	Please enter password	
	Please enter the password again	
	Confirm	
English <b>v</b>		

Figure 4.1.1

Note: the password shall be a combination of digits and letters. (Password can be 6-32 characters)

After the initial password is set, enter the password protection setting page, as shown in following figure:

← Password	protection		×
	Please set the security question		
	Please choose question one	•	
	Please enter the answer to question 1		
	Please choose the second question	•	
	Please enter the answer to question 2		
	Please choose question 3	•	
	Please enter the answer to question 3		
	Confirm		
English <b>v</b>	]		

Figure 4.1.2

After the password protection question is set, you will enter the login page, as shown in following figure:





The information of related parameters in log-in interface is as follows:

Parameter	Description
Auto login	Tick and enable the check box. If the user name and password
	is correct, there's no need to input user name and password
	anymore the next time, you may enter automatically.
	Cancel automatic login: System configuration -> Common
	Settings->Login Settings->Automatic Login Software.

Save	Tick and enable the check box. If the user name and password
password	is correct, the current password will be saved and it will
	automatically fill in the password for the next time.
Login	Click and enable it. If the user name and password is correct,
	you may log in the program.
Forget the	Click enable and click to enter the password verification page.
password	After the password security question is successfully verified,
	you can re-enter the initial password setting page to set the
	password.
English <b>▼</b> 简体中文 English русский 한국어 ใทย Tiếng việt Le français lingua italiana عربی	Support shifting between multiple languages.
×	Click and enable it. Click to close Easy7 login interface.

Table 4.1.1

# 4.2. Framework setting

Input correct user name and password, click "Login" to enter the main program interface of Easy7 Smart Client Express. The default grouping is shown in below figure:

Tiandy	Home page			0018 -	07 × 10.08.45
Common functions	5				
Live View the point	ew Eve images at the monitoring	Playback Search and play the recording file at the monitoring point	Device management Add, modify and delete groups	System configuration Typical operation on client configuration	
Alarm r Real-tim messag exception	management ne indication of unit alorm te to facilitate access to unit on	TV Wall TV wal configuration, preview, offline switch settings	Iniet and outlet management Face management, human gate real- time preview and information query	ElectronicMap Management and operation function of electronic map	
Basic functions					
man	User Operation logs	Data statistics	Intelligent search Face recognition		
•		©Tiandy Co.Ltd.	All Rights Reserved		admin

Figure 4.2.1

After entering the interface, click "<sup>(1)</sup>" on the right upper corner of the interface to display version information and date, as shown in below figure:



Figure 4.2.2

The mouse slides over "<sup>•</sup> on the right upper corner of the interface to display the current CPU occupancy and memory usage, as shown in below figure:

CPU 25.49% | RAM 5381.00M

Figure 4.2.3

When connecting video, if CPU utilized rate exceeds 75%, it cannot connect to real-time video. As shown in following figure:



Figure 4.2.4

Click " 🗇 " on the right corner of the interface to lock the interface. When correct delock password (i.e. login password) is input, the screen will be delocked, as shown in below figure:

Software Delocking	
Delocking user name	admin
Delock password	
	Jnlock



Only accounts with "system lock-in authority" and "system unlocking authority" are able to carry out delock operation.

Click "—" on the right corner of the interface to minimize the program; click " $\Box$ / $\Box$ " on the right corner of interface to restore/maximize the program; click "×" on the right corner of interface to quit the program.

In order ensure that users may not close the program by mistake in using process, when " $\times$ " is clicked to quick the program, a notice will pop up to confirm whether to quit the program, as shown in below figure:





If " $\times$ " is clicked by mistake, click "Cancel" to return to previous operation interface; if you are sure to quit the system, click "OK" to quit.

The right upper corner of the interface will display current system time **13:54:38** "to facilitate user to check time at any time.

The navigation menu bar on the top of the interface can be separated from the main interface by dragging the menu, or the position can be exchanged by dragging.

Interface function items are divided into: common functions and basic functions. The module icons in basic and common function area can be dragged separately, and the user can choose the common function for convenience, as shown in below figure:

Ti	andy	Home page							0016	- (7 × 10.08.45
	Common	functions								
	Þ	Live View View the live images at the mo point	pritoring	Playback Search and p the monitoring	lay the recording file at goint	Device manage Add, modify and delete groups	ment	System co Typical oper configuratio	nfiguration ation on client	
		Alarm management Real-time indication of unit ala message to facilitate access to exception	arm o umt	TV Wall TV wail config switch setting	juration, preview, offline S	Inlet and outlet m Face management time preview and	nanagement It, human gate real- information query	Electronic Managemer of electronic	fap t and operation function map	
	Basic fun	ctions								
		User management	Operation logs	Data statistics	Alarm configuration	Intelligent search	Face recognition			
à										
•					©Tiandy Co.,Li	d All Rights Reserved				admin

Figure 4.2.7

Real-time preview: View the live images at the monitoring point.

Video playback: Search and play the recording file at the monitoring point.

Equipment management: General management of monitoring devices to facilitate

addition.

System configuration: Typical operation on client configuration.

Alarm management: Real-time indication of unit alarm message to facilitate access to unit exception.

TV Wall: TV Wall configuration, preview, offline switch settings.

Inlet and outlet management: Face management, human gate realtime preview and information query.

ElectronicMap: Management and operation function of electronic map.

Face recognition: Management and distribution of face database.

User management: User password change allowed.

Operation logs: Check the system operations logs to understand the system operation.

Intelligent search: Intelligent analysis information from search, such as face retrieval, indoor electric vehicle testing and so on.

Data statistics: Total amount.

Alarm configuration: Coordinated configuration of various alarms.

[Note] After each login, the module icon will return to the default position, and the navigation menu bar position will be saved as the position when you quit last time.

Click "

Real-time atam [])								
Time of alarm								
2020-09-08 09:47:13	192.168.15.149-Channel 1	Intelligent analysis of video case diagnostics(NO.9)	Alarm removal		4Grade 🔍			
2020-09-08 09:47:13	192.168.15.149-Channel 1	Intelligent analysis of video case diagnostics(NO.9)	Event		4Grade 🔶			
2020-09-08 09:47:12		Intelligent analysis of perimeter(NO.2)						
2020-09-08 09:47:10	10.30.10.19-Channel 1	Intelligent analysis of not wearing the mask(NO.1)	Event		4Grade 🔶			
2020-09-08 09:47:09		Intelligent analysis of video case diagnostics(NO.9)			4Grade 🔶			

#### Figure 4.2.8

"Real-time alarm" records time, source, type, status, grade and other information of the alarm. When alarm information occurs, click "Play" to check alarm video playback, as shown in below figure:



Figure 4.2.9

# 5. Function operation instruction

# 5.1. Equipment management

Click the equipment management icon

on home page to enter the

equipment management interface.

## 5.1.1. Encode device management

Click "Device" to enter the device management interface. The device interface displays name, device type, IP address, port, video channel, connection status and other basic information of all added device, in which if the connection status is green, it means the device is on-line, and if it is red, it means the device is offline; addition, modification, deletion and other operation of the device can be conducted. As shown in below figure:

Tiandy	Home page							
Device Group								
Encode device (2)	O Auto Saperte	+ 444 / Madda	Dalate Disect Salaction	ORatesh				
Decoding device (1)								
Gate equipment (0)		Name	Device Type	IP address		Video Channel	Connection status	Operation
		192.168.23.54	TD series	192.168.23.54	3000			-
		192.168.23.53	TD series	192.168.23.53				5
Output Impo				Total 1 Page 20PiecePage V 4 1	> To 1 Page			
▲				©Tiandy Co.,Ltd All Rights Reserved				admin

Figure 5.1.1.1

The information of related parameters in the interface is as follows:

Parameter	Description
Auto Search	Automatically search for devices under the same network
	segment, batch addition supported.
Add	Manually add encode device, support IP method, Standard
	domain name method, EasyDDNS method , P2P direct

	connection method, P2P account number method to add
	device.
Modify	Modify information of already added device.
Delete	Delete already added device, batch deletion of device
	supported.
Output	Select the device, and output the device information in
	three forms of Equipment List, Organization Chart, and
	Organization Relationship Table.
Import	Click the device, and input the information in Equipment
	List, Organization Chart, and Organization Relationship
	Table, which are contained in the file.
Invert Selection	Select all device that are not selected at that moment.
Refresh	Update the status of device at current interface.
Name	Display the name of all already added device.
Device Type	Display the device type of all already added device, TD
	series (Tiandy series) supported.
IP Address	Display the IP address of all already added device.
Port	Display the port of all already added device.
Video Channel	Display the maximum number of video channels allowed
	to play of all already added device.
Connection Status	Display the current connection status of all already added
	device.
Operation	Click and enable it to open the web user-side interface of
	the device.

Table 5.1.1.1

# 5. 1. 1. 1. Auto search of encode device

Click "<sup>Q Auto Search</sup>" to enter automatic search interface, as shown in below figure:

Add	Device				×		
	+ Add C Refresh						
	Device Type	IP address	Port	Channel No.	Product number		
	TD-S	192.168.23.191	3000		Unknown		
	TD-S	192.168.23.21	3000		Unknown		
	TD-DVR	192.168.23.222	3000	10	TC_NR3005M7_S1		
	TD-DVR	192.168.23.232	3000		Unknown		
	TD-DVR	192.168.23.234	3000	40	Unknown		
	TD-S	192.168.23.236	3000		Unknown		
	TD-DVR	192.168.23.237	3000	10	Unknown		
	TD-S	192.168.23.246	3000		Unknown		
	TD-S	192.168.23.247	3000		Unknown		
	TD-S	192.168.23.31	3000		Unknown		
-				•			

Figure 5.1.1.2

Tick and select one or more device in device column, click "+Add" and a pop-up to add device will display, input the device's user name and password (it's recommended to set unified user name and password for several device, if user name or password is wrong, the batch addition of partial device will fail). If you select to import it into a group, the device will be automatically imported into the group, otherwise you need to manually add to a group, as shown in below figure:

Add Device	>	<			
Add Mode	ІР Туре				
User Name	admin				
Password	••••				
Import to Group					
OK Cancel					

Figure 5.1.1.3

After addition, it will display the number of device successfully and unsuccessfully added, as shown in below figure:



Click " C Refresh " to refresh the information of on-line device.

5. 1. 1. 2.	Encode device addition
-------------	------------------------

Click "

+ Add " to enter device addition interface, as shown in below figure:

Add Device		×
Add Mode	IP	
	✓ Off-line Add	
Device Name	Please enter device name	
Device Type	TD series	
Device IP		
Port	3000	
User Name	admin	
Password	••••	
Video Chan	Please enter video Channel	
	✓ Import to Group	
	Add Cancel	

Figure 5.1.1.5

Select device addition type and fill in corresponding device name, device ID, port, user name, password and video channel, and tick to select whether it's offline device addition and whether needs to import a group according to requirement, the description of related parameter information is as follows:

Parameter	Description		
	Select different add type: IP type, Standard domain name		
Add Mode	type, EasyDDNS type, P2P direct connection type, P2P		
	account number type.		
Off line Add	Tick, then both on-line and offline device can be added.		
OII-IIIe Auu	Not to tick, then only on-line device can be added.		
Device Name	Add device name. (There's illegal character limit when		

	adding device name, following characters are not allowed
	to be input ~!#\$%^()=[]{},":;'<>?*`+/\&)
Device Type	Optional device type: TD series (Tiandy series).
Device IP	Add device IP.
DNS	Add device DNS.
	This information needs to be typed in when enabling the
	P2P direct connection adding model.
	Find [Device ID] via Device IE->Config>System
Device ID	Config>System Maintenance->System
	Upgrading->Version Info, or Device
	IE->Config>Advanced Option->System Settings, then
	type in the digital characters.
DNS Lloss nome	It's necessary to input this information when EasyDDNS
DINS User manne	type is selected.
DNS Decoverd	It's necessary to input this information when EasyDDNS
DINS Password	type is selected.
Port	Add the communication port of device.
User Name	Add the login user name of device.
Password	Add the login password of device.
Video Channel	Add the total number of video channels the device has.
	Tick, then the system will automatically add the device to
Import to Group	Customized list and create a group (the same as device
	name).

### Table 5.1.1.2

Upon correct information is input, the device will be connected, as shown in below figure:



Figure 5.1.1.6

#### 5. 1. 1. 3. Encode device modification

Tick and select the device to be modified, click " <sup>∠ Modify</sup>" to enter device information modification interface, as shown in below figure:

Modify Device		×
Add Mode	IP	
Device Name	192.168.25.48	
Device Type	TD series	
Device IP	192.168.25.48	
Port	3000	
User Name	admin	
Password	••••	
Video Chan	1	
	Modify Cancel	



Modification of add type, device name, device type, device IP, port, user name and password, video channel and other related information supported. Click "Modify" to complete modification, as shown in below figure:



#### Figure 5.1.1.8

#### 5. 1. 1. 4. Encode device deletion

Select one or more devices to be deleted, click " <sup>Delete</sup> " to enter device deletion interface, as shown in below figure:

Notic	e		×
Sure	to want to dele	te the selected	host?
	ОК	Cancel	

Figure 5.1.1.9

### 5. 1. 1. 5. Encode device output

Check the device that needs to be added and handled, click the

button" Output". Only after the password verification could the device information be output, as is shown in below figure:

Verify password X			
User Name	admin		
Password			
	Confirm		



The selected device will be output to the file in three forms of Equipment List, Organization Chart and Organization Relationship Table, as is shown in below figure:

admin\_Equipment list.csv
 admin\_Organization chart.csv
 admin\_Organization relationship table.csv

#### Figure 5.1.1.11

#### 5. 1. 1. 6. Encode device import

Upload the Equipment List, Organization Chart and Organization Relationship Table . The upload result will record the number of host computer, success and failure, as is shown in below figure:





#### 5. 1. 1. 7. Encode device invert selection

Select one or more devices not to be operated, click "<sup>Implet Selection</sup>", select all devices not selected at that moment, and conduct on selected devices.

5. 1. 1. 8. Encode device refresh

Click " Click " Click " Click Click Click " Click Clic

#### 5. 1. 2. Deciding device management

The operation is the same as 5.1.1 encode device management.

#### 5. 1. 3. Gate equipment management

The operation is the same as 5.1.1 encode device management.

Note:

1. The device serial number is the factory number of the gate equipment, such as ID060218100922201900889.

2. When connecting the Tiandy equipment, it should be noted that the port number is 80.

3. If the device is configured as Tiandy PAD, you need to enter PAD backend - > communication settings to configure the server address (this address is the IP address of the platform).

#### 5.1.4. Grouping

Click "Group" to enter group management interface. Information of all devices

and customized groups in current system will be displayed, as shown in below figure:

Tic	andy	Home page	System configuration	
Device	Group			
	Device List			Customized List
	🗈 🔲 💭 My device			) 🗖 🖿 Device List
				🖂 🗋 192.168.16.221
	E 🔳 🖬 192.168.1			C 🗋 🖿 192.168.1.22
	🗉 🔳 192.168.1			G 📄 192.168.23.48
	🗉 📄 🚍 192.168.2			□ ■ 192-168.16-222
			7ª Import	
			₽' Export	
				All rights reserved. Tiandy Technologies Co., 11d add

Figure 5.1.2.1

The description of related parameters in this interface is as follows:

Parameter	Description						
	Set the channel name on the local device tree synchronously to the front-end channel.						
C Get Device Name	Get the front-end channel name of on-line channel in Device list.						
∠ Modify Group	Select a group in Customized list, click to modify the group name.						
+ Add Group	Select the list needs to create sub-group in Customized list, click to add a group.						
	Tick and select a Customized list group, click to delete the group and delete the sub-groups and channels in the group at the same time.						
겨 Import	Tick and select the channel in left Device list, select a group in right Customized list, click to import the device to the customized device list.						
⊾ ⁄ Export	Tick and select the channel in Customized list group, click to export that channel.						







The information in left Device list is the information of all added encode devices and their channels automatically generated by the system. The right Customized list is the group information customized by users themselves. To facilitate user's management, users may add the encode device on the left to the Customized list on the right as necessary. For example, to add all channels of device 10.30.10.12 in Device list to the "Group Test" in customized group of Customized list, the operation steps are:

1) Tick and select all channels of 10.30.20.12 in Device list

∃ ∠ == 10.30.10.12

1) Select the customized group to be added in Customized list (highlighted

when	
selected)	+ 🖉 🗇
<b>2</b> ) Click " Import " to add channels.	
Similarly, select corresponding device channel in	Customized list, click
" Export " to delete the device channel from Customize	ed list. (Note: Modules

other than equipment management all load Customized list, users need to add used

#### devices into Customized list.)

If the name of Channel 1 in device 10.30.10.21 in Device list needs to be modified, click " $\checkmark$ " and a pop-up for modifying device name will display (if the video has been encrypted, it can be decrypted here), as shown in below figure:

Modify the information of [channel0] ×			
Name	Channel 1		
Туре	Channel 🔻		
Whether to set a password			
Save	Cancel		

Figure 5.1.2.2

Similarly, select list group in Customized list, click " $\checkmark$ " and a pop-up for modifying watch point name will display, as shown in below figure:



Figure 5.1.2.3

# 5.2. Real-time preview

Click the real-time preview icon Click the real-time preview interface. The main interface consists of Device list, video preview window, View, PTZ control ,Senior and Target Information, as shown in below figure:

Tiandy	(1)	Home page	Data statis	stics Real-time pr	eview	Equipment management			0 0 1 0 - 0 × 09:59:23
Device List		1247							Real-Time History
(		2020-	12-16 \	Ned 09:59	9:17			Channel 1	
E • E Device List		I I							
<ul> <li>192 198 19.99</li> <li>192 198 19.221</li> </ul>									
🖬 🛩 📠 192.168 16 222									Keven 2020-12-16 09:59:02
									кну 3 2020-12-16 09:59:01
		14649-14714-71							
			7				Γ		North I
		0 # 5							
		Real-Time Hi	story						Min 2020-12-16 09:57-22
View		You Ma No We	uth mask earing glasses matth	Youth Male No mask Wearing glasses		Youth Male No mask Wearing glasses	Youth Female No mask Not wearing glasses	Youth Maie No mask Wearing glasses	
PTZ Control						22.168.16.221-Channel 1			
Advanced Function		2020-12-16 09:58							2020-12-16 09:55 33
-									admin

Figure 5.2

# 5.2.1. Device list

Click "Device list" on the left to display all customized group list and input key information in search blank, double click to check device watch point, as shown in below figure:

Device List		•
100	8	Q
192.168.1.100		



#### 5. 2. 1. 1. Right key menu of encode device customized group list

Click right key on the customized group list and the right key menu of customized group list will pop up, as shown in below figure:



Figure 5.2.1.1 **31** 

The description of related parameters is as follows:

Parameter	Description			
Turn off all videos	Turn off all videos connected at that moment.			
	All the videos in current list are added and played in main			
Main code stream	code stream mode (as for the channel being played, the			
	playing code stream will not be changed)			
	All the videos in current list are added and played in			
Subcode stream	subcode stream mode (as for the channel being played, the			
	playing code stream will not be changed)			
Time calibration	Conduct time calibration on on-line devices in all group			
	lists.			
Manual alarm	Cancel the current alarm in the channel in video manually.			

Table 5.2.1.1

### 5. 2. 1. 2. Right key menu of encode device group list

Select a group in Device list and click right key, the right key menu of device group list will pop up, as shown in below figure:



Figure 5.2.1.2

The description of related parameters is as follows:

Parameter Description
-----------------------

Turn off all videos	Turn off all videos connected at that moment.		
Turn off this video	Turn off all videos connected in current group.		
Added to the list of	Add salested succeds device to automotic antitab success list		
switch groups	Add selected encode device to automatic switch group list.		
	All the videos in current list are added and played in main		
Main code stream	code stream mode (as for the channel being played, the		
	playing code stream will not be changed)		
	All the videos in current list are added and played in		
Subcode stream	subcode stream mode (as for the channel being played, the		
	playing code stream will not be changed)		
Time calibration	Conduct time calibration on on-line devices in selected		
	group lists.		
Manual alarm	Cancel the current alarm in the channel in video manually.		

Table 5.2.1.2

# 5. 2. 1. 3. Right key menu of encode device list

Select a channel watch point of a device in device list group, click right key, the right menu of device list will pop up, as shown in below figure:





The description of related parameters is as follows:

Parameter	Description						
	Right click	the er	ncode dev	vice ch	annel to	o restore	the connection
	between th	he devi	ice host	compu	ter of	the chan	nel and Easy7
	platform.	For ex	ample, so	elect C	Channel	1 in [D	evice List] in
	above figu	re (the	e affiliate	d host	compt	ter is 19	2.168.15.191),
	right clic	k "Log	gin to 1	the af	filiated	host co	omputer", the
Login to the	connection status of the host computer 192,168,15,191 is						
affiliated host	on-line, as	shown	in below	figure	:		
computer	Name	Device Type	IP address	Port	Video Channel	Connection status	C 🖃 🔳 Device List
compater	192.168.15.191	TD series	192.168.15.191	3000		On-line	International
	192.168.15.213	TD series	192.168.15.213	3000			Channel 1
	192.168.15.149	TD series	192.168.15.149	3000			<ul> <li>192.168.15.149</li> </ul>
	192.168.15.144	TD series	192.168.15.144	3000			🔤 👰 Channel 1
	192.168.15.148	TD series	192.168.15.148	3000			🗉 🗹 💼 192.168.15.144
	192.168.15.139	TD series	192.168.15.139	3000			In the second
	192.168.15.184	TD series	192.168.15.184	3000	20		■ 192.168.15.139     ■ 402.469.451.404
	192.168.15.52	TD series	192.168.15.52	3000			<ul> <li>Image: 192.168.15.184</li> <li>Image: Image: 192.168.15.52</li> </ul>
	192.168.15.188	TD series	192.168.15.188	3000			<ul> <li>         192.168.15.188     </li> </ul>
	192.168.15.197	TD series	192.168.15.197	3000			192.168.15.197

	Right click the encode device channel to disconnect the						
	connection between the device host computer of the channel and						
	Easy7 platform. For example, select Channel 1 in [New Group]						
	in above figure (the affiliated host computer is 192.168.15.149),						
	right click "Log off the affiliated host computer", the connection						
	status of the host computer 192.168.15.149 is offline, as shown						
Log off the	in below figure:						
aniliated host	Name Device Type IP address Port Video Channel Connection status c 🗈 🖿 Device List						
computer	192.168.15.213         TD series         192.168.15.213         3000         1         One-line           192.168.15.213         TD series         192.168.15.213         3000         1         One-line						
	192.168.15.149         TD series         192.168.15.149         3000         1         On-line         □         ■         192.168.15.149           192.168.15.144         TD series         192.168.15.144         3000         1         On-line         ♥ Channel 1						
	192.168.15.148         TD series         192.168.15.148         3000         1         On-line         □         ■ 192.168.15.144						
	192.168.15.139         TD series         192.168.15.139         3000         2         On-Mine         □         ■         101.101.1010           192.168.15.139         TD series         192.168.15.139         3000         2         On-Mine         □         ■         102.168.15.139						
	Interfection         Detaile         Number of the sector         Detaile         Detaile <thdetaile< th="">         Detaile         Detai</thdetaile<>						
	192.168.15.188 TD series 192.168.15.188 3000 2 On-line     □ ■ 192.168.15.188						
Turn off all videos	Turn off all videos connected at that moment.						
Main code stream	In the channel of login encode device, click this button to						
Wall Code stream	connect the main code stream video of the channel.						
Subcode stream	In the channel of login encode device, click this button to						
Subcode stream	connect the subcode stream video of the channel.						
Video interruption	In the channel connected to video, click this button to disconnect						
	the video of the channel.						
	In the channel of login encode device, click this button to talk to						
	the video source of the channel. Click this button in the channel						
Start intercom	of DVR/NVR device, the intercom box "Talking to XXXX" will						
	pop up to start talking with DVR/NVR; click this button in the						
	channel of IPC device, the intercom box "Talking to XXX" will						
	pop up to start talking with IPC device.						
Stop intercom	In the channel of login encode device, click this button to stop						
Stop intercom	the intercom with video source of the channel.						

Time calibration	To conduct time calibration on this on-line device.
Change channel name	Change the name of currently selected channel.
Manual alarm	Cancel the current alarm in the channel in video manually.

Table 5.2.1.3

#### 5. 2. 2. Video preview window

In video preview window, the video will be displayed in the middle, capture menu, video menu and sound menu are in the left lower part, menus can realize its function respectively. Double click video window to maximize it and double click it again to restore, as shown in below figure:



Figure 5.2.2.1

During the video preview, the split screen window will self-adapt to the video according to the number of linked videos, and it supports the real-time video playing of devices added in various ways.

The target bar in the below will display human face information, age, sex, whether or not wearing a mask, whether or not wearing glasses and physical temperature, etc.

The target bar in the right will display the comparison similarity result with the human face database, and the strangers' face will not be displayed.

When previewing video, the target bar on the right side can display the real-time detected face information.
When previewing video, the status bar at bottom left (in dark color) may display current channel is connecting respectively, audio preview, capture function and channel video recording are supported. The channel name will be displayed at bottom right, when the alert is turned on, the right upper corner of the video window will display the alert icon and not to display it when the alert is turned off, as shown in below figure:

Tiandy	Ho	me page	Data statis	tics Re	al-time preview	Equipment management				0 0 1 0 - 0 x 005923
Device List		1247								Real-Time History
C	2	020-1	2-16 V	Ved 09	9:59:17			CI	nannel 1	
192.148.16.222										Keven 2020-12-16 09:59:02
										Kely 2020-12-16 09:59:01
		4649-14714-71-18	5 and 10-000-pairs	-				Га		
	6	1 <b>4</b> 4 🐁							800000	
		eal-Time Histor								2020-12-16 09:57:22
Ver		Youth Male No mas Wearin	ik g glasses W	Youth Male No mi Wear	isk ng glasses	Youth Male No mask Wearing glasse	s Youth Female No mask Not wearing method	glasses	Youth Male No mask Wearing glasses	
PTZ Control		02.168.16.221-Chan		192 168 16 221-Cha		192.168.16.221-Channel 1	192 168 16 221-Channel 1	1 192 168 1	6 221-Channel 1	
Advanced Function		1020-12-16 09:58:28		2020-12-16 09:58 2		2020-12-16-09-58-25	2020-12-16 09:58:21	2020-12-1	6 09 57 22	2020-12-16 09:55:33

Figure 5.2.2.2

#### 5. 2. 2. 1. Toolbar in video preview interface

The description of icons in toolbar in video preview interface is as follows:

Icon	
•0	Capture all, to capture windows of all connected videos at current screen.
**	Start all recording, record windows of all connected videos at current screen.
<b>Q</b> e	Intercom list, display current intercom status.
	Save view, users click to save current view information.
۹.	Rotating display plan, allow users to set their own switch mode, so that Easy7 can automatically switch video channels on [Real-time preview] interface for users'

	convenient browse.
	Start rotating display, automatically switch video channels
	to preview according to rotating display plan.
	Group switching list, click this button to display group
	switching list. There will have devices in the list only
	when right click the device group in customized device list
	of device list on the left to select and add devices to [Add
	to group switching list].
	Start/Stop group switching, open video window, click this
<u>[]</u>	button to conduct group switching; click again to stop
	group switching.
	Set number of video views, click and the setting menu of
	displayer will pop up.
	Full screen, click to display video window at full screen.
	Click ESC button or right click the video to cancel
	full-screen display to escape from full-screen model.
	Indicate that the video connecting status is direct
<b>P</b>	connection
×	Turn off the video, i.e. disconnect the connection of
<b>T</b>	present video.
<b>\$</b> )/	Turn on audio / Turn off audio
0	Screen capture, capture the picture of the present video.
<b>**</b>	Turn on tape recording / turn off tape recording

Table 5.1.2.1

# 5. 2. 2. 2. Right key menu of video preview window

Right click video preview window and the right key menu of video preview window will pop up, as shown in below figure:

Turn off the video		
Audio pre-view		
Snap shot		
Adjust the video's aspect ratio	►	√Filled
control	►	4:3
Switching of main code and subcode streams		16:9
Video parameter		16:10
Time calibration		9:16
Change channel name		
Full screen		
Manual alarm		

Figure 5.2.2.3

The description of related parameters is as follows:

Parameter	Description
Type off the yideo	Click on the single video window of connected video
Turn on the video	to turn off the video in the window.
Andia ma view	Click on the single video window of connected video
Audio pre-view	to listen to the audio of video channel in the window.
Snon shot	Click on the single video window of connected video
Shap shot	to take snap shot of the window.
Adjust the video's aspect	Adjust the video's aspect ratio, filled, 4:3, 16:9, 16:10
ratio	and 9: 16 supported.
Control	Electronic amplification and fast ball 3D control are
Control	available.
Electronic emplification	After enabling the electronic amplification function,
Electronic amplification	press and hold left button of mouse and move the

	mouse in video & image area to choose the area you
	want to amplify (roll the pulley of mouse to amplify
	the image in the area chosen).
	By clicking mouse, the scenes monitored are adjusted to video center. In detail:
	1. Click the left button on the point of monitored video and the point will move to center of the video.
Fast ball 3D control	2. Press and hold the left button and move the mouse downward and rightward to choose a rectangular area. The center of the rectangular area chosen will move to the center of the video and amplify.
	3. Press and hold the left button and move the mouse upward and leftward to choose a rectangular area. The center of the rectangular area chosen will move to the center of the video and shrinks.
Switching of main code and	Auto switch between main code and subcode streams.
subcode streams	Support simultaneous switch among native video.
Video parameter	Set the display parameter of currently selected video: brightness, contrast, saturation and Hue.
Video parameter × Brightnes: Contrast Saturation Hue Restore Default	Modify video parameters of selected video, restore default supported.
Time calibration	Conduct time calibration on the on-line device.
Change channel name	Change the name of currently selected channel.
Full screen	Display video view window at full screen.
Manual alarm	Cancel the current alarm in the channel in video manually.

Table 5.2.2.2

# 5. 2. 2. 3. Rotating display plan

The main function of rotating display plan is to allow users to set their own

switch mode, so that Easy7 can automatically switch video channels on [Real-time preview] interface for users' convenient browse.

1) Add view:

After configuring the split screen scheme and the video played, click " " in preview interface toolbar to save view, as shown in below figure:

Save view					
View Name Please enter view name					
Save to Cruise Plan					
	ОК	Cancel			

Figure 5.2.2.4

**2**) Add rotating display plan:

Click view bar on the left and select the view to be added, right click "Add to the regular rotating switch program", as shown in below figure:

Device List	· ·	
View	▼	
test-face	Name change Added to the regular rotating switch program Delete	

Figure 5.2.2.5

**3**) Set rotating display plan:

Click " in preview interface toolbar in bottom right to enter to List of view rotating display plan interface, as shown in below figure:

View Cruise Plan List X						
🖉 Modify	🗇 Delete	A Move u	レ Move d			
	View Name	Time inter	val(s)			
	westdoor	30				
	Clo	se				

Figure 5.2.2.6

(1) Change the rotating display intervals: tick and select the view to be

modified, click " Modify " too change the rotating display interval (the range of interval value is 30~3600s), as shown in below figure:

Modify the cruise intervals				
time interval		3(		
	ОК		Cancel	



(2) Delete: tick and select the view to be deleted, click " <sup>Delete</sup>" to delete

the view, as shown in below figure:



Figure 5.2.2.8

(3) Move upwards/Move down: tick and select the view to be moved, click

"<sup>A Move upward</sup> & Move down" to adjust the view play order.

**4)** Turn on/Turn off rotating display plan:

Click " in preview interface toolbar on bottom right to turn on rotating display plan, click again to turn off rotating display plan.

### 5. 2. 2. 4. Group switching setting

#### **1**) Add group switching:

Right click a group in "Device list" on the left, click "Add to group switching list" to add group switching, the pop-up notice box is shown as follows:

Notice		×
Succeeded	to add to view	cruise plan.
	ОК	

Figure 5.2.2.9

**2**) Set group switching:

Click "IPI" in preview interface toolbar on bottom right to set interval and group split screen number of group switching, as shown in below figure:





(1) Set group switching interval: set group switching interval in upper part of the interface, the range of interval value is 30~3600s.

(2) Set split screen number, - $\times$ - screen (not to change split screen number and keep original split screen number),  $1\times1$  screen and  $2\times2$  screen supported. Two methods can be adopted to change split screen number, explained as follows:

1)Click " Modify " to enter Set Split Screen Number interface;

(2)Double click the split screen number in Group Split Screen to set enter Set Split Screen Number interface, as shown in below figure:



Figure 5.2.2.11

**3**) Turn on/Turn off group switching:

Click "O" on preview interface toolbar on bottom right to turn on group switching, click again to turn off group switching.

#### 5. 2. 2. 5. Target Information

Under and in the right of real-time preview interface, display information of identified persons and the comparison human face database, as is shown in below figure:



Figure 5.2.2.12

The target information can identify the person's age, sex, whether or not wearing

a mask, whether or not wearing glasses, detected physical temperature and detection time in real time. At the same time, it can also identify whether the person matches in the human face database. If yes, it can be compared with the pictures uploaded in the database, and the similarity, the name of the person and the detection time will be displayed, otherwise stranger alarm will be on.

If previous record needs to be checked, shift to "History" to check history information.

### 5.2.3. View

View list shows currently saved view tag, double click to preview the information of this view. Right click this list view node and a menu will pop up, as shown in below figure:

Name change	
Added to the regular rotating switch program	
Delete	

Figure 5.2.3

The description of related parameters is as follows:

Parameter	Description
Name change	Click to change view name.
Add to the regular	Click to add the view to the regular rotating switch plan
rotating switch plan	list.
Delete	Click to delete this view information node from view list.

Table 5.2.3

### 5.2.4. PTZ control

PTZ control may control PTZ speed, preset, etc., as shown in below figure:





The description of icons on PTZ control interface is as follows:

Icon	Description
	8-direction key, press corresponding direction key to control PTZ to rotate in the direction accordingly; the center button is scan shortcut key.
Q∕€	Zoom control button, press "Q" to control the device to perform zoom-out operation, the field of view angle becomes larger and the scene becomes smaller; press "Q" control device to perform zoom-in operation, the field of view angle becomes smaller and the scene becomes larger.
<b>بَفِ:</b> / بَنْ:	Focus control button, press "" to control the device to perform focusing-in operation, the near scene is clear and the far scene is fuzzy; press "" to control the device to perform focusing-out operation, the far scene is clear and the near scene is fuzzy.
0/0	Aperture control button, press " <sup>(©)</sup> " to control the device to perform aperture reduction operation, press

	" • to control device to perform aperture
	enlargement operation.
Speed —	The slider can adjust the rotation speed of the device.
Preset 1	Set the preset number for calling.
	Call the preset. Select saved preset, click to call and
Ŵ	the screen will jump to the preset part.
	Set the preset. Select the preset number to be saved,
Z	adjust the screen to the preset to be saved, click Set to
	save this position.

Table 5.2.4

# 5.2.5. Senior

Senior may set the light, power and wiper, as shown in below figure:

Advanced Fur	nction	•
Light		
Open	Close	
Power		
Open	Close	
Wiper		
Open		



The description of related parameters is as follows:

Parameter	Description
Light Close	Open/close light.
Power Open Close	Open/close power.

Wiper	
Open	Open wiper.

Table 5.2.5

# 5.3. Video playback

Click the video playback icon Click the video playback interface, query of video recording and time-based video downloading are supported, as shown in below figure:



Figure 5.3

# 5.3.1. Video query

In video playback interface, click Watch point on the left, set range of time for query, if more precise query is required, click "**More**" to set storage type, stream type and other screening conditions for query, then click "**More**" again to hide detailed screening condition, as shown in below figure:

Monitoring point 🗸	Monitoring point 🗸
Q	Q
🖃 🖬 Device List	🖸 🖬 Device List
	III.30.10.80
10.30.10.5 📄 🖬	🗄 🗹 💼 10.30.10.5
192.168.15.184	192.168.15.184
192.168.1.31	
192.168.16.221 🖬 🗹	<table-of-contents> 🗹 💼 192.168.16.221</table-of-contents>
E 📄 💼 192.168.16.222	∃ 192.168.16.222
192.168.1.80	🛨 📃 💼 192.168.1.80
	Query Time Range 2020-11-28 00:000 00 2020-11-28 23:59:59 ▼ More Storage location
Query	Remote storage
2020-11-28 00:00:00 2020-11-28 23:59:59	Stream type
▲ More	Mainstream
Query	C Time-based download
Query results	Query results

Figure 5.3.1.1

Select range of time, select the start time on the start calendar of the time range and the end time on the calendar for the end time.

When front-end storage is selected in storage type, following stream types can be selected, both main code stream and subcode stream supported.

When conditions are selected, click Query to display query result notice box, as shown in below figure:



Click "<sup>Query results</sup> below to check current query results, the expanded interface is shown in below figure:

50



Figure 5.3.1.3

At this time, the query results will be displayed on the progress bar, and users can playback by clicking the time point on the progress bar

## 5. 3. 2. Video playback

Play mode 1: for queried videos, double click one video file to realize playback of the file.

Play mode 2: select a playback window, click *for the playback control to realize video playback on time axis related to selected window.* 

Play mode 3: select a playback window, directly click the time point in time axis to play back from that time point.

#### 5. 3. 2. 1. Playback control

The playback control menu is shown as follows:



Figure 5.3.2.1

The description of icons on playback control interface is as follows:

Icon	Description
	Slow forward button, click to make the video file play
*	slowly.
	Note: as for the equipment added by P2P direct

	connection, click the "slow play" button to slow from 4x
	to 2x and from 2x to 1x. 1x speed is the slowest. 1/2 speed
	is not supported.
	Fast forward button, click to make the video file play
	quickly.
	Note: the equipment added by P2P direct connection
	supports 4X speed playing at most.
N II	Play/Pause button, click to control the start/pause of video
<b>P</b> / <b>H</b>	file.
N	Step forward button, click to make the video file play
	frame by frame.
-	Stop button, click to stop the playback of current video
-	file.
ā	Snap shot button, click to snap shot the selected video file
0	being played.
	Video clip button: click it to start video clip and click it
	again to finish that. The time axis of clipped section will
~	become red and the target section will be saved. The
00	format of video saved can be modified by setting "system
	settings -> video -> download video format"; two formats
	sdv and mp4 are available.
	Set screen number button, click to pop up the menu of
	playback window split screen.
	$1 \times 1$ screen playback supported, click and the video
	playback window will display in single screen.
	$1 \times 2$ screen playback supported, click and the video
	playback window will display in two split screens.
	$1 \times 3$ screen playback supported, click and the video
	playback window will display in three split screens.

	2×2 screen playback supported, click and the video
	playback window will display in four split screens.
===	3×3 screen playback supported, click and the video
	playback window will display in nine split screens.
	4×4 screen playback supported, click and the video
	playback window will display in sixteen split screens.
	Full screen display button, click to display the playback
	window in full screen. Click ESC or right click to cancel
	full screen display to turn off full screen display.
<b>∢</b> »	Volume adjustment bar, drag to adjust the sound of video
	playback. Click on the horn to turn sound on/off.
/+	Used to adjust the accuracy of time axis.
Window 1	Display the current control window number.
	Video type filter button, click to filter the video time axis
T	type, and the time axis of unselected video type will not be
	displayed. The filter of all types, alarm recording, timing
	recording and manual recording is supported.

Table 5.3.2.1

## 5. 3. 2. 2. Right key menu of playback window

In video playback window, right click, and the right key menu of playback window will pop up, as shown in below figure:



Figure 5.3.2.2

The description of related parameter is as follows:

Parameter	Description
-----------	-------------

Stop playback	Click to stop the playback of current video.
Snap shot	Click to snap shot of selected playback window.
Change channel name	Click to change channel name of selected playback
	window.
Full screen	Click to display the playback window at full screen. Click
	again to turn off full screen display.
Electronic zoom	Click the left button of mouse to choose and zoom in the
	area.

Table 5.3.2.2

## 5. 3. 3. Video downloading

The downloading is divided into two modes: by file and by time segment.

#### 5. 3. 3. 1. Download by file

### **1**) Batch downloading:

In video playback interface, click query result to check query result interface,

tick and select several video files and right click, click """ to conduct batch downloading, as shown in below figure:



Figure 5.3.3.1

Click "I" to enter export progress list interface to check the progress of file downloading, as shown in below figure:

Output the list of progress					×
Front-end expo Loca	ally exporte				
File name	Size(MB)	Export time	Progress	Status	Storage path
U00C0M2020112723	508.30	2020-11-28	10%	Downloa	C:/Users/07378/App
U00C0M2020112801	508.29	2020-11-28	0%	Waiting	C:/Users/07378/App
Export total:2 Exported	a finished0				

Figure 5.3.3.2

### **2**) Stop export:

Stop Export

In export progress list, select the file needs to stop export, right click this file,

select "

" to stop downloading the file, as shown in below figure:

Output the list of progress	;				×
Front-end expo Lo	ally exporte				
File name	Size(MB)	Export time	Progress	s Status	Storage path
U00C0M2020112723	508.30	2020-11-28		3% Stop	C:/Users/07378/App
U00C0M2020112801	. 508.29	2020-11-28		Stop exporting Re-export Clean Record Clean All	C:/Users/07378/App
Export total:2 Export	ed finished0				

Figure 5.3.3.3

#### **3**) ReExport:

In export progress list, select the file needs to re-export, right click this file,

select " ReExport " to export this file again to download.

**4**) Clean record:

In export progress list, right click a file, select " Clean Record " to delete all downloaded records.

**5**) Clean all:

In export progress list, right click a file, select "Clean All" to delete all downloaded records in the list.

(Note: When downloading front-end storage video files, only one record file can be downloaded at the same time.)

#### 5. 3. 3. 2. By time segment

The video on the front-end storage supports downloading by time segment.

Select the channel you want to download (either through the drop-down menu or by clicking the channel in the tree list), select the time segment you want to download,

and then click " Time-based download

## 5. 3. 4. Recent browsing

Record the latest video and click to preview it, as shown in below figure:



Figure 5.3.4

# 5.4. System Configuration

Click the system configuration icon and on home page to enter system settings interface.

# 5. 4. 1. Common settings

Tiandy	Home page         System configuration	0 ⊕   ⊕ – ⊡ × 10.59.21
Common Settings	Login Settings	
Storage management Intelligent application P2P setting	Path Setting Save path of capture photo sx07278/kgObia/RoamingEaryClinistPicture Browse Video Download Save Path 2728/kgObia/RoamingEaryClinistPicture Browse	
	system Language English • "take effect after reboot Skin dark •	
	Dafa backup database backup Backup Recover Reset Re index Configuration Dulput Import "Table effect white rebood	
	Log Settings. Period of teeping operation tog 30 dam • Period of teeping alarm tog 30 dam •	
	Restore Default	-

Figure 5.4.1.1

The description of related parameters in the interface is as follows:

]	Parameter	Description
Login Settings	Automatic Login Software	Tick and select, after fill in correct [User name] and [Password] by users, Easy7 will realize automatic software login function when the operation system starts.
Path Setting	Save path of capture photo Video Download Save Path	The save path of capture, preview and playback photo. The save path of video download.
System	Language	Set the language of software system, effective after restart.
System	Skin	Set the skin of software system, effective after restart.
Data backup	Data backup path	Back up, recover, clean up and re-index

		software database backup files.				
		Export equipment list, user right and				
	C	electronic map by pressing one key,				
	Configuration	import new configuration files and restart				
		it to take effect.				
	Period of keeping	Cat the same time of each exercise last				
Log Sottings	operation log	Set the save time of each operation log.				
Log Settings	Period of keeping	Set the save time of each slown log				
	alarm log	Set the save time of each alarm log.				
		Restore the configuration of current page				
Res	store Default	to the configuration information when				
		initially installed.				

Table 5.4.1

# 5. 4. 2. Video Settings

Tiandy	Home page	System configuration					
🌣 Common Settings							
ট Video Settings	Automatically restore the stat						
🛕 Alarm grade	Switch between M	lain and Su 💿	Automatic 🔵 Mar	nual			
🖴 Storage management							
😭 Intelligent application	Automatic Switchin	ng Screen	4				
P2P setting	Manual Default Co	onnection					
	Play property sett	ing	Good fluency				
	Decoding mode setting		Software decode				
	Video download fo	ormat	SDV format				
	Preview frame rate	e I	nide				

Figure 5.4.2

The description of related parameters in the interface is as follows:

Parameter	Description
-----------	-------------

Automatically restore	The video connected to video preview, when turns on the		
the state last time you	software again, the video before turn-off will restore		
exit from the system	connection.		
Switch between Main and Sub Streams, Automatic Switching Screen Number	Set switching screen number, when the number of windows displayed in the client-side video browsing interface is greater than the number of split screens, the connected channel video will default to the subcode stream.		
Manual Default Connection	Set the code stream type of default play.		
Play property setting	Available to set Good fluency/Minimum delay. Take effect after replaying video.		
Decoding mode	Software decode and hardware decoding are supported,		
setting	effective after restart. Take effect after reboot.		
Video download	The download recording may set SDV (private format)		
format	and MP4 (general format).		
Preview frame rate	Show or conceal frame rate on preview screen. Take effect after accessing video again.		

Table 5.4.2

# 5. 4. 3. Alarm grade

Tiandy	Home page System configuration	0 0   0 - 17 × 11.06:17
<ul> <li>Common Settings</li> <li>Video Settings</li> </ul>	1Grade #	
A Alarm grade	Offine Video loss alarm Audio loss alarm Disk absence on unit exception, Recording exception on unit	
	Sharphy increasing capacity a	
Storage management		
Intelligent application		
P2P setting	2Grade •	
	[ Disk full on unit exception ] Disk read/write error on unit] (IP conflict on unit exception ] Absence of redundant disk o] MAC address conflict detecti] Array exception on unit exce]	
	Hot backup exception on unit) Disk overloading on unit exce) Flard disc Smart exception on) faird disc temperature except)	
	30rade	
	Online Warming permeter Warming single told line	
	(intelligent analysis of tracking) intelligent analysis of flow sta intelligent analysis of mass g intelligent analysis of off post intelligent analysis of water le intelligent analysis of audio di	
	Intelligent analysis of face sh Intelligent analysis of filegal p Intelligent analysis of vigilance intelligent analysis of vehicle Intelligent analysis of particing Intelligent analysis of hemet	
	Inteligent analysis of wearing inteligent analysis of not wea Alarm on inteligent analysis Comparison alarm Strangers call the police indoor electric vehicle testing	
	Sorade •	
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Figure 5.4.3

Drag the alarm type label to other grades to set the type to a new grade. Alarm grade is used for alarm record filter.

Tiandy	Home page Sys	tem cor	nfiguration				
🍄 Common Settings	Continuous recording time (	20					
Video Settings	Continuous recording time (	50					
Alarm grade	Record format	sdv					
Storage management							
intelligent application	Type of recor	Mainstr	eam				
P2P setting	Min. disk space	🖲 Ву р	ercentag	O By space			
		10			%		
	Disk full	Delete data      Stop storing data					
	Storage locat		Location	Total size (C		Available space (%)	Available space (G)
	Store face snapshots and I			150		23.8	36
			D:/	261		44.8	117
			E7 54	260		9.9	26
				200		03.3	217

# 5. 4. 4. Storage management

Figure 5.4.4

The description of related parameters in the interface is as follows:

Continuous recording	Set the time of continuous recording (recording				
time (min)	packaging), the time range is 5~120 min.				
Record format	SDV format and mp4 format are supported for recording storage.				
Type of record streaming	Main code stream and minor stream supported.				
Min. disk space Supported to set by percentage (%) or by space (G), in corresponding parameter in the text box below.					
Disk full	Supported to select and delete the earliest local recording or stop recording.				
Storage location	Set the storage location of files.				

Table 5.4.3

# 5. 4. 5. Intelligence application

Tiandy	Home page	System configuration
🏟 Common Settings	Smart application: whe	ether to enable the client to receive face and gate pictures
Video Settings	Enable	
🛕 Alarm grade		
🖴 Storage management	Duration of picture	e storage ( 30
fintelligent application		
P2P setting		
	Deletion strate	egy
	Duration of and a	
	Duration of saving	

Figure 5.4.5

After ticking "enable intelligent applications", pictures of human face and man lock can be received. The picture snapshot reserve time can be defined for actual need.

After checking deletion strategy, the strategy can be executed after the upper limit of the stored guest flow duration (6-24 months be supported to choose from) is reached.

# 5.4.6. P2P setting

Tiandy	Home page	System configuration	
🔅 Common Settings			
Video Settings			
🛦 Alarm grade	P2P s		
Storage management	Regio China	▼	
😭 Intelligent application	. Save *	Take effect after reboot	
P2P setting			
	User		
	Pass		
	Login		

Figure 5.4.6

The description of related parameters in the interface is as follows:

Parameter	Description				
Region	The place of P2P equipment configuration				
User name	Enter the user name of P2P mobile phone client side				
Password	Enter the password of P2P mobile phone client side				
Log in	Enter correct user name and password to log in successfully.				
Save	Click "save" to save the current configuration. That takes effect after restarting the program.				

Table 5.4.6

# 5.5. Alarm management

Click the alarm management icon on home page to enter alarm management interface.

## 5. 5. 1. Real-time alarm

Real-time alarm list displays the alarm received after this login. The list will be refreshed automatically, time of alarm, source of alarm, type of alarm, alarm grade and other alarm information will be displayed, as shown in below figure:

Tiandy	Home page	Alarm management				0018	- • × 11:17:38
Real-time alarm	History alarm						
Check	L)			Filter level	Select all	ଏ Grade 1 🔹 ଅ Grade 2 🔹 ଅ Grade 3 🍨 ଅ Grade 4 🍨 ଅ Gr	ade 5 鱼
	Time of alarm	Source of alarm	Alarm Type	Alarm status	Preview	Alarm grade	
	2021-11-25 11:17:35	192.168.23.53-Channel 1	Video motion alarm	Alarm	Play	5Grade 🔍	
	2021-11-25 11:17:33	192.168.23.53-Channel 1	Video motion alarm	Alarm removal		5Grade 😐	
	2021-11-25 11:17:22	192.168.23.53-Channel 1	Video motion alarm	Alarm		5Grade 😐	
	2021-11-25 11:17:04	192.168.23.53-Channel 1	Video motion alarm	Alarm removal		5Grade 😐	
	2021-11-25 11:16:36	192.168.23.53-Channel 1	Video motion alarm	Alarm		5Grade 😐	
	2021-11-25 11:16:33	192.168.23.53-Channel 1	Video motion alarm	Alarm removal		5Grade 🤍	
	2021-11-25 11:16:13	192.168.23.53-Channel 1	Video motion alarm	Alarm		5Grade 🤤	
	2021-11-25 11:16:11	192.168.23.53-Channel 1	Video motion alarm	Alarm removal		5Grade 😐	
	2021-11-25 11:16:00	192.168.23.53-Channel 1	Video motion alarm	Alarm		5Grade 😐	
	2021-11-25 11:15:29	192.168.23.53-Channel 1	Video motion alarm	Alarm removal		5Grade 😐	
	2021-11-25 11:15:19	192.168.23.53-Channel 1	Video motion alarm	Alarm		5Grade 🤤	
	2021-11-25 11:15:09	192.168.23.53-Channel 1	Video motion alarm	Alarm removal		5Grade 😐	
	2021-11-25 11:12:52	192.168.23.53-Channel 1	Video motion alarm	Alarm		5Grade 😐	
		192.168.23.53-Channel 1	Video motion alarm	Alarm removal		5Grade 🔍	
	2021_11_25 11:12:33	102 168 23 53_Channel 1	Video motion alarm	∆larm		5Grada 😐	
<b>A</b>			©Tiandy	Co.,Ltd All Rights Reserv	red		admin

Figure 5.5.1

The description of related parameters in the interface is as follow:

Parameter	Description			
	Tick and select alarm records need to be checked, click to			
	fill in handling suggestion, the checked alarm records will			
Check	be removed from real-time alarm, the handing suggestion			
	and checking status will update to the history alarm record			
	of corresponding alarm record.			
Audio	Click to turn on/off alarm audio.			
	Click to play the video 10s before and after the time of			
Play	alarm, if there's no video, real-time preview will be			
	displayed.			
	Tick and select filter level, the selected level will be			
Filter level	displayed in the list, nothing will be displayed if on level			
	selected.			

#### Table 5.5.1

# 5. 5. 2. History alarm

	History	alarm	list	displays	all	alarms,	including	checked	and	unchecked	alarms,
as	shown in l	below	figu	re:							

There also										
Tianay	Home page		management							
Real-time alarm	History alarm									
Starting time	2021-11-25 00:00:00 🗐	End time 2	2021-11-25 23:59:59							
Source of alarm		Alarm Type	NI.		Status check All		User check All	•	Query	Reset
Check	Outrut						all 🗆 Crada 1 🗛 🛛	Crade 2 . C. Crada	2 a 🖂 Crada 4 d	Crada 5
Clieck	Output									
	Time of alarm	Source of a	alarm	Alarm Type	Alarm status	Preview	Alarm grade	Status check	User check	Time chec
	2021-11-25 11:17:35	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm		5Grade 🔍	Not confirmed		
	2021-11-25 11:17:33	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm removal		5Grade 🔍	Not confirmed		
	2021-11-25 11:17:22	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm		5Grade 🔍	Not confirmed		
	2021-11-25 11:17:04	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm removal		5Grade 🔍	Not confirmed		
	2021-11-25 11:16:36	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm		5Grade 🔍	Not confirmed		
	2021-11-25 11:16:33	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm removal		5Grade 🔍	Not confirmed		
	2021-11-25 11:16:13	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm		5Grade 🔍	Not confirmed		
	2021-11-25 11:16:11	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm removal		5Grade 🔍	Not confirmed		
	2021-11-25 11:16:00	192.168.23.53-0	Channel 1 Vid	eo motion alar	rm Alarm		5Grade 🔍	Not confirmed		
<										
			Total140Piece To	tal3Page 50	Ditems/page 🔻 < 1	2 3 → Te	D 1 Page			
<b>A</b>					Tiandy Co., Ltd All Rights Re	served				admin

Figure 5.5.2

The description of related parameters in the interface is as follows:

Parameter	Description					
Starting time	Available to set the starting time of history alarm query.					
End time	Available to set the end time of history alarm query.					
Source of alarm	Available to set the source of alarm of history alarm query,					
Source of alarm	search by key word supported.					
Status chock	Available to set the checking status of history alarm query,					
Status check	including all, unchecked and checked.					
User check	check Available to set the checking user of history alarm query					
Quory	Click to search history alarm information conforms to					
Query	search condition.					
Reset	Click to restore to default query condition.					
	Tick and select alarm records need to be checked, click to					
Chaok	fill in handling suggestion. Update verification status,					
Check	verify users, verify real-time, and process comments after					
	verification.					

Output	Click to output query results to local device.						
	Tick and select filter level, the selected level will be						
Filter level	displayed in the list, nothing will be displayed if on level						
	selected.						
	Click to play the video 10s before and after the time of						
Play	alarm, if there's no video, real-time preview will be						
	displayed.						

Table 5.5.2

# 5.6. TV Wall

Click the TV wall icon on homepage to enter TV wall configuration interface. There are functions of TV wall configuration, TV wall management and off-line switch settings as shown below.

Tiandy	Home page	TV Wall		
TV wall confi TV wall	Offline switc			
Q	TV wall name test	- 🙂 🗢 🖨		
🖃 🔲 💭 Device List				
E 192.168.23.52				
<ul> <li>田 192 168 23 52De</li> </ul>		192 168 23	23.52Deco. 192.198.23.52Deco.	
<ul> <li>□ 192 168 23.52De</li> </ul>		192 168 23	23 52D+co. 192 198 23 52D+co	
□ 田 192.168.23.52De				
■ 192 168 23.52De ■ 192 168 23.52De ■ 192 168 23.52De				
■ 🖽 192 168 23.52De				
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Figure 5.6

## 5. 6. 1. TV wall configuration

Wall layout can be configured on the TV wall configuration page. Click the button to enter the name of TV wall layout and then click "OK". In this way, the name of TV wall layout can be added as shown below:

Add TV wall lay	out	×
Name		
	ок	



The current name of TV wall layout can be modified by clicking the button <sup>(2)</sup>. After clicking "OK", the name of TV wall layout can be modified as shown below:

Modify the name of the TV wall layout						
Name						
	OK					



To delete a TV wall layout, choose a layout name and click the button  $\bigcirc$ . The layout data cannot be recovered after the layout is deleted. Therefore, there is a prompt box for your confirmation. Click "Yes" button to delete the current TV wall layout; click "Cancel" to retain the TV wall layout, as shown below:



Figure 5.6.1.3

After setting the name of TV wall, click the lower configuration list to configure TV wall layout. It supports 1 screen, 4 screens, 9 screens, 16 screens and user-defined screen settings. At the same time, every screen can be adjusted, such as left justifying and right justifying. The parameters and description are shown below:

Parameter	Description
>	Binding: tick "Decoding output channel" in equipment
	list, tick TV wall screen on the right and click it to bind the
	current decoding output channel with the screen.
	Unbinding: choose TV wall screen on the right and click it
<	to unbind the current decoding output channel with the
	screen.
	Add 1 screen
	Add 4 screens
	Add 9 screens
	Add 16 screens
×	Define the rows of screens
×	Click to choose the screen to be deleted
Ē	Clear screens: delete all the screens on current TV wall.
Ī	Left justifying: choose two screens at least and click to
	justify to the left side of the first screen chosen.
Ī	Right justifying: choose two screens at least and click to
	justify to the right side of the first screen chosen.
	Top justifying: choose two screens at least and click to
∎∎Ţ	justify to the top side of the first screen chosen.
<u>Ont</u>	Bottom justifying: choose two screens at least and click to
	justify to the bottom side of the first screen chosen.
: <b>D</b>	Equalize size: choose two screens at least and click to
i	equalize size with that of the first screen chosen.
8	Splicing: choose two screens at least and bind decoding
	output channel. The splicing shapes shall be regular (such
	as rectangle). Click to splice successfully.
N	Cancel splicing: choose the spliced screens and click to
	cancel the splicing.

	Save: Click the button after setting TV wall. In this way,
	the TV wall screen layout can be saved.

Table 5.6.1.1

Wall resolution can be configured on TV wall configuration page as shown below. There are three resolutions:  $1920 \times 1080$  50HZ,  $1920 \times 1080$  60HZ and 4K 30HZ. If 4K 30HZ is set, decoding can be output from only one route.



Figure 5.6.1.4

## 5.6.2. TV wall

TV wall interface is mainly used for configuring TV wall video display.

### 5. 6. 2. 1. TV Wall Video Configuration

Choose TV wall name on TV wall page to show the current TV wall layout. Choose a screen that needs video equipment. Choose the video equipment to be added in the left equipment list. One equipment can be added for only one time.

Tiandy	Home page	TV	Wall	© <b>©  </b> ⊕ − ⊡ × 1121:53
TV wall confi TV wall	Offline switc			
Device List	TV wall name	test 🔻	Local pre	view
٩				
🖃 🔳 🖿 Device List				
192.168.23.54				
<ul> <li>192 108 23 53</li> </ul>				
View 🔺				
PTZ Control				
Advanced Fu		8 8 8	6 6	
<b>A</b>				©Tiandy Co.,Ltd All Rights Reserved admin

Figure 5.6.2.1

The relevant icons and parameters on the interface are described below:

Parameter	Description		
Local preview	After starting preview, videos can be previewed on current		
	TV wall interface.		
	Set the quantity of screens. 1 screen, 4 screens, 6 screens,		
	8 screens, 9 screens, 16 screens, 25 screens and 36 screens		
	can be supported for every decoding output channel.		
	Choose decoding output channel and click screen quantity		
	to set the upper limit of screens of the decoding output		
	channel.		
	Click the button to show switch group list. Click the right		
	button to define the equipment group in equipment list on		
	the left, choose [Add to switch group list] to add		
	equipment in the list.		
Q	Start / stop group switch: open video window, click the		
	button to switch group; click it again to stop the group		
	switch.		
•	Save the view: click to save the current view information.		
	View browse plan: users can set suitable switch way and		

	Easy7 can switch video channel automatically on page
	[Real-time preview], which is convenient for users'
	browse.
2)	Start view browse and switch video channel automatically
	for preview according to the view browse plan.
È	Start all off-line switch, click to enable and start to watch
	decoding video of all output channels on decoder.
Ē	Stop all off-line switch, click to enable and start to stop all
	decoded videos.

Table 5.6.2.1

If splicing function of equipment is started, click the splicing screen with the right button as shown below.



Figure 5.6.2.1

The relevant icons and parameters on the interface are described below:

Parameter	Description
Picture setting of	The quantity of screens set by splicing unit can be defined
spicing unit	by user.

	User-defined X Number of rows Number of columns OK
Create display area	Choose the screen in splicing unit, click the right button to create display area.
Create all display	Click the right button to display the screen areas in all
areas	splicing units.
Close all display areas	Click the right button to close the screen areas in all splicing units.
All windows zoom to	Click the right button to shrink the maximized screen to
a single screen	the original.
Save screen scheme	Click the right button to save the display plan of screens in current all splicing units.
Application screen scheme	Click the right button to apply existing screen plan to current splicing unit.

Restart the host	Restart the current decoder.	
------------------	------------------------------	--

Table 5.6.2.2

The display area created by clicking the right button is shown below.



Figure 5.6.2.2

The relevant icons and parameters on the interface are described below:

Parameter	Description						
Turn off the video	Close the video preview on current splicing screen.						
Audio pre-view	Preview the audio effect of current splicing screen.						
Decoder audio preview	Display audio on decoder.						
Decoder offline	It is permitted to set video switching of current splicing						
switch	screen window.						
	Offine saitch setup       plate offine saitch       Stop offine saitch         Image: State setup       plate offine saitch       Stop offine saitch         Image: State setup       State offine saitch       Stop offine saitch         Image: State setup       State offine saitch       State         Image: State setup       State offine saitch       State         Image: State setup       Image: State setup       State         Image: State setup       State       Image: State         Image: State       Image: State       Image: State         Image: State       Image: State       Image: State         Image: State       Image: State       Image: State						
--	---	--	--	--	--	--	--
Switching of main code and subcode streams	Video preview effect can be switched between main code stream and subcode stream						
Video parameter	The brightness, contrast ratio, saturability and chroma of video can be modified.						
Close the display area	Close current display area of splicing screen						
All windows shrink to a single screen	Shrink all screens to single splicing screens						
Set to top / bottom	Choose the screens in splicing unit, click them to set to top layer / bottom layer.						
Other operations of splicing screens	As for every splicing screen, create / close display area, shrink to the screen, maximize all screens etc.; screen scheme can be saved and applied.						
Create all display	Click the right button to display the screen area in all						
areas	splicing units						
Close all display areas	Click the right button to close the screen area in all splicing units						

Zoom to a single	Choose the screens in splicing unit, click to shrink them to						
screen	a screen.						
Zoom to occupied	Choose the screens in splicing unit, click to spread them						
screen	on the screen fully.						
Maximize to all	Choose the screens in splicing unit, click to spread them						
screens	on all splicing units.						
Save screen scheme	Click the right button to save display scheme of screen areas in all current splicing units.						
Application screen scheme	Click the right button to apply existing screen scheme to the current splicing unit.						

Table 5.6.2.3

# 5. 6. 2. 2. Device list

Same as Real-time preview.

# 5. 6. 2. 3. View

Same as Real-time preview.

# 5. 6. 2. 4. **PTZ Control**

Same as Real-time preview.

### 5. 6. 2. 5. Advanced Function

Same as Real-time preview.

# 5. 6. 3. Offline switch setup

Offline switch configuration is used for TV wall screen switch setting on decoder, as shown below. Code stream type, switch time and display mode of every decoding output channel can be set.

Tiandy	Home page	TV V	Vall				
TV wall confi TV wall	Offline switc						
٩	Decode out	-			nitiate o	offline switch Stop offline sw	vitc
<ul> <li>Device List</li> <li>192.168.23.54</li> </ul>	Decoding ou	192.168.23.52Decode o	utput 1 🔻				
192.168.23.53 💼 🖬	Stream type	Mainstream					
	Switching ti	30	<b>^</b>	Set			
	Display mode	Single picture		Move upward	Move down		
	Cha	nnel Name	Length	of stay (seconds)		Stream type	
	192.1	168.18.43:6		20		Mainstream	
A		©Tiandy Co.,Lt	d All Rights Rese	erved			admin

Figure 5.6.3.1

Choose decoding output channel and set display mode (such as sixteen screens) as shown below.

Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type
Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type
Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type
Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type	Channel Name	ength of stay (second:	Stream type

Figure 5.6.3.2

Choose the equipment from the left equipment list for offline switch and drag the equipment to the channel. In this way, equipment can be added to the screen. As shown below, click "nitiate offline switch," at top right corner to start offline switching, or click the right button on screen list to start offline switching. One channel cannot be added to any screen repeatedly.

Channel Name	ength of stay (second:	Stream type
192.168.23.53:1	3 <sup>°</sup> Delete	•••• ream
	Delete a	all in the second s
	Offline s	switch

Figure 5.6.3.3

Choose the channels on screen, modify code stream type, switch time and sequence of channels on screen in above decoding output setting.

Parameter	Description				
Initiate offling switch	Click to enable and start it to watch decoding video of the				
initiate offinie switch	output channel on decoder.				
Stop offling switching	Click to enable and start it to stop playing the decoding				
Stop offine switching	video.				
Deceding output	The equipment supports several decoding output channels.				
Decoding output	Video effect of every decoding output channel can be set				
channels	for actual need.				
	Set code stream type of channels added to each screen.				
	Choose the channels whose code stream type shall be				
	changed from the following screen list, then choose code				
Stream type	stream type from the drop-down box of code stream types.				
	In this way, code stream can be switched.				
	Note: Before changing code stream type, it is necessary to				
	stop offline switching firstly.				
Switching time	Set the interval of screen switching (unit: second) in range				
Switching time	10 seconds ~ 1000 seconds. The interval shall be integer.				

Relevant parameters on the interface are described below:

	Choose the channel whose switching time needs to				
	change. After changing switching time, click the button				
	" <sup>Set</sup> " to update duration of screen stay.				
	Note: Before changing switching time, it is necessary to				
	stop offline switching firstly.				
	Set the screen display mode of decoding output channel,				
	such as single screen, screen in screen, four screens, 1-5,				
	1-7, nine screens and sixteen screens. 1-5 screen means 1				
	large screen and 5 small screens; 1-7 screen means 1 large				
	screen and 7 small screens. The sequence of channel				
Display mode	screens is in accordance with the sequence of addition. To				
	change the sequence, choose channel firstly and adjust				
	screen sequence by pressing " <sup>Move upward</sup> " or " <sup>Move down</sup> " Note:				
	Before changing channel display mode, stop offline				
	switching firstly.				

Table 5.6.3.1

# 5.7. Face recognition

Click the face recognition icon , on homepage to enter the interface of face recognition for face database management, face database download and face configuration as shown below:



Figure 5.7

# 5.7.1. Face database management

#### 5. 7. 1. 1. Personnel Query

Personnel can be inquired based on name, serial number and gender.

#### 5. 7. 1. 2. Face Database Addition / Modification / Delete

1) Face database addition

Click the right button on left "Face database list", choose "<sup>Add</sup>"'to create a new face database as shown below:



Figure 5.7.1.1

Enter name of face database and click "OK" button to create a new face database. The name of face database is exclusive.

2) Face database modification

Click the right button on the name of face database to be modified, choose

"Modify" enter a new name and click "OK" button to complete the modification.

3) Face database delete

Click the right button on the name of face database to be deleted, choose "<sup>Delete</sup>" and click "OK" button to delete the face database.

#### 5. 7. 1. 3. Face Image Addition

Choose the face database that needs face image addition, click "Add" to add face image as shown below:

Staff details						×
	Name			Date of birth	2021-11-25	Ē
	No.			Country	China	
	Card number			Province		
	Gender	🔵 Male 💿 Female 💿	Unknown	City		•
Local upload	Tel.			Company		
Image requirements: The format is JPG Size 300*300 to 800*800 Less than 1MB	ID type	ID card		Address		
	ID number					
		Next OK	Can	icel		

Figure 5.7.1.2

Click "local upload" to upload face image (required item). Image format shall be JPG and the dimensions shall be 300\*300~800\*800; the size shall not be larger than 1MB. The image shall be clear enough for easy face recognition.

Enter name of the image (required item).

Enter corresponding serial number of the person (required item). The serial number can be  $0 \sim 9999999999$ .

Other items are not required and can be filled in for actual demand.

Click "<sup>Next</sup>" to save information of the current person and create a new page of person information.

Click " or " to maintain current personnel information and close the page.

Click "<sup>Cancel</sup>" to close the current page of personnel information.

#### 5. 7. 1. 4. Add Existing Face Image

Choose a face database, click "<sup>Add existing</sup>" and choose the personnel to be added as shown below; click "<sup>OK</sup>" to complete the addition. The page of current personnel can be closed by clicking "<sup>Cancel</sup>".

Personnel list

Personnel list X						
Q						
🖸 🔲 🚢 Personnel information lis	t					
🕀 🔳 🚨 label						
🔲 🚨 lab2						
OK Cancel						

Figure 5.7.1.3

#### 5. 7. 1. 5. Delete (All) Face Image(s)

Choose the face image to be deleted, click "<sup>Delete</sup>" to delete the chosen image; to delete all face images, click "<sup>Delete all</sup>".

## 5. 7. 1. 6. Face Image Import / Export / Export All

1) Import

Click "<sup>Import</sup>" to enter the import page as shown below. Click "download import template" to download template of personnel information.

Import	×							
List of personnel information Staff information picture (name # ID no.)								
Imported organization needs to be included in the organiz	ation list							
Import file	Select files							
iload import tem								
ок	Cancel							

Figure 5.7.1.4

Fill personnel information in the template as shown below:

Atter	ntiorU	se the 1														
Pers	onnelS	erial nu	Card numb	Gender (	phone nu	Birthday	Country	Province	City	Address	Company	ID type	ID number	Image pat	Face libs	rary name
Zhang	g Sar1	23	6666	Female	123456789	2000-01-1	China	Tianjin	Tianjin	Xiging Di	i**** Co.,	ID card	120111200	C:/FacePi	Face data	abase

Figure 5.7.1.5

Tick "personnel information sheet" or "personnel information image (name # job number)", click "Select files" to import file, click "OK" to upload the file; click "cancel" to close the page.

## 5.7.2. Face database download

Choose the channel of face database download from left "equipment list" (the channel shall support face recognition).

Tiandy	Home page	Face recogni	ition	() <b>©   ⊖</b> − □ × 12:19:28
Face databa Face dat	Add	Remove Copy t	o	
<ul> <li>Device List</li> <li>192.168.23.54</li> <li>192.168.23.53</li> </ul>		Face database	nchronous stat	Operation
A		©Tiandy Co.,Ltd	I All Rights Reserved	admin

Figure 5.7.2.1

Click "<sup>Add</sup>" to choose a face database to be synchronized, then click "OK"

as shown below.

Fac	e database		×
		Face database	Create time
		label	2021-11-25 12:06:03
		lab2	2021-11-25 12:14:56
			OK Cancel

Figure 5.7.2.2

Status and result of synchronization can be seen on current page. If the synchronization fails, click "operation result" on "operation" page to find information of synchronization failure as shown below. If you want to try synchronization again, choose the content to be synchronized and click "



Click "<sup>Copy to</sup>" to copy it to other channel.

# 5.7.3. Face configuration

On the page of face configuration, face database can be started for current channel; face similarity can be set as shown below.



Figure 5.7.3.1

# 5.8. Inlet and outlet management

Click the exit / entrance management icon



, on homepage to enter exit /

entrance management page. Human gate and vehicle gate can be managed as shown below.



Figure 5.8

# 5.8.1. Gate management

Same as face recognition.

#### 5.8.1.1. Face database management

Same as face recognition.

#### 5. 8. 1. 2. Face database download

Same as face recognition.

### 5.8.2. Live view

The monitored areas can be previewed on the page of preview as shown below.

Equipment gate opening and lifting linkage is supported.

Tiandy	Home page	System configuration	TV Wall	Device management	Inlet and outlet management	-	① ●   ② − □ × 14:58:53
Gate management							
ALIVE VIEW	PAD			Open gate			
. History of the gate							
Checkpoint preview							
A History of checkpoint							
Δ			©Tiandy Co.,Ltd All F	Rights Reserved			admin

Figure 5.8.2.1

Click the right "<" to unfold equipment list, set real-time equipment preview sequence and the equipment shown. As shown below, choose the equipment to be

moved, click " <sup>Move upward</sup> or	Move down	" to change the sequence.
		Device
	N	PAD
		>
		Nove upward Move down

Figure 5.8.2.2

# 5.8.3. History of the gate

On the page of human gate history, access areas, user name and access time can

be searched as shown below.

Tiandy	Home page	System configuration	TV Wall	Device m	anagement	Inlet and outlet management	-	⊙ ●   ⊕ − ⊡ × 14:59:09
Gate management Live view	Access area All	▼ Name	Access time	2021-11-24 00:00:00	🖹 To 202	21-11-24 23:59:59	Query	Export history
. History of the gate	Serial number	Access area			Name	Trans	it time	Operation
2. Checkpoint preview								
. History of checkpoint								
		То	tal1Page 20iten	ns/page 🔻 < 1		1 Page		
<b>A</b>			©Tiandy Co.,Ltd	All Rights Reserved				admin

Figure 5.8.3.1

Click "View" to find access information of the user as shown below.



Figure 5.8.3.2

# 5.8.4. Checkpoint preview

Real-time captured image at checkpoint in current monitored area can be seen on the page of checkpoint preview as shown below. Information of vehicle can be found.

Tiandy	Home page	System configuration	TV Wall	Device management	Inlet and outlet management	•	© ⊜   ⊕ - ♂ × 14:59:23
Cate management Cue view Cue	Camera1111 License plate number Vehicle type Transit time	r Vehick Vehick Channel	color brand umber				
<b>A</b>	Driving direction		©Tiandy Co.,Ltd All Rights R	teserved			admin

Figure 5.8.4.1

Click the right "<" to unfold equipment list, set real-time equipment preview sequence and the equipment shown. As shown below, choose the equipment to be " to change the sequence.





# 5.8.5. History of checkpoint

Access area, license plate number and access time can be searched on the page of checkpoint history as shown below.

Tiandy	Home page	System configuration	TV Wall Dev	vice management		
🖀 Gate management	Access area All	Number of license plate	Access time	2021-11-24 00:00:00	📋 То 2021-11-24 23:59:59	Query
🙎 Live view	Serial nu	imber Access a	rea Number	of license plate	Transit time	Operation
History of the gate						
Checkpoint preview						
. History of checkpoint						
			Total1Page 20items/page V	1 > To	1 Page	
A			©Tiandy Co.,Ltd All Rights Reserv	ed		admin

Figure 5.8.5.1

Click "View" to find access information of the vehicle as shown below.



Figure 5.8.5.2

# 5.9. ElectronicMap

Click the electronic map icon on homepage to enter the page of electronic map management and operation as shown below.



Figure 5.9

Drag the image manually or operate mouse wheel to change position of the image or zoom it in.

# 5.9.1. Electronic Map Configuration

Click " Click " to configure the electronic map as shown below:



Figure 5.9.1

#### 5. 9. 1. 1. Add Map

Click "+Add...", as shown below, enter map name and choose route of map, click "OK" to save the current map; or click "cancel" to close the current page.

Add map		×
Map name		
Image path		Browse
	Confirm	]

Figure 5.9.1.1

#### 5. 9. 1. 2. **Delete Map**

Choose an electronic map from right list of maps, click "<sup>Delet.</sup>" and there will be a prompt dialog box as shown below. Click "Yes" to delete the electronic map; or click "cancel" to close the prompt dialog box and the map will not be deleted.





#### 5. 9. 1. 3. Modify Map

If you want to modify map name or the base map, you can click "<sup>2 Modif...</sup>", as shown below, click "OK" to save the current map; or click "cancel" to close the current page.

Modify map		×
Map name	Nacy	
Image path	36e35317d777a5bf06cb6ca.jpg	Browse
	Confirm	

Figure 5.9.1.3

#### 5. 9. 1. 4. Add / Delete Equipment

In the self-defined equipment list on the right of edit interface, choose the equipment to be added to the electronic map, drag it to the area that needs the equipment. In this way, data collection channel can be added. Drag channel equipment icon "Q" to change addition position.

If the equipment was added, "added already" will be prompted as shown below.

#### 🛯 👰 Channel 6 🛛 Added

To delete equipment, choose the equipment and click the right button on " Delete devices "; or choose the equipment in the left list of electronic maps, click " E3 Delet... ", to delete the equipment on the current electronic map.

#### 5. 9. 1. 5. **Configure Hot Zone**

Click " Content of the left electronic maps on the current electronic map as shown below. Tick the left electronic map and click " Import" to add the electronic map to the right linked area; or click " Export" to move back electronic map from right linked area to area of electronic map. Click "OK" to show the hot zone icon " on current electronic map. Drag it to set position of hot zone anew. Or click "cancel" to close the current page.

Configure hot zone		×
E-map	Related hot zone	
	A Import	
	LY Export	
	ferra	
Cor	dirm Cancel	

Figure 5.9.1.4

To delete the hot zone, choose it and click right button on "<sup>Delete hot zone</sup>". In this way, the hot zone can be deleted from current electronic map.

# 5. 9. 2. Electronic Map Preview



Figure 5.9.2.1

On the page of electronic map preview, the image can be dragged manually to change its position; or operate mouse wheel to zoom in.

Click "Fulls..." to preview the image on the whole screen. Click "DReturn" to return to the last step.

# 5. 10. User management

Click the user management icon on home page to enter user management

interface. The interface will display the basic information of all added users at that moment, as shown in below figure:



Figure 5.10

[Note] Only admin-super administrator account has the authority to enable this

function.



Click "Add user interface, as shown in below figure:

Add Use	ers			×
User level Adminstrater		Password		Please enter 6-32 digits password
User Nar	ne	Confir	rm password	
Validity	2031-11-25 15:50:02			
Descrip.				
	User authority			Permissions
	Video browsing authority			Q
$\checkmark$	PTZ control authority			
$\checkmark$	Replay authority			Device List
$\checkmark$	Download authority			<b>1</b> 92.168.2
	System lock-in authority			■ 192.168.2
	System unlocking authority			192.168.1
	Intercom authority			a nad
	Alarm verification authority			
	E-map browsing permission			
	E-map editing permissions			
	ОК		Cancel	

Figure 5.10.1

The description of related parameters in the interface is as follows:

Parameter	Description			
User level	el Set administrator or operator for current system.			
User name	Users to fill in any name.			
	[Note] There's illegal character limit when adding user			
	name, following characters are not allowed to be input			
	~!#\$%^()=[]{},":;'<>?*`+/\&.			
Password	To set password for newly added user.			
Confirm password	Needs to be the same as input "Password".			
Validity	Set the expire date of the authority for users.			
Description	Supplement and describe user information.			
User authority	Set the user authority of administrator or operator, such as			
	the authority of video browsing, PTZ control, video			
	playback, video download, system lock, system delock,			
	intercom, alarm check, etc.			

Permissions	Set devices permit user authority to apply.
-------------	---

Table 5.10.1

## 5. 10. 2. Edit user

Select the user needs to be edited, click "<sup>Edit</sup>" to enter Change users interface, as shown in below figure:

Edit User				>	<
User level	Super Administrator		Password	•••••	
User Name	admin		Confirm password	•••••	
Validity	2099-12-31 00:00:00				
Descrip					
	User authority			Permissions	
🗹 Vide	o browsing authority			Q	
🗹 PTZ	control authority				
🗹 Repl	lay authority			Device List	
🖂 Dow	nload authority			<b>192.168.2</b>	
🗹 Syst	em lock-in authority			■ 192.168.2	
🗹 Syst	em unlocking authority			192.168.1	
🗹 Inter	com authority			a 192.100.1	
🗹 Aları	m verification authority				
🗹 E-ma	ap browsing permission				
☑ E-ma	ap editing permissions				
		ОК	Cancel		



In the editing interface, the related information of the user can be changed, including user level, user name, validity, password, description, user authority and permissions. Admin-super administrator can only change password.

## 5. 10. 3. **Delete user**

Select the user needs to be deleted, click "Delete" and a notice box will pop up, as shown in below figure:

Notice		×
Sure to delete the	e selected user?	
Cancel	ОК	

Figure 5.10.3

Click "OK" to delete the selected user; click "Cancel" to cancel deletion.

[Note] Several users can be deleted at the same time.

# 5.11. Intelligent search

Click the intelligence retrieval icon lome page to enter the intelligence retrieval interface.

## 5.11.1. Face retrieval

Tiandy	Home page													
2. Face retrieval			Start time 2021-11			End time			Gender			Age group		
🖍 Indoor electric vehicle testing		We	aring mask			Wearing glasses			Body temperature measurement		₩2		Detries	
	🗄 🛎 🖿 Device List	Wee				wearing glasses			body temperature measurement				Realiteve	
	2 🖿 192 168.23.54	Output	Export all	Select all Invert Se	lection									
	🗉 📃 💼 192.168.23.53		Figure											
	192 168 16 221		-											
	Image: Applied to the second secon		Snapshot Time	Channel name	Gender	Age group	Nearing glasses	Wearing mask n	perature meas	Оре	ration			
	pad		021-11-25 15 55 41	192.168.18 Channel 1	Male	Youth	glasses	No mask	Invalid	Details	Playback			
	192 108 23 54		021-11-25 15:55:41	192 168 18 Channel 1	Male	Youth	Wearing glasses	No mask	Invalid	Details	Playback			
			021-11-25 15 55 41	192.168.18 Channel 1	Male	Youth	Wearing glasses	No mask	Invalid	Details	Playback			
			021-11-25 15:54:05	192 168 18 Channel 1	Male	Youth	Not wearing glasses	No mask	Invalid	Details	Playback			
			021-11-25 15 54 05	192.168.18 Channel 1	Male	Youth	Not wearing glasses	No mask	Invalid	Details	Playback			
			021-11-25 15 54 05	192.168.18 Chappel 1	Male	Youth	Not wearing	No mask	Invalid	Details	Playback			
			021-11-25 15:53:38	192.168.18	Male	Youth	Unknown	No mask	Invalid	Details	Playback			
			021-11-25 15:53:37	192.168.18	Male	Junior	Unknown	No mask	Invalid	Details	Playback			
		2	021-11-25 15:53:37	192.168.18	Male	Youth	Unknown	No mask	Invalid	Details	Playback			
			021-11-25 15 52 46	192.168.18	Male	Youth	Linknown	No mask	Invalid	Details	Playback			
			024 44 25 45 54-40	Channel 1 192.168.18	Male	histor	Unknown	No mark	Invested	Debula	Distance			
			021-11-20 10.01.10	Channel 1 192.168.18	Mare	Maria Maria	Wearing	No mask	Invalid	Deterio	The back			
			021-11-25 15:50.19	Channel 1 192.168.18	Male	Touen	glasses Not wearing	NO Mask	Invalid	Details	Fiajback			
		2	021-11-25 15:50:19	Channel 1	Male	Youth	glasses	No mask	Invalid	Details	Playback			
		2	021-11-25 15:50:18	Channel 1	Male	Youth	glasses	No mask	Invalid	Details	Playback			~
						Total147Pie	ce Total10Page		3 > To 1 Page					
A					©Tiand	Co.,Ltd All Right	s Reserved							admin



Retrieve by starting and end time, by gender, by age group, by whether wearing mask, by whether wearing glasses and by body temperature measurement are supported.

Users may select any channel among watch points on the left, set query condition and click "Retrieve" to retrieve the detailed information recorded by this watch point in the time period, both list and figure display form are supported. Click "List" and the retrieval result will be displayed in list, including capture time, channel name, gender, age group, whether wear mask, whether wear glasses and body temperature measurement; click "Details" to check the detailed information of captured picture, as shown in below figure, click "Playback" to check playback video.



Figure 5.11.2

Click "Figure" and the retrieval result will be displayed in figure, the detailed information of captured picture and playback information will be checked, as shown in below figure:



Figure 5.11.3

Select any data in the retrieval result and click "<sup>Output</sup>" to download this data result to local device, the exported result is shown as in below figure:

Snapshot Channel rGender	Age group	Wearing gWearing πBody	/ tempBig pictuSmall picture path
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Female	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Junior	Wearing εWearing π	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Not weariNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Not weariNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Wearing gNo mask	0 E:/Test/cE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Middle ag	Not weariNo mask	0 E:/Test/eE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Not weariWearing π	0 E:/Test/cE:/Test/easy7/FacePic/20
2020-11-2192.168.1Male	Youth	Not weariWearing π	0 E:/Test/cE:/Test/easy7/FacePic/20

Figure 5.11.4

Click " Export all " to export all retrieved results.

Tiandy	Home page	Intelligent search				© ⊕   ⊕ − ⊡ × 15:59:18
<ul> <li>Eace retrieval</li> <li>Indoor electric vehicle testin</li> </ul>	Device List	Starting time 2021-1		End Time 2021-11-25 23:59:59		Retrieve
	Custom device list	Export Export	all select all Reverse election			
	■ 192.168.16.221		Capture time			
	■ 192.168.18.103			Channel 1 Channel 1	Indoor electric vehicle testing	Details Replay Details Replay
	<b>1</b> 192,106,23,54		2021-11-25 15:56:33 2021-11-25 15:56:31	Channel 1 Channel 1	Indoor electric vehicle testing	Details Replay Details Replay
				Channel 1	Indoor electric vehicle testing	Details Replay
		•	2021-11-25 15:56:18 2021-11-25 15:56:12	Channel 1 Channel 1	Indoor electric vehicle testing	Details Replay
				Channel 1 Channel 1	Indoor electric vehicle testing	Details Replay Details Replay
			2021-11-25 15:56:02	Channel 1	Indoor electric vehicle testing	Details Replay
				Channel 1	Indoor electric vehicle testing	Details Replay
			2021-11-25 15:56:00 2021-11-25 15:55:58	Channel 1 Channel 1	Indoor electric vehicle testing	Details Replay Details Replay
				Total16Piece Total2Page < 1 2	> To 1 Page	
<b>A</b>			©Tiandy Co.,L	Id All Rights Reserved		admin

Figure 5.11.2.1

Search can be based on beginning and ending time.

Users can choose equipment that supports the algorithm from left monitoring points, set query conditions and click "Retrieve", to find all recorded detailed information of the monitoring point during the time. The information can be presented in list format or graph format.

Search result can be presented in list format by clicking "<u>List</u>", including capture time, channel name, alarm type etc. The detailed information of captured

image can be seen by clicking "<sup>Details</sup>" as shown below. Click "<sup>Replay</sup>" to watch playback.



Figure 5.11.2.2

Search result can be presented in graph format by clicking " " Detailed

information of captured image and playback information can be seen as shown below.







" to export all search results. or click "

# 5.12. Data statistics

Click the data statistics icon **Click** on home page to enter the data statistics interface.

## 5. 12. 1. Face statistics

Face statistics supports to carry out statistics by age group, by gender, by the number of people, by whether wear glasses, by whether wear mask and by body temperature measurement.

#### 5. 12. 1. 1. Statistics by age group

According to age group, the face statistics can be divided into junior, youth, middle age and old age to display. The platform supports list and graphic display, as shown in below figure.

Tiandy	Home page	Intelligent search Data statist	ics Real-time preview			
Face statistics	o	Type of statistics: Age group 🔹 Type of re	eport: Daily Report 🔹 Date of statistics:	2020-11-27 🗉 Statistics	Output	
A Visitor flow statistics	Im Device List	List Graphics				
	□ ✓ ■ 192.168.16.221	Statistical Time		Youth	Middle age	Old age
	9 9 192.168.16.221-4	c) 000.0050				
	Image: 192168122	01-00-01-59				
	192.168.25.48	0200-0259				
	192,168,16,222	03:00-03:59				
		04:00-04:59				
		05:00-05:59				
		06:00-06:59				
		08:00-08:59				
		09:00-09:59				
		17:00-17:59				
		18:00-18:59				
		19:00-19:59				
		20:00-20:59				
		21:00-21:59				
		22:00-22:59				
		23:00-23:59				
A			All rights reserved. Tiandy Technologies	s Co., Ltd		admir

Figure 5.12.1.1



Figure 5.12.1.2

### 5. 12. 1. 2. Statistics by gender

According to gender, the face statistics can be divided into male, female and unknown to display. The platform supports list and graphic display, as shown in below figure.

[Note] :When the device detects people shape but does not detect face, it will display "unknown".

Tiandy	Home page in	ntalligant sourch Data statistics	Post-time proviner		
	nome page in		Real-une preview		
		Type of statistics: Gender • Type of report: D	ally Report	Statistics Output	
A Visitor flow statistics	🗉 🔳 Device List	List Graphics			
	🗉 🗹 🖿 192.168.16.221	Statistical Time			
	🗹 👰 192.168.16.221-C	00:00-00:59			
	E 📄 🖿 192.168.1.22	01:00-01:59			
	Image: 192.168.25.48	02:00-02:59			
	Image: 192.168.16.222	03:00-03:59			
		04:00-04:59			
		06:00-06:59			
		08:00-08:59			
		16:00-16:59			
		18:00-18:59			
		20:00-20:59			
		22:00-22:59			
<b>A</b>		All r	ights reserved. Tlandy Technologies Co., Ltd		admin

Figure 5.12.1.3

Tiandy	Home page Intelligent search Data statistics Real-time preview	© ⊚   ≏ − ♂ × 15:40:43
Face states	Home page         Intelligent search         Outs statistics         Real-time preview           Image: The outstatic search         Type of report paids floads         > Due of statistics         > Due o	
	Mácra 178. E Universidárie, E Ferredezidárie, Dildez-3176	
A	All rights reserved. Tlandy Technologies Co., Ltd	admin

Figure 5.12.1.4

#### 5. 12. 1. 3. Statistics by the number of people

The statistics of the number of people every hour in face statistics. The platform supports list and graphic display, as shown in below figure.

Tiandy	Home page	Intelligent search		Real-time preview		
Face statistics	٩	Type of statistics: The number	er of pe 🔻 Type of report: Daily	Report • Date of statistics: 2020-11-27	Statistics Output	<b>正</b> ビ
A Visitor flow statistics	🗉 🔳 Device List	List Grap	ohics			
	🗉 🗹 🖿 192.168.16.221					The number of people
	🖂 👰 192.168.16.221-6		00:00-00	0.59		
	Image: 1921681.22		01:00-01			
	Image: 192.168.25.48		02:00-02			
	E E 192.168.16.222					
			04:00-04	4:59		
			05:00-09			
			06:00-06	6.59		
			07:00-07			
			08:00-08	8.59		98
			09:00-09	9.59		99
			10:00-10	0.59		124
			11:00-11	1:59		
			1200-12	259		85 102
			13:00-13	459		
			1500.15	5.50		
			16:00-16	659		
			17:00-17			
			18:00-18	859		
			19:00-19			
4			All righ	ts reserved. Tlandy Technologies Co., Ltd		admin

Figure 5.12.1.5



to switch to bar graph display.



Figure 5.12.1.6



Figure 5.12.1.7

## 5. 12. 1. 4. Statistics by whether wearing glasses

The statistics of whether wearing glasses in face statistics, can be divided into not wearing glasses and wearing glasses to display. The platform supports list and graphic display, as shown in below figure.

Tiandy	Home page Int	telligent search Data statistics Rea	II-time preview	© ⊕   ≏ - ♂ × 15:43:44
E Face statistics	٩	Type of statistics: Wearing glasses * Type of report: Daily Report	Date of statistics: 2020-11-27     Statistics: Output	
A Visitor flow statistics	🗉 🔳 Device List	List Graphics	Statistics	
	🗆 🗹 🖿 192.168.16.221		Not wearing glasses	Wearing glasses
	✓ ♥ 192.168.16.221-CF	00:00-00:59		
	🗉 📄 🖿 192.168.1.22	01:00-01:59		
	Image: 192.168.25.48	02:00-02:59		
	Image:			
		04:00-04:59		
		06:00-06:59		
		08:00-08:59		
		09:00-09:59		
		18:00-18:59		
		2000-2059		
•		All slabts record	d Tanda Tachaologiac Co. 184	admin

Figure 5.12.1.8



Figure 5.12.1.9

# 5. 12. 1. 5. Statistics by whether wearing mask

The statistics of whether wearing mask in face statistics, can be divided into no mask and wearing mask to display. The platform supports list and graphic display, as shown in below figure.

Tiandy	Home page In	telligent search Data statistics Rea	II-time preview	© ●   ⋳ - ♂ × 15:45:01
Tace statistics		Type of statistics: Wearing mark * Type of report: Daily Report	Date of statistics 2020-11-27	
		The state of the s		
25. Visitor flow statistics	🗉 🔳 Device List	List Graphics		
	🗉 🗹 🖿 192.168.16.221			Wearing mask
	✓ ♥ 192.168.16.221-Cł	00.00-00.59		
	Image: 192.168.1.22	01:00-01:59		
	Image:	02:00-02:59		
	Image: 192.168.16.222			
		04:00-04:59		
		06:00-06:59		
		08:00-08:59		
		09:00-09:59		
		16:00-16:59		
		18.00-18.59		
		20:00-20:59		
		22:00-22:59		
		23:00-23:59		

Figure 5.12.1.10



Figure 5.12.1.11

# 5. 12. 1. 6. Statistics by body temperature measurement

The face statistics will conduct statistics of the number of people with abnormal body temperature every hour by time. The platform supports list and graphic display, as shown in below figure.

Tiandy	Home page	Intelligent search	Data statistics	Real-time preview			○ ⊖   ⊕ - ♂ × 1551.21	
E Face statistics		Q Type of statistics: Body tem	perature * Type of report: De	ily Report • Date of statistics: 2020-11-27	Statistics		la L	
2. Visitor flow statistics	E . In Deze liet	List Gray	phics					
						Body temperature un screntable		
	2 B 10141162021			ai line		Body temperature unacceptable		
	D D 102 168 1 33		00.00	-00.59	•			
				-01:59				
	192.106.25.40		0200-0259					
	192.168.16.222		0300	-03:59				
			0400	-04:59				
			0500	-05.59				
			0400	-0x59				
			0800	-0/59 ne-59				
			0000	-06.59				
			1000	1059				
			1100	11:59				
			1200	1159				
			1200	12:57				
			1400	-13.59				
			1600	16:59				
			1500	-1559				
			1700	-10.59				
			1000	19-59				
			1900	10.57				
			2005	-19.59				
			2100	21.59				
			2200	21.57				
			2300	.2159				





Figure 5.12.1.12



Figure 5.12.1.13

# 5. 12. 2. Visitor flow statistics

Guest flow statistics supports two methods namely real-time statistics and report statistics. Real-time statistics can monitor the real-time guest flow according to the established area, and give an alarm when the number of person hikes too much; the report statistics can count the number of people entering, leaving and passing by in the established area, and display them with a list or a graph, as is shown in below figure:



Figure 5.12.2.1

#### 5. 12. 2. 1. Real-timeStatistics Device List

Enter the device list bar, type in the key information in the search box, and double-click to locate the guest flow equipment, as is shown in below figure:




Select the device in the guest flow device list and right-click to pop up the right-click menu of guest flow device list, as is shown in below figure:



Figure 5.12.2.3

Select "Analyse Config." to enter configuration tool page to view the configuration of each present channel, as is shown in below figure:



Figure 5.12.2.4

Parameters	Explanation	
Analysis channel	Switch shannels and analyze the configuration of each shannel	
name	Switch channels and analyse the configuration of each channel.	
Mada	Read the algorithm supported by the front-end device and draw	
Mode	it in the right video frame or directly in the video frame.	
Sample	Display the effect sketch shown in the video box.	
	Display the maximum size of the target, and the range can be	
Max. Size of the target	set from 6% to 30%	
Min Size of the torget	Display the minimum size of the target, and the range can be set	
Min. Size of the target	from 5% to 20%	
Consitivity	Set the detection sensitivity. The higher the sensitivity, the more	
Sensitivity	sensitive it is. The range can be set from 0 to 100.	
Video frame	Display the video and its algorithm under the channel.	
Hide prompt	Hide the prompts in the configuration information on the left.	

0	Redraw the statistical area in the video graph.
M	Redraw the statistical lines in the video graph.
ŵ	Eliminate the lines.

Table 5.12.2.1

Other right-click menu button 5.2.1 device list.

Click" Add Device," in device list to enter guest flow camera configuration page, as is shown in below figure:

People counting camera configuration				
٩		+ Add Group	🛱 Delete Group	🖉 Modify Group
🗉 🔳 Device List				Q
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐		🖂 📄 People count	ing camera list	
🗹 👰 192.168.16.221-Channel 1		9 192.168.2	25.48-Channel 1	
192.168.16.222				
192.168.25.48				
	A Import			
	⊾ Export			

Figure 5.12.2.5

Parameters	Explanation
	In the left device list, select the device or device channel. In the
⊅ Import	right guest flow camera list, select a group, and click to add the
	device or device channel to the guest flow camera group.
	In the right guest flow camera list, select a group or device
try Export	channel, and click to delete the group and its device channel or
	device channel from the guest flow camera list.

	In the right guest flow camera list, select the node and click to
+ Add Group	add the guest flow group.
🛱 Delete Group	In the right guest flow camera list, select a group and click to
	delete the guest flow group.
	In the right guest flow camera list, select the node and click to
	modify the guest flow group name.



## 5. 12. 2. 2. Real-time Statistics Area List

Enter the area list to shift area scene, as is shown in below figure:

Zone list	•
	🕀 Add area
Old school	区會

Figure 5.12.2.6

In the area list, click "i" to delete established area, click " $\swarrow$ " to update the configuration information of present area, click "i Add area" to enter the area configuration page to set information of area detection time, capacity, number of people surge, whether or not to enable alarm, detection device channel, etc, as is shown in below figure:

Area configuration	×
Area name	Old school ×
Start time	00:00:00 End time 23:59:59
People capacity	Enable alarm 1 (Upper limit of people capacity)
Rapidly increase	Enable alarm 1 / Hour < (Upper limit of increased number of people
Alarm interval	10 <b>v</b> (Minute)
Number of people st	aying 1 (Current number of people)
Add	Delete
	Channel Name
	192.168.25.48-192.168.25.48-Channel 1
	Confirm Cancel

Figure 5.12.2.7

Parameters	Explanation
Area name	Set the name of the detection area to facilitate the rapid
	positioning of the area.
Start time/End time	Set the time of starting and finishing of statistics.
People capacity	Set the upper limit of the capacity. This is required.
Rapidly increased number of people	Set the upper limit of the increase of the number of people in
	the unit time (10 minutes, 30 minutes, 1 hour, 2 hours). This is a
	required field.

Alarm interval	Set alarm interval, supporting 10, 20, 30, 40, 50, 60 minutes.
Number of people	Set the summer number of existing people
staying	Set the current number of existing people.
Add	Set the detected channel video to be detected. Multiple channel
	videos adding is possible.
Delete	Select the channel video to be deleted. Multiple channel videos
Delete	deletion is possible.



## 5. 12. 2. 3. Real-time Data of Real-time Statistics

Select the area to be viewed in the area list, and the configuration information of the area can be viewed at the bottom of the interface, as is shown in below figure:

Recount People of	capacity: 1Pe	ople Num	nber of people staying:	1People	Statistical Tim	e: 00:00:00~2	3:59:59 Rapi			<b>.</b> 0			0
0													
Peak	Enter:		5 3- 5 2-										
0	<ul> <li>Leave:</li> <li>Passing:</li> </ul>		unu 1-										
Current number of people			► 0 <b>1</b> 0:51:00	10:52:00	10:53:00	10:54:00 10:	55:00 10:56:00	10:57:00	10:58:00	10:59:00	11:00:0	•	
		A11 -	righte received. Tiandy Tech		Ltd							adi	min

Figure 5.12.2.8

Parameters	Explanation
Recount	Click to eliminate the recorded number of people.
Peak	Record the maximum number of people in current area.
Current number of people	Record the number of people at current time. If the number
	exceeds the one that can be accommodated, it will turn into a
	red box; otherwise, it will be a green box.
	Record the number of people in three status namely entering /
Enter/Leave/Dessing	leaving / passing by. At the same time, the color of each case is
Enter/Leave/Fassing	distinguished. Red colour represents entering, green leaving,
	and blue passing by.
Real-time Line Chart	The number of people is displayed in real time according to

	minutes. Red represents entering, green represents leaving, and
	blue represents passing.
6	Capture, capture picture save path can be changed from [system
0	settings] > [common settings] > [path settings].
	Start all videos. The video download and save path can be
** •	changed from system Settings > Common Settings > Path
	Settings.
	Set the number of pictures, supporting picture display amount 1,
	4, 9, 36, 49, 64.
(m)	Full screen, full screen display of video page and real-time data
. <b>.</b> .	page. Click again to cancel the full screen.

Table 5.12.2.4

## 5. 12. 2. 4. Video Page of Real-time Statistics

View the video effect of real-time preview in video page, as is shown in below figure:



Figure 5.12.2.9

Refer to 5.2.2 Video Preview Window for page-related parameters. :

### 5. 12. 2. 5. Report statistics

On the report statistics page, count the number of people in a selected area. It supports the statistics of the number of people entering, leaving and passing by according to the detailed time, as is shown in below figure:

Tiandy	Home page Sy	stem configuration Real-time p	Data statistics	Equipment management	0 @ <b> </b> ⊕ − <i>C</i> × 11.04.50
Face statistics	Real time stati Report statisti				
<ol> <li>Visitor flow statistics</li> </ol>	Q	Type of report Daily Report Statistics Output List Graphics	Date of stati 2020-11-23	Detail time	
		Statistical Time	Number of people entering	Number of people leaving	Number of people passing
		00:00-00:59			
		02:00-02:59			
		04:00-04:59			
		06:00-06:59			
		07:00-07:59			
		08:00-08:59			
		09:00-09:59			
A			All rights reserved. Transfy Technologies (	Co. Ltd	admin



Select the report type and statistical time. If statistics need to be made according to the detailed time, enable the "detailed time" check box, and the statistics of the number of people in the detailed period will be displayed during the statistics. Click "export" to export the statistical data to the machine, as is shown in below figure.

Tiandy	Home page Sys	stem configuration	Real-time preview	Data statistics	Equipment management		
Face statistics	Real time stati Report statisti						
🧟 Visitor flow statistics	Q	Type of report Daily Rep Statistics Outpu List Gra	ort • t t	Date of stati 2020-11-23	☐ 2 Detai time 00 ▼ : 00		
		Statistica		Number of people entering	Number of people leaving	Number of people passing	
		0000-1					
A			All	rights reserved. Tiandy Technologies C	o., Ltd		admin

Figure 5.12.2.11

The data can be displayed in the two forms namely list or graph. The graphic form supports line chart and bar chart, as shown in below figure:



Figure 5.12.2.12



Figure 5.12.2.13

# 5.13. Alarm configuration

Click the alarm configuration icon configuration home page to enter the alarm configuration interface. To conduct alarm configuration on watch point and device respectively is supported.

9 — 🗗 🗙 16.07.25
admin

5. 13. 1. Alarm configuration of watch point

Figure 5.13.1.1

Select the channel needs alarm configuration in the watch point on the left, tick

and select required alarm type, set whether to enable ", click "set" or

"Set coordinated action" to set the operation of coordinated alarm or coordinated recording in corresponding alarm type, as shown in below figure:

Set the linkage action				
Alarm Type	e Video motion alarm			
Coordinated	Audio alarm	Default audio-1	▼ <	
	Poptip			
	Video	Single picture		
	Send Email			
Add	Delete			
	Target	ecordin	Delayed recording	
	OK	Cancel		

Figure 5.13.1.2

### 5. 13. 1. 1. Set coordinated alarm

Tick and select the check box ahead of "Audible alarm", select alarm audio effect in the drop-down list, customized alarm audio supported (supported audio format is .wav), alarm audio audition supported.

#### 5. 13. 1. 2. Set coordinated recording

Click Add and set "Coordinated monitoring point", as shown in below figure:

Location of coordinated monitoring point	×
	Q
🖃 🔳 Device List	
H 🗌 💼 192.168.15.148	
	$\sim$
OK	cel

Figure 5.13.1.3

Select the channel needs to set recording, click "OK" to add the target channel of coordinated recording, click "Cancel" to restore to last parameter setting. Click the number below or "Advanced" to continue to set "Pre-recording" and "Delayed recording" time, as shown in below figure:

Advanced				×
Channel name	192.168.25.48-192.168.25.48-Channel 1			nnel 1 🔻
Pre-recording interva	ıls (s)	0	•	
Post recording time(s)			•	
			OK	Cancel



Pre-recording and delayed recording interval supports the time setting of 0s, 5s,

10s, 15s, 25s and 30s, click "OK" to save time setting, click "Cancel" to restore to last parameter setting.

## 5. 13. 1. 3. Copy to other channel

Click and select the type of alarm, click "Copy to" to copy the parameter of Enabled status, Coordinated client action and Coordinated monitoring point of the selected copy to other channel, as shown in below figure:



Figure 5.13.1.5

#### 5. 13. 1. 4. All enabled/All disabled

Click "All enabled" or "All disabled" to enable/disable all types of alarm in the channel.

#### 5.13.1.5. Email setup

Click "Email setup" "button, and the E-mail can be configured. After the configuration is successful, the email alarm can be linked. As shown in the figure below:

Email setup		×
SMTP service	smtp.163.com	
User Name	username@163.com	
thorization code	Email client authorization code	
Receiver	Receiver's email address	
	onnection te	
Con	firm Cancel	

Figure5.13.1.6

Relative parameters explanation of the interface is as below:

Parameters	Explanation
SMTP service	Configure the E-mail server address.
User name	Configure sender E-mail name.
Thorization code	Configure sender E-mail authorization code.
Receiver	Configure the recipient E-mail address.
Connection testing	Verify that this method can connect successfully.

Table 5.13.1

## 5. 13. 2. Alarm configuration of the device

Tiandy	Hom	e page Alar		Intelligent	search	Data statistics	Real-time preview		
Monitoring point	* set	the linkage action	opy to All enabl	ed All disabled	Advanced				
Device	·								
<b>m</b> 192.168.1.22		Alarm Type	Alarm grade	Enabled	Operation	Coordinated client acti		Coordinated monitoring point	
192.168.16.222		Online	3Grade 😐	•					
<b>=</b> 192.168.25.48			1Grade 🗧	•					
<b>= 192.168.16.221</b>		Audio loss alarn	m 1Grade 🗕	•					
		Disk full on unit exce	ption 2Grade 😑	•					
		Disk absence on u exception	unit 1Grade 🗕	•					
		Disk read/write error o exception		•					
			eption 2Grade 😐	•					
		Absence of redundar on unit exceptio	nt disk 2Grade 🗕	•					
		MAC address cont detection on unit exc	flict 2Grade 🗕	•					
		Array exception on exception		•					
		Hot backup exception	on on 2Grade 🗕	•					
		Disk overloading on exception		•					
		Recording exception exception	on unit 1Grade 🗕	•					
		Hard disc Smart exce on unit exceptio	ption 2Grade 🗕	•					
		hard disc temperat exception alarn	ture 2Grade <mark>=</mark>	•					
People counting area									
<b>A</b>					All rights re	served. Tlandy Technologies Co	, Ltd		admin

#### Figure 5.13.2.1

The specific operation is the same as the alarm configuration of monitoring point.

Tiandy	Home page	Data statistics	; Equipment m	nanagement	Alarm configuration			
Monitoring point	Set the linkage action	Copy to All	anabled All disabled	Advanced				
Device 🔺	Alan	n Type Alarm	grade Enabled	Operation	Coordinated client a	ction	Coordinate	d moi
People counting area	Capacity	exceeded 1Grad	le 😐 🕥	Set	No			No
westdoor	Alarm	for surge 1Grad	le 😐 🕥	Set	No			
<b>A</b>			All rights reserved. Tiandy T	echnologies Co., Ltd				admin

5. 13. 3. Alarm configuration of people counting area

Figure 5.13.3.1

The specific operation is the same as the alarm configuration of monitoring point.

## 5.14. Operation logs

Click the operation log icon icon on home page to enter the operation log interface. Login log, operation log and configuration log query supported, as shown in below figure:

Tiandy	Home page	Operation logs Alarm con	figuration Intelligent search	Data statistics	Real-time preview	© ⊛   ⊕ − ♂ × 16-29-42
Starting time Log Type All	2020-11-27 16:00:00 🖹	Ending time 202 Detailed Type All	20-11-27 23:59:59	User Name a	admin	Query Reset
Departure	Operation time 2000-11-27 366448 2000-11-27 366448 2000-11-27 366448 2000-11-27 366448 2000-11-27 366448 2000-11-27 366448 2000-11-27 366438 2000-11-27 366428 2000-11-27 366428	Uper admin admin admin admin admin admin admin admin admin admin	Log Type Cymrifon Oymrifon Oymrifon Cymrifon Cymrifon Cymrifon Oymrifon		Detailed Type Star provise Star provise Star provise Star provise Star provise Star provise Star provise Star provise	Log denription Users skelle Regis exerting attellit module starts predi- Users and im Regis exerting attellit module attest predi- Users with Regis exerting attellit module attest predi- Users attellit Regis exerting attellit module attest predi-
•		TotalisPi	ece Total1Page <u>Stittems/pe</u> V < 1 All rights reserved. Tlandy Technolo	> To 1 Page		admin

Figure 5.14

The description of related parameter in the interface is as follows:

Parameter	Description				
Starting time	Available to set the starting time of log query.				
Ending time	Available to set the ending time of log query.				
User name Available to query the operation record of on					
	Admin-super administrator user may check the operation				
	record of all users.				
Log Type	Available to query logs by type, including all, login,				
	operation and configuration.				
Detail Type	Available to conduct detailed classified query of all, login,				
	operation and configuration by type.				
Log description	Search key word to query log information.				
Export Logs	Click Export Logs, available to output and save logs.				
Query	Click Query, available to query logs according to query				
	conditions.				
Reset	Click Reset, to restore query conditions to default status.				
Total X Pages	Display how many pages does the query result has.				
To X Page	Select a page to jump to the log record on that page.				