

COFDM Multifunctional Receiver Operation Instructions



Chapter I

- (1) Stand a good receiving antenna. Sucker whip antenna on the outside or the roof as possible, try to rod-shaped antenna mounted on the roof or other high points.



Note: The use of rod-shaped antenna and the Yagi antenna on the roof, if the roof is not the lightning rod, follow the engineering requirements to erection of lightning rod lightning protection, so that the antenna is within the effective range of a lightning rod! **Remember!**

Remember!

- (2) Connect the antenna to the receiver antenna input port. If matching a filter amplifier, through the filter amplifier after connected to the receiver's antenna input port. When the antenna interface is not F-type, please use the standard supplied adapters to contact.
- (3) Please connect the audio and video output to the monitor.
- (4) The power supply connected to the receiver input.

Equipment Settings

After the receiver boot-strap, but the screen does not display corresponding the front-end appears work, such as the need for manual searches. In line with the next steps:

(1) description of the receiver panel



Diagram 1: The receiver panel instruction

A : Power switch,

B : Wireless signal lock indicator, when receiving the signal light's on

C : Menu key

D : Exit

E : LEFT

F : Down

G : Right

H : UP

I : OK

(2) : Parameters setting

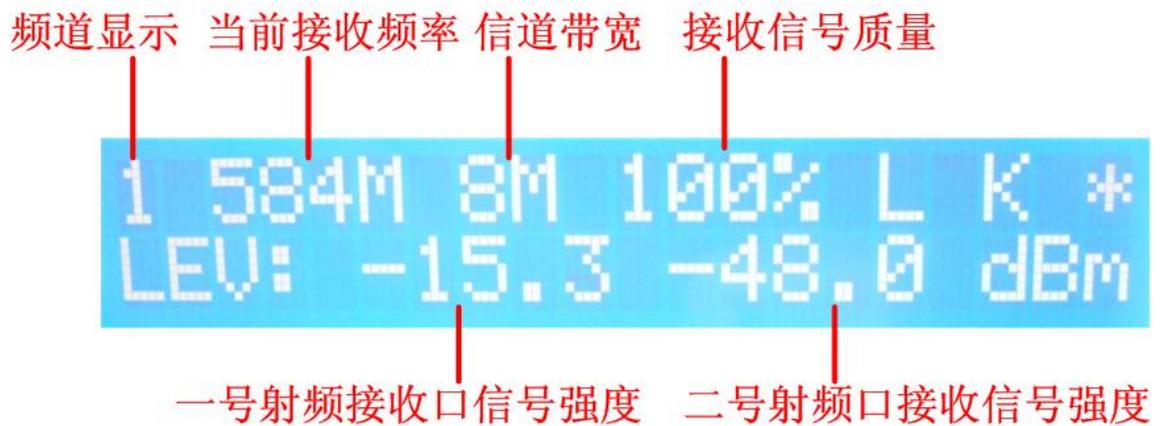


Diagram 2 . The receiver receives the signal display interface

(3) : Parameter setting procedure



Diagram 3: Enter the menu interface



Diagram 4 : Settings and move the cursor to select the menu in the "SEARCH", press "OK" button to enter



Diagram 5: Left-right move the cursor, up and down keys to change the value



Diagram 6: When the frequency setting is complete, the channel bandwidth selection and transmitter of the same value, and press "OK" button to search



Diagram 7: The search is complete, the receiver screen will display the new search channel information .



Diagram 8: Re-enter the menu to the "SAVE" choose "YES" to save the current settings, such as when the power without saving, the receiver will automatically regarded as not saved, the next re-boot still searching



Diagram 9 : No need to remove the current channel, first enter the menu "CONFIG", to confirm and enter the next level menu "DELETE CH" press "OK" and select "YES" to confirm the deletion

Chapter II Notes

Use of this system should note the following.

1. Environmental exploration

Before use, the electromagnetic environment should be measured, set the operating frequency should be not used in the local, to avoid traffic in the blind and the co-channel interference; the receiver antenna should try to be set up an high point , to get better coverage degrees.

2. Power

Before powering on the device, be sure to check the antenna interface is connected with the load or antenna, to avoid the antenna interface in the no-load then damage the transmitter case .

3. Antenna selection

In the choice of antenna should be selected according to frequency bands used. To make long-distance transmission, the best selection is directional antenna to improve the gain .

4. Antenna feeder line installation

Connected with the antenna feeder, in close connection, it should be waterproof tape or waterproof outer wrap clay to prevent rainwater from entering the feeder line. Connection should try to avoid the downward gravity or pull , and the general after be connected, put the feeder line horizontal banding in the rack. to prevent gravity caused by the feeder line and the antenna connection loose, resulting in poor contact. Feeder lines should along the mounting pole be put down , try to avoid bending and twisting, and every 1 to 2 meters lashing poles installed, before entering the room, it should be more fixed interval on a building , to prevent the feeder line long-standing wind swing be damaged.

5. Antenna installation

Antenna installation should be the system design requirements, site investigation results of the antenna installation height and direction, to tighten the good parts of the installation, the antenna must pay attention to polarization. In the erection of the roof fixed antenna, the antenna should be possible to maintain maximum height, and vertical installation (except for special one-way coverage). Sucker antenna mounted on the roof, the chassis should ensure that its magnetic pull the lower part of a complete surface.

6. Lightning Protection

Equipment if used in multi-mine areas, lightning protection measures should be considered, to pay attention to the ground, the equipment has a good grounding effect.

Antenna set should pay attention to mine. Construction site already has a good lightning protection, the entire antenna system should be in the range of lightning protection facilities (within 45 degrees in the lightning frame); construction site without lightning protection, you need to pay attention to the following three aspects:

6.1 In the horizontal distance of about 1.5m from the antenna to be set up at the lightning rod, lightning rod at the top of the antenna should be higher than the top;

6.2 Lightning rod should be greater than 0.6 meters tapered metal rods, materials is not easy rust, good conductivity, such as copper. Lightning rod and the antenna to be connected with the building;

6.3, Such as on-site installation full of lightning inconvenience, at least ensure that the access device-side antenna feeder installation lightning arrester, arrester ground and the installation of the building is connected through a low resistance.

7. Remarks

7.1 System must be completed connect the antenna then can be in the boot;

7.2 System must be shut off power later ,then the antenna can be removed ;

7.3 System must be in dry, ventilated place of work;

7.4 System settings are the factory standard configuring, without permission do not change.

8, The use of the environment

The system has a non-line-mobile transmission, mobile environment to meet the duty in a variety of needs. However, the rain, close cover, strong electromagnetic interference to the equipment's performance will have some effect, will have a shorter communication distance, image quality is poor, mosaic, or even intermittent and so on, so the user is on the environment to observe, measure and then to work, to play the maximum performance of the system.

9. Tips and tricks

- 1、 Placed antenna in the outdoor , away from the wall a minimum distance of 1 meter.
- 2、 If you know in the receive direction, the receiver using directional antennas can greatly improve the transmission distance, but the transmitter front moves because of its use, the direction always in flux, generally do not use a directional antenna.
- 3、 System can use an auto-iris camera, if you use monochrome camera, color camera image resolution is much higher (the image is very sharp), this is because there is no treatment for color coding, all of the bandwidth for the gray images processed.
- 4、 Indoors, you can try to slowly move the antenna, you may find in some locations have very good reception. This is because the intensity of electromagnetic waves with wavelengths cyclical changes.
- 5、 When you put the receiver on the outside and in the back windows (windows can generally be reflective about 30% of energy), the system may be even greater coverage.
- 6、 A car is close to a "Faraday" electric potential, equivalent to about 20% to 30% of the transmission power in the car, then the best try to move the antenna outside the car, open the windows and the best antenna as close to the window.
- 7、 In order to make better diversity reception, try to Diversity Receiver two pulled away from the receiving antenna.
- 8、 If possible, the transmitter and receiver antenna will be elevated, the higher the position

of the antenna, transmission distance more farther.

- 9、 As long as possible not to use the long antenna feeder cable to the transmitter or receiver, so that the antenna power will decay very powerful, if you want to extend the antenna to the camera or monitor the distance, only to extend the video cable, if you use the RG59 video cable from the receiver or transmitter of the video line up to only 50 meters away.

ChapterIII Troubleshooting

Fault	Solution
Without image and sound	<p>1. Check the transmitter batteries are charged (according to battery indicator button), whether the buckle into the deck, the antenna is connected, the transmitter power switch is turned on.</p> <p>2. Check the camera batteries are charged, audio and video cables are connected transmitter, the power switch is turned on, is in standby mode,</p> <p>3. Check the receiver antenna is connected, whether antenna connector is water or loose, AC power is switched on electricity, power switch is turned</p> <p>4. Check whether the monitor audio and video cables connected, the power switch is turned on, brightness, contrast and volume is in the right position.</p> <p>5. Check the frequency setting, set the transmit and receive frequencies are the same</p> <p>6. Check the electromagnetic environment, in the vicinity have the same frequency signal interference</p> <p>7. Restart the manual search, whether the lock signal</p> <p>8. Check the transmitter front-end is too far, more than the distance covered can be transmitter try to near the end close the receiver</p>
Receiver	check the camera and transmitter video cable is connected

<p>without image, but the normal sound</p>	<p>properly</p> <p>check the receiver and the TV's video cable is connected properly</p> <p>Check the TV's brightness and contrast settings are appropriate</p>
<p>No sound or noise of receiver</p> <p>However, the normal image</p>	<p>1、 Check the camera and transmitter audio cable is connected properly</p> <p>2、 Check the receiver and the TV or audio output device the audio cable is connected properly</p> <p>3. Check the camera's audio level settings and the TV volume is set to the appropriate</p>
<p>Continuous image, after the pause, black screen, then the normal</p>	<p>1、 The signal is not good, is normal;</p> <p>2、 Check whether the walkie-talkie or radio interference in the near</p>
<p>Image black, sometimes flashing stripes</p>	<p>1、 Check the transmitter and the camera video cable and both sides of the interface contact is good working;</p> <p>2、 Check the receiver and the TV's video cable and both sides of the interface contact is good working;</p>
<p>Image appear the green or color block</p>	<p>Transmitter video connector loose and then fixed the video connector</p>
<p>Coverage suddenly become smaller</p>	<p>1、 Check the transmitter is working properly, the frequency settings are off</p> <p>2、 Check the transmitting antenna, receiving antenna is even better, if water penetration and contact bad ( this is the most common cause!)</p> <p>3、 Check the transmitter battery is normal.</p>

	<p>4. Check the surrounding environment of electromagnetic whether interference with signal frequency.</p>
<p>Coverage is small, transmission distance is not far</p>	<p>Check the receiver antenna position, increased the height of receiving antenna, if necessary, using high-gain omni-directional, directional antennas and diversity reception</p>
<p>There are images and sound, but the image blur</p>	<p>Check the front of the camera focus on transmitting the accuracy ,whether auto focus setting is opening</p>

Chapter IV System connect diagram

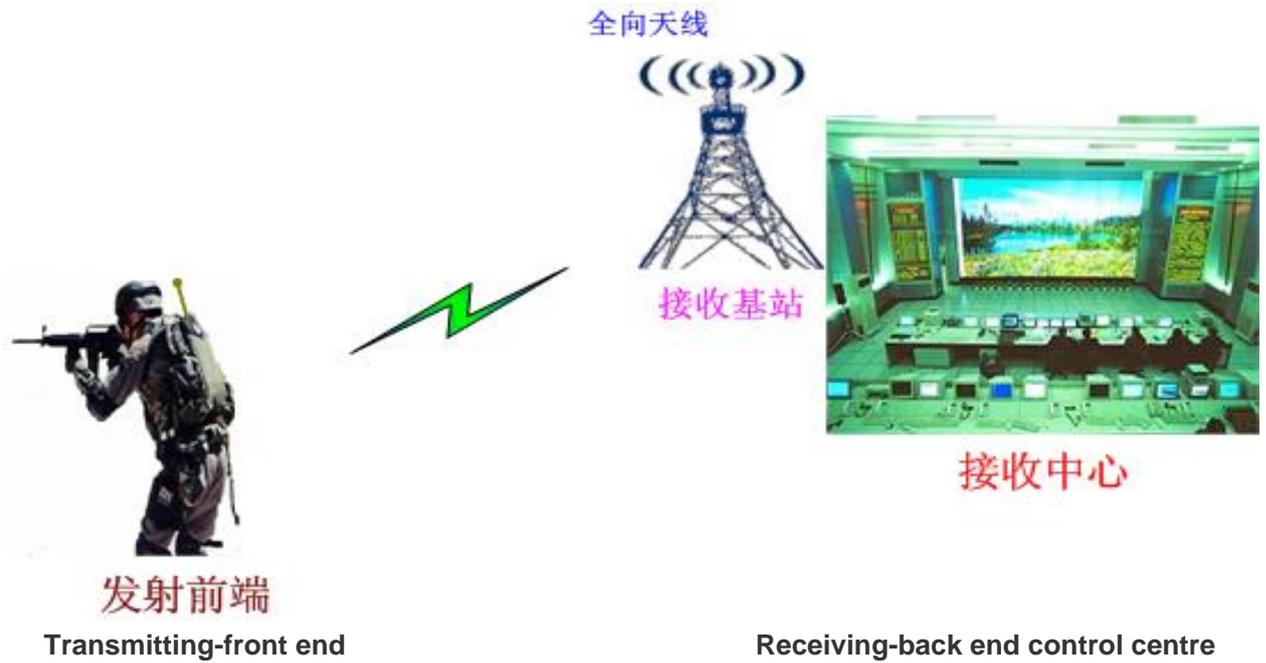


Diagram 1 :System Application Diagram

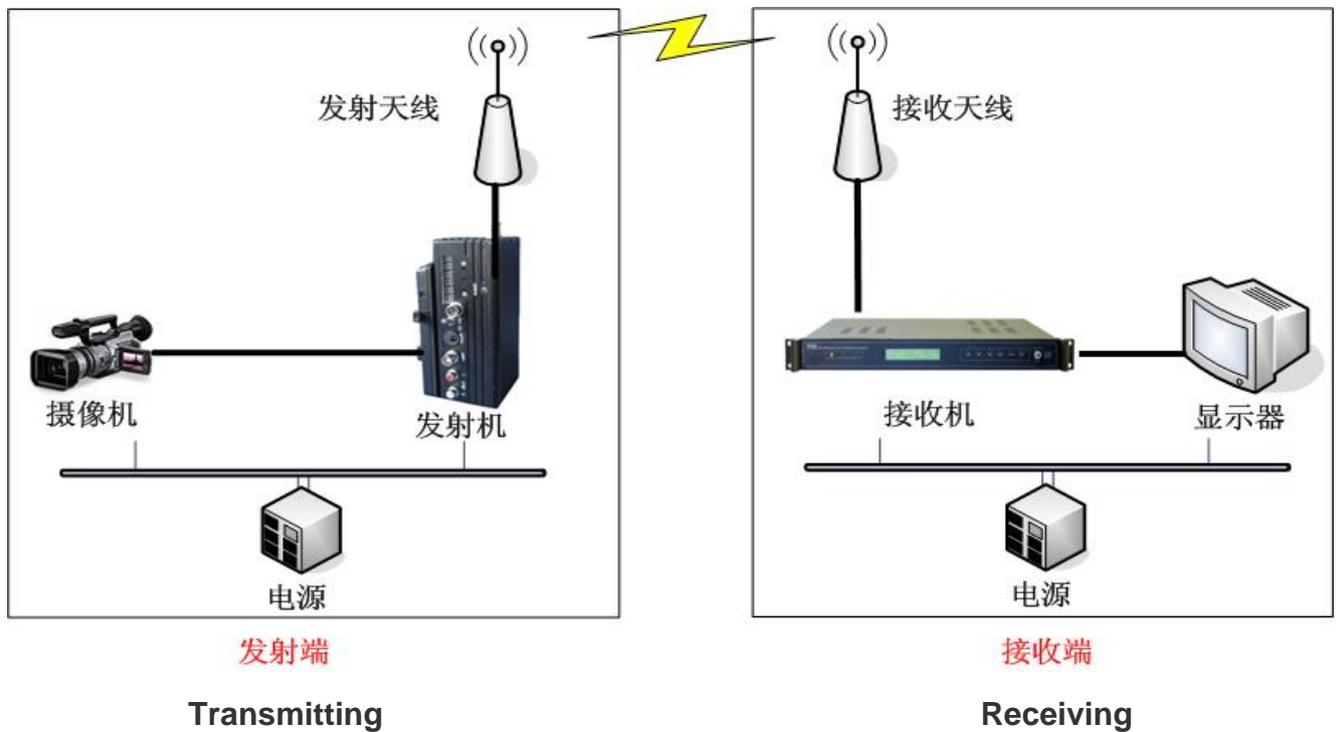


Diagram 2 :System connection diagram

Chapter V System apply

If you connect the steps exactly as the previous two sections, you can start you need to transfer the images.

The transmitter back to the body, open the camera and transmitter switch, hand-held camera to shoot, the receive side, open the receiver and a monitor switch, then if the distance between the front and the receiver within the coverage, the receiver can see and hear live images and sound.

If you find some audio and video transmission problems, such as mosaic or no signals, first check the system settings are correct, the antenna is tightened. If the device is set up and connect all normal, move the front near the receiving end, then if the normal reception, the distance covered by the system is not enough, you need to change the location of the receiving antenna, rod antenna with higher gain, the use of diversity reception other ways to increase the coverage distance. Please contact our technical support department for the program.