



Public Address System Wireless Transmitter WEP9115T, WEP9125T



Operation Instruction V2.2

Welcome to use our wireless public address system. For the better application of this equipment, please read the operation instruction carefully prior to use.

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<http://www.lyintlcorp.com/>

Contents

Performance features of product	- 2 -
Operation Instruction.....	- 3 -
I. Appearance and Interfaces	- 3 -
II. Instruction to Operation	- 3 -
1. Preparatory works prior to startup	- 3 -
2. Startup.....	- 3 -
3. Adjustment of input signal level	- 4 -
4. Setting of transmitting parameters.....	- 4 -
III. Electric performance indicators	- 5 -
IV. System Application Scheme	- 6 -
1. Single-machine operation mode	- 6 -
2. Online operation mode A.....	- 7 -
V. Erection of Transmitting Antenna	- 7 -
Packing List.....	- 9 -
After-Sales Service	- 9 -

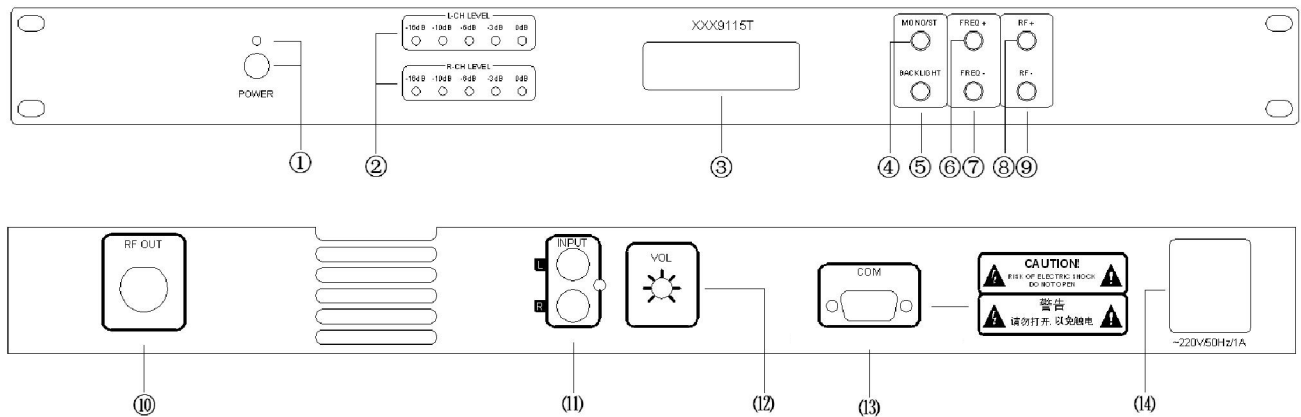
Performance features of product

- ◆ Professional-class 1U aluminum-alloy drawn panel, luxurious LCD;
- ◆ Working with control host to achieve the maximum 1000 zones control;
- ◆ High-definition stereo 15W/25W large-power transmitter, large coverage of signal;
- ◆ Friendly and eye-catching display interface, understandable information on machine parameters;
- ◆ Ultra-wide range of frequency, avoiding local same-frequency interference easily;
- ◆ Adjusting the transmitting frequency within effective range at will, to avoid local same-frequency interference;
- ◆ Adjustable transmitting signal intensity, applicable to application at difference distances;
- ◆ Switchover of transmitting modes between single track and stereo at will;
- ◆ Adjusting the level matching according to different program source equipments;
- ◆ Dynamic real-time indication of dual-track input signal level, facilitating the checking of the level;

Special announcement: Any entity or person using this equipment shall abide by the relevant requirements in the national radio management laws and regulations. Our company shall take no liability for any unlawful act arising from the misuse of such equipment! The illustrations involved herein shall only be used for reference. The goods in kind shall prevail.

Operation Instruction

I. Appearance and Interfaces



①Power supply switch and indicator lamp; ②Input signal level indicator lamp; ③LCD; ④Switchover between single track/stereo transmitting mode; ⑤LCD backlight switch (key lock); ⑥Upward setting of transmitting frequency; ⑦Downward setting of transmitting frequency; ⑧Setting of increasing transmitting frequency; ⑨ Setting of decreasing transmitting frequency; ⑩Radio frequency output interface, used for connection to transmitting antenna; (11)Audio signal input interface; (12)Input signal level adjustment interface; (13)Serial communication interface, used for connection to control host; (14)Power input socket; please connect the power supply on the basis of the parameters marked below.

II. Instruction to Operation

1. Preparatory works prior to startup

Connect the system power line correctly; connect the outdoor transmitting antenna to RE OUT interface (**The user purchasing the lightning arrester shall first connect the lightning arrester to this interface, and then connect the transmitting antenna**); Rotate the VOL to the left side to the minimum level with a small straight screwdriver, and connect the audio signal source; if there is a control host, it is required to connect the communication line simultaneously; turn on the system power supply.

There are two operation modes for the machine, i.e. the single-machine mode and online control mode.

When connecting the control host at a higher level, the machine will switch automatically into the online mode; in



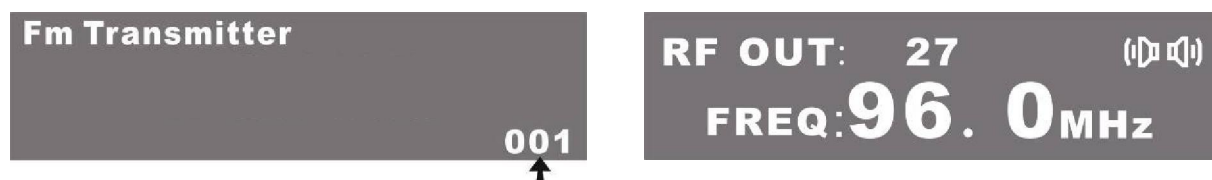
such case, the machine is under the control of the host, and the screen will flash to display “ON LINE”; in case of the abnormal communication with the host, the screen will display “OFF LINE”.

In case of the single-machine mode, it is not connected to the control host at a higher level; therefore, the following steps shall be taken:

2. Startup

After turning on the system power supply, the transmitter will automatically switch on the power after certain delay, and the screen is lighted up; at the same time, it will display the LOGO of the machine and the address number of the machine (The figure displayed at the lower right corner is the address value of the machine) on the LCD, and

finally display the parameters of the current transmitter.

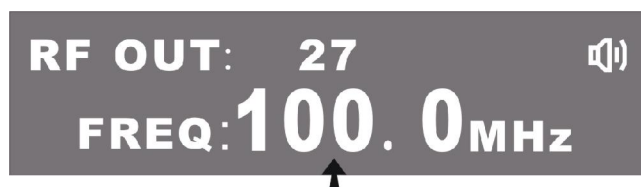


3. Adjustment of input signal level

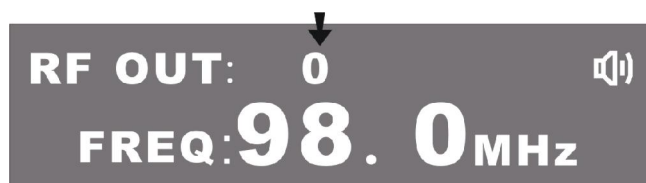
Play the program source, adjust ⑫ (VOL) and check the level indicator lamp (When playing the proportion of the program with strong signal, the occasional lightening of the 0dB red level lamp shall be deemed as the optimal status). Attention: If the red level indicator lamp is lightened for a long term, the program signal will be distorted to a great extent, and the terminal will be unable to receive normally! It is recommended to connect all the equipments according to the connection application diagram below. First calibrate the signal from the program source, so that the 0dB level lamp thereof is just lightened, and then adjust the level of the transmitter, so that the 0dB level lamp thereof is just lightened, so as to guarantee the system level accurate and consistent. Thereafter, it is required to adjust the volume on the control equipment.

4. Setting of transmitting parameters

- (1) **Setting of transmitting frequency:** It is possible to set the transmitting frequency of the transmitter with the button of FREQ+/FREQ-, ranging from 76MHz to 108MHz with the stepping rate of 0.1MHz. At the position as indicated by the arrow on the diagram below, the displayed value will vary with the adjustment;



- (2) **Setting of transmitting power:** It is possible to set the output radio frequency signal intensity of the transmitter with the button of RF+/RF- in order to achieve the adjustment within the coverage range; the adjustment is made ranging from 0 to 27; at the position as indicated by the arrow on the diagram below, the displayed value will vary with the adjustment;



- (3) **Setting of transmitting mode:** It is possible to set the operating mode of the transmitter with the button of MONO/ST, and switch over between the single-track and stereo modes. At the position as indicated by the arrow on the diagram below, the number of the small loudspeaker displayed on the screen will vary with the adjustment (The display of one loudspeaker indicates the single-track transmitting, and the display of two loudspeakers indicates the stereo transmitting); in most cases, please set the single-track mode;



- (4) **Setting of display screen backlight:** It is possible to turn on or off the backlight of the display screen with the button of BACKLIGHT; when the backlight is turned off, it is impossible to operate the other buttons.

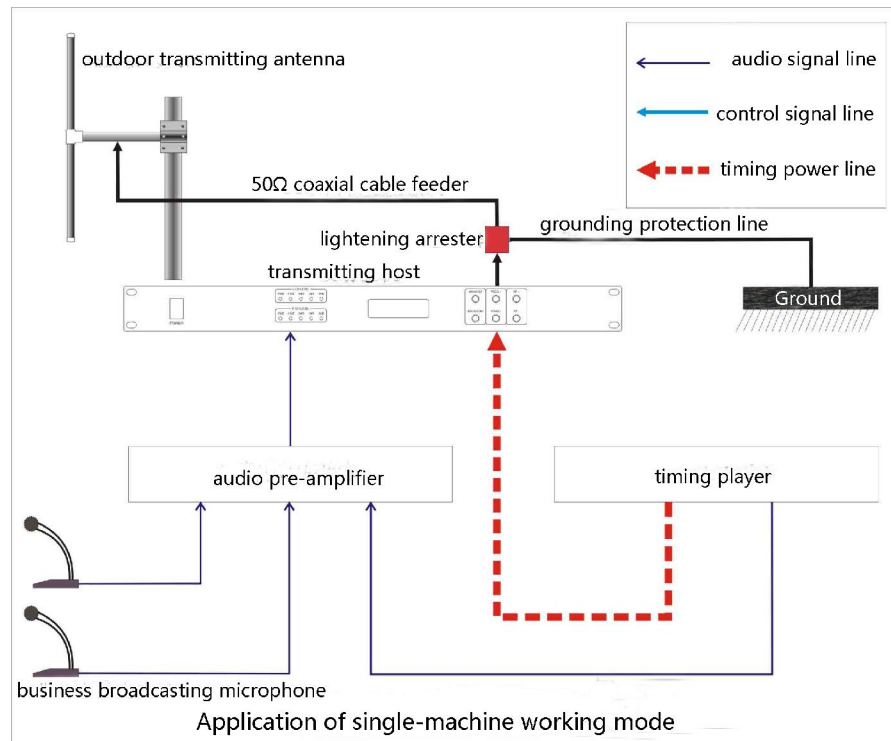
III. Electric performance indicators

Item	Parameter of indicator
Range of working environment temperature	-10°C - +50°C
Range of transmitting frequency	76~108MHz
Frequency interval	0.1MHz
Maximum transmitting power	15W (WEP9115T), 25W (WEP9115T)
Radio frequency output impedance	50Ω
Mode of modulation	Frequency modulation FM
Maximum frequency deviation	75KHz (stereo mode)
Pre-emphasis time	50μS
Control mode	RS232 communication, 9600bps
Addressing ability	1000 zones
Channel resolution	≥42dB
Signal to noise ratio	63dB (stereo mode)
Frequency response	20Hz~15KHz
Audio input impedance	10KΩ
Audio distortion	≤0.1%
Control host	WEP10M host (control range of 1000 zones) PC wireless addressable software (control range of 1000 zones) PA7005 host (control range of 64 zones)
Power supply	AC220V/50Hz
Auxiliary receiving terminal	Wireless addressable series receiving terminal

IV. System Application Scheme

1. Single-machine operation mode

This is the simplest application mode, under which all the terminals will be switched on or off simultaneously and applicable to project without the need for zone playing control. If the zone control is needed, please refer to the following application modes.

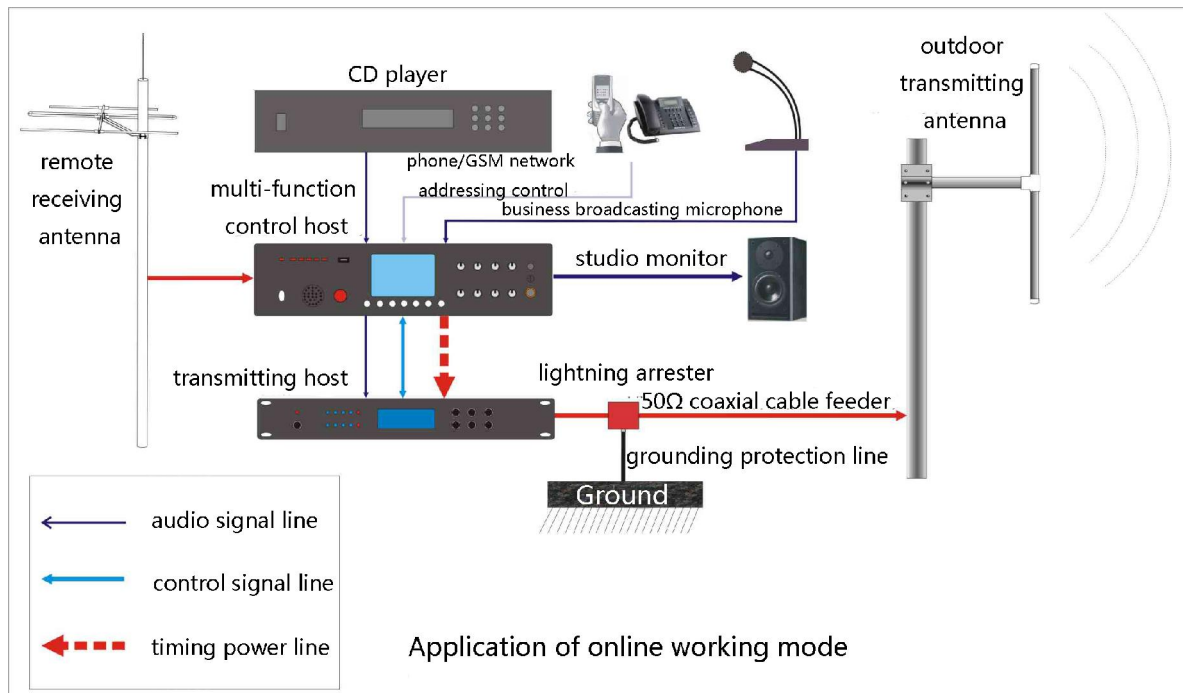


First, the business microphone and program source signal enter the pre-amplifier, and then enter the adjusted audio signal into WEP91XXT transmitter, and then connect the radio frequency signal through the coaxial cable to the outdoor transmitting antenna to be propagated to the broad space. The system is under the control of the timing player (For example, a school requires to ring the getting up bell at A.M. 6:00, and to play the program of radio calisthenics at A.M. 6:30. Accordingly, the system may set by the following way: The system shall turn on the transmitter and the system power at A.M. 5:57 to get into the waiting state, and play the getting up bell preset in timing player for one minute, and then play the preset music programs until A.M. 6:30, and then play the program of radio calisthenics; upon the completion of the playing, the system power will be turned off, and the whole control task is fulfilled).

2. Online operation mode A

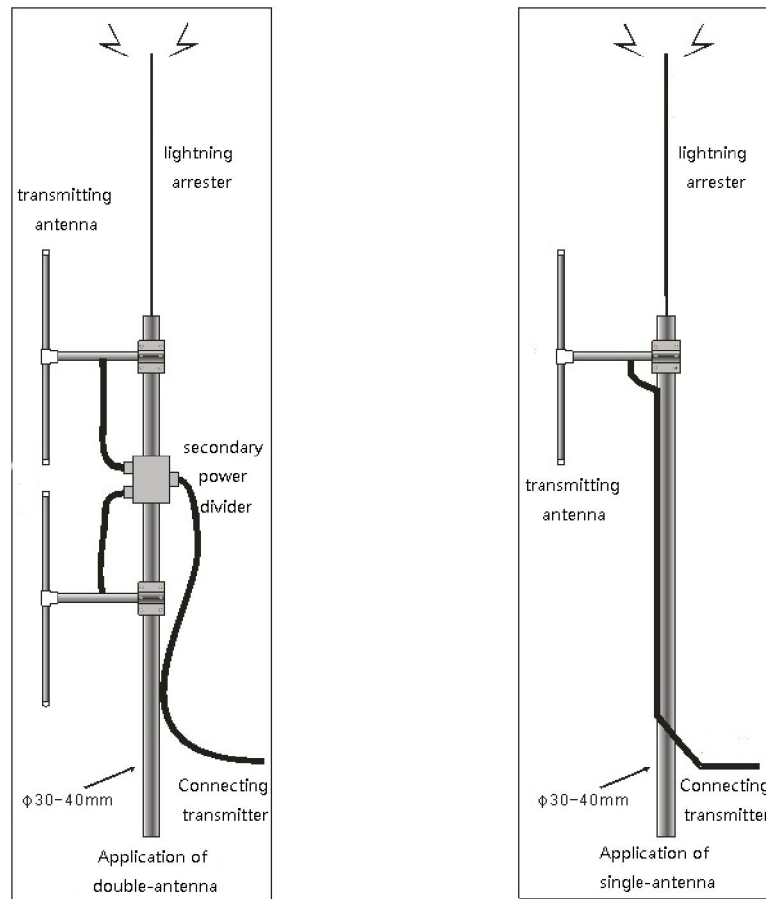
This mode is applicable to the engineering projects with fewer zones. This mode supports the complete control of 64 zones, and achieves the complete control functions such as volume adjustment of the zones, the switch-on/off of the zones, the automatic timing broadcasting, the emergency paging, phone paging broadcasting, and the re-broadcasting of the radio at the higher level. In addition to the moderate cost, this system is adaptive to most of the application environments.

The system takes one PA7005 as the control core (Please refer to the relevant operation instruction for PA7005 multi-function control host in details), and the audio signal, control signal, and power supply control terminal are directly connected to the transmitter; all the other peripheral equipment (External sound source, phone line, receiving antenna, broadcasting microphone, and studio monitor) are connected to the multi-function control host, which will process all the tasks.



V. Erection of Transmitting Antenna

With regard to various applications, it is allowed to set up the machine room in the highest building in the neighborhood and erect the antenna on the top of such building. The best position for the mounting of the tower and the erection of the antenna is a place (peak) with the elevation higher than surroundings. The installation of the transmitting antenna system is shown in the two diagrams below. On principles, the higher the position of the antenna system is, the larger the signal coverage is. In the event that the antenna signal is required to cover a small area, it is allowed to install the antenna system in an appropriate place with lower elevation. The adjustment test shall be carried out according to the application environment. In case of the higher requirement, it is allowed to allocate the double-antenna system to increase the transmitting distance and enhance the signal coverage.



By reference to the diagram above, it is possible to install the acceptable antenna system in a simple and quick manner. On the transmitting antenna, there are the scale marks ranging from 88 to 108MHz. Please set the scale at the frequency to be used. It is reasonable to set the frequency of the transmitter about ± 1 MHz of such scale. On the top of a round steel pipe or galvanized pipe in the diameter of 30-40mm, a reinforcing steel bar in the length of 1.5m is welded and used as the lightning arrester. The top of the steel bar shall be polished into the shape of needle. On the bottom of the steel pipe, the reinforcing steel bar shall be welded for grounding, and the other end of the reinforcing steel bar shall be welded on the lightning protection net. Finally, the feeder is connected to the transmitting antenna, and the connector shall be wrapped with waterproof adhesive tape, and the strict waterproof treatment is also needed. The connection shall be as firm as possible. The feeder shall be bound along the steel pipe at the interval of 0.5m until the bottom. Finally, the steel pipes mounted with the transmitting antenna shall be erected and fixed in the proper way.

Attention: The transmitting antenna shall not be close to the metal or the wall of building. Due to the outdoor service for a long term, the proper measures shall be taken to prevent lightning and protect the system equipment from damage. The antenna frame or antenna mast shall be mounted firmly in order to resist various severe weathers. All the connectors shall be subject to the waterproof treatment, and the aerosol paint and glass cement shall be used for rust and leakage prevention.

Packing List

1	WEP91XXT host	1 set
2	Three-core power line	1 piece
3	50-7 coaxial cable antenna connector	2 pieces
4	Lightning arrester	1 piece
5	Stereo lotus line	1 piece
6	Straight-through serial port line	1 piece
7	Operation instruction	1 copy
8	Warranty card	1 copy
9	Inspection certificate	1 copy
10	Optional accessories: RF50-7 coaxial cable, dipole transmitting antenna, one-to-two power divider	

After-Sales Service

1. In case of the installation and operation according to this instruction, the company will provide the free warranty service (Including replacement of parts free of charge) for any problem in the normal operation for one year since the date of purchase.
2. In case of the warranty, the user shall show the user's voucher of warranty card and the invoice as the certificate.
3. In any of the following cases, the free warranty shall not be applicable:
 - 3.1 The damage to the product due to the installation, use or handling by error;
 - 3.2 The damage to the product due to the abnormal conditions (e.g. excessively high power voltage or ambient humidity);
 - 3.3 The damage to the product due to natural and man-made disaster and other accidents;
 - 3.4 The number on the product body is changed, altered or removed;
 - 3.5 The product has been repaired or refitted by the person other than those authorized by the company;
4. Please keep the operation instruction and warranty card properly.
5. For the issue or matter not covered herein, please contact the distributor or visit <http://www.lyintlcorp.com>
6. In case of any fault occurred during the period of warranty, please contact the service personnel of our company (or distributor); our company will not take responsibility for the damage due to the unauthorized disassembly or the repair by the person other than the technicians of our company.