Product Overview

Product Introduction

The wireless portable recording system is based on the guiding principle of the overall outline of the national Thirteen-Five Plan, which is based on the development of a new type of policy-compliant recording system on the basis of strengthening the innovation and development of educational equipment products.

For the market live equipment line clutter, the construction of cumbersome, complex control, complex coordination, high cost and other problems, Shenzhen Rui Wireless Portable recording system in the practical, human-machine function has done a lot of innovation, the entire use of wireless signal transmission technology, its operating interface simple, 0 basis can also be easy to start, To change the traditional direct recording equipment all kinds of drawbacks, so that the operation and application more humane.

The wireless portable recording system developed in Shenzhen, from equipment construction, equipment commissioning, equipment use process and management, is completed by one person, applicable to all kinds of education and teaching, meetings, forums, dances and other scenes.

Wireless portable recording and broadcasting system overall solution, the biggest feature is to get rid of the shackles between the traditional equipment, all the information can be realized by wireless real-time transmission, equipment power supply with a strong mobile battery, long life, stable performance; product support real-time live broadcast function, using popular

micro-letter app applications, Users do not need to install any additional plug-ins and applications, very convenient to use.

Deployed wireless portable recording system, operators only in the product LCD panel on the basis of function clicks or through the USB keyboard mouse call shortcut function, you can complete the device scene and function switch.

Product appearance

Wireless portable recording System product main equipment as shown in Figure
1-1:

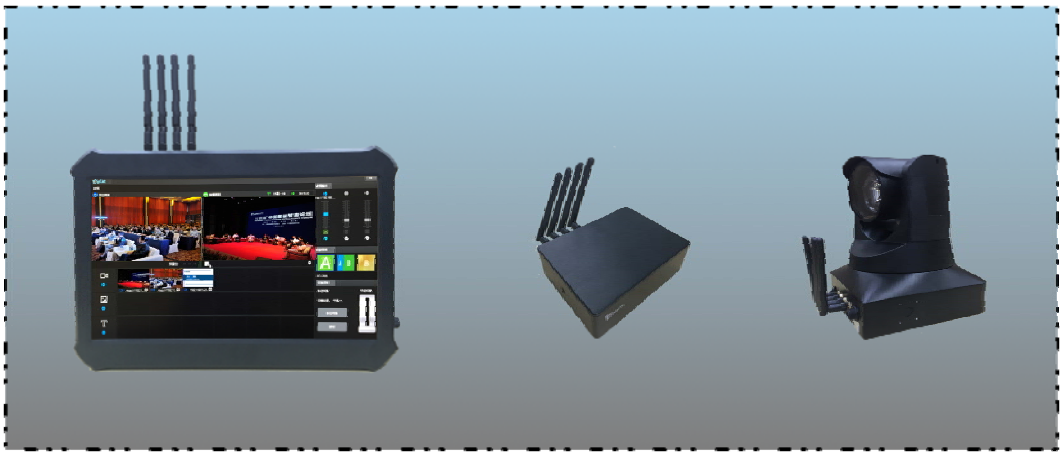


Figure 1 1 Products main equipment

1.1.1 Wireless Portable Multicast host

The front panel of the wireless portable recording host is shown in the following illustration:

1	Wireless Antennas	2	Pre-supervised live screen
3	Scene output screen	4	Scene Add Lens Area
5	Local resource Add Zone	6	Text Scheme add area
7	Feature settings	8	Audio Add Area
9	Special effects Settings	10	Toggle Scene Area

The interface diagram for the wireless portable multicast host is shown in the following illustration:

1	Device switch	2	Power connector
3	HDMI HD Output interface	4	USB3.0 interface
5	Lan Network Port	6	Line ININterface
7	Line OUT	8	MICInterface

1.1.1 Wireless Waterproof camera

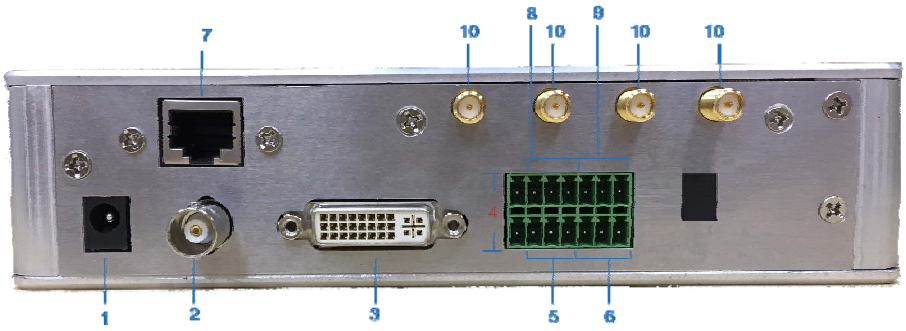
Wireless waterproof camera YC200 look as shown in the following illustration:：

Instructions and Knobs	Function description
Wireless Antennas	Transmit the image of the captured images
Power connector	Device Power Input Interface

Number	Parts	Description
1	Power connector	Access DC v power supply.
2	SDI signal Input Interface	3G-SDI interface, access to SDI signal.
3	DVI Signal Input Interface	DVI interface, Access DVI signal.
4	Audio Input Interface（MIC IN）	Unbalanced interface, access microphone audio signal。
5	Audio Input Interface（MIC IN）	Balanced interface, access microphone audio signal。
6	Audio Input Interface（LINE IN）	Access Stereo signal。
7	Network interface	Connect to the local area network through this interface.
8	Camera Control Interface (RS232)	Camera control interface based on RS232 interface specification.
9	Camera Control Interface (RS485)	Camera control interface based on RS485 interface specification.
10	Wireless Antennas	for wireless data transmission.

1.1.1 Wireless picture Transmission box

Wireless waterproof camera YC100 look as shown in the following illustration：



1.1.1 Ybolo micro-letter Live service

The main interface of the Ybolo micro-letter Live service is shown in the following illustration:

1.2 Product parameters

Product parameters for wireless Portable multicast Ycat hosts see the following table:

function	Description
Wireless network	
Wireless Operating Frequency	5.1—5.9 (GHz) *Frequency selectable *
Wireless transmission distance	≤300 meters (outdoor open without blocking case), ≤ 150 meters (indoor without blocking case)
Wireless bandwidth	Maximum 300Mbps (decision of transmission distance and channel occupancy)
Anti-jamming mode	Manual/Auto Select channel Mode
Video parameters	
Codec standard	H.264 Baseline\Main\Height Profile
Image Push Quality	640×360@30fps; 960*540@30fps
Image decoding Quality	720P@25fps，
Support Camera video	4 Road
Video Streaming control mode	CBR/VBR
Audio parameters	
Coding standards	AAC 44.1KHz

Audio input	1 Road micin 1 Road LineIn
Audio output	1Road LINEOUT
Video and Ybolo Cloud push management	
Video mode	Manual video, exciting soccer video real-time interception (5-30 seconds)
Ybolo push	RTMP protocol
Live mode	Micro-letter Live, web live
Video Preservation	Native hard disk
Video parameters	720P@25fps，25fps, 1M-12M(optional)
Exciting football video playback mode	Exciting playback, recent playback
How to back up	Support hard disk, U disk storage and Backup
Wireless Portable Multicast Host	
Guided broadcast mode	Manual Seeding
Multiple scenes	Multiple scenes can be added to support one-click switching
Subtitle mode	Preset three kinds of subtitles
Set of coordinates	Three kinds of Taiwan standard, custom
Special effects Switch mode	Multiple special effects switching mode
External resources	
Support Pictures	PNG、JPEG
Support PPT	Office 2003 version above
Support Video Format	MP4 (soccer special video format)

Technical specifications for wireless waterproof cameras see the following table:

function	Description
Basic parameters	
Minimum illuminance	0.5Lux(F1.8, AGC ON)

Connection mode	
Connection mode	Wireless network connection
Network Mode interface	1 RJ45
Power connector	Aviation Waterproof 2pin
Wireless Operating Frequency	5.1—5.9 (GHz)
Wireless transmission distance	≤300 meters (outdoor open without blocking case), ≤ 150 meters (indoor without blocking case)
Wireless bandwidth	Maximum 300Mbps (decision of transmission distance and channel occupancy)
Anti-jamming mode	Manual/Auto Select channel Mode
Scan mode	Scan by line
Zoom ratio	12 Times Optical Zoom
Focal	f＝3.9～46.1mm
Horizontal Perspective	6.3 ° (Narrow angle) ~72.5° (Wide angle)
Aperture number	F1.8 ～ F2.4
Digital Noise Reduction	2d & 3d Digital Noise Reduction
Focus mode	Automatic/Manual
Exposure mode	Course pattern recognition, automatic exposure, automatic white balance, automatic gain
Video frame rate	50Hz: 25fps (1280×720 adjustable)
Sync mode	Internal synchronization
Language menu	Chinese and English
Horizontal speed	0.1 ～100°/S
Vertical speed	0.1～45°/S
Horizontal rotation Range	-170°～+170°
Vertical Rotation Range	-30°～+30°
Preset position Precision	±0.1°
Signal-to-noise ratio	＞55dB
Gamma correction	Support

Mobile Reconnaissance	Support
Mirror	Support
Power off memory	Support
Waterproof Grade	IP64

Wireless Map transmission box specification See the following table:

Video encoding	H.264 High Profile
Audio encoding	AAC
Frame rate	1 ~ 30 Frames/sec
Audio sampling rate	44.1kHz 48kHz
Audio Code Rate	64Kbps 96Kbps 128Kbps
Video bitrate Range	128kbps ~ 20Mbps
Code rate Mode	VBR CBR
3G-SDI Video Input	1280×720P@50@60 1920×1080I@50@60 1920×1080P@25@30@60
DVI Video Input	1280×720P@50@60 1920×1080I@50@60 1920×1080P@25@30@50@60
DVI VGA input	640×480@60@72@75@85 800×600@60@72@75@85 1024×768@60@75@85 1280×720@60@75HZ@85HZ 1280×768@60 1280×800@60 1280×960@60 1280×1024@60 1366×768@60 1400×1050@60 1440×900@60 1600×900@60 1600×1200@60

Camera Control Protocol	PELCO-P、PELCO-D、VISCA Camera Control Protocol.
Size	220.0mm ×221.0mm×44.5mm
Weight	0.6kg
Working temperature	-20ºC ~ 60ºC
Humidity	5% ~ 95%
Storage and transport temperature	-40ºC ~ 80ºC
Operating voltage	DC 12V
Working current	3A
Power	8W

Mobile Power specifications See the following table:

function	Description
Power adapter	Dc12v/3a or Ycat, Ycat dedicated 95W battery DC14 4v/3.5A
Input voltage	DC9V-DC16V
Input current	4A（MAX）
Maximum output power	50w
Maximum Output current	3.5A
Power	15W(MAX)
Maximum cruising time of the battery	≤ 8 hours (ycat dedicated 95W battery)
Storage temperature	-10℃～+60℃
Storage humidity	20%～95%
Working temperature	-10℃～+50℃
Working humidity	20%～80%
Net	0.8kg
Size	134*88*52mm
Use environment	Outdoor, full prevention of rain design
Optional accessories	Ycat tripod, high altitude telescopic pole ycat Special 95W battery

Technical specification of the cloud Resource management platform for the education of Rui-access see the following table:

Parameters	Value
Running operating system	LINUX
Live	Web pages receive live, support windows, mainstream browsers in Mac operating systems (IE, Safari, Chrome, Firefox, etc.). The live node supports up to 10000 channel @384kbps.
Demand	Web pages receive on demand, support windows, mainstream browsers in Mac operating systems (IE, Safari, Chrome, Firefox, etc.). The on-demand node supports up to 10000-channel @384kbps.
Number of live or on-demand users	Supports up to 10,000 live or on-demand users.
Storage	Support for iSCSI network storage.

2. Device InstallationyCat

2. The wiring of the wireless portable recording system is shown in the following

illustration:

According to the connection way of the diagram above, the corresponding cables are used to connect each device.

2. operational instructions.

1.2 YCat Use Debugging method

Ycat Wireless portable recording and wireless waterproof camera yc200 Connection configuration is simple, the user simply by adding a direct-attached IP address or RTSP pull-flow address in the Ycat product configuration interface to complete the connection.

Ycat Wireless Portable recording system mainly consists of four modules, resource management, audio control, video control and system control.

- Resource Management Module control scene Add, subtitles, pictures, ppt and so on
- Audio control module mainly manages audio output channel
- Video control module debugging camera angle, focal length, color and preset position settings and other functions
- System control Module records system hardware Resource usage, software version information and live account management

1.2 Resource Management

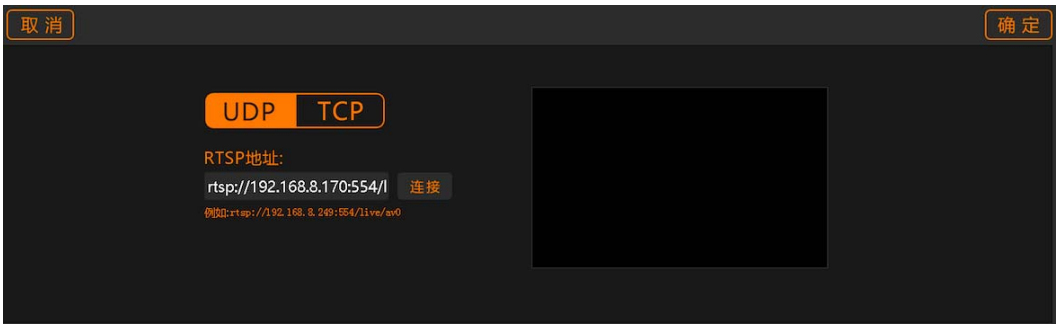
Network Resource settings

In the resource management module can be achieved by adding wireless map box, wireless waterproof camera and painting pictures and other scenes to achieve different scene information collection, at the same time by adding local pictures, video, PPT and subtitles and other information, to achieve different combinations of information and special effects of the switch pre-supervision and output

1.3 Add wireless Camera

Click on the resource management module in the lower left corner“ ”Icon on the“ ”symbols, popping“

”Options box, click "RTSP" to enter the following page。



RTSP is mainly used for wireless camera connection, the choice of adding rtsp, pop up the interface shown above, the default choice of UDP connection, the address bar will have a default IP, the normal use, just the IP address here to modify the wireless camera Wireless module IP address can be.

When you are finished, you can click "Connect" to view the status, or directly click the "OK" button in the upper right corner to add this network video directly to the resource window. As shown in Figure 3.1.1.1b

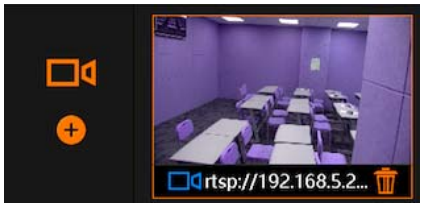


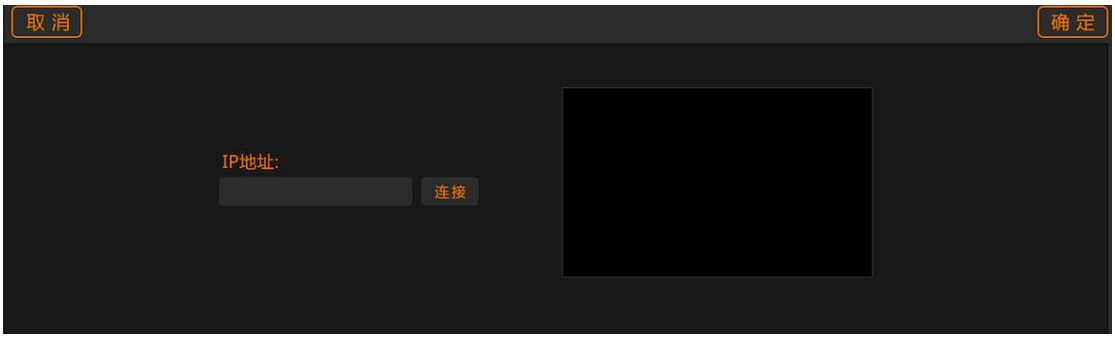
Figure 3.1.1.1b

To remove the added scene, click on Figure 3.1.1. The icon button in the lower right corner of the 1b window.

Add Encoder

Click on the resource management module in the lower left corner“ ”Icon on the“ ”symbols, popping“

”Options box, click "Encoder" to enter the following page.



When adding encoders, directly enter the Encoder wireless module IP.

When you are finished, you can click "Connect" to view the status, or directly click the "OK" button in the upper right corner to add this network video directly to the resource window.

The deletion method is the same way as adding a wireless camera.

1.1.1.1 Add painting

There are 6 kinds of output modes in the painting, which are：

A total of 6 ways

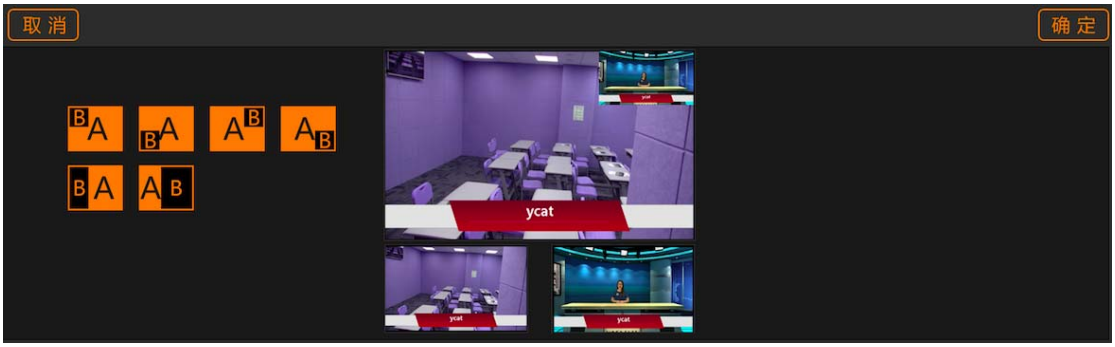


图 3.1.1.3

Figure 3.1. The painting in 1.3 is composed of“ ”Combination method.

1.1.1.2 Add subtitles

Click on the lower left corner of the software interface“ ”The following“ ”symbols, popping“

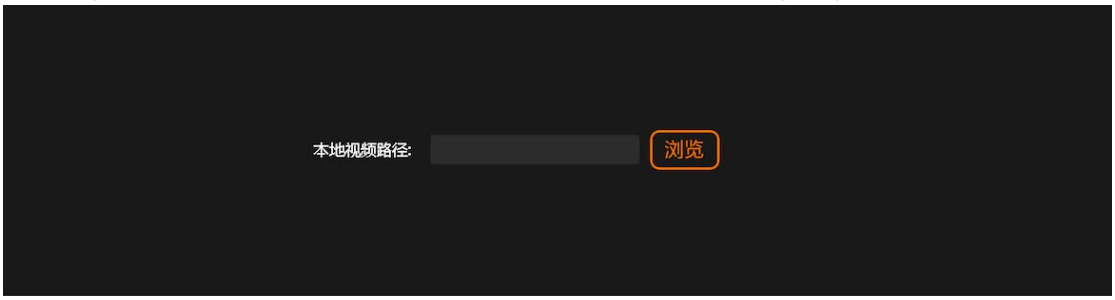
”Option box, select Subtitles to enter the following page。

In the subtitle add page, subtitle Ribbon support to add basic subtitles and scrolling subtitles, basic and scrolling subtitles to add multiple lists, when used directly click on the call, the caption can be used according to different scenarios to choose a different template, all the imported text list support import, export and delete features.

Users can also according to the needs of the use of the site to select the appropriate picture of the event, import to the output screen.

Add local Video

Click on the lower left corner of the software interface“ ”The following“ ”symbols, popping“ ”Option box, select "Video" to enter the following page。



Select the local MP4 format video, you can display the added video window in the lower left corner of the home page, click to display the watch in the pre-Supervisor screen, double-click to output directly to the remote.

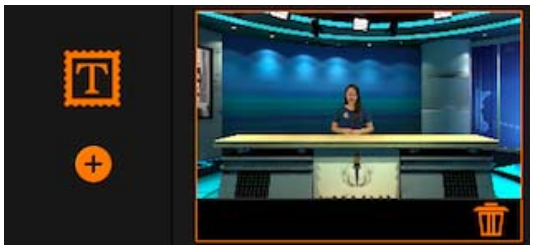


Figure added Local video

1.1.1.3 Add local picture

Click on the lower left corner of the software interface“ ”The following“ ”symbols, popping“ 字幕 视频 图片 PPT ”Options box, select Picture to enter the following page。

Select the picture you added as transparent. png format, the picture can be designed according to the actual scene.

1.1.1.1 Add PPT

Click on the lower left corner of the software interface“ ”The following“ ”symbols, popping“ 字幕 视频 图片 PPT ”Options box, select PPT to enter the following page。

Select the local need to output PPT files, click on the upper right corner of the "OK" to output to the home page resource management pages, you need to output can be clicked or double-click to select, click to display to the Supervisor screen, double-click directly output to the live screen.

1.2 Audio control

Local audio is divided into "local audio" and "Push output audio", the local audio source is mainly to access the local resource source and external audio sound source

Figure Audio Control

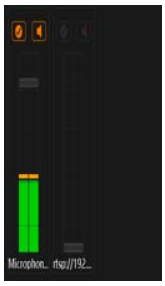


Figure Local Input sound source

Figure Push Flow output sound source

Real-time live broadcast, the push output audio will only have all the way output, push output which way, depending on the input audio we choose which way as output audio (each audio with a push, listening two icon)

After the tick, to push the corresponding audio volume to a suitable position, it is necessary to note that when you check the audio as a push output audio, tuning words need to be adjusted at the same time as input and output, that is, local or external audio source and push output audio need to set the volume separately

1.2 Video Control

The main adjustment camera color, quality, angle, speed, mode, preset position and so on.

1.1.1 Camera settings

The setting area of the cloud station can set the angle of the camera's left, right, top and bottom, and adjust the angle with the speed etc.

The effect of setting the speed is that when the camera direction, focus zoom and focus mode debugging, according to the speed of the design at this point can adjust the camera.

The preset position of the camera is the default parameter, the general preset position setting is not less than 64 kinds, according to the actual demand, design different angle preset position scene, in the use process through the direct call preset position, can realize the scene different azimuth, distance and so on fast call switch

After the camera direction is adjusted in place, it can be fine-tuned by setting the distance and focus of the focal length, so that the picture of the camera is more exquisite and true.

The main adjustment camera quality, according to different site conditions, set different parameters.

Mode selection can choose Outdoor mode and indoor mode

- Camera brightness, range 0-10, for image brightness adjustment
- Camera contrast, range 0-10, for image contrast adjustment
- camera sharpness, range 0-10, for image sharpness adjustment, mainly for detail analytic mode clarity effect.
- Camera white balance, mainly used in different lighting scene color correction
- camera saturation, mainly used to capture the color of the image gain
- Camera chroma, range 0-10, for image chroma adjustment

1.2 System control

记录系统信息和资源消耗情况，微信直播服务登陆及注销控制，关机控制等。

Resource usage records the current CPU occupancy rate of the system, CPU usage of the program, built-in occupancy and disk space remaining information.

Software version information records the current wireless portable multicast host software version information and software build time.

Ybolo Cloud Platform access mainly control the current system micro-credit Live server account login entry, for the account and password has been assigned to the secondary login can be carried out micro-broadcast function; Users may also be able to set up the relevant permissions on the live platform by clicking on the Sharing setting function Pass to the micro-letter for sharing.

1.1.1 Micro-letter Live service

Click to open the Internet Explorer on the computer desktop, in the IE URL Access column to enter http://www. ybolo. com, click the "Register" button in the upper right

corner

Click on the registration button and go to the following page:

According to the registration prompt information fills in the user name, the enterprise name, the enterprise English name, the industry, the company address, the contact, the contact telephone, the mailbox, the management password and so on information, the above information input must follow the prompt information to fill in, otherwise prompts the user to form the wrong information, and After filling in the information in the following format, see the following figure

After filling in all required information, in the "I have read and agree" in front of the check, confirm the above information filled the authenticity of the information, and according to the "Ybolo Enterprise Food Platform User Registration agreement" to bear the responsibility of China's laws and regulations, filled with information and operation of the service is not illegal, not illegal, For the users of the illegal use of all the adverse effects and responsibility by the user to bear, Shenzhen Rui Information Technology Co., Ltd. Poly Accountability Rights.

All the above information is completed, select "I have read and agree" and other information, click "Register" button, that is, the background submitted registration information, by the Shenzhen Rui Access Information Technology Co., Ltd. Administrator in the background audit, and distribution of account information, the distribution of "micro-letter Live service" The account information will be sent directly to the user's registered phone number or email address.

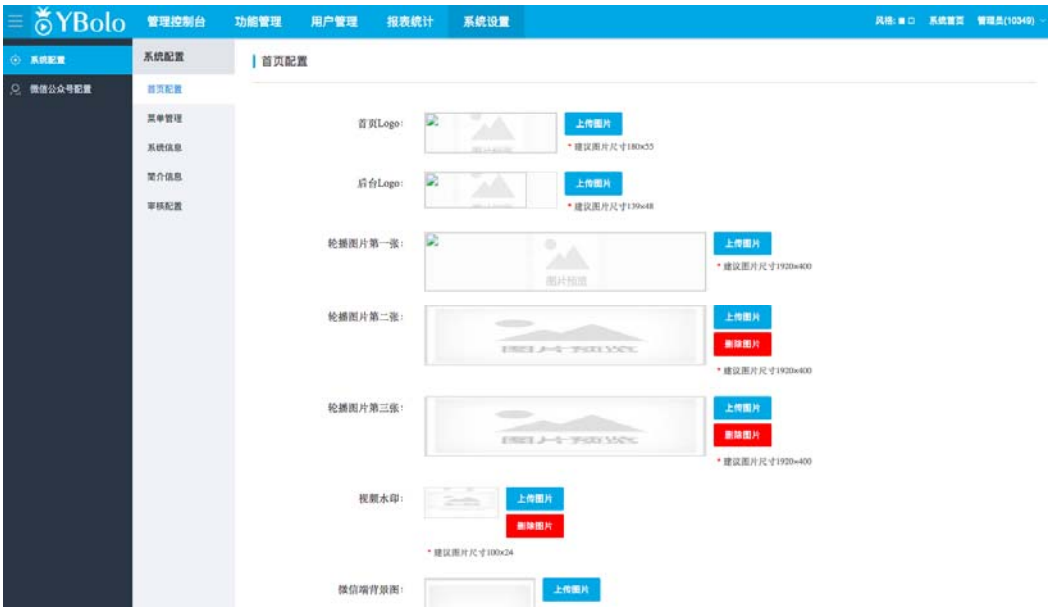
The registration process information, especially the enterprise user and the management password, the user must keep in mind, enterprise user (for example in this case registered Enterprise User: Admin@szruiqu. com) for the Enterprise management user name, admin password for admin password. When the user admin needs to manage the micro-credit live service, it can enter the admin page through the Enterprise User (admin@szruiqu. com) and admin password to login directly in the foreground.

After clicking the "Register" button, the following page pops up:

Click "Bind public Number" to enter the following page:

Enter the Admin user password at the password, then click the "Login" button to enter the following management page, in which the micro-letter Public Number Configuration page The application for the information of the public number of the micro-letter is required to be completed by the user and filled in with the corresponding

information.



Enterprise administrator through the background can configure the micro-letter public account related information, can also modify the system configuration, System Information modification support to modify home logo, background logo, polling pictures and other information. Enterprise background management also supports functional management, user management and Reporting statistics.

Functional management includes video management, broadcast management, recording and broadcasting management, album management and news bulletins, each module is composed of several small module functions.

The user management includes the member management and the user management two big modules, the user management mainly involves the enterprise organization structure, the role, the user information and so on management and the establishment, the member management mainly records the member information and the billing information and so on.

When users apply for and fill in the details of the public information, the next step is to establish a micro-credit live channel and micro-letter broadcast login username and password, the specific steps are as follows:

Enter user management-user management-user management, as shown below

Click "Y Series User New", the system automatically generate custom string user name 102349y001, default password 123, (such as the above figure user management) after the establishment, into the "functional Management"-"Live Management"-"Live channel management", visible in the list automatically generated live channels.

Map Live channel Management

such as "Map Live channel management", in the Live channel management page generated live channel, stating that the application has been completed, enterprise administrators only need to "figure user management" generated in the user name (10349y001) and password (123), in the Ycat Wireless Portable Multicast host system settings "Ybolo Landing" Enter the username and password in the login, through the network can be pushed to the micro-letter broadcast.

1.2 Push and record settings

The main functions of the module include: Setting up the push address, address alias (channel name), resolution, frame spacing, code rate and other information.

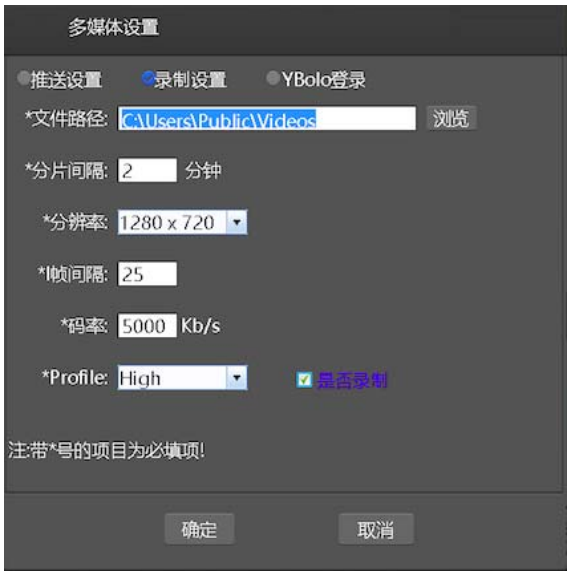
1.1.1 Push settings

Push mode adopts RTMP standard push flow protocol, first in the cloud streaming live on the server to establish the live channel and generate a push-flow address, and then in the Ycat host's push address to fill in the streaming streaming server generated by the push address, you can collect the local video signal to the cloud streaming server, when the push function is turned on, Local camera lens real-time scene can be pushed to the far end, remote users through mobile devices, PCs and other networked devices, access to open live channels, you can live in real-time viewing.

Set address alias (channel name) direct display of the address to someone else, convenient access to the viewing of the screening of tourists, through the code rate test can test the network real-time situation, according to the results of the test to fill in the numerical value (generally the value of the proposed here is less than the test value), the resolution defaults to the phone screen to adapt to the 640* 360 pixel, also can adjust according to network bandwidth condition.

1.1.1 Recording settings

Modules include file storage path, fragmentation interval, resolution, frame interval, code rate and other functions settings, users can be set according to the requirements of different file location, resolution, frame interval (recommended default), code rate and other information.



Profile function settings are push compression level, the higher the compression, the smaller the push code flow, the greater the system hardware wear.

1.1.1ybolo Landing

Enter the user name and password in the background of the system to click on the login can be realized remotely live.

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body