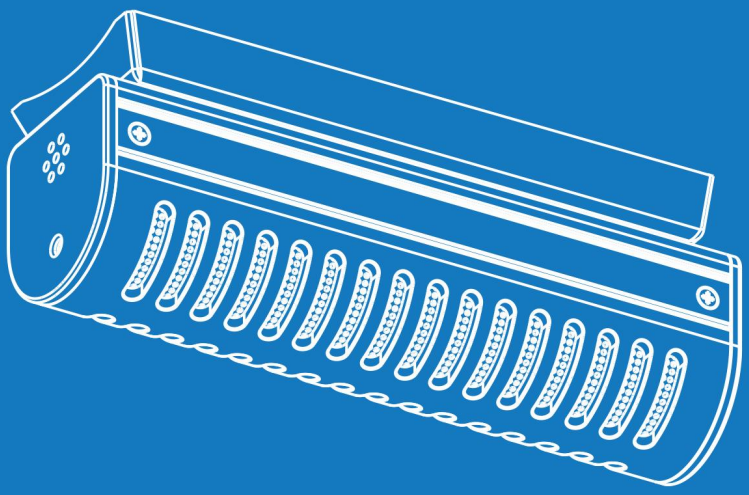
SPON

DIRECTIONAL PICK-UP

User Manual



IP NETWORK INTERCOM SYSTEM

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Summarize

Safety precaution

Please abide by the warning and the relevant safety tips.

Please take this manual in convenient place after you reading the guide for future reference.

Warning

The sign means there is potential safety hazard, when operate wrong may result in death or serious injury.

The sign is used to remind the user that attached is the important operation and maintenance data.

Setting and Installation

（1）Avoid being wet with the water.

Don’t make the machine or exposed to rain water or other liquid contamination of the environment, or lead to fire or get an electric shock.

（2）Don’t use unspecified voltage.

Using the marked voltage on the machine.

Using more than the logo of voltage could lead to fire or shock.

（3）Don’t scratch the power cord.

Don’t scratch the power cord or cut it.

Simultaneously, keep the power line far way from heated objects, put heavy things on it will lead to fires or electric shock.

Using machine

（1）In case of the anomalies

Please turn off the power supply immediately when finding the abnormal phenomena, please connect with the agency.if you continue to use, it will likely fires or shock.

·The smoke or odor of the machine.

·The inside of the machine is flooded by water or foreign bodies intrusion.

·Machine falling or machine shell damage.

·The power cord damage(wire core is exposed of broken, etc)

·Fault(eg it can’t network, no sound ect)

（2）Don’t open the machine internal or modify the machine.

Do not let foreign matters invade the machines internal.

Don’t let the metal items or inflammable objects inserting machine such as foreign inserting machines or throw into the vents machines internal, otherwise will likely cause fires or electric shock.

（3）Please do not touch it when thundering

To avoid electric shock, please do not touch the machine and the plug when lightning, etc.

（4）Please do not place containers with liquid or small metal objects on machine above.

If gets upset containers, and let the fluid inflow to the machine that will likely fires or cause shock.

（5）Do not open the machine internal or modify the machine.

The machine internal contains high voltage parts, once open the cover or modify the machine, it will likely fires or cause shock. All the maintenance and other machine modification should be operated by professional personnel.

（6）Maintenance and the precautions for not using in a long time.

While maintenance, if the machine is not using for 10 days or more , please shut off power supply switch for safety. If do not comply with this provision, it will likely cause electric shock or fires.

Product Introduction

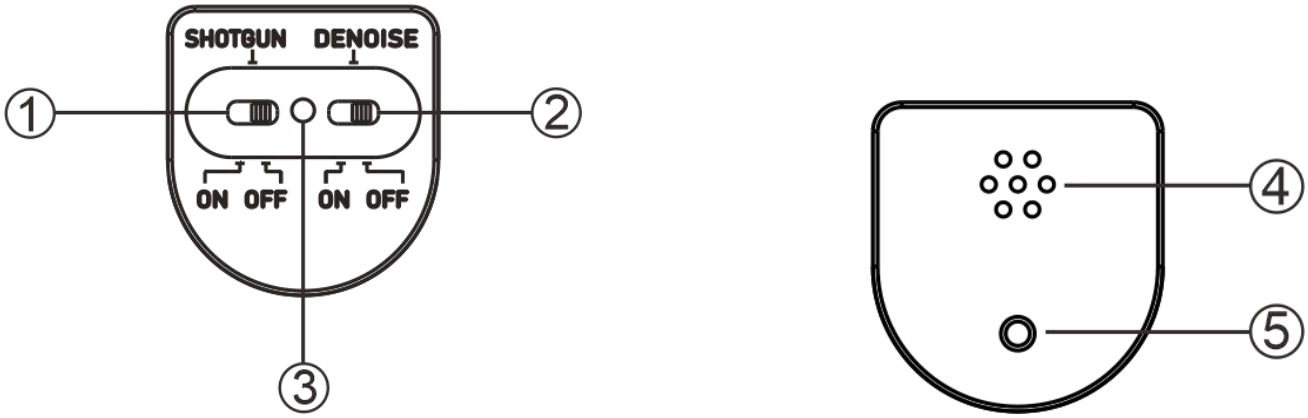
Directional pick-up is suitable for sound collection in finance, judiciary, police, smart city, rail traffic and other occasions. It can access IP pick-up gateway (or hard disk video recorder).

Feature

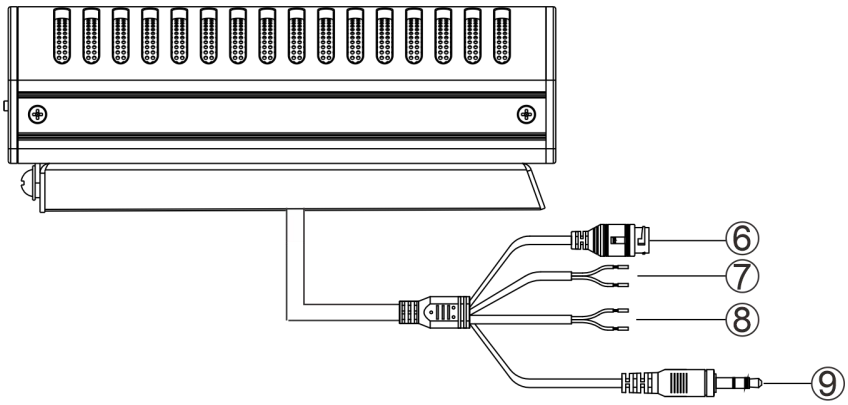
- Metal material, integrated installation with the camera shield, it is small and beautiful;
- Built-in high-speed DSP digital signal processor to ensure HD output;
- Using high sensitivity microphone, high fidelity, high sensitivity, low noise;
- Eliminate the sound difference between far and near distance, so that the sound output amplitude is more balanced and the sound playback effect is smoother and more comfortable;
- Ultra-remote pickup, long transmission distance, strong anti-interference ability, convenient wiring.

Interface Description

Side View



Bottom View



①Directional dial switch: dial to the ON end, for directional pickup; Dial to the OFF end, for omnidirectional pickup.

②De-noising dial switch: dial to the ON end, to open De-noising; Dial to the OFF end, to close the De-noising.

③Indicator Light

Flashing green	Network connection/data transfer is normal
Flashing yellow, and green,alternately.	Querying device
Flash yellow for once.	Dial the directional dial switch

Flash yellow, and green,alternately, for three times.	Dial the De-noising dial switch

④Omnidirectional microphone: pick up local omnidirectional microphone audio.

⑤Directional microphone: pick up local directional microphone audio.

⑥Network interface: insert network cable to connect to the ordinary network switch or POE switch.

⑦Reserved.

⑧Power interface, Red: Power positive end; Black: Power negative end.

⑨3.5 male head analog audio output interface: it can be connected to IP network.

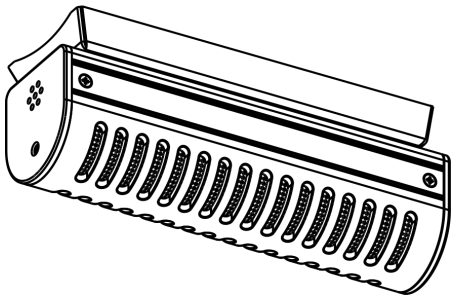
Camera's (or hard disk video recorder) analog recording input interface.

Introduction

Packing List

Directional pick-up includes the following accessories.Please check following parts. Contact your reseller if any parts are missing.

(1) Directional pick-up 1pcs



(2) Bracket 1pcs

(3) Washer head cross screw(M3*8(304)) 1pcs

(4) Quick Installation Manual 1 pcs

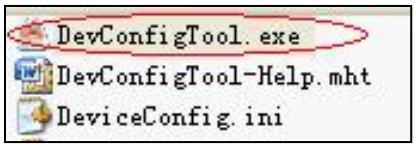
(5) Certification 1pcs

Basic Network Setting

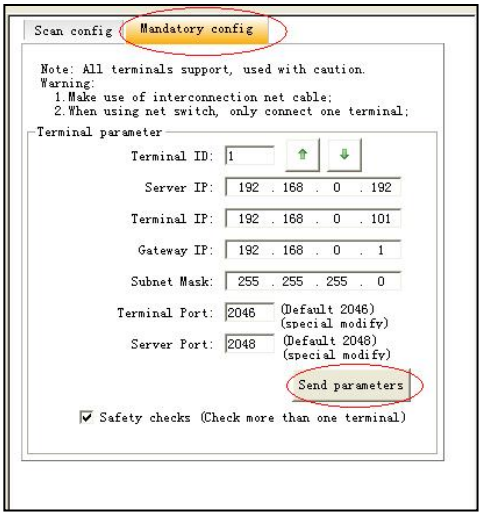
Connected the terminal according to the "Quick Installation Guide", turn on the power, and setting the network parameters of the terminal according to the on-site use environment.There are two ways:

Terminal Equipment Scanning Tools

(1)Run "IP Audio Terminal Configuration Tool" and enter the default password "123456".



(2)From the right menu choose【Mandatory method configuration 】, then in the【 terminal parameters 】 fill in the correct parameters, click "send parameters" button to complete the IP parameters Settings.



Note:

1. When using the Windows 7/Win 10 operating system, please use the administrator mode,and then shut down the firewall and the related software.
2. Terminal equipment scanning tools can only configure one terminal. When using this method, please make sure t hat a computer is only corresponding to one target terminal.
3. If you need IP audio terminal configuration tools, please contact our customer service.

Web Page Mode

Enter the Directional pick-up web interface, then revise the terminal network parameters according to the live environment, after finish Setting, click "save".

The detailed operation steps please refer to the custom terminal network parameters setting.

User-defined web page settings

Login web page

(1) Input the IP address of the Directional pick-up(The default IP address is 192.168.1.101) in the address bar of the web browser, and then enter.

(2) Input the username and password in the login window(The default username is admin, and the default password is Rdc070#*), and then press login.

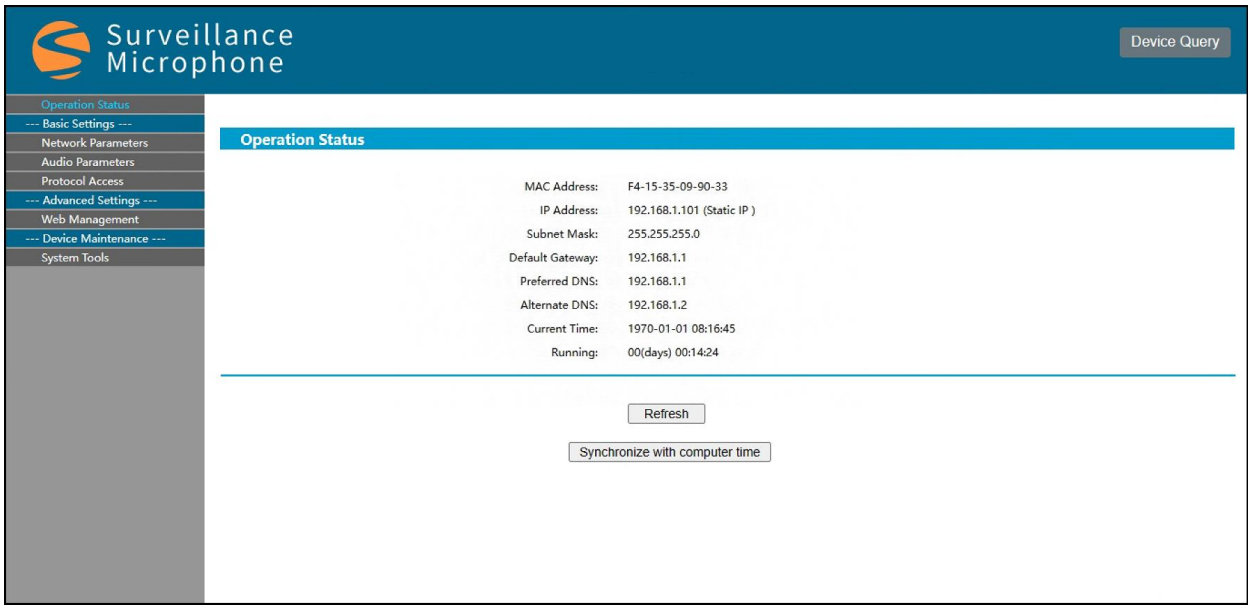
(3) Enter to the web page of the Directional pick-up.

Operation Status

On“Operation Status”, users can check the device IP address , subnet mask, gateway information, system running time , current time ect.

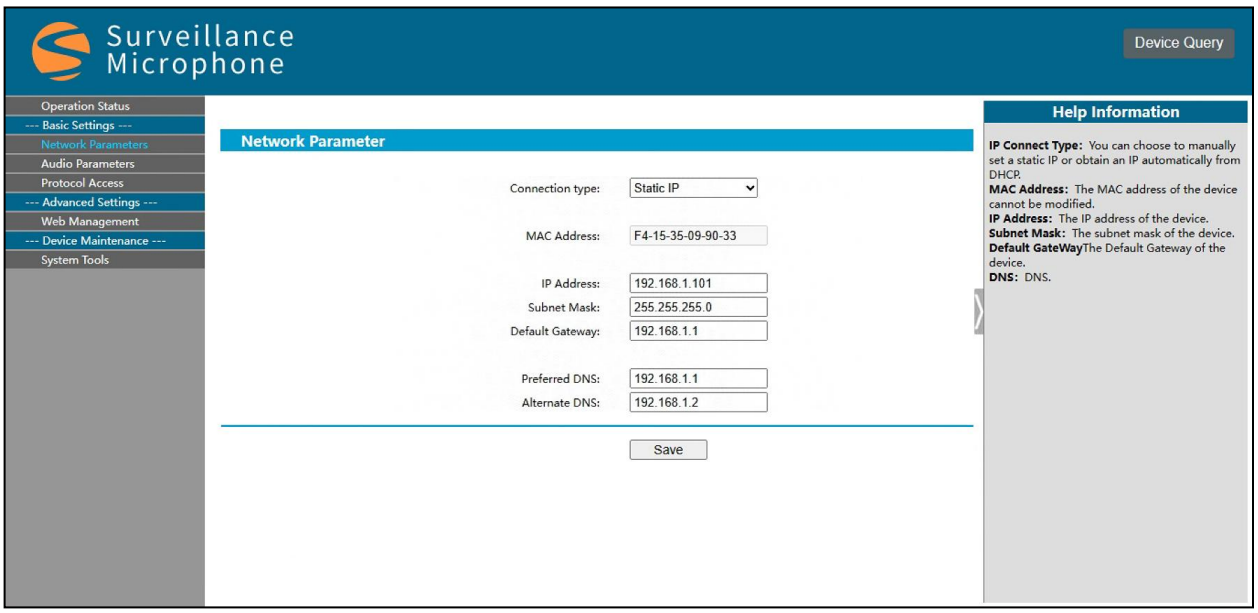
Click on the “Device Query”button on the upper right corner of the page, you can find the device which corresponding to the current page according to the change of device indicator status.

Click on the“Synchronize with computer time” button, the system time will be synchronized with the pc time.



Network Parameters

Set the network parameters of the device. Please modify each parameter in the network parameters according to the environment where the terminal is located, and click [Save] when finished. The parameter modification will take effect after rebooting the device.



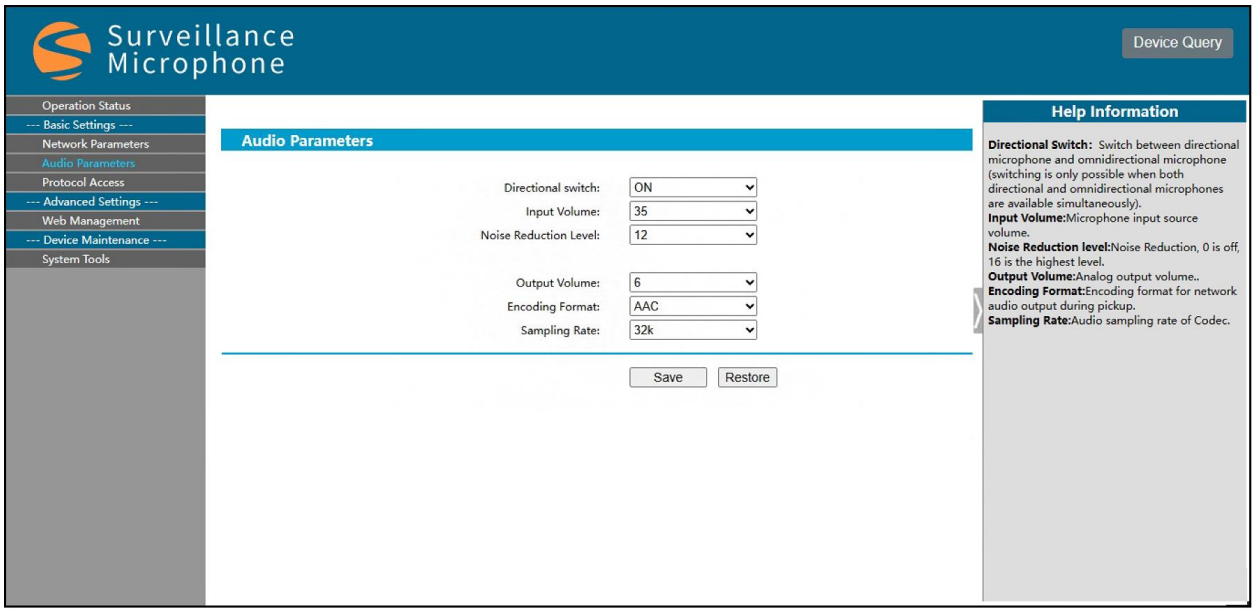
The meanings of the parameters are as follows:

Connection type	Supports static or dynamic IP address assignment. Static IP: User-defined IP address and other information Dynamic IP：Assign IP address via DHCP
IP Address	The IP address of the device, the factory default IP is 192.168.1.101, which cannot be

	repeated with other terminals.
Subnet Mask	Mask of the subnet where the terminal is located.
Default Gateway	Mask of the subnet where the terminal is located.
Preferred DNS	The IP of the preferred domain name resolver of the network where the terminal is located
Alternate DNS	The IP of the alternate domain name resolver of the network where the terminal is located

Audio Parameters

Set the audio-related parameters, click [Save] after the modification is completed, and the parameter modification will take effect after rebooting the device.



The meanings of the parameters are as follows:

Directional Switch	Set whether to enable directional pickup function. When it is on, the device has a directional pickup effect, the sound in the main direction of the device body is significantly greater than the sound on both sides. When it is off, the device has no directional pickup effect, and the sound effect in all directions of the device body is the same, and there is no suppression effect. It is on by default. If you adjust the directional pick-up function on the hardware, the parameters that have been adjusted on the hardware are the main ones. The hardware parameters are synchronized on the web. If the parameters are adjusted on the web page, the parameters that are adjusted on the web page are used.
Input Volume	Set the input volume of local input (microphone input).
Noise Reduction Level	0 is off, 16 is the highest level, and the default is 12. The higher the noise reduction level, the more noise is filtered. (Note: Hardware De-noising dial switch need to be turned on)
Output Volume	Set the analog output volume.
Encoding Format	The output encoding format of network pickup. Please set it as required.
Sampling Rate	Audio sampling rate of Codec. Please set it as required.

Protocol Access

(1)Device Name

Users can set up pick-up' s name here. This name is used for login server platform. Moreover, If you add it to an NVR channel, the device name is the NVR channel name.

(2)Parent node IP

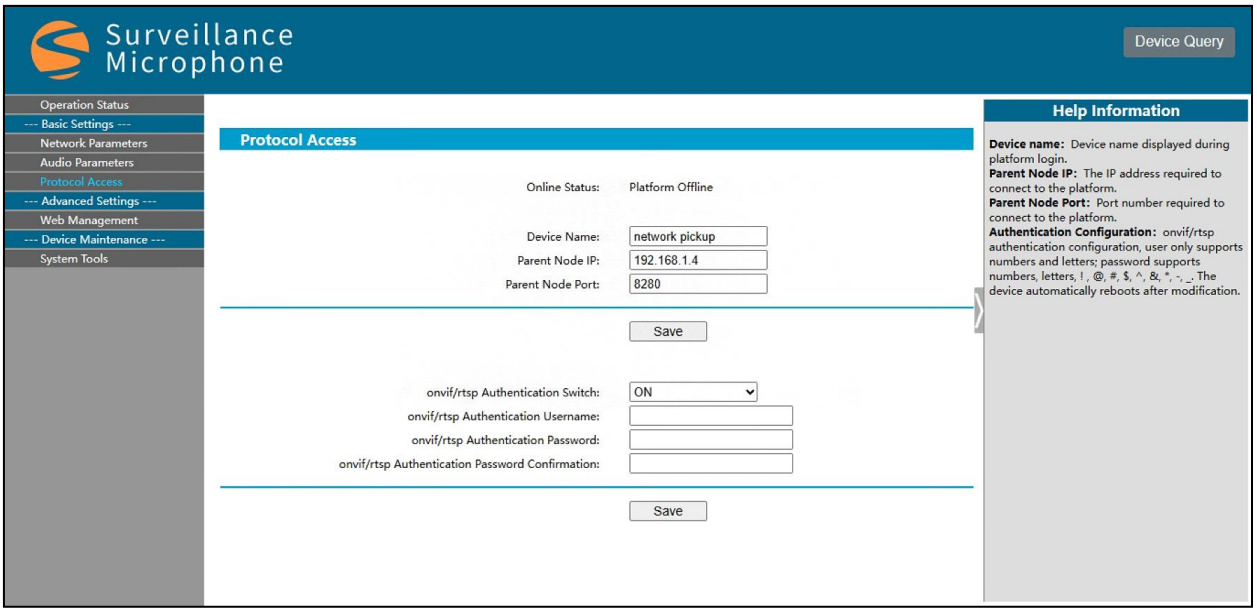
Users can set up the pick-up server platform's IP address and port here. After the device logs into the server platform , the page displays Platform Online. The device is offline or the IP address of server platform does not exist, the page displays Platform Offline.

(3)Onvif/rtsp authentication configuration

After the authentication switch is on, you can configure the Onvif authentication username and password. The RTSP authentication username is the same as the Onvif authentication username.

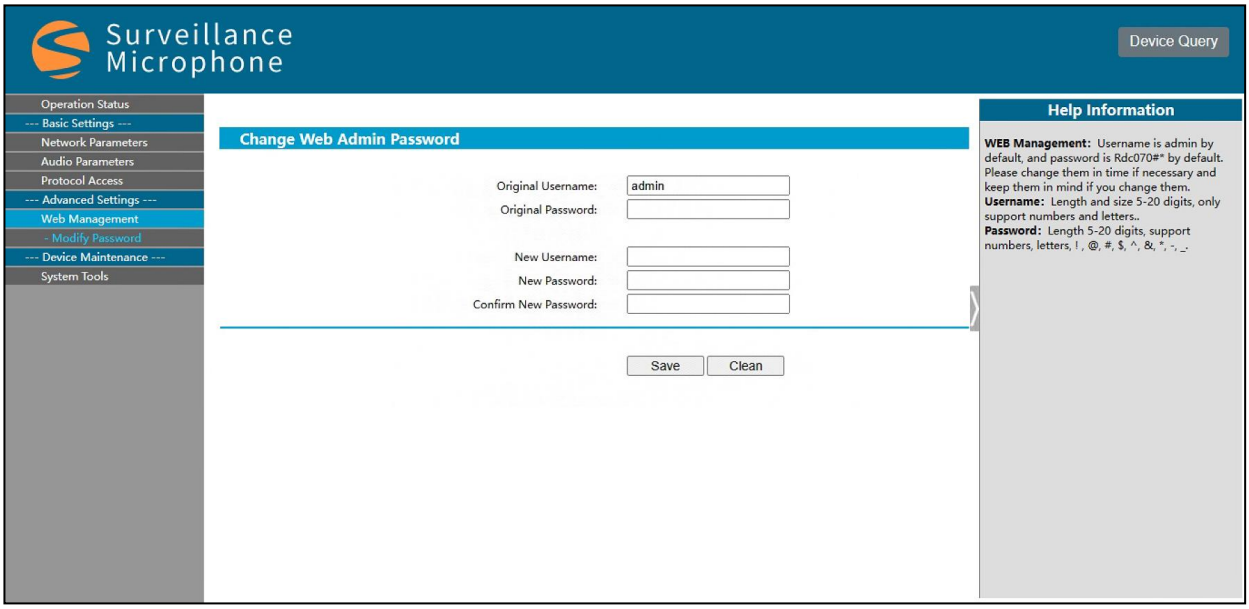
When the authentication switch is off, using onvif and rtsp pulling stream don't need to authenticate.

The authentication switch is on by default, the default username is admin, the default password is Rdc070#*.



Modify Password

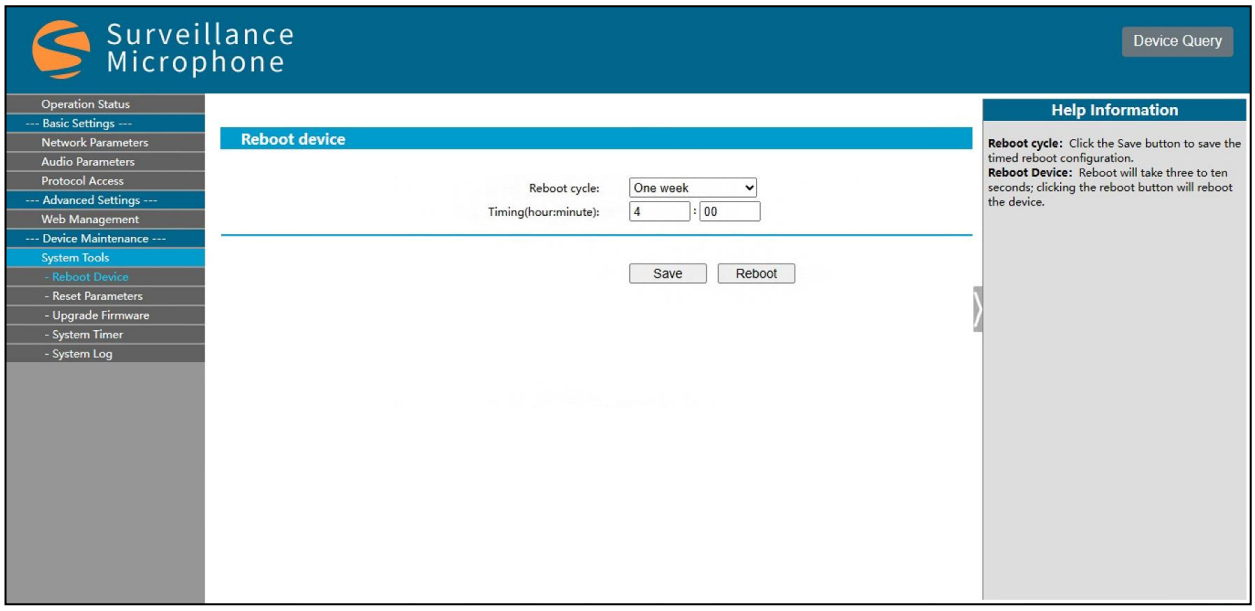
You can change the username and password for logging into the web page in here.



Reboot Device

After this function is enabled, you can set the time for restarting the device every day. Click on [Save] after the settings are completed, and it will take effect after rebooting the device.

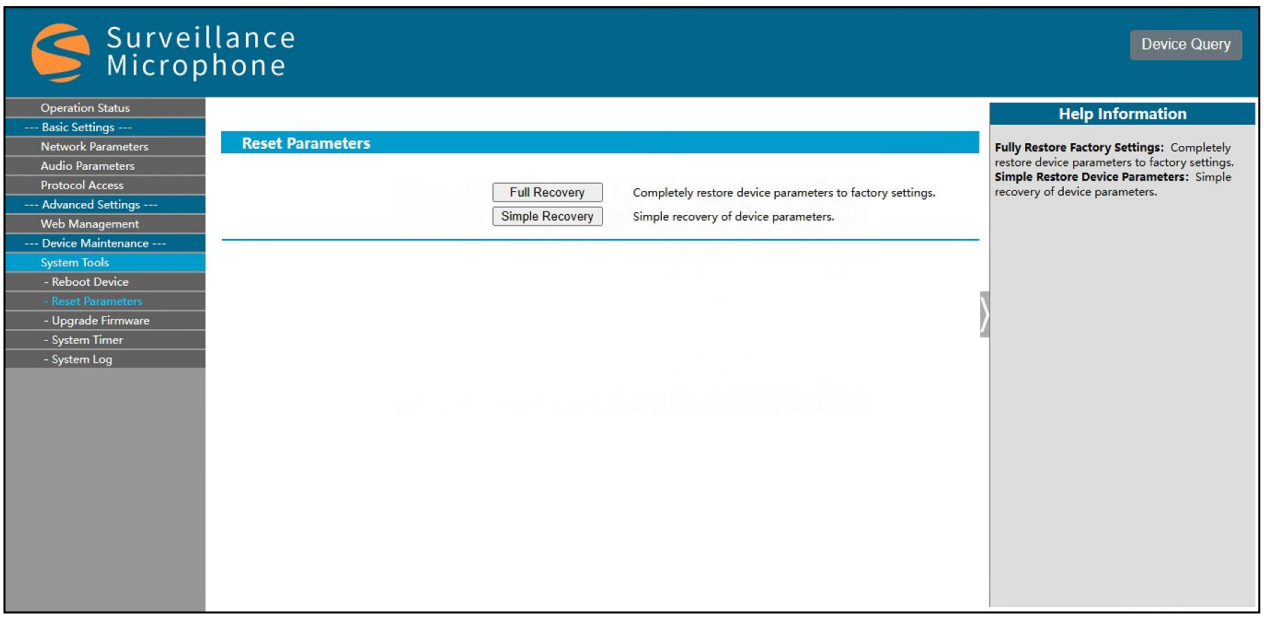
Click on the "Reboot" button to manually restart the device .



Reset Parameters

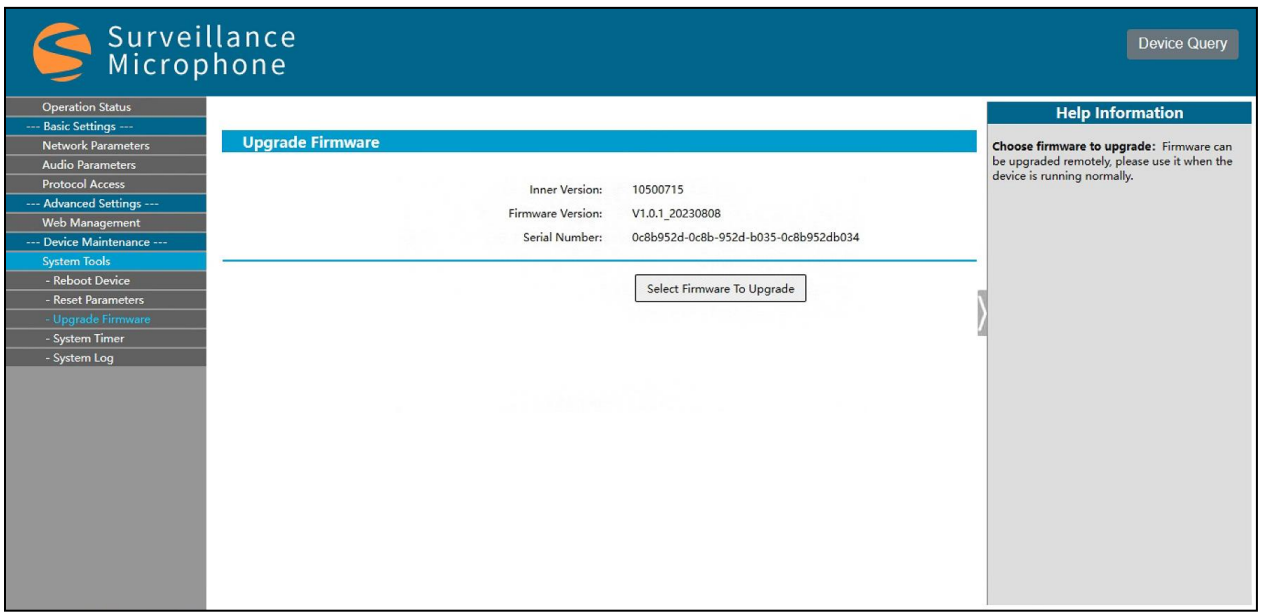
Full Recovery: After clicking it , all parameters of the pick-up will restore to default.

Simple Recovery: Click on “Simple Recovery” button to restore all of parameters of the pick-up to default settings except IP address and other network parameters.



Update Firmware (Note: Do not upgrade the firmware unless there is a special need)

On the upgrade firmware page, click on "Select Firmware To Update" button, select the firmware upgrade file provided by the manufacturer to upgrade firmware**. (Note: Do not power off during the upgrade process. Otherwise, the upgrade may fail and the device may be faulty.)**



System Timer

Support three kinds of time calibration methods : Web time calibration , platform time calibration, NTP time calibration. The default is “Time calibration disabled”.

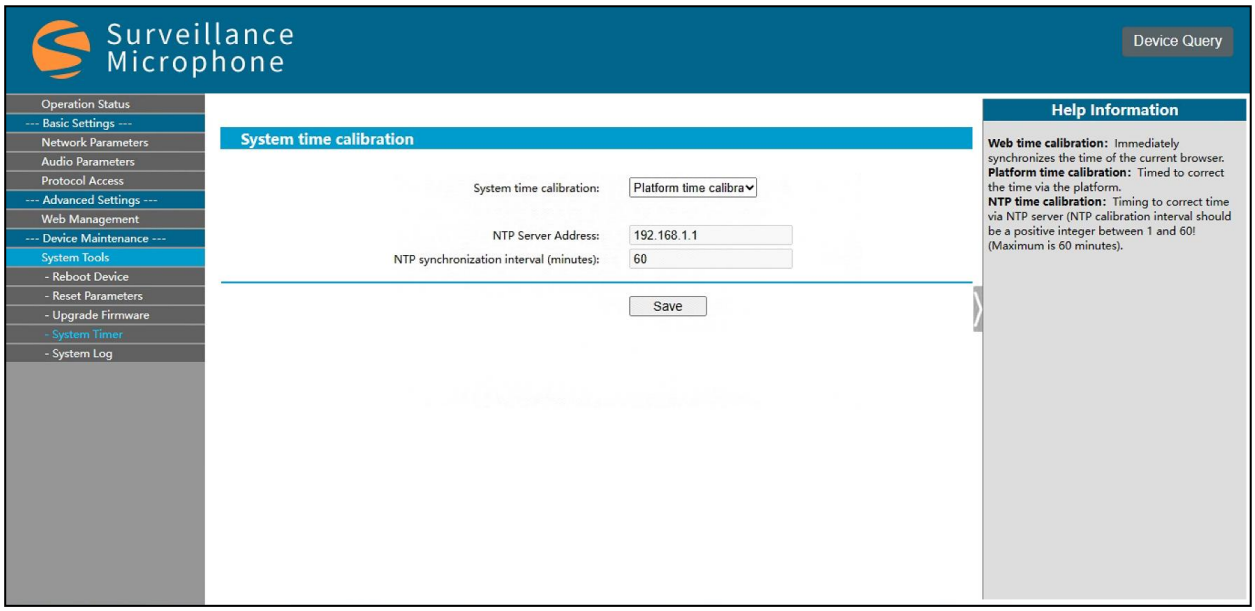
Web time calibration: After choosing this option , the device’ s system time will be same as PC (Remark: it will only calibrate time once when logging in web page)

NTP time calibration: After choosing it and set up NTP server’s IP address& NTP calibration time intervals , device itself will calibrate time as per calibration time intervals which user set up.

(Note: 1. Please make sure that the NTP server has been installed and started.)

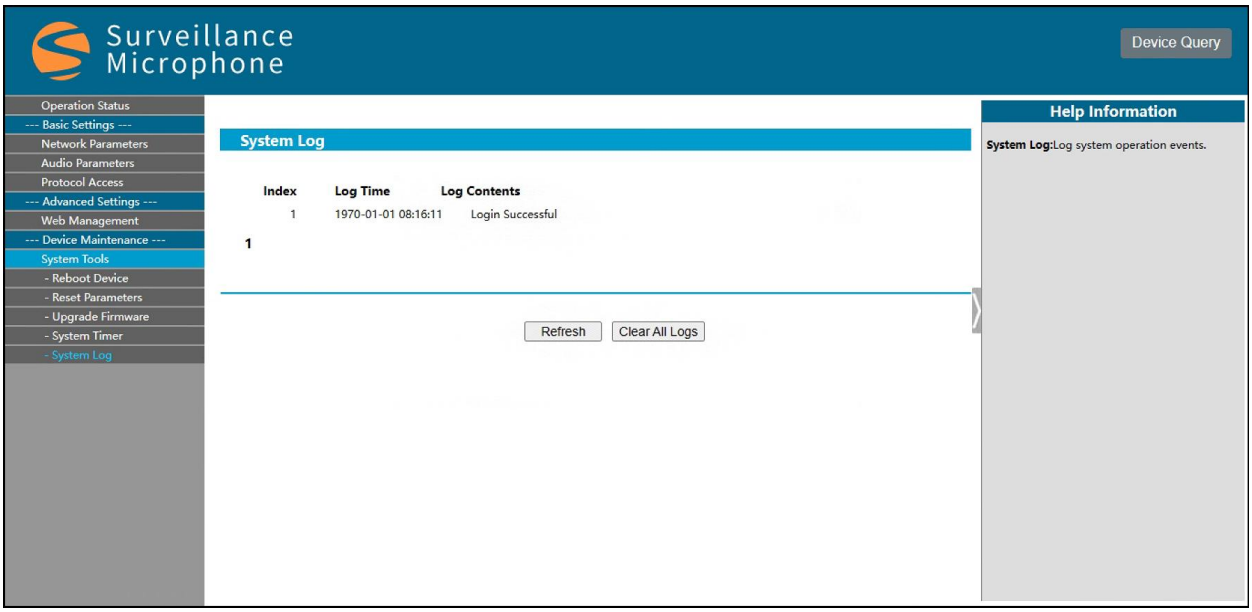
Platform time calibration : When choosing this option , the platform server will calibrate the time of the device and make its time the same as that of platform server.

Click on [Save] after the settings are completed, and it will take effect after rebooting the device.



System Log

Directional pick-up can automatically record the operation process and generate logs, and support users to view system logs on the web page.



Basic Functions

Connecting DVR

Directional pick-up's audio and video can be previewed and played back through DVD after it connecting DVR, The device occupies only one channel in the NVR.

Support RTSP pulling stream

User can pull video and audio stream via RTSP streaming player . The pick-up 's RTSP address is:
Main stream: rtsp://IP address/forward;
Sub stream: rtsp://IP address/forward_sub.

User can pull pick-up 's audio stream using tools which support RTSP pulling stream , such as VLC player or specified network camera. Its address is rtsp://IP address/audiotracker_X, X is channel number, X=1,.

Support analog audio output

After the device is powered on, the analog audio output signal line can always output analog audio.

Support logging in the pick-up system platform

After filling in the server IP address and port in the " Protocol Access" page , the device can log in to the pickup system server platform. The device can perform real-time monitoring, audio playback, video preview and playback functions on the platform, and device management operations can be performed on the platform. **(For more details, please refer to the manual of the pickup system server platform)**

Directional pickup

Outdoor directional surveillance microphone has the function of directional pickup. After the directional pickup switch is turned on on the Web page, the sounds picked up in the main direction of the device body are obviously larger than those on both sides. After the directional pickup switch is turned off, the device has no directional pickup effect, and the sound effect in all directions of the device body is the same, and there is no suppression effect.

Troubleshooting

No sound from Outdoor directional surveillance microphone

1.Check whether the power supply and network cable of the device are normal or not.

2. Check whether the interface is loose and whether there is a bad contact or not.

3. Check whether the volume configuration is muted or not.

Bad sound quality with big noise

1. Check whether the power supply of the device is normal or not, simultaneously the signal wire of the device should avoid interference areas.

2. Determine whether the sound is howling sound or not. If the Outdoor directional surveillance microphone and the playback device are in the same room, please use a headset.

3. If the analog output is connected to other audio equipment, please disconnect it and connect it to an active speaker for testing.

Web page is displayed abnormally

Refresh or clear cache or change browser.

The audio stream of pick-up that the specified IPC pulled has no sound.

1.Check whether the IPC supports this function.

2.Use VLC to pull the pick-up's audiotracker stream to check whether there is sound.

3. Check whether the audio encoding and sampling rate of the pick-up audio stream and IPC meet the requirements.

The device status indicator is off

Check network cable connection.

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