

NVS-IP100001SW IP Based PA & Intercom Server Software User Manual



Thank you for using our public address system. Please read this User Manual carefully to make better use of this equipment.





Contents

Produ	Product Overview4		
•	Features	4	
•	Function List		
Softwe	are Installation	7	
Soltwa	are installation	/	
•	Operation Environment	9	
•	Installation Steps	9	
•	Software Operation	10	
•	Software Registration	.11	
Serve	Software Operation Description	.12	
•	Software Login	.12	
•	Overview	.12	
•	Terminal Status	.13	
•	Table View	13	
•	Grid View	15	
•	Map View	16	
•	Scene View	19	
•	Schedule Task	21	
•	Add Scheme	.22	
•	Add Task	.22	
•	Real-time task	.30	
•	Media	33	
•	Record	34	
•	Report	35	
•	PA Controller	35	
•	Basic settings	38	
•	Terminal management	38	
•	Zone management	.45	
•	User management	47	
•	Role management	49	
•	Talk settings	.51	
•	PA settings	52	
•	Conference settings	.54	
•	Composite settings	50	



•	Multi-server	61
•	Advanced settings	63
•	SDK Configuration	63
	Backup/Restore	
•	Device upgrade	64
•	Language configuration	65
•	Extended Function	65
•	System customization	66
•	Version information	67
EAO		60



Product Overview

IP based PA and Intercom Server Software adopts advanced IP Audio technology, which is a pure digital transmission system by transmitting the signal in data packet on the LAN and WAN. The system solves the limitation of the transmission distance, susceptible to interference and such problems in traditional intercom and PA systems. It is evident from the system's design that a robust digital communication system can be created by simply connecting a terminal to a computer. Without requiring separate wiring for each interface, it integrates the computer network, intercommunication, and public address systems.

Features

Function

It covers the intercom and PA system functions such as audio streaming ondemand service, budget management, terminal management, and authorization management, and soon.

Transmission

Audio transmission distance can infinitely extend and it can be operated over LAN and internet. The system supports the significant application in a large scale, such as the centralized control room from the main campus to subcampus, from the headquarter to the branch office, to realize the fast and reliable information communication. The program takes up only 0.1Mbps of bandwidth per channel.

Tone quality

Terminal output level close to CD quality (44.1K, 16.bit). It is more suitable for music enjoyment and listening training, such as Colleague Entrance Examination, CET4 and CET6 listening part. All the listening material can be clearly played and the candidates will not be puzzled by the vague sounds.

- The tone quality is clear and smooth, not disturbed by external electromagnetic waves. The minimum bandwidth is only 34kbps. The calling delay in LAN is less than 30 milliseconds.
- The transmission distance can be infinitely extended. With the network, it can realize the intercom and multiparty call and build information and communication system in wider scale.
- It adopts digital audio processing technology and the audio width is 7KKz. The system has the function of echo cancellation and noise reduction, and realizes full-duplex conversation, multiparty calling and zone-broadcast.
- Confidential communication, special audio coding format, encryption processing, prevent eavesdropping;



• It is simple to adjust the communication scale, and it can complete the system expansion with increasing the terminal.

Function List

Function	Sub-Function	Description
Talking	Two-way hands-free call	When the call is connected, it is immediately switched to hands-free mode with full-duplex and echo cancellation.
	Two-way earphone call	When you want to talk in a noisy area or avoid influencing others, use an external earphone.
Call	Single Button Call	A quick call to a target terminal; each terminal has the ability to set its own target.
	Number Buttons Call	To call any terminal at random using numerical buttons.
	Call Ringtone	"Call busy" and "hang up" tones can be programmed (only supported by the terminals with a SD card).
Call Answer	Auto Answer	The terminal can be programmed to respond automatically after one ring.
	Manual Answer	The ringing on the terminal continues until a manual response is received.
Call Transfer	Busy line transfer	If the target line is busy, the call can be immediately switched to another terminal.
	Power off Transfer	The call will be automatically transferred if the target is turned off or disconnected.
	No answer transfer	The call will be automatically transferred if it is not answered within a certain number of ring tones.
	Manual Transfer	The received call can be manually transferred to any terminal and the current call can be terminated.
	Breakdown Call	A call can be abruptly terminated by the administrator.
	Caller ID Display	To view the caller's ID and to review missed and incoming calls;
	Incoming Call Playing	The name of the incoming call terminal is automatically played through the internal loudspeaker.
Broadcast		IP network paging microphone can broadcast to a single or several zones. Each terminal's volume can be adjusted remotely by the server software.
Emergency		Use an IP paging microphone you can send a pre-
broadcast		recorded voice message to a specific terminal. (Using multiple voice messages is a possibility.)
Monitoring		The sound conditions around the terminal in the main control room can be monitored using the terminal's built-in microphone.



DCM	T	The level of the territory of the territ
BGM		The loudspeakers of the terminal can play
		background music and the music will stop during
		conversation; live broadcast, timing broadcast,
External control		trigger broadcast is available.
External control		The terminal short circuit output can control the
		electrical door lock; The
		terminal short circuit input can connect the
Digital reserve		external red emergency button.
Digital record		The system can automatically record the data of
		conversation and store on
11. delevide e la mis		the server.
Hubbub alarm		If it has detected a screaming or a tumult, the
		terminal will automatically deliver the alarm to the
	<u> </u>	centre service software.
Extension Interface	Integrate wireless	Through the linkage between the IP wireless
	intercom	intercom base station and the 400 wireless
		intercom system, the wired user can join in the
		wireless
		users' group freely and make a half-duplex (PTT
		mode) conversation with them.
	Integrate wireless	Integrated with fixed phone: Connected with IP
	intercom	telephone PBX can make two-way conversation
		(with voice prompts); The fixed telephone can
		broadcast to the intercom system (including the
		partitions and all zones);
		Integrated with the VOIP telephone: Inter-working
		with VOIP phone. It's compatible with SIP protocol
		and VOIP system;
	Integrate fire/PA system	To be comprehensively compatible with IP PA
		system with the function of timing and live
		broadcast.
		To broadcast through the PA system with the pre-
		programming information
		according to the alarms from the firefighting
		centre.
	Linkage CCTV	We can offer SDK secondary develop package, the
		call switch can be controlled by CCTV or the
		monitor screen can be automatically switched
		during talking.
Scale Application	Cluster server (for the	To adopt multi servers to manage terminals to
	large-scale use)	reduce the risk of the malfunction of the network;
		serving for the inter-provincial applications
		over a large scale where as much as 100000pcs
		terminals is used at one time (a cluster of 100
		pieces of servers with 1000 pieces of terminals
		loaded on each server).
	Single server (for	To manage all the terminals, and its application
	medium	scale is up to 1000 pieces of terminals. (Each server
	scale)	can load 1000 terminals)

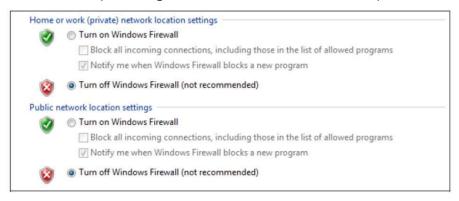


Without server	Be independent from the server to make the basic communication; Assist some independent zone to take emergency measures when its connection to the server breaks down; Its application scale is up
	to 100 pieces of terminals. (Small scale)

Note: all above functions need to complete with the appropriate model terminal.

Software Installation

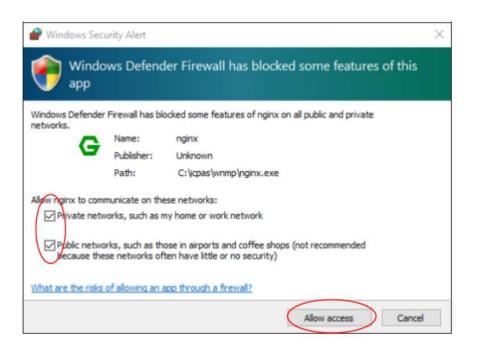
Warning: Some firewall software may interfere with the operation of IP PA and intercom system software; thus, before installing the software, please close all firewall software (including the WindowsXP built-in firewall).



Note: When the software initially starts up after installation, select "private network" and "public network" from the security warning pop-up in Windows, then click "allow access" to allow relevant service software programmes to pass past the firewall, as seen in the image below. (Note that different system server settings may differ; for example, these settings in Win10)











Operation Environment

• CPU: above Intel I3 series processor

• Memory: 4G or above

• Hard disk: 500G hard disk or above

• Network card: 100M/1000M self-adaption

• Sound card: the computer request for it and it must with stereo mixing function.

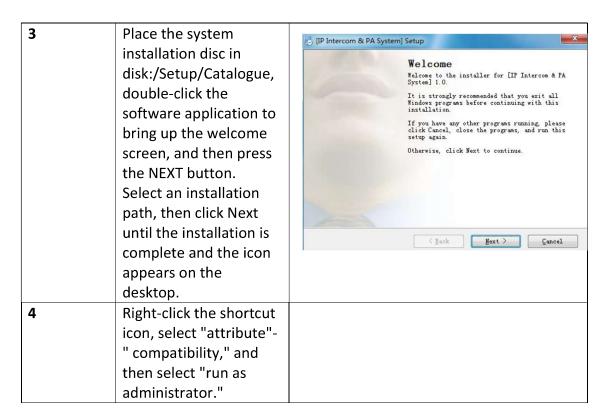
Installation Steps

This software supports Windows 7 (including) and above operating systems (recommend Windows 10), and not support Window XP operating system.

Install Sever Software

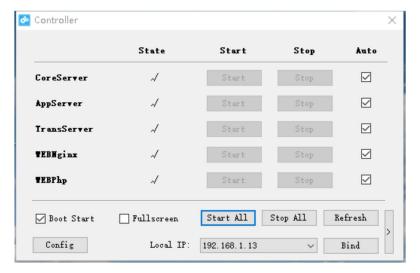
Step	Operation	Diagram
2	Verify that the machine has a 100/1000M network card and that the drive application is installed appropriately. The IP address can be automatically obtained in the network's TCP/IP	Internet Protocol Version 4 (TCP/IPv4) Properties
	in the network's TCP/IP settings. Note: If the network's DHCP service has not been enabled, please contact the network manager to obtain a fixed IP address.	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. Obtain an IP address automatically Use the following IP address: IP address: IP address: IP 2 . 168 . 1 . 13 Subnet mask: Default gateway: IP 2 . 168 . 1 . 1 Obtain DNS server address automatically Use the following DNS server addresses: Preferred DNS server: Alternate DNS server: Alternate DNS server: Advanced





Software Operation

Double click "ICPAS controller" icon to enter server control interface.



Open the server

Please check that the server IP address in "Local IP" rectangle is correct after opening the controller (when there are several network cards, please bind one of them for IP intercom and PA system use), and then check whether all servers are started or not (note: defaults is "Auto Start")



Restart the server

Click "Stop All' first, and then click "Start All"

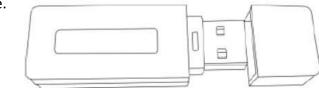
Note:

- 1) when server starts normally, the status bar displays V. If displays ×, please click "Stop All" to stop all servers, and then click "Config" to check whether the server port is occupied or not.
- 2) Set IP access restriction: click 【Config】 【IP access restriction】, select "restriction" and add IP address, the restriction will be effective after preservation. IP address added access restriction allows access to the server, the factory default is unlimited (all IP allow access to server).

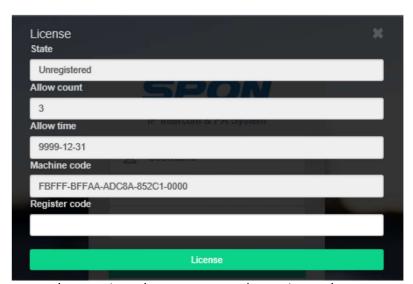
Software Registration

A serial number or a dongle can be used to obtain authorization to use the official version server software.

Dongle: plug the dongle directly into the USB port (no need for a drive), then restart the server software.



Licence: The system will immediately pop up the registration information when you access the server IP address over the web. To obtain a licence for the use of the official server software, send the machine code to the manufacturer.



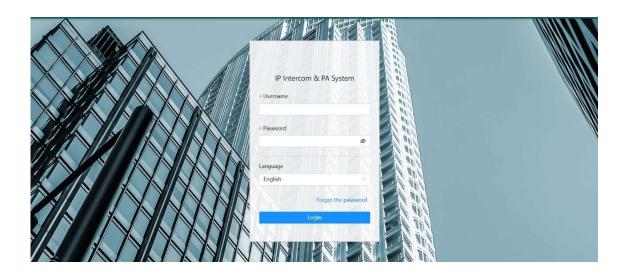
Note: Before normal operation, the server must be registered.



Server Software Operation Description

Software Login

To access the server web page, enter the IP address in the browser and the user's name and password in the login window (the default is admin).



Note: If the login web page is unusual, it could be due to a low-version browser; please upgrade the version or change the browser.

Overview

After successfully signing in to the server, the primary interface displays the following contents.

1) Terminal online status:

Add the data from the online and offline terminals together.

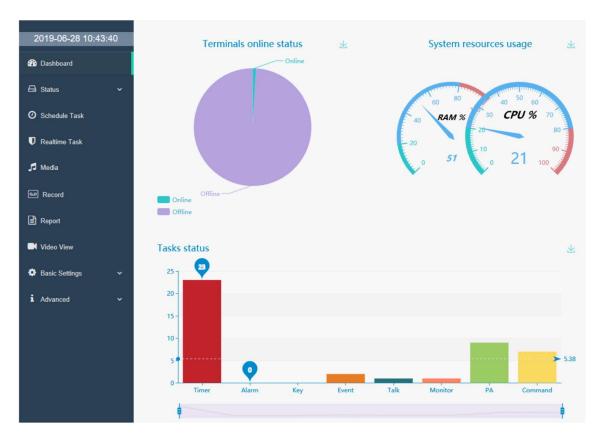
2) Schedule task:

Count how many times the timing (Timer), alarm (Alarm), and button pressed (Key) activities have been completed in the current planning tasks.

3) System resource usage:

To display server resources usage in real-time.





Terminal Status

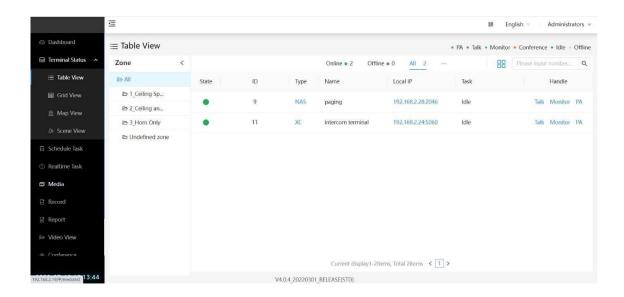
The "Status" displays the terminal view mode, which supports tabular, grid, map, and scene views.

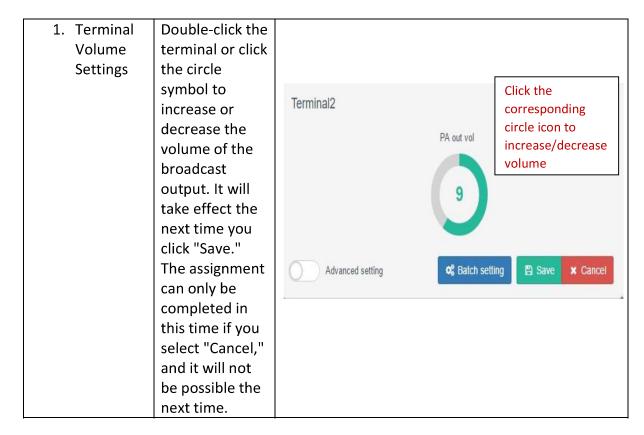
(Note: Additional options include a map and scene view, which will be available after authorization. Otherwise, the module will not be displayed on the status bar unless you choose it and provide the licence code in "Advanced"-" Extension.").

Table View

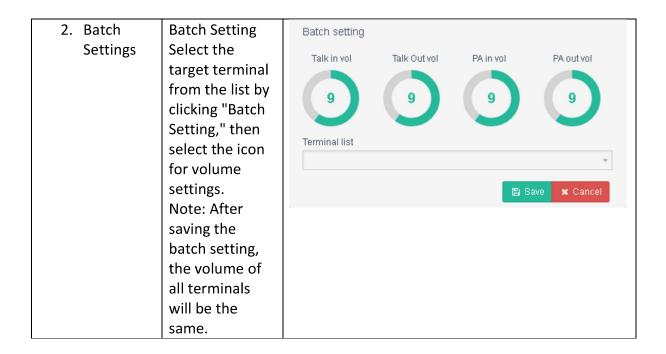
The interface is table-based and may display a zone list, terminal login status (online or offline), and task status (such as intercom, broadcast, idle etc.)





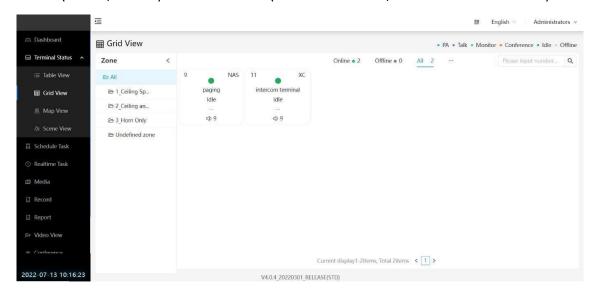






Grid View

The interface displays in grid and the grid view can show the zone list, terminal login status (online, offline) and task status (such as intercom, broadcast and Idle etc.)

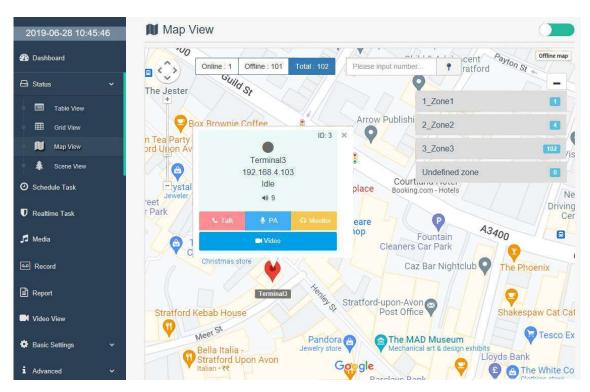


Terminal Volume Adjustment



Map View

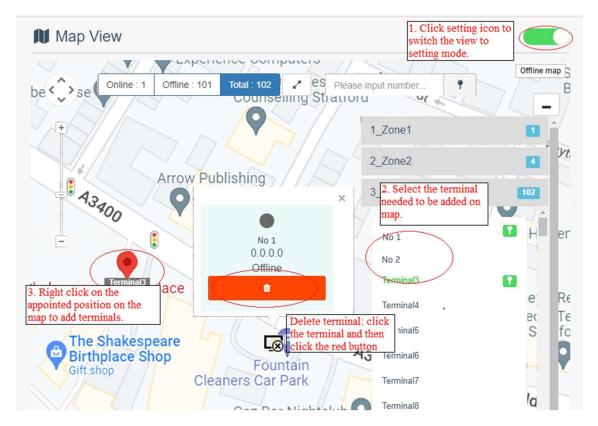
The location and status of the terminal can be viewed on a map. The login address information may be readily seen by placing a marker on the map. The target terminal can also begin intercom, broadcast, monitor, and view videos in map view.



Add terminal map marks

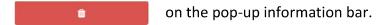
Step	Description	
1	Click setting icon at the right upper corner to switch the view to setting mode	
2		
2	Select the terminal needed to be added on map in terminal list, and then	
	right click the map to add the it to the corresponding position.	
3	Right click on the appointed position on the map to add terminals.	
4	After marking terminal position on map, please click icon at the	
	right upper corner to turn off setting mode.	





Note:

- 1) Move marked terminal position: right click appointed position on map directly after selecting the terminal in the terminal list.
- 2) Delete marked terminal position: click the terminal and the delete button

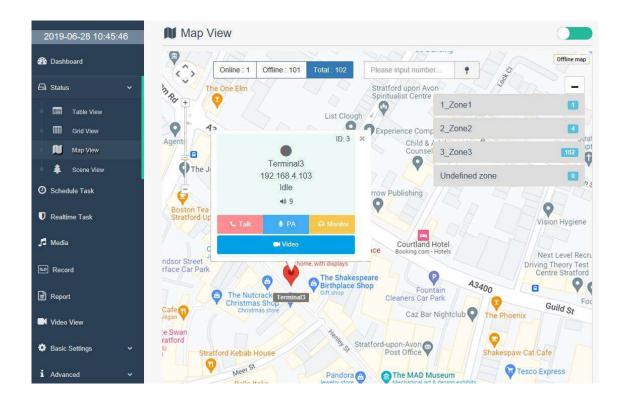


Initiate Intercom, Broadcast and Video

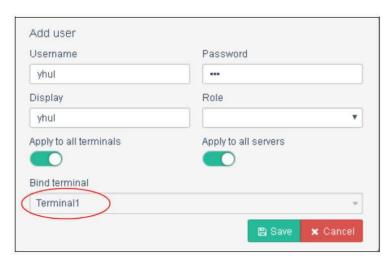
Marked terminals can be conveniently viewed in the terminal list in the Map view. To verify the status of the terminal login (online or offline), click the terminal symbol on the map (intercom, broadcast, and Idle).

To activate intercom, broadcast, or monitor to this terminal, click the terminal on the map and then the corresponding button.





Note: who initiate the intercom, broadcast and monitor will be binding the centre microphone in 【Basic Settings 】 - 【User management】, as the right picture shows.





Video

To check the terminal camera video in real time, first click the terminal on the map, then click the video.

Note: This function requires video to be bound in the "Terminal" tab. See [Basic Settings] - [Terminal] as below for details.

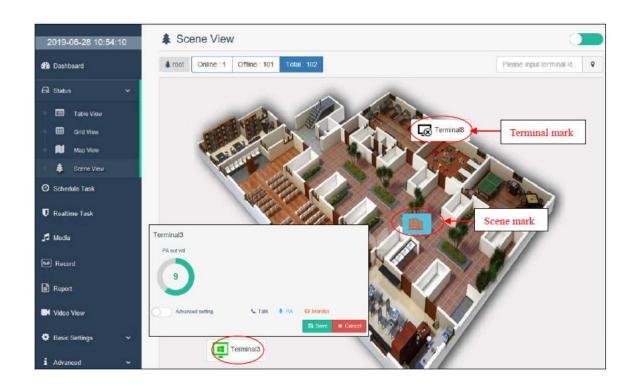


Scene View

It can show the terminal login location in the Scene View. Users can customize the scene image and add a terminal mark or a picture. The scene mark can also be added to the scene map. To switch the scene, click the scene mark. (To change the scene, click the left upper selection button)

To examine the terminal login status (online, offline), task status (intercom, broadcast), and initiate intercom, broadcast, monitoring, and other functions, click the terminal mark on the scene map. (Intercom, broadcast, monitoring initiator is the central microphone which is bound in [Basic Settings] -[User] tab).

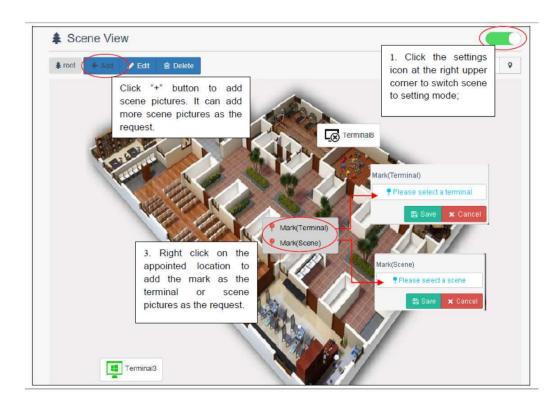




Self-defined scene mode

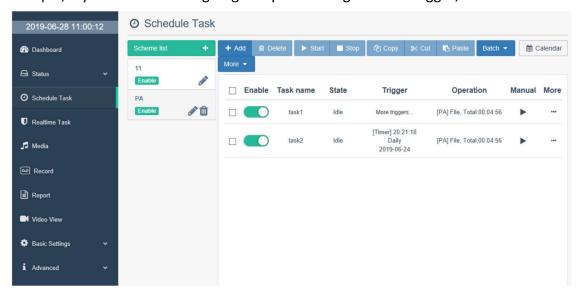
Step	Description	
1	Click the settings icon at the right upper corner to switch scene	
	to setting mode.	
2	Click "+" button to add scene pictures. It can add more scene pictures as	
	the request.	
3	Right click on the appointed location to add the mark as the terminal or	
	scene picture as the request.	
4	Once the scene mark has been added, click the right upper button	
	to turn off the setting mode.	





Schedule Task

The [Schedule task] allows users to schedule jobs such as broadcast, alarm, intercom, and timing programs. When the server receives a triggering signal from the terminals, it will perform activities without the need for operator interaction. For example, if you add one timing ring and pick "timing" in Add-Trigger, the execution





time will be specified. To set as broadcast in [Add-Operation]. When the task's due date arrives, the system will announce it. Please see the following detailed operation:

Add Scheme

Click the scheme list to add the scheme. Set the scheme name and execution time in the pop-up task window.

Note: click the icon • under the date to quickly set the time as current time.



Add Task

Add Task

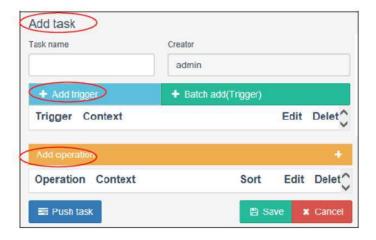
Click to add the task icon the task name, triggers, and operation in the pop-up task window. It can do multiple operations for a single task at the same time. It allows set the play order for tasks with the same time and level.

Task adding steps are as follows:

- 1. To set a name for a task;
- 2. Add trigger (see "Add Triggers" as follow for details).
- 3. Add operation (see "Add Operation" as follow for details);

Push task: When a task is finished, click "Push task" to send this task to device. The push task can be executed when the device is offline.

It will be effective after saving settings.





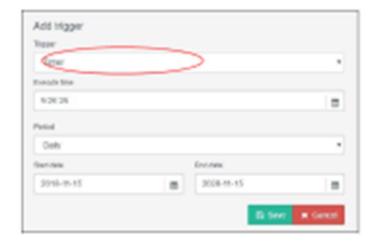
Add Trigger

No Functions

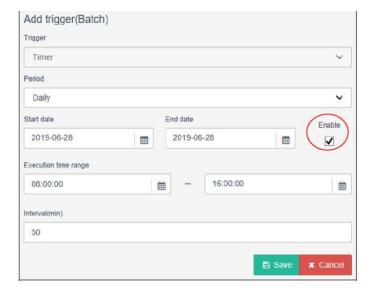
Diagram

Add trigger: Timer
The goal of a timing task is to complete it at the specified time.
After you've set the execution time, schedule, start and end dates, and saved them, you're ready to go. It will start automatically at the specified time.
Note: the start date must be within the

start date range in the scheme.



Batch addition (trigger)
Timing task can work with batch addition.
Task cycle can work with
daily/weekly/time;
Set the task start time, execution time
range and interval time. The task will
be executed as setting time after saved.
Note: choose enabled to set the end of
task date.





2 Add trigger: Event

Event type

[Alarm]: The event terminal is examined and the alarm trigger port is set up.

The specified event set in the "operation" is activated when the terminal alarm input is triggered, such as playing the specified note, initiating the conversation, and so on, and the exact event is explained in the "add operation" section below.

[button]: Check the event terminal and set the terminal button number. The defined event in the operation is triggered when the terminal presses the specified button.

[Card]: When the terminal is swiping, check the event terminal and trigger the appropriate event in the operation.

[Login]: When the event terminal lands on the server, check it and trigger the operation's specified event.

[Talk]: Check the event terminal; if it is operational, it will cause the specified event to be triggered.

[Monitor]: Check the event terminal; if the terminal is monitored, the operation's specified event will be triggered.

[PA]: Check the event terminal; when the terminal initiates or receives a broadcast, the specified event in the operation is triggered.







Add Operation

No Functions

1 Add operation: PA

The task is to the o time, or the terminal defined event is triggered (the specified event is the type of event given in the trigger), and the specified audio is played when the operation is set to broadcast.

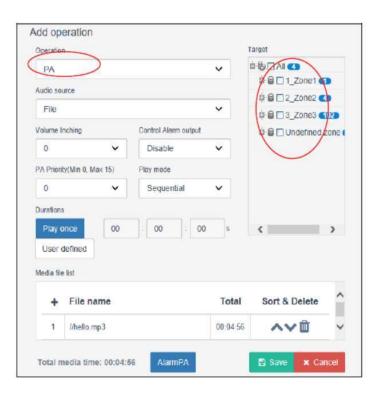
1.1 audio source type: [file]

1.Media file adding: click the button to select an audio file to be added to the file list. (The audio files in the media library's list.) Please upload audio files in advance to the media library.)

(Note: a task can be added many audio files, but the file format must be same. E.g., you can choose mp3 or WAV format, but you cannot choose mp3 and WAV format.)

- 2. Select the target terminal in the target area.
- 3.Synchronous control strong cut: When the timing task runs, a short-circuit signal is generated at the same time, which is used to regulate the terminal in the target area's strong cut signal output.
- 4.Broadcast level: When multiple tasks have the same execution date on the same day, the highest level is executed first, followed by the same level.
- 5.Play mode: Can be adjusted to play in order or at random (valid when the duration is not 0).
- 6.The time of duration: Audio broadcast time parameters are set to only broadcast once by default. Customized broadcast time options are supported. The broadcast will be automatically interrupted at the scheduled time if the broadcast time is less than the file time. It will broadcast in loop if the time is prolonged.

Diagram



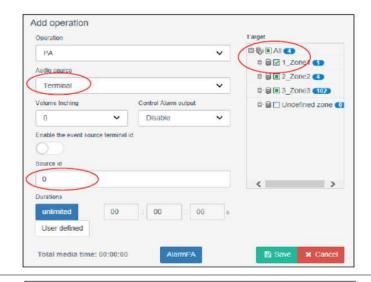


Add operation: PA

1.2 audio source type: [terminal]

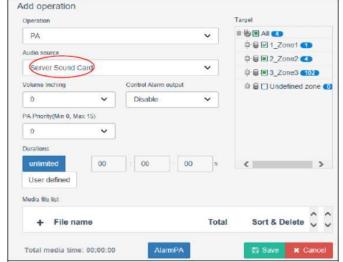
When the trigger is activated and the audio source type is terminal, the broadcast microphone is broadcast to the target region. Set the sound source terminal number 2 as an example, and terminal 2 will broadcast the target region at the desired time.

Enable event source number: the event terminal will be broadcast from the event terminal.



Add operation: PA

To broadcast, gather audio resources from the computer server sound card.

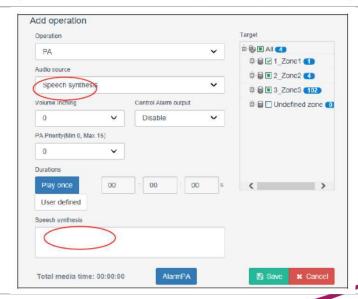


Add operation: PA

1.4 Audio resource type: **Speech**

Synthesis]

The words are transformed to audio for transmission, and the dialogue windows require word input.





2 Add operation: Talk

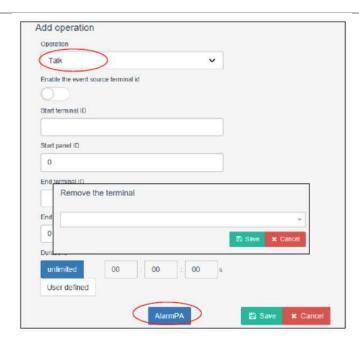
Set to automatically launch monitor at the specified time when operation is set to talk and start and end panel IDs are set (or triggered pointed event)

Note; terminal with panel, please input panel ID.

Duration: Set the talk time in seconds. During the time limit, no calls can be dropped. If there are no time constraints, it can be set to 0 in the actual world.

Enable source event ID: Check the event terminal from the added trigger and initiate talk to the target terminal.

Alarm output broadcast: To set the alarm terminal number, click [AlarmPA]. The alert can be released by clicking the "Cancel" button when the local alarm output is triggered while chatting. (Only for some terminals)

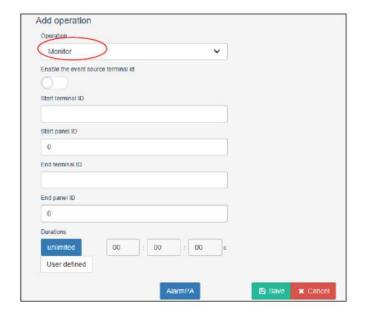


3 Add operation: monitor

When the operation is set to monitor and the start and end panel IDs are supplied, the monitor will start automatically at the appropriate time (or triggered pointed event)

Enable source event ID: check the event terminal and monitor the target terminal.

Note: only the terminal with monitor function has the right to initiate monitor.





4 Add operation: delay

Delay time when the terminal is not in use.



5 Add operation: Command

5.1 Command type: volume

Terminal volume settings when the event is triggered.

5.2 Command type: Alarm output

The alarm output port closed/open duration time, as well as the alarm output port number and type (closed/open) to corresponding device trigger settings.

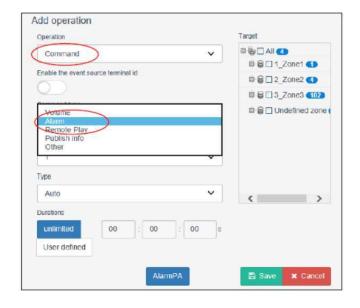
5.3 Command type: remotely broadcast control

Check the target terminal and broadcast control number folder settings. When the task is run manually or automatically, the file will be played.

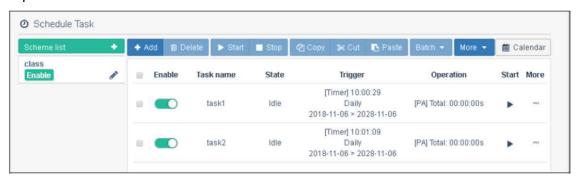
5.4Command type: publish information

The content shown on the LED screen will be displayed via Publish Info. Select the destination terminal and enter the text in the "Send Content" box. The settings text information will be displayed on the LED screen when the task is running manually or automatically.

Enable the event source terminal number: the command terminal is the one that the trigger selects.



After adding tasks, task state will be displayed in the scheme list, as the below picture shows:





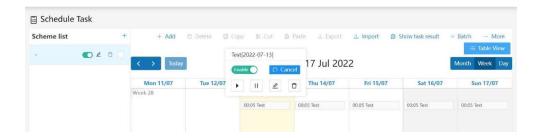
Enable or disable task/ modify or delete task/ start or stop task/ push task/ log:

1	Enable Or Disable Task	to enable or disable task, check task and click button in the toolbar
2	Modify Task	To alter a task, double-click it or click the "More" button at the far right of the task list and select the "Modify" option;
3	Delete Task	To delete a task, pick it, then click the "More" button at the far right of the task list and select "Delete."
4	Manually start/stop the Task	Select the task, click the "Start" button to start it manually, and then click the "Stop" button to stop it manually.
5	Copy/Cut/Paste	To paste the task into other programmes, check the task, click the "Copy" or "Cut" button, choose another programme, and click the "Paste" button.
6	Batch	To batch adjust the task cycle type, terminals adding and deleting, and sound source modification, check the task and click the "Batch" button.
7	Push Task Management	Click the button and select "Push task management" to view the pushed tasks;
8	Sort by Time	Click the button and select "Sort by time" to sort according to the task running time;
9	Daily Task	Click the More button and select "Daily task" to view the scheduled task of the day;
10	Export to main Controller	Check timing ringing task, and click button, select "Export to main controller" to export the task to directory "C:\NAS2007". After manually copy NAS2007 folder to SD card of the main controller. When the device is offline, the exported timing ringing task will be executed.
11	View Task Running Log	To view the task running log, record task running time, and task type (human execution / automatic execution), click the "More" button at the far right of the task list and pick "Log."



Calendar View

To convert to calendar view, click the "Calendar View" option on the planned task interface, which enables displaying monthly, weekly, and daily tasks.



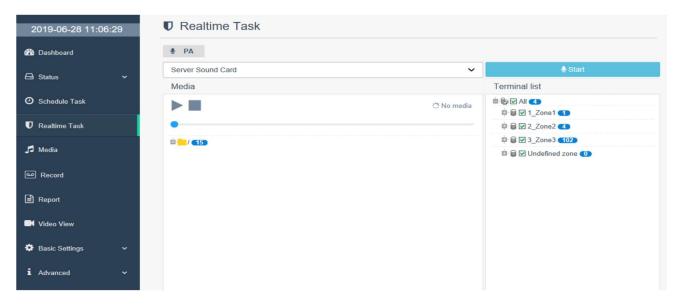
Click a task, and click button to open/close the task.

Click a task, and click Cancel Resume button to temporarily cancel/restore the current task;

Real Time Task

Server sound card, file, terminal and speech synthesis broadcast are supported by Real-time task. Select broadcast type and check target terminals, and then click

◆ Broadcast
 to initiate real-time broadcast.





1 Server sound card: To broadcast to the target terminal, collect Computer sound card on the server.



2 File: To broadcast to the target terminal, use an audio file from the media library. Note: left-click to pick audio, double-click to audition online.

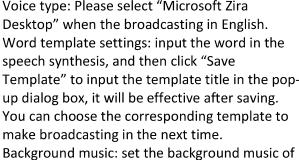


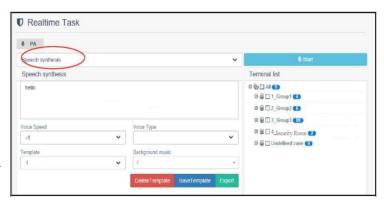
3 Terminal: set terminal ID of initiating broadcast, this terminal initiate broadcast to target terminals.



"speech synthesis" area, and broadcast to the target area by text conversion convert to audio. Voice Speed: Set the speed of the speech during speech playback. When set in 0, it means playing at normal speech speed. Voice type: Please select "Microsoft Zira Desktop" when the broadcasting in English. Word template settings: input the word in the speech synthesis, and then click "Save Template" to input the template title in the pop-

4 Speech synthesis: Input broadcast content in the





Note: Make sure your computer's sound card supports stereo mixing. The "stereo mixing" sound card in the Win 7 system is concealed by default; to enable "stereo mixing," follow the procedures below:

voice broadcasting.



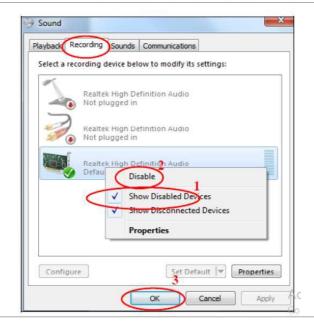
1 Open control panel and select "Hardware and Sound".



2 Open control panel and select "Hardware and Sound".



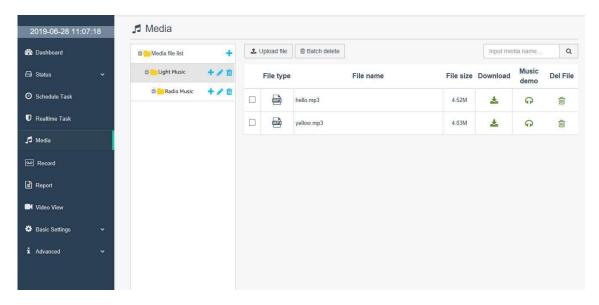
- 3 Select "Recording" parameters and modify settings:
 - 1. Right click on the "Recording" parameter blank, and check "Show Disabled Devices".
 - 2. Right click "stereo-mixing", enable.
 - 3. Click "OK"





Media

Users can upload audio recourse to media as the audio recourse of timing belling, broadcast and real-time tasks. Audio recourse of media support download, online audition and delete.



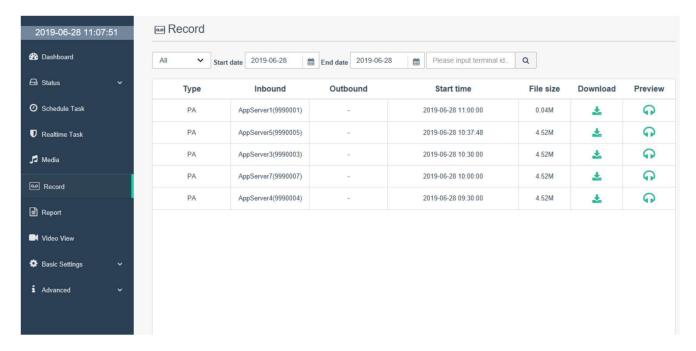
Add audio files

- 1. Click the " 🗼 " button beside " media file list" to build new files catalogue.
- 2. Select the desired catalogue and click the " button to upload audio files to the media library; file formats supported include MP3 and WAV. (It's fine to add audio files with varied bit rates; the system background will automatically convert them to qualified bit rate files.)



Record

This server can save intercom, broadcast, and monitor across terminals save files in WAV format on the server for later download and review.



Inquiry/ download/ audition recording files:

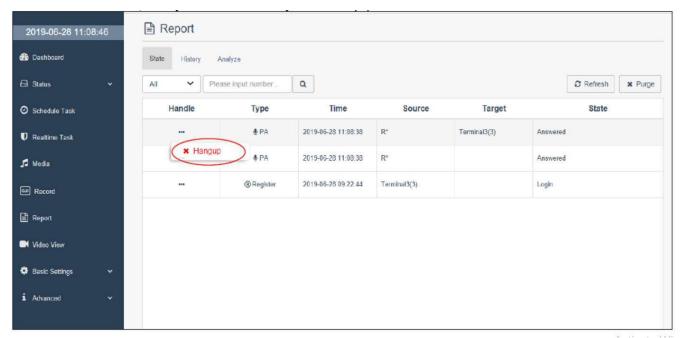
Recording files can inquiry by category, time and terminal number. Select the file type and start time, press the search button to inquiry the recording file (If you need to follow the terminal inquiry, please input the terminal number), after inquired the recording file, click the [Download] or [Music demo] button on the right to download or listen to the recording file online.

Note: if "Video Record" function is enabled in "Talk" of terminal management, you can check and download the video files.



Report

Record real-time status, history and statistical analysis of the equipment.



1 Real-time state	Record the events of registration, talk, PA, monitor, alarm and meeting;
	Hang up: click and then click "Hang up" button to mandatory terminated the corresponding intercom, broadcast, monitoring and
	other events.
	Delete: click to delete all records and terminate the intercom,
	broadcast, monitoring and other events.
2 History	Record working records of all devices, such as registration, talk, PA,
	and which is support multiple format export.
3 Analyse Statistics the total working times of the terminal in the f	
	charts or data views.

PA Controller

The PA controller is a simple operating controller for customizing the broadcast function. To use this module, go to 【Advanced Settings】 - 【Extended Function】 and enable the broadcast controller function. The following is the broadcast operation:



1. Select the broadcast type

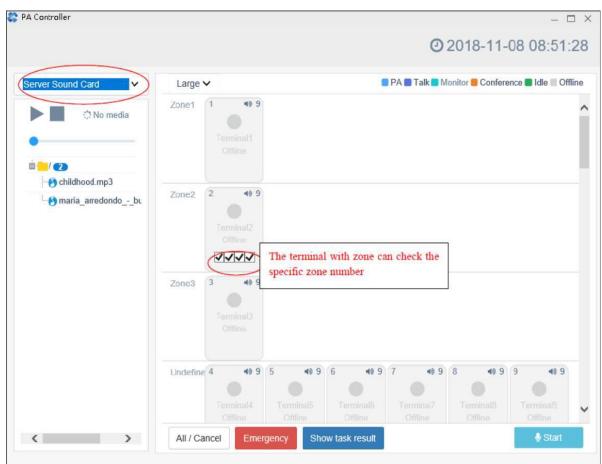
Server sound card: To transmit the target terminal, the acquisition server is located in the computer sound card audio source.

File: Use the media audio file to broadcast to the target terminal. (Note: Left click to select audio, double click to listen online)

Terminal: The broadcast terminal's terminal ID number is set, and the terminal begins broadcasting to the targe terminal.

Speech synthesis: By converting text to audio, input broadcast content in the "speech synthesis" box, then broadcast to the target region.

- 2. Choose your target zone or terminal (click the partition number to select all the terminals under the partition with one click).
- 3. Click the Start Broadcast button on the bottom right to initiate the broadcast. (Click the "Emergency Broadcast" button to initiate a broadcast for all partitions)





Note: Terminals with zone support broadcast to specific zones, as follows:

1. Set the number of zones and the name of terminals in

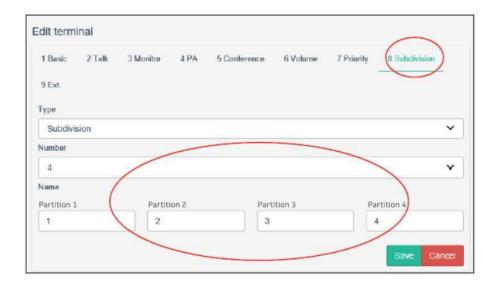
【Basic Settings】 - 【
Terminal Management 】 - 【
Add/modify Terminal 】 【Subdivision】 . Click save
after setting.

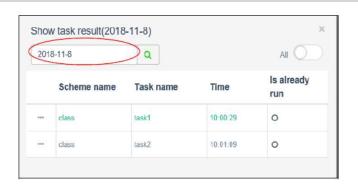
2. In the PA controller terminal list, the set zone number can be displayed.

The defaults are all selected. Click the corresponding button to cancel the check. After cancelling, the zone will no longer receive the broadcast initiated by the server.

View the daily tasks: click the "Daily task" button to view the list of scheduled tasks for the day, showing green color indicating the scheduled task is currently being executed.

- 1. The daily task execution can be queried by time;
- 2. Click the button before the task to temporarily enable or disable the current task;
- 3.Click the "All" button in the upper right corner to display all scheduled tasks for the day (including disabled).



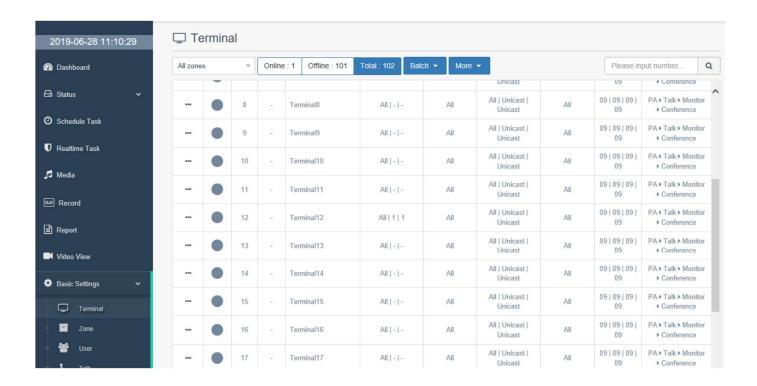




Basic Operations

Terminal Management

You can change terminal settings when installing software, and you can add, modify, and delete terminal in the terminal management interface.



Edit Terminal

Enter into 【Basic settings】— 【Terminal management】—click "Add" to add terminals (or double click the terminal and modify terminal attribute), set basic attribute/ talk attribute/ monitor attribute/ PA attribute/ volume/ task priority of terminals.



1 "Basic" attribute

> Set terminal ID and name.

Note: terminal ID is unique, cannot repeat with other host numbers. It is suggested to use a positive integer starting from 1 as the terminal No.

- Terminal password: set terminal password.
- PIN code: if XC-APP access function is enabled in "Advance"-" Extension", the PIN code of the APP device can be filled in.
- ➤ Binding video: The server video's real-time preview function and event-linked automatic video popup function must be attached to the video, which can be either the terminal's own camera or the environment camera gun. The operation mode is as follows:

Video address format is rtsp:// username : password@IP address: port; (e.g.rtsp://admin:123@192.168.1.101:554) Bind more than one video address, please divided by \$ (e.g., rtsp://admin:123@192.168.1.101:55

4\$rtsp://admin:123@192.168.1.102:555)

2 "Talk" Attribute

Call target: set terminal call map, at most point 5 (when the target is busy or power off, call will automatically transfer to the next target); if you need fixed call to the terminal, please point all 5 targets to this terminal.

Extension call target: double click terminal button, target terminals can be set in the "ExCall Target" (left button corresponds to call target, right button corresponds to extend call target), the principle is consistent with the call target.

Add term	inal						
1 Basic	2 Talk	3 Monitor	4 PA	5 Conference	6 Volume	7 Priority	8 Subdivision
9 Ext.							
ID							
Name							
Password							
1234 PIN(use for	r APP)						
Binding vid	eo						
							Save Cancel



Manage target: Set manage terminal, and the computer will no longer receive server tasks within the defined time frame, and managed terminal will handle relevant operations like intercom.

(Note: managed terminal must be set as the same level host)

Transfer time: When the target is busy or the power off, the call is automatically transferred to the next target time, which can be adjusted from 0-120 seconds.

Note: if you need set more than one target terminal ID, please divided by English comma ",";

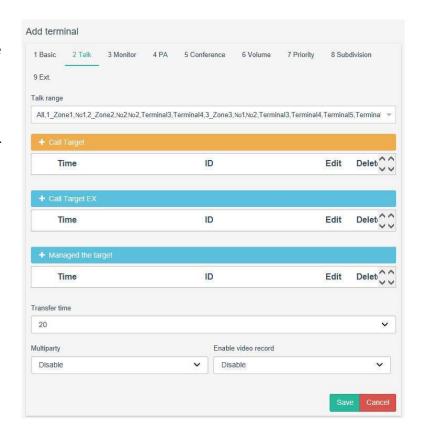
Allow multiparty calls: set whether to enable multiparty calling.

Talk range: set talk permissions of terminals, it is suggested to check all.

Enable video recording: Only applies to the camera's terminal binding. During the conversation, recording files will be generated, which can be viewed or downloaded in the "Recording" interface.

3 "Monitor" attribute

The monitor attribute can be used to specify monitor terminals and monitor permissions, as well as to check permitted terminals in the "Monitor range."





4 "PA" attribute

The PA attribute can be used to establish terminal broadcast permissions as well as the transmission mode for receiving and sending broadcast.

By default, the system transmits audio resources to the terminal.

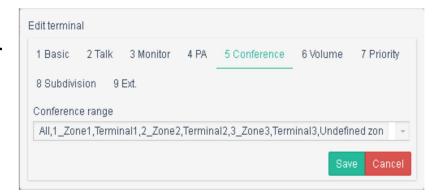
Compare unicast and multicast

Name	Explanation	Advantages	Disadvantages
Unicast	The switcher in the network just transmits data and does not copy data in the one-to-one communication mode between the server and terminal. If ten terminals request the same data, the server must provide it to each one individually ten times.	Every different customer's requirement to deliver different data is addressed by the server; tailored service is simple to implement.	Server aims at every terminal to send data flow, server flow = terminal quantity x terminal flow; The server load is heavy in the flow media application of big quantity terminals and terminals with large flow.
Multicast	The server-to-terminal communication mode is one-to-one, which implies that hosts in the same group can accept all data in that group. Only the required data is transmitted and copied by the switcher to the demander.	Clients required the same data flow to join the same group and share one data flow, reducing server load.	At present, although devices are support multicast transmission, but limit the use of multicast (specially in WAN)



5 Meeting

Meeting authorized terminals can be set on the meeting attribute.



6 Volume

To increase/decrease and configure the terminal's intercom/broadcast input/output, click the circle mark.

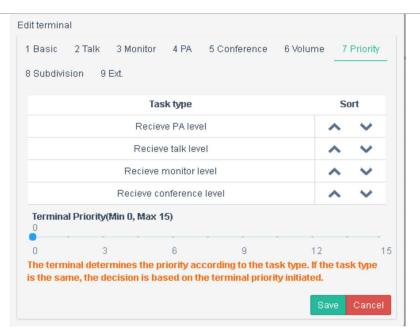


7 Task priority

Set task priority and terminal levels.

When terminals do multiple jobs, the higher-priority task might disable the lower-priority task. When the task type is the same, the terminal level decides.

Terminal priority settings: click or pull the on the terminal lever line.



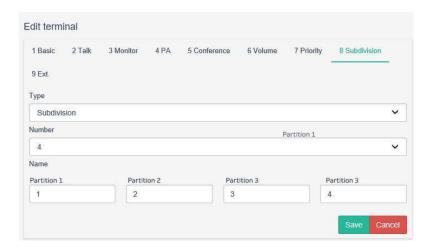


8 Subdivision

Different zones/panels can be selected for broadcast when the subdivision is set for broadcast console to commence broadcast on the terminal of the tape zone/panel, which is simple and adaptable.

Type: Depending on the terminal type, choose a subdivision or panel. Number: set the number of zones of the terminal, select 4 zones, 8 zones and 16 zones according to the actual situation;

Name: customize each zone name.



Batch Management

No Functions

Diagram

1 Batch add

Click Batch "Batch" button, and select "Batch add", input the start and end ID need to be added in the pop-up dialog box, and then click "Add".

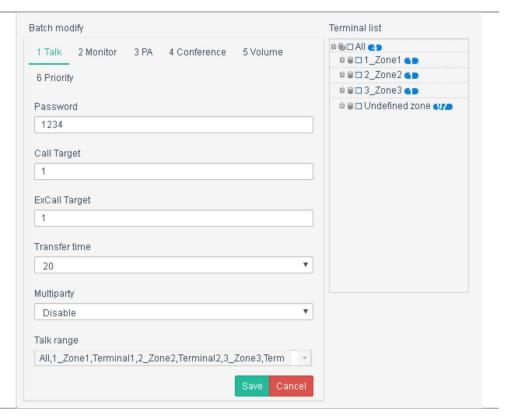
IP intercom and PA system software at most support 1000 PCS terminals, suggest to add 1-1000 terminal No.





2 Batch modify

Click "batch modify t" button, and select "batch modify", and then check the terminals and terminal attributes need to be modified on the "Terminal list"



3 Batch delete

Click "Batch" button - 【
Batch delete】 and input
the start and end ID
need to be deleted in
the pop-up dialog box,
and then click delete.

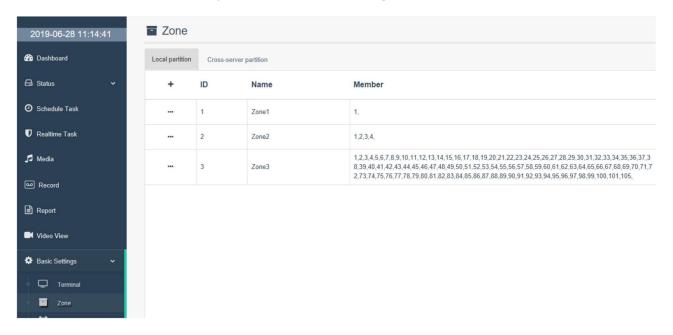






Zone Management

Zones can be divided by project real-world scenario on the "Zone" management interface; zones are mostly utilized for broadcasting zone selection.



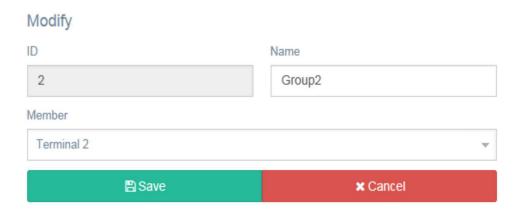
Add/Modify Zone





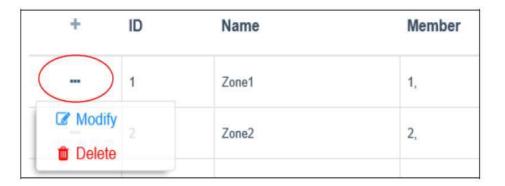
2 Modify zone

To modify name / member, double click the zone.



3 Delete zone

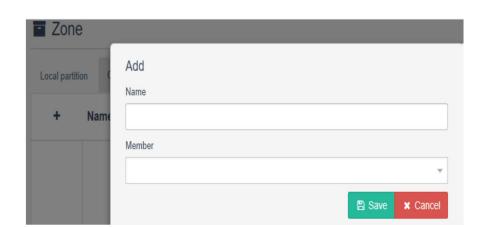
Click "..." button to modify and delete zone.



4 Cross-server zone settings

Please enter the information for other servers under "Basic Settings"- "Multiserver."
Click "Cross-server Zone" and then "Add Zones" to customise the zone name and member list.
Server number+ terminal ID number is the cross-server zone member display mode.
The zone modification and deletion operations

are the same as before.

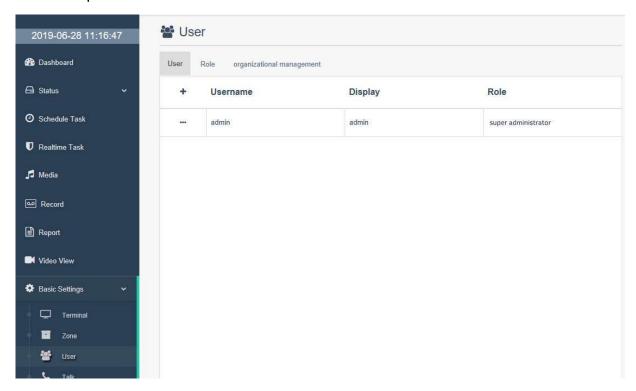




User Management

User management

The server's user management can assign login accounts and rights to the different operators.





Add User/Modify User/Delete User

No Functions

Diagram

1 Add user

In the popup dialogue box, enter the user's name, password (which must be fewer than 6m digits and must be a combination of uppercase letter, lowercase letter, and number), and role name.

Note: terminal authorization range default as all terminals and servers. If some terminal and server authority request, you can turn off "Apply to all terminals" and "Apply to all servers" buttons (open state:

close state:), and then choose the authorized terminals and servers in the member and server list. Binding terminal: Setting the centre microphone number for map control and video connectivity.

Department: Department of User

Binding SIP gateway: SIP gateway configuration and number settings (Note: In "Multi-Server" - "SIP Trunk," you can add a SIP gateway.)

2 Edit/Delete user

Edit user: To update related information, such as display name, password, and permission, etc., click the edit button "..." and select "Edit user" or double-click a user.

Note: If the user forgets the password, the administrator can modify the password through "Edit user".

Delete user: Click the edit button

" in front of the user name, select "Edit" to delete the user.

Add user		
Username		Password
Display		Role
		~
Apply to all terminals		Apply to all servers
Bind terminal		
Terminal3		*
department		
Bind SIP gateway		Bind phone number
5002	~	
		Save ★ Cancel





Role Management

You may design roles and apply rights to roles through the role administration interface, and users can only access permitted modules. The red " " denotes unauthorised access, while the green " " shows permission.



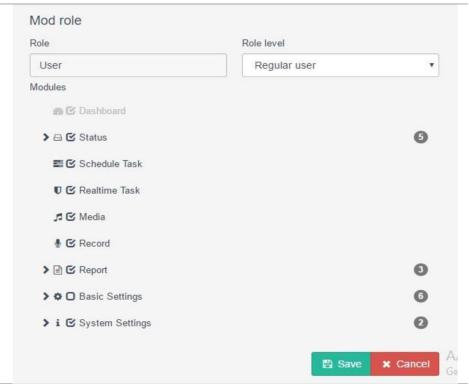
Add Role/Modify Role/Delete Role

No Functions Diagram Add role Add role For setting the role name Role Role level and task permission in the Admin Regular user pop-up task bar, click " * " Modules button in add role; Self-built task: only view > ⊟ □ Status 6 the planned tasks of the user; Schedule Task All tasks: view planned tasks of all users; ♬ O Media Module permissions: check ● □ Record the role owned module permissions; > P O Report Click "Save" to complete > ♥ □ Basic Settings settings. > i □ System Settings Save **X** Cancel



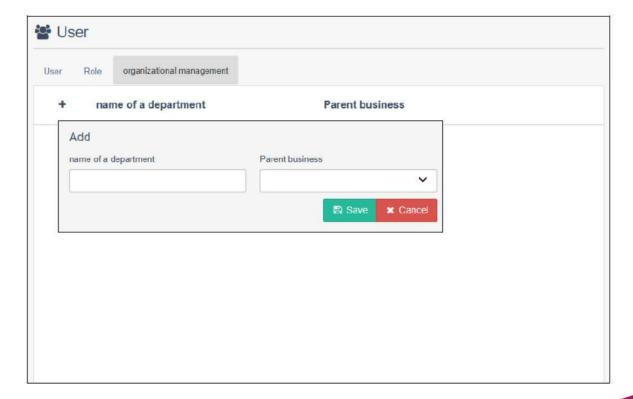
2 Modify/Delete role

Click the button before the role to modify or delete its display name, password, permissions and other relative information.



Organisation Structure Management

Department organization structure settings, and click † to add the catalogue.





Talk Settings

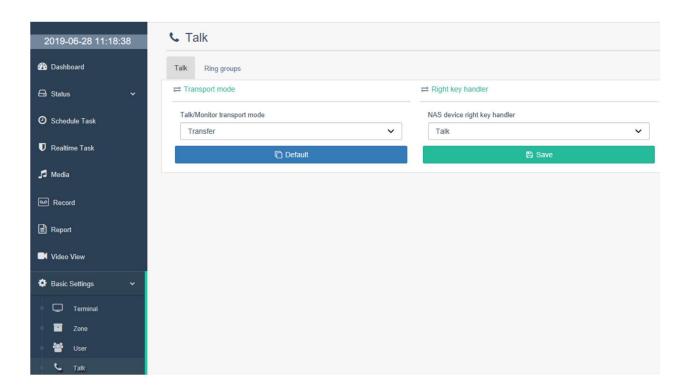
Intercom settings

Intercom/monitor transmission mode: It is configured to server forward by default and can be changed to direct mode.

Serve forward: Data will be transmitted from one server to another, for example, from terminal 1 to server and then to terminal 2.

Direct mode: Data is not sent from the server; instead, it is sent directly from terminal 1 to terminal 2 without passing via the server.

Process mode in right button: Set the right button to dual-function. That is, you can press the right button to initiate intercom in intercom settings and the right button to trigger alarm output in alarm output settings.

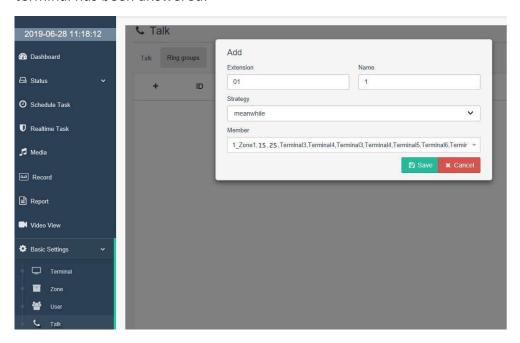


Ring groups

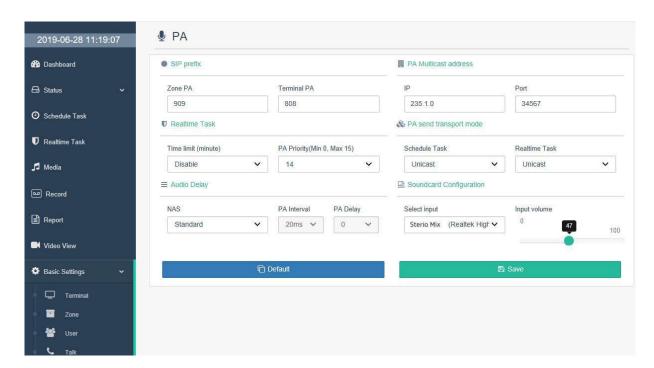
The function interface can be set in group call mode, click to add a ringing group, set a grouping number (Note: the grouping number is ID number format, and cannot be duplicated with other terminal ID), and set the group name and strategy (e.g., ringing mode, can be set to simultaneous ringing or order ringing, order ringing is sorted



according to the order in which the member list has selected), and member list. When a terminal dials a pre-programmed group number, all terminals in the group ring in the pre-programmed ringing mode. Other terminals will stop ringing after the terminal has been answered.



PA Settings





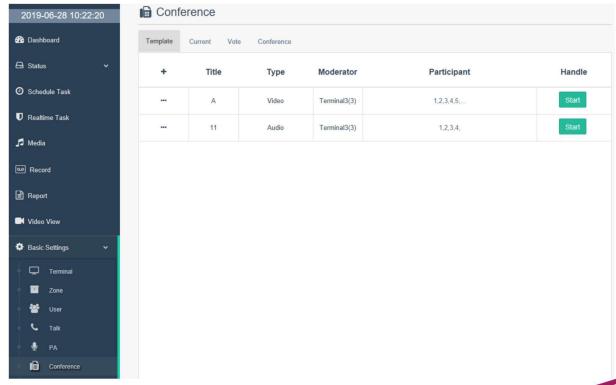
No	Functions	Diagram	
1	SIP prefix The prefix numbers are required to use the broadcast capability with standard SIP devices.	SIP prefix Zone PA 909	Terminal PA 808
3	Real-time task Time limits: When the "Real-time task" time control as minute is off, the audio will play according to the real time of the audio. PA level: set priority for real-time task broadcasting, from lowest 0 to highest 15. Audio delay To send broadcast, different delay modes are specified for the intercom device: standard mode, speed mode, and customized mode.	□ Realtime Task Time limit (minute) Disable Audio Delay NAS Standard V	PA Priority(Min 0, Max 15) 14 PA Interval PA Delay 20ms 0
4	PA multicast address To avoid interference, fill distinct IP addresses and ports when there are numerous servers on the LAN and various servers launch multicast.	PA Multicast address IP 235.1.0	Port 34567



5 PA transmission mode Unicast (server 🙈 PA send transport mode forwarding): The server forwards broadcast data Schedule Task Realtime Task from terminal 1 to server and subsequently to Unicast Unicast terminal 2. Multicast (pass-through mode): The server does not forward broadcast data, such as from terminal 1 to terminal 2, to the server. 6 Sound card configuration Soundcard Configuration When broadcast configuring, the server Select input Input volume sound card input mode 100 Sterio Mix (Realtek High D > (typically stereo mixing), and volume adjustment.

Conference Settings

It can add video/audio conferences and control and manage conference parties directly from the web page.





Add/Modify/Delete Conference

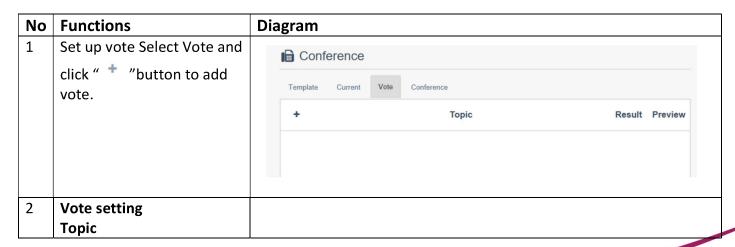
No **Functions** Diagram Add conference Title In the pop-up management interface, 33 4 melting screen click the add conference button and Polling Interval:10s Polling Interval:10s Terminal3 name the conference; audio and video Participant conferences can be selected for the conference type. **Host party** Set the initiator of the conference; (the Polling Interval:10s Polling Interval:0s host party only supports the terminal Terminal9, Terminal11, Terminal13, with conference function) **Parties** Determine the conference receiver, that is, the parties. **Conference screen melting** During the video conference, the screen will display video from each terminal using the screen melting mode that has been set. (There is no audio conference available.) Multiple display 1, 2, 4, 9, 16 multiple displays signify that the screen may simultaneously display 1 grid, 2 grid, 4 grid, 9 grid, and 16 grid videos. Multiple display terminals and round patrol time settings can be added to each grid. Multiple display terminal settings In the conferee list, click a grid and select the multiple display terminal. Different terminals can be selected at the same time, and the video will rotate according to the time settings. (Please note that each terminal cannot be repeated.)



Conference operation After the conference has added, click the Start button on the right, it will Conference automatically be running the conference, and the interface jumps to the "Current conference" module: Click the "add" button to temporarily add attendees and press "stop" button to cancel the conference. Click the "mute / speak" button to manually control the host party in mute/speak. Click the "Kick" button to kick the host party out of the conference and end the entire conference. 3 Edit/delete conference Template to edit/delete Current Conference Click the button the conference. Title Moderator Type Terminal3(3) Video @ Edit Terminal3(3) Audio Delete Video Terminal3(3) 33

Vote Management

If you add a vote to the vote management, the IP video intercom paging console can initiate a vote.



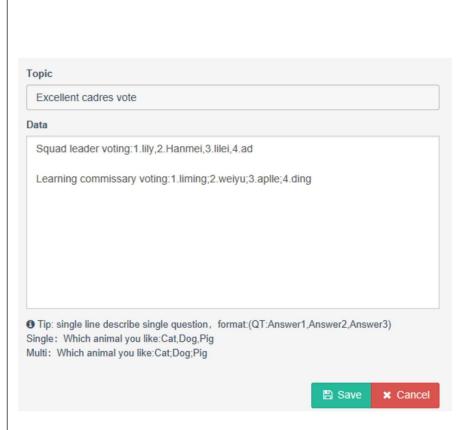


The topic of vote.

Content

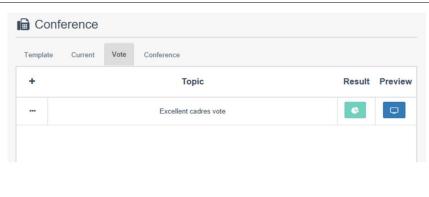
Each row represents a poll question format: question: answer1, answer2, answer3...). the single option is separated by a comma, and the multiple option is separated by a semicolon. (Note: all punctuation marks in the data shall be entered in English)

Note: Click the preview button after saving to see if the voting is qualified.



The vote will be presented on the vote management interface after it has been set up.

During the conference, the host can press "start a vote" to start a vote established by the server, which will be received by all participants. After the voting is concluded, the votes will be shown directly on the host vote interface. Meanwhile, the server software can be used to check the vote results.

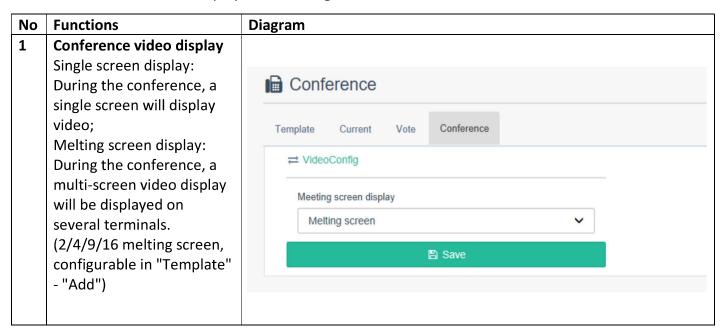




Preview vote result Excellent cadres vote button to Squad leader voting preview vote result after voting completed. 1.lily 2.Hanmei 3.lilei 3 4.ad 0 Learning commissary voting 1.liming 2.weiyu 3.aplle 0 4.ding

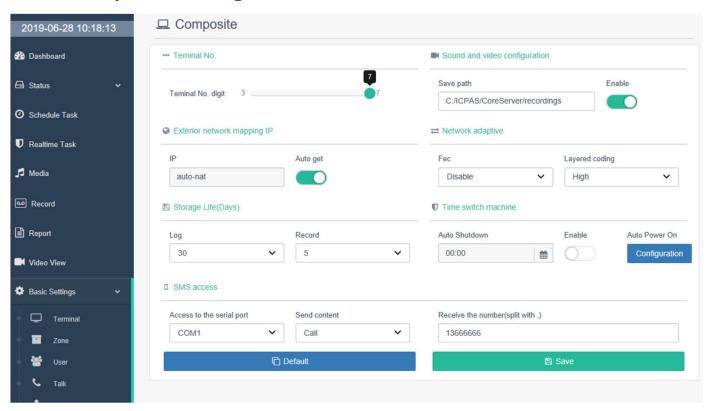
Conference Settings

Video conference display mode settings.





Composite Settings



No	Functions	Diagram
1	Terminal NO. settings Set the terminal number to a	Teminal No.
	maximum of seven digits.	Teminal No. digit 3
2	Exterior network mapping IP When interior network is	C Exterior network mapping IP
	different from exterior network, set the exterior network mapping IP.	IP Auto get



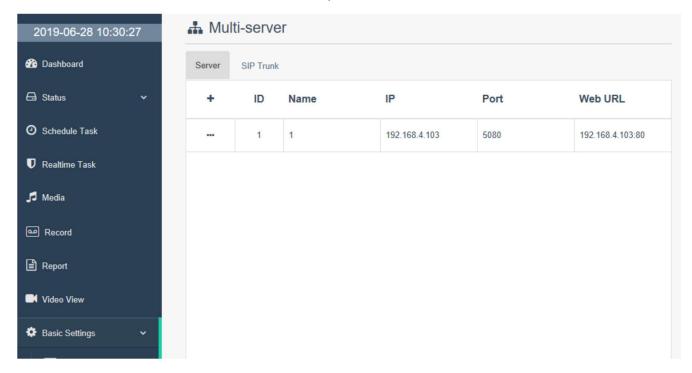
		I	
3	Storage life (days) Set the running log and record time, and support infinite	Storage Life(Days)	
	storage.	Log	Record
		30 🔻	5
4	Sound and video configuration Set whether or not to record and where the recordings should be saved. When enabled,	Sound and video configu	ration
	the server can create and preserve WAV format recording files for intercom, broadcast,	Save path C:/ICPAS/CoreServer/re	Enable
	listening, and other content across terminals.		
5	Network self-adaption Error repair and code flow settings are both automated.		Layered coding High
6	Timing switch machine Turn on the enable button and set the server on/off time. For example, the server can be turned off at night and turned on in the morning automatically.	Time switch machine Auto Shutdown	Enable Auto Power On
	Auto power off Setting the server power off time. Auto power on Click "Power on settings" to open the help document and set the auto power on time according to the prompts.	00:00	Configuration





Multi-Server

To achieve cross-server communication, add a server to the multi-server.





No Functions Diagram

1 Add server

The server interconnection should add both the server information and the server information of the interconnection, click add " + " to add server and to set ID, name, IP, Port (default is 5080).

Use proxy

The server terminal must get interconnected server data in order to access other server data.

	Port	
	5080	
Proxy port		
9021		
	Is it NAS server?	
		Proxy port 9021

2 Add SIP Trunk

If an external call is required, the system should be configured accordingly.

Dial prefix

The prefix used to dial an outside phone;

Terminal number

ID number of the telephone gateway;

Type

Select to access the SIP gateway (IP VOIP interface) or SIP server (PBX)

Name	Prefix	
ID	Туре	
	SIP Gateway	•

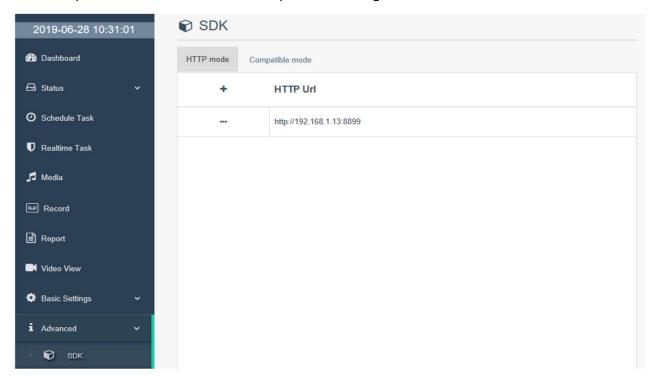


Advanced Settings

SDK Configuration

HTTP mode: the third access platform is HTTP interface access mode:

Compatible mode: the third access platform is original internal access mode.

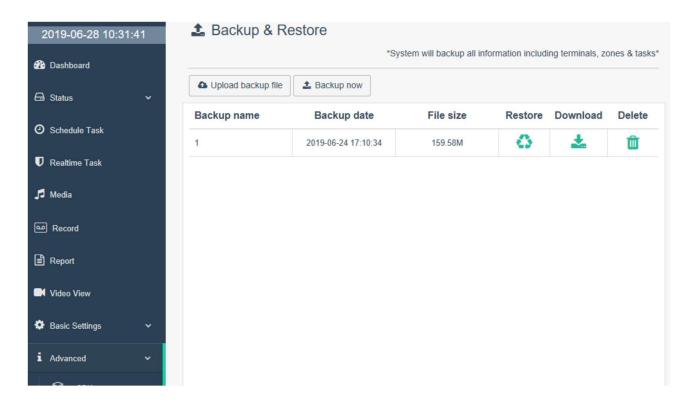


Backup/Restore

All terminal/zone/tasks/user information should be backed up. When data is lost, the backup can be used to restore it (for example, when the coverage is installed, the system parameter data is adjusted, the user's data is backed up before the coverage is installed, and the data is covered after the coverage is deployed).

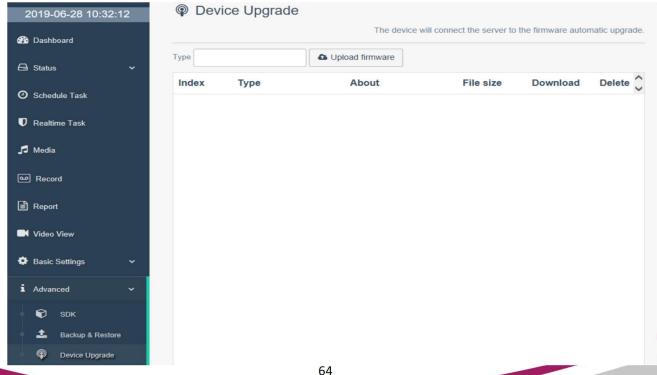
To automatically backup data and save the file on the server, click "Backup now." To restore the current data, select "Restore" and then "Download Support." To recover the data, click "upload backup file" when necessary.





Device upgrade

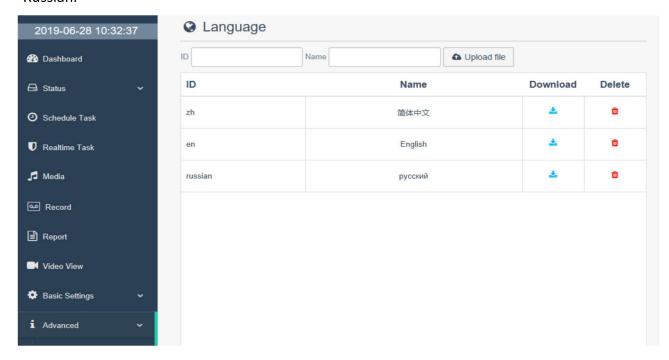
Click the "Upload firmware" button to send the upgrade file to the server, and the terminal will automatically download the firmware update programme from the server. (Please note that only sections of terminals are acceptable.)





Language Configuration

Available for system language configuration, default language is Chinese, English and Russian.



Extended Function

The extended function allows you to open the broadcast console, identity recognition, and intelligent analysis by pressing the button without a licence.

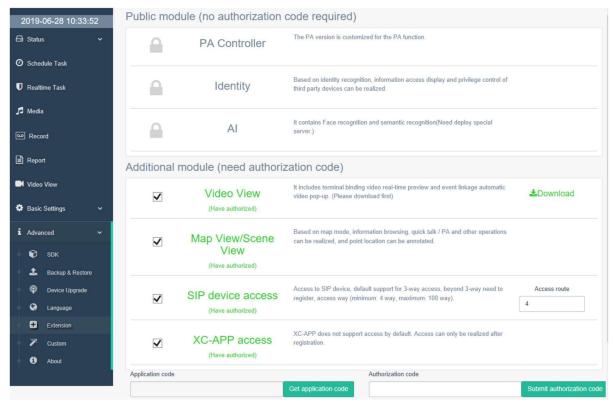
Additional modules that can be used after authorization include video, map view/scene view, SIP device access, and XC-APP access. Check the needed module, click "Get application code," transmit the application code to the manufacturer, and then request authorization using the manufacturer's licence.

Video view: includes event linkage automated video popover and binding video realtime preview After authorisation, click the "download" button on the right to download and install video control; (see "Video preview" for details)

Map view/scene view: It can work with intercom, broadcast, and other operations (see "Terminal status" - "Map view"/" Scene view "for details) and can browse information, position, and mark on map/scene view. SIP device connection: by default, 3-way SIP device access is enabled; after authorization, 4-100 channels can be accessed.

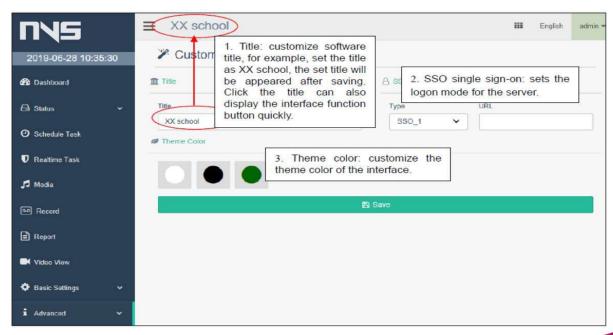


XC-APP connection: XC-APP is the default access in. And after authorization, it will be fine. PIN code must be entered in "Basic Settings" - "Terminal Management."



System customization

Interface for personalising the system. Software title, theme colour, and login mode options.





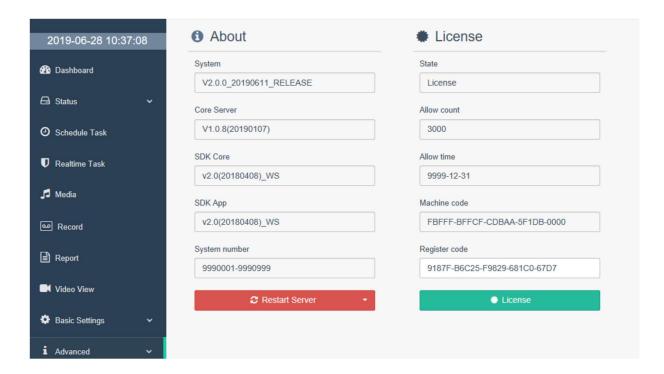
Version information

Version information

Click "Restart Server" to restart the server, which will display the server version, core server version, and other information.

License

Please provide the machine code so that the supplier can obtain the official server licence.





FAQ

Fault phenomenon	Fault reasons & exclude 1. By default, the firewall blocks server software access to the network, preventing the server from functioning normally. As a result, the firewall must be turned off or the server software application must be added to the firewall's exception list.		
Why can't all terminals log in?			
	2. The terminal address and the set server IP [server IP] is different.		
	3. The server is closed.		
Why some terminals can't login?	1. The terminal hasn't properly set the gateway for crossnetwork.		
	2. If your network is down, we recommend doing a ping command test. The objective testing method is to connect a terminal to a computer (and specify the terminal IP address), then use the Ping command to evaluate server connectivity.		
	3. To run the server under the Win7 operating system, please utilise administrator.		



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