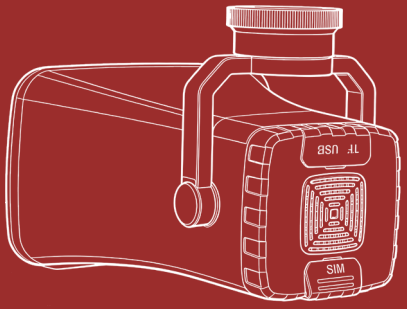
VIEWPRO

M120-PRO

Loudspeaker Manual



V2.0

1.1 Product Overview

The M120-PRO is a drone device with an integrated loudspeaker system, primarily used in public safety, emergency rescue, inspection, and other operational scenarios.

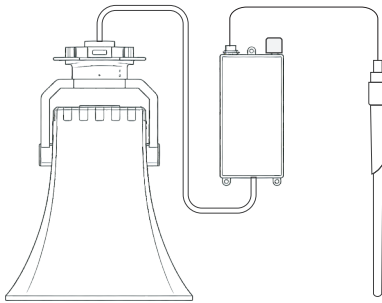


Figure 1.1 M120 Pro

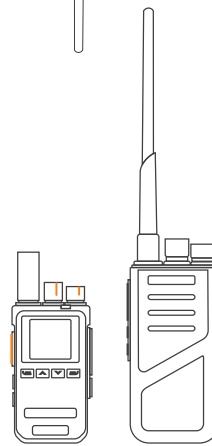
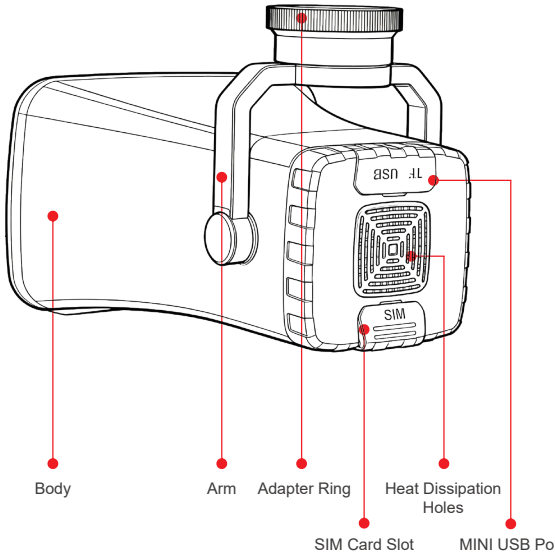


Figure 2.2 Walkie-Talkie

1.2 Loudspeaker Body Description



1.3 M120-RPO Technical Specifications

Parameter	Specification
Dimensions	142.7*95.2*201.6mm (L*W*H)
Weight	691g ±5g
Material	PP/(ABS+PC)/Aluminum Alloy
Power	25W
Max Sound Pressure	124dB@1m
Effective Broadcasting Range	800-1000m
Operating Temperature	-10°C~+40°C
Communication Link	LTE 4G network link, Analog link, TCP link
Broadcast Mode	TTS(Text-to-Speech) / Voice Broadcast / Audio Files
App Support	Android 5.0 and above
Max Sound Pressure	124dB@1m
Directivity	0°~ 90° (Pitch)
Mount Interface	Standard Quick Release
Pitch Angle	Adjustable
Audio Format	WAV、MP3、AAC、FLAC、M4A

1.4 Three Configurations

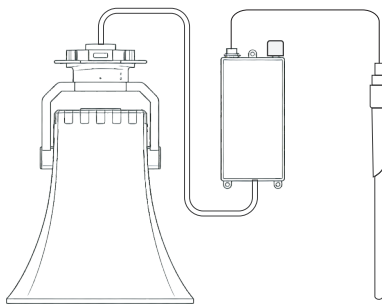
The loudspeaker currently supports three connection methods: LTE 4G network, analog intercom, and TCP control.The LTE 4G network connection supports two options: a 4G walkie-talkie and an Android app.
Users can select and combine these three connection methods according to their specific requirements.

Configuration	Features & Accessories
LTE 4G Network	4G Walkie-Talkie (√) Android App (√)
Analog Intercom	Analog Walkie-Talkie (√)
TCP Control	Android Ground Station (√)

1.5 Detailed Usage Instructions

Loudspeaker Connection Instructions:

The loudspeaker connects to our viewport via the adapter ring. Simply connect viewport to the UAV's 12V power supply.



Loudspeaker Power On:

After connecting the power, wait about 1 minutes. A buzzing sound from the speaker indicates the loudspeaker is ready.

SIM Card Installation and Removal:

At the top of the loudspeaker, there is one MINI USB port and two card slots. One is for the SIM card, and the other is for the SD card. The MINI USB port is used for debugging purposes.

Open the rubber cover of the SIM card slot. If a SIM card is already inserted, gently press the card to eject it.

To install the SIM card, hold the card with the chip facing inward and the cut corner facing downward, then insert it into the SIM card slot. After insertion, close the rubber cover to complete the installation.

Note:

For overseas customers, the SIM card is not included by default. Users need to purchase and install their own SIM card.

SD Card Installation and Removal

Open the rubber cover of the SD card slot located on the top of the loudspeaker. If an SD card is already inserted, press it gently to eject it.

To install the SD card, insert it into the slot with the chip facing inward. After insertion, close the rubber cover to complete the installation. The SD card is included by default at the factory.

Loudspeaker Control Methods:

The loudspeaker supports four control methods:
1.Mobile App Control – Connect the loudspeaker to a mobile app and operate it through the app.
2.4G Walkie-Talkie Control – Connect a 4G walkie-talkie to the loudspeaker and control it via the device.
3.Analog Walkie-Talkie Control – Connect an analog walkie-talkie to the loudspeaker and use it for voice broadcasting.
4.The fourth method is to control the loudspeaker via TCP using an Android ground station connected through the video transmission link. The following sections describe how to use each of the four control methods.

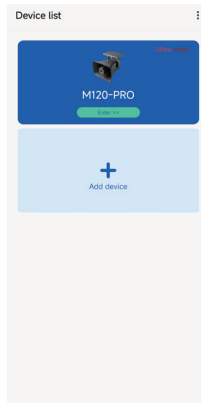
App Instructions (Not available in Analog-Only Configuration)

As shown in the figure below, this is the first operation method: connecting the loudspeaker via the mobile APP over the 4G network.



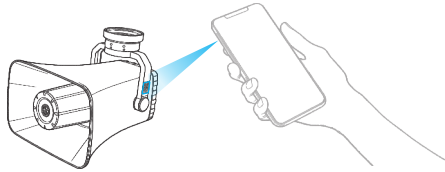
Binding between APP and loudspeaker

As shown in the figure below, this is the login and device binding interface of the loudspeaker.



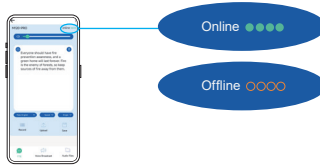
Device list

a. For first-time use, the mobile app must be bound to the loudspeaker. Open the app and go to the login page on the home screen. Tap “Add Device”, and a scanning window will appear. Scan the QR code attached to the loudspeaker body to complete the binding automatically.



b. After binding is completed, the connected loudspeaker will appear at the top of the screen. Tap it to enter and log in to the device interface.

c. The top-right corner will display the online status of the bound loudspeaker.



Function Introduction

Once the mobile phone is successfully bound and the loudspeaker shows online, you can tap to enter the main interface.After logging in, the main interface includes three functional pages: Text-to-Speech / Live Voice Broadcast / Audio File Playback

Tap the corresponding buttons at the bottom of the menu to switch between these functions.



Text-to-Speech Function



Live Voice Broadcast Function



Audio File Interface

Text-to-Speech Function:

1.Enter the text to be converted in the input box. The text can be in Chinese or English, with a maximum length of 10,000 characters. Then tap the Upload button to send the generated audio to the loudspeaker. The generated audio can be played from the Audio Files page.

2.You can select the voice for the broadcast and adjust the playback speed.

3.Tap Save to store the entered text. You can view saved content in the records section.

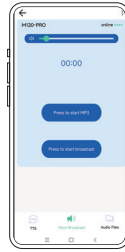
4.Previously saved text can be selected and played from the records.

5.Tap the Delete button in the upper-right corner to clear all input text. Tap the headphone icon in the upper-left corner to preview the text-to-speech effect on your phone.

Voice Broadcast / Recording Function Introduction:

1.Tap the Start Broadcast button at the bottom to begin real-time broadcasting. The timer above will start running, indicating the recording duration.

2.To stop broadcasting, tap the button again.

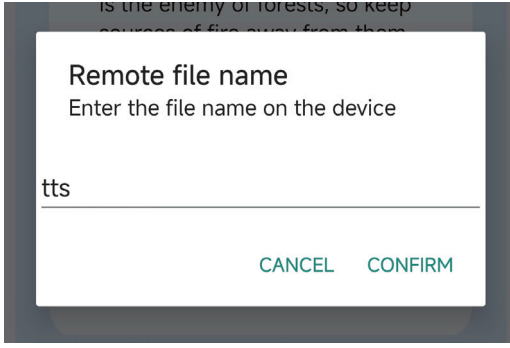


Voice Broadcast / Recording

3. Recording Function

Tap the "Press to Start MP3 Recording" button to start recording MP3 audio. The timer above will start running to indicate the recording time.

4. To stop recording, tap the "Stop" button. The interface shown below will appear, where you can rename the MP3 file. After renaming the file, tap "Save and Upload" to upload it directly to the loudspeaker. The file can then be played from the Audio Files page.Tap "Save" to save the file only to the phone's local storage. Tap "Cancel" to exit this interface.



Audio File Interface:

1.The interface displays audio files stored in the loudspeaker. Select any file and tap Play to start playback.The following five audio file formats are currently supported: WAV, MP3, AAC, FLAC, and M4A.

2.Tap the Play button again to pause playback.

3.You can set playback mode to single play or loop playback.

4.Tap the Delete button in the upper-right corner to delete all files.

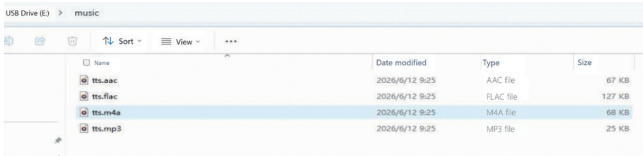
5.Swipe left on a file to reveal the delete option and remove a specific file.

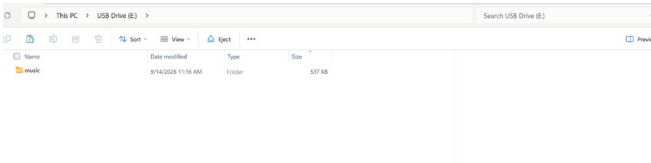
6. There are two ways to upload audio files.The first method is to tap the "Upload" button directly in the Audio Files interface. The app will open the Music directory of the Android system, where you can select the audio file to upload.
During the upload process, a progress bar will be displayed at the top of the page. When the upload is complete, a message will indicate "File uploaded successfully."



Audio File Interface

7. The second method is to copy the required files from a computer to the "music" directory on the TF card. Place the "music" directory in the root directory of the TF card.
Then insert the TF card into the card slot of the loudspeaker and power on the loudspeaker.
The files will then be automatically imported into the loudspeaker.





Volume Adjustment:

Drag the volume slider on each interface to adjust the loudspeaker volume. The range is from 0 to 30.

Speaker Pitch Adjustment:

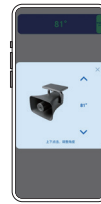
Tap the three-dot icon in the upper-right corner to open the settings interface. Use the left and right direction buttons to adjust the speaker angle.



Text-to-Speech Function



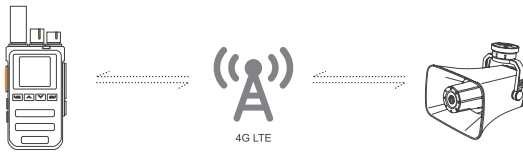
Settings



Adjust Angle

4G Walkie-Talkie Instructions (Optional):

The following figure shows the 4G network connection between the walkie-talkie and the loudspeaker.



Buttons and Interfaces:

The leftmost top rod is the antenna / The middle knob is currently not in use / The rightmost knob is the power switch.

Left Side Buttons:

Top button: Press and hold for voice broadcast.

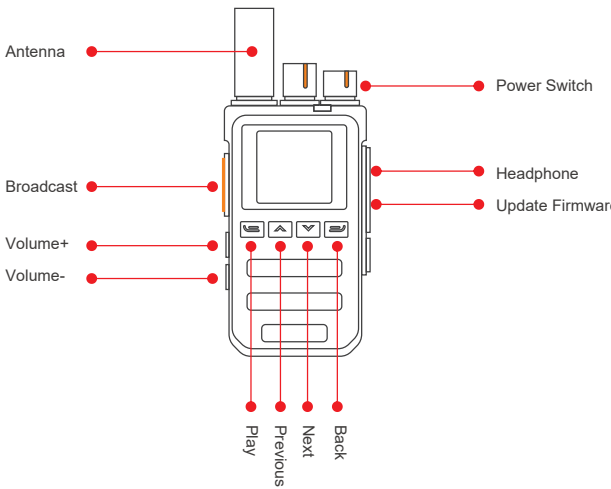
Lower buttons: Adjust volume or speaker angle (increase/decrease).

Right Side Ports:

One port for firmware upgrade.One headphone jack.

Front Panel Buttons:

Confirm/Play button Up selection button Down selection button Return button



Charging:

There is a Type-C port at the bottom of the walkie-talkie. Connect it to the charger to charge the device.



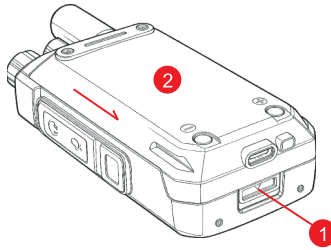
Type-C interface

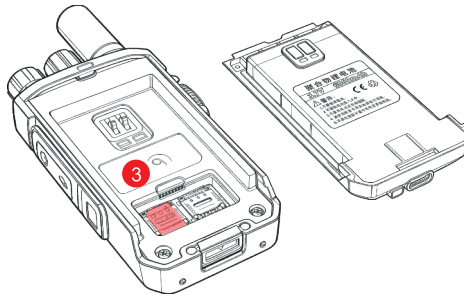
SIM Card Installation and Removal:

The battery can be removed by pressing the bottom latch and sliding off the back cover. After removing the battery, the SIM card slot will be exposed. Slide the SIM card holder to install or remove the SIM card.

Note:

SIM cards are not included for overseas customers. Users must purchase their own SIM card.

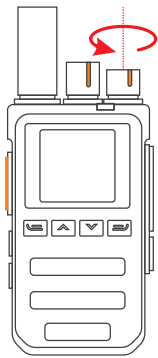




Power On/Off:

Rotate the right knob to the left to power on (startup animation will appear).

Rotate it to the right to power off (shutdown animation will appear).



Turn right to power on



Turn left to power on

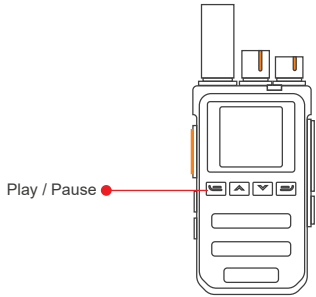
After startup:

If the loudspeaker is offline, “Offline” will be displayed.

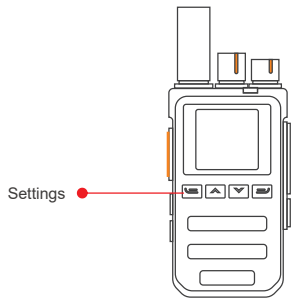
If connected, “Online” will be displayed.

File Playback:

1.After powering on, the file list stored in the loudspeaker will be displayed. Use the up/down buttons to select a file, then press the Play button to play or pause.

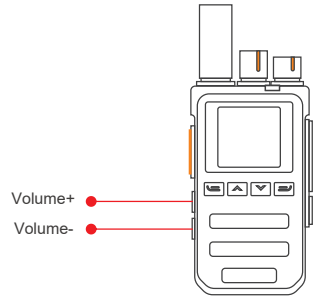


2.Press and hold the Play button to enter the settings menu, where you can configure playback mode (single or loop).



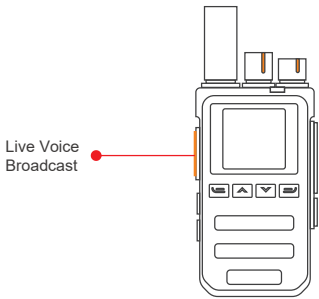
Volume Adjustment:

Use the side up/down buttons to increase or decrease the volume.



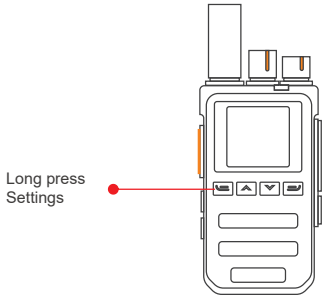
Live Voice Broadcast:

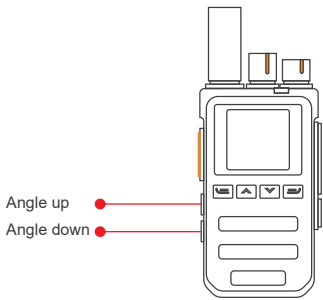
Press and hold the large button on the left side to start real-time broadcasting. Release the button to stop.



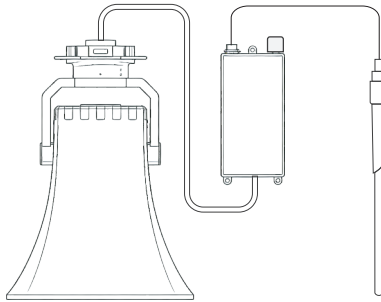
Speaker Angle Adjustment:

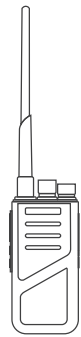
Press and hold the Play button to enter the settings menu. Select the second option to access the speaker angle adjustment interface. Use the side buttons to adjust the pitch angle.





Analog Walkie-Talkie Instructions (Optional)





Walkie-Talkie

Power On/Off:

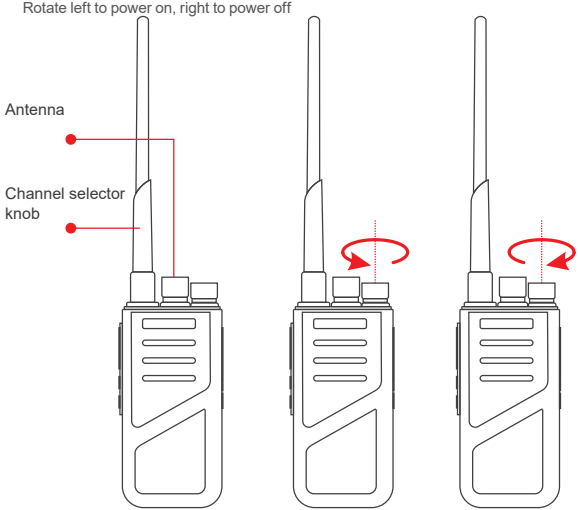
1.Walkie-Talkie Side:

Left: Antenna

Middle: Channel selector knob

Right: Power/volume knob

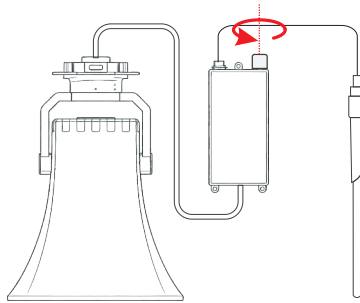
Rotate left to power on, right to power off



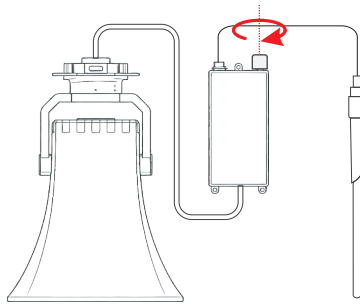
2.Loudspeaker Side:

The connected communication box has a knob

Rotate left to power on, right to power off



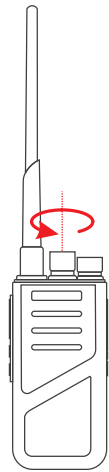
Turn left to power on

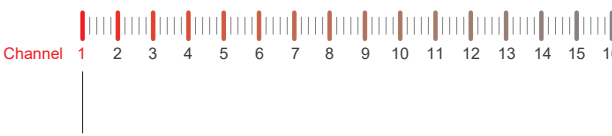


Turn right to power off

Channel Selection:

Rotate the middle knob to select channels 1–16. The default channel is 1.





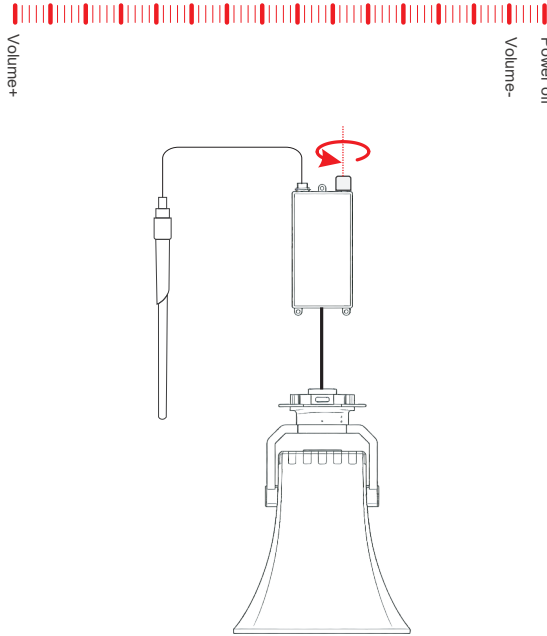
Volume Adjustment:

Rotate the knob on the loudspeaker-side communication box:

Left: Increase volume

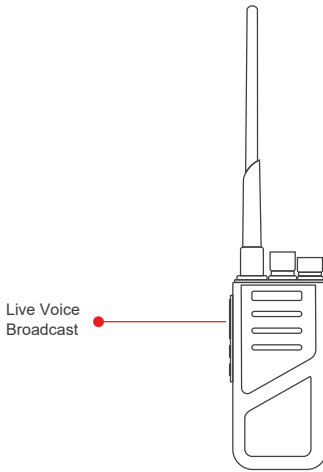
Right: Decrease volume

Fully right: Power off the box



Live Voice Broadcast:

There are three buttons on the left side of the walkie-talkie. Press and hold the top button to start broadcasting. Release it to stop.

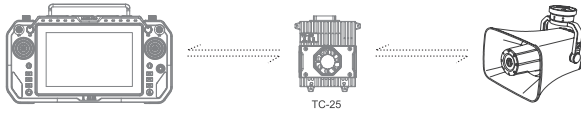


Charging:

Place the walkie-talkie into the charging base. Connect the base to a 220V/110V AC power supply to charge.

TCP Control Instructions (Using the Latest Android Version of Viewlink)

As shown in the figure below, use the Android handheld ground station to connect to the loudspeaker through the video transmission link.

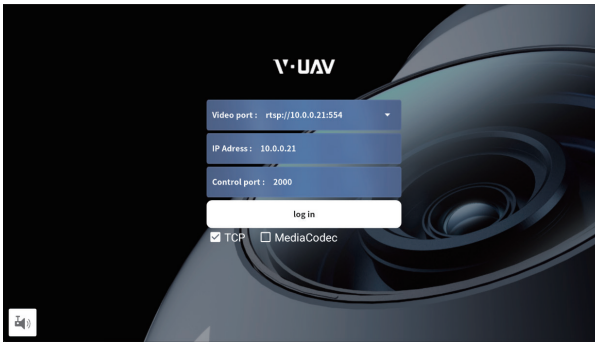


How to Connect the Loudspeaker via TCP

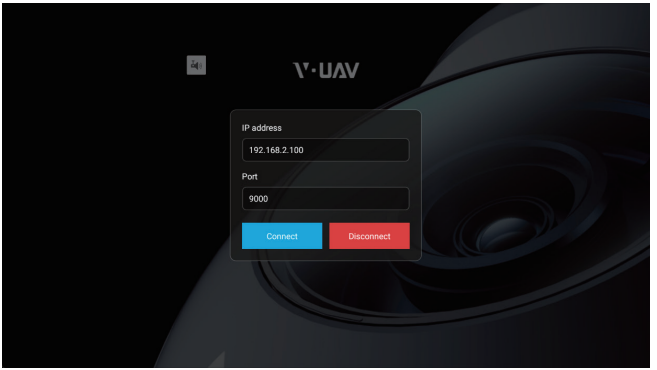
Using the latest Android version of Viewlink, there are two connection methods: connecting to the loudspeaker separately, or connecting to both the gimbal and the loudspeaker simultaneously.

A. Connecting to the Loudspeaker Separately

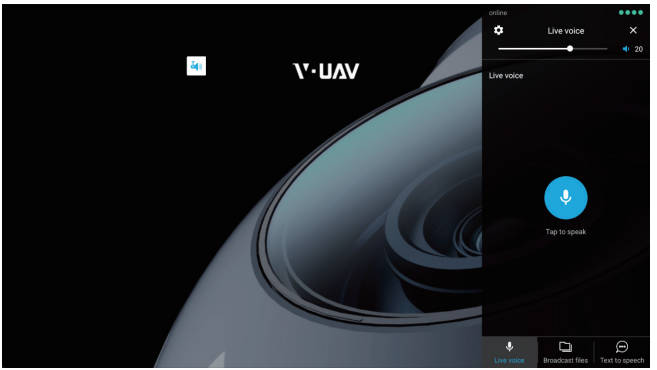
1.After entering the app, tap the loudspeaker icon in the lower-left corner to enter the loudspeaker connection interface.



2. After entering the connection interface, enter the IP address and port number (factory default IP: 192.168.2.100; port: 9000), then tap Connect.



3. After the connection is established, the interface shown below will appear. "Online" displayed in the upper-right corner indicates that the connection is successful.



B. How to Connect the Gimbal and Loudspeaker Simultaneously

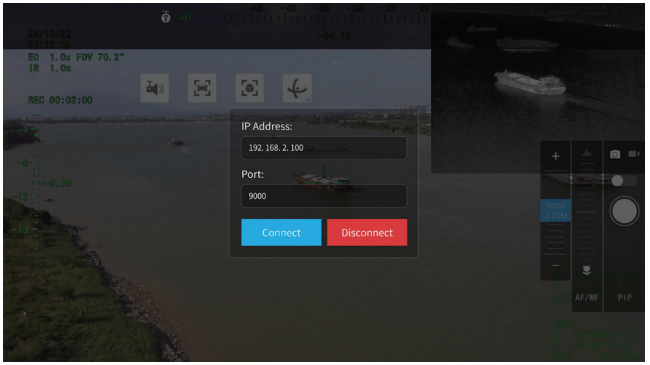
1. After entering the app, enter the gimbal IP address and port number, then tap "Log in", as shown below.



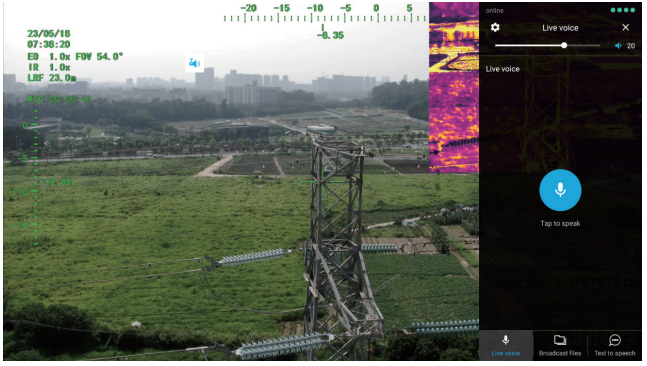
2. The gimbal image will be displayed as shown below, indicating that the gimbal has been connected successfully. Then tap the loudspeaker icon to enter the loudspeaker connection interface.



3. After entering the connection interface, enter the IP address and port number, then tap Connect.

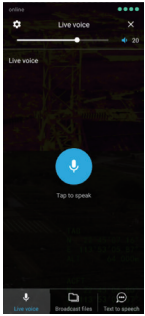


4. After the connection is successful, the interface shown below will appear. Tap the loudspeaker icon to collapse or expand the loudspeaker control interface.

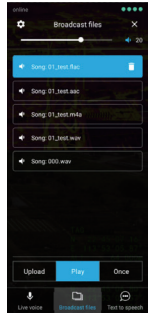


Function Introduction

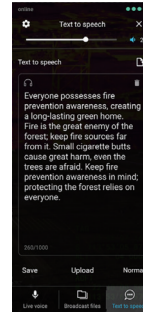
After the app is successfully connected, the loudspeaker will be shown as online. You can then tap to enter the main interface. After logging in, the main interface provides three functional pages: Voice Broadcast, Audio Files, and TTS(Text-to-Speech). Tap the three buttons at the bottom of the menu to switch between the different functional pages.



Voice Broadcast



Audio Files



TTS

Voice Broadcast Function

1.First, tap the microphone button to start a real-time voice broadcast. When the microphone icon changes from white to yellow, the broadcast is active.

2. To stop the voice broadcast, simply tap the microphone button again.

Audio File Interface

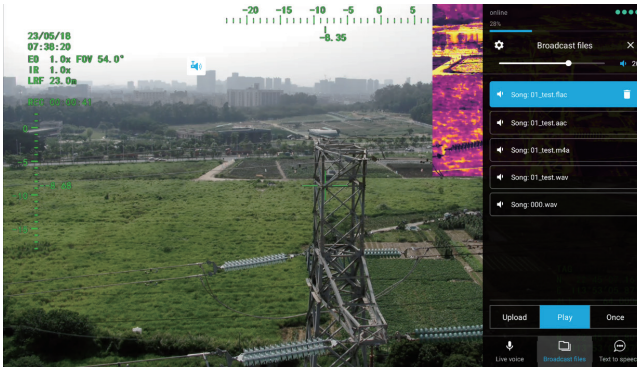
1. The interface displays the audio files stored in the loudspeaker. To play a file, select the desired file and tap Play.

2. Tap the Play button again to pause playback.

3. Audio files can be played once or in a single-track loop.

4. Select a file and tap the trash bin icon on the right to delete the selected file.

5. To upload an audio file, tap the "Upload" button in the Audio Files interface. The app will directly open the Music directory of the Android system, where you can select the audio file to upload. During the upload process, a progress bar will be displayed at the top of the page. When the upload is complete, a message will indicate "File uploaded successfully."



Text-to-Speech Function

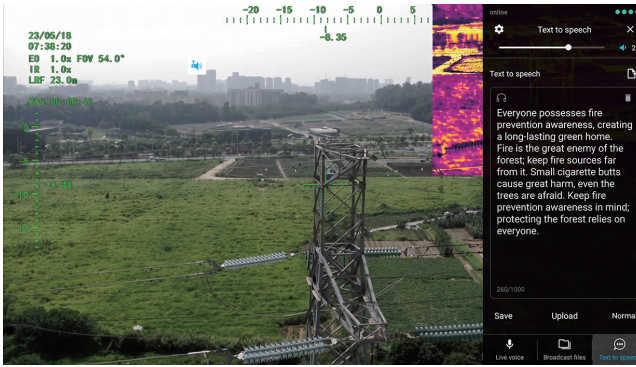
1. Enter the text to be converted in the input box. The text can be in Chinese or English, with a maximum length of 1,000 characters. Then tap the Upload button to send the generated audio to the loudspeaker. The generated audio can be played from the Audio Files page.

2. The voice is selected automatically. English text uses an English voice, while Chinese text uses a Chinese voice.

3. Tap Save after entering the text to save it. You can then open the Records section to view the saved text.

4. Previously saved text can be selected from the Records section and uploaded.

5. Tap the Delete button in the upper-right corner to delete the entered text. Tap the headphone icon in the upper-left corner to preview the text-to-speech result on the ground station.

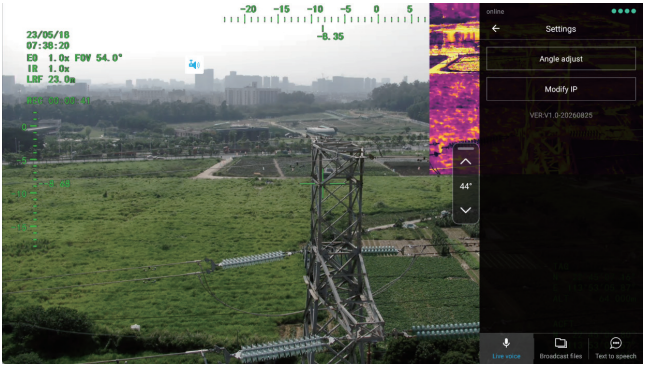


Adjusting the Volume:

Drag the volume bar on each interface to adjust the loudspeaker volume. The volume level ranges from 0 to 30.

Adjusting the Loudspeaker Pitch Angle

In the loudspeaker control interface, tap the gear icon in the upper-left corner to enter the Settings interface. Then tap the "Angle Adjustment" button. A floating window for angle adjustment will appear, as shown below. The user can adjust the angle to the desired position.



Changing the Loudspeaker IP Address

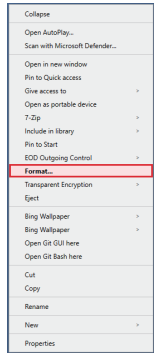
In the loudspeaker control interface, tap the gear icon in the upper-left corner to enter the Settings interface. Then tap the "Change IP" button. An input box will appear below. Enter the required IP address, subnet mask, and gateway, then tap the "Send to Device" button, as shown below.

Restart the loudspeaker. Re-enter the app and enter the new IP address. You can then connect to the loudspeaker directly.

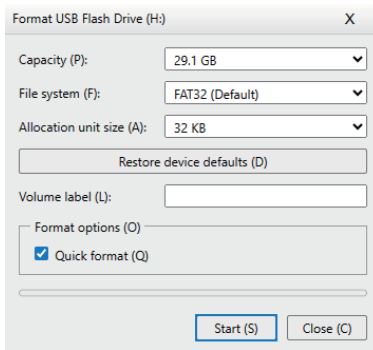


How to Update the Program Using a TF Card

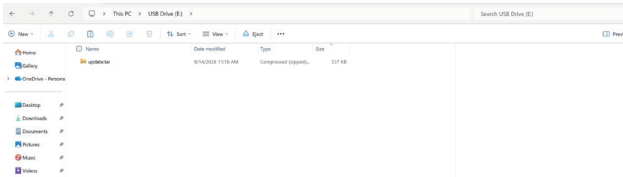
1.Insert a new TF card into a card reader, and then connect the card reader to the computer.



2.After connecting it to the computer, right-click the disk corresponding to the TF card and format the TF card.



3.Copy the update.tar file to the root directory of the TF card.



4.Eject the USB drive, disconnect the card reader, and remove the TF card. Insert the TF card into the TF card slot on the back of the device. (This step must be performed while the loudspeaker is powered off.)



5.After inserting the TF card, power on the loudspeaker and wait for 2 minutes. Then power off the loudspeaker. Remove the TF card, insert it into the card reader, and connect it to the computer. Check whether the "Update.tar" file has disappeared from the root directory. If the file has disappeared, the update was successful. If it remains, the update was unsuccessful. Start the procedure again and check whether any step was missed.

