



ULTRA HIGH FREQUENCY

CPU-CONTROLLED DUAL-ANTENNA DIVERSITY RECEIVER

Instructions For Use







Thank you for using BARDL's product. Please read the user manual carefully before you operate the wireless microphone.

1. PRODUCT INTRODUCTION

UHF SF-318 professional wireless microphone is designed in UHF, dual CPU control, PLL synthesized and signals testing. There are together 300 adjustable frequency points for the customer to choose.

(1) Features

A. Wide band UHF frequency delivery

This system uses the UHF to delivery. The frequency is 684.7MHz. UHF makes the wireless microphone avoid the traffic jam off frequency and the interrupts from the other kind of frequencies.

B.CPU control

The whole system is controlled by the micro computer.

C.LCD display

All of the menu items can be displayed in the LCD screen.

D.PLL synthesized

PLL synthesized is a better design than quartz locked design. The frequency is more stable and the receiving is more fluently.

E. True diversity receiving wireless system

True diversity receiving wireless system makes the wireless microphone always receive the strongest signals and get the best S/N.

F.Noise testing and the noise reduction function

The system can analyze the noise signal the normal signal constantly. When the noise signal is stronger than the normal signal, the system will cut the noise signal automatically.

G.Lower battery warning

When the battery is low, the lights both on the microphone and the receiver will be shining to warn the user to change the battery.

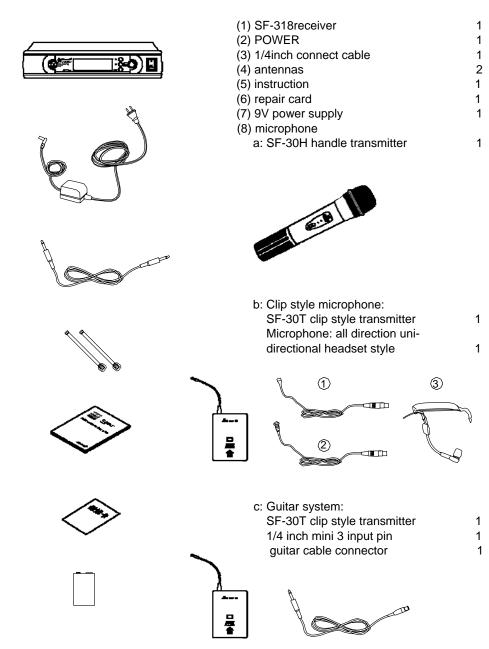
H.Audio output function

The audio output jack has 3 pin XLR balance output and 1/4 inches un-balance earphone jack. They can be connected to the peripheral equipment.

I.Modulation design

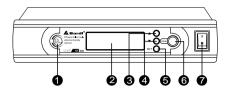
The microphone is designed in modulation. It is easy to adapt the different microphone head in various places.

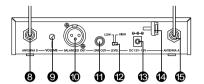
2 SYSTEMS'S ACCESSORY INSTRUCTION



3.INSTALLATION

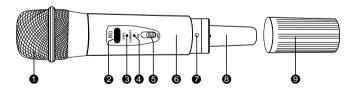
(1) SF-318 Receiver





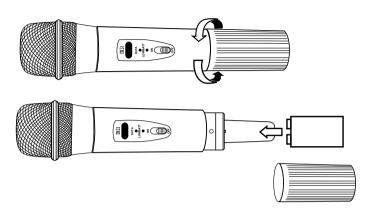
- 1. Infrared ray transmitter
- 2. LCD screen
- 3. UP key
- 4. Down Key
- 5. SET key
- 6. Infrared ray transmitter setting button
- 7. Power
- 8. Antenna B connector
- 9. Volume button to adjust the volume
- 10. BNC balance audio output socket
- 11. Un-balanced mixing audio output socket: 1/4-inch un-balancedearphone jacks, un-balanced mixing audio output.
- 12. unblaced volume switch: when it is on LOW position, it is microphone output. When it is on HIGH position, it is AUX volume
- 13. onnect to 12V DC power input socket. The pole in the central should be connected to the positive electric. The voltage cannot be lower than 10V and can not be higher 15V
- 14. Power line fixed fitting
- 15. Antenna A connector

(2) Handle style microphone



- 1. Sound Head
- 2. Infrared ray transmitter window
- 3. Infrared ray data receiving indicate light
- 4. Low power indicate light
- 5. Power switch
- 6. Handle microphone
- 7. Gain control (Customer are not recommend to use this key)
- 8. 9V battery
- 9. Battery cover

a: Change the battery

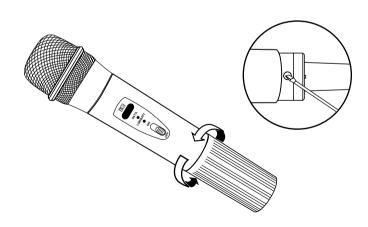


One battery can work about 8 hours.

When the indicate light is bright, the battery should be renew, as the change above.

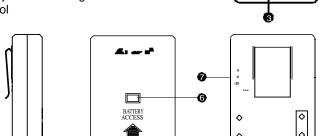
b: Gain control

Screw off the battery cover, the Gain control hole can be see. Adjust it to the switable position; according to the volume and the environment of show, with a small screwdriver.



(3) Clip style microphone

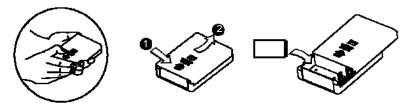
- 1. antenna
- 2. power
- 3. low electrical voltage indicate light
- 4. infrared ray data receiving indicate light
- 5. radio input 3 pin connector
- 6. infrared ray data receiving window
- 7. gain control



a: Change the battery

One battery can work about 8 hours.

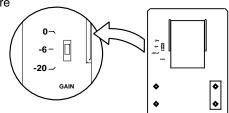
When the indicate light is bright, the battery should be renew, as the change above.



b: Gain control

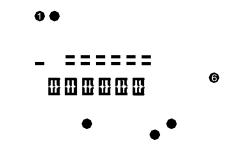
SF-30T has three position for choosing, choose the suitable position according to your music instrument.

- 0: microphone
- -6: guitar without soure
- -20: guitar with soure



4 OPERATION METHOD OF MANUAL

(1) LCD panel of the receiver



- 1. Indicating the intensity of RF signal in 8lattices
- 2. Indicating the intensity of RF/AF signal in 8 lattices
- 3. Most of the menu indicated by 6 characters
- 4. Frequency Unit
- 5. Receiver selects an antenna channel while it shows A in the effective position, or it select antenna channel while it shows B
- 6. IF there are antennas indicated in the testing position, it shows that the same RF signals are received, oppositely, it shows there aren't any RF signals.

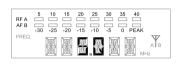
(2) Instruction

When depress POWER (receiver) or electrical power (transmitter) ,LCD will show the state of the system.

SQUELC

mute:(only in receiver)

SQ is controlled by CPU, which is convenient to adjust the mute sensitivity of receiver. Shielding all the microphone signal and any other interferential signal so that it can avoid the strong noise output.





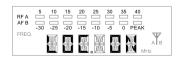
- A. Depress SET to get the SQUELC menu, LCD shows SQUELC.
- B. LCD will show the initial setting of SQ while SET is up .such as 10Db
- C. Depress UP or DOWN repeatedly ,the mute level will be increased or decreased,and then relax your grip to get the level you want, the level is shining.
- D. Depress SET to stop shining, and the system will return to the initial menu.

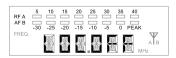
Remark: There are 5 levels, which are 0dB 5dB 10dB 15dB 20dB, when it is 0dB,any signal can go through freely, the noise also can go through while interference, so set it at 5dB. You can increase he level when the interference arouse. The higher of the level, the shorter of the receiving distance.

LOCK

Lock setting: Lock any button control, which can't be changed any more. Once the buttons are locked, they can't work normally until tfreeing of locking. This function can avoid touching off other functions while using.







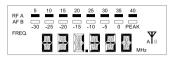
Lock setting:

- A. Depress SET continually until the "LOCK" menu is come out, and then it will indicate "LOC OFF", which means the buttons aren't locked
- B. Depress DOWN continually until it indicates "LOC ON" ,it will be shining at that time. (notice: Depress the button UP of transmitter can also has this function.)
- C. Depress SET to confirm it .
- D. Any of the buttons are "LOC" at that time, and then it will return to the initial menu.

Unlock setting:

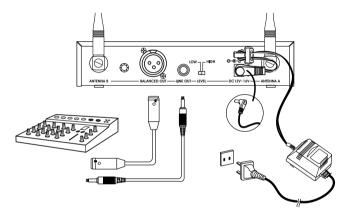
- A. Depress SET, it will indicate "LOC", and then "LOC ON".
- B. Depress UP ,it will indicate "LOC OFF",and then shining.
- C. Depress SET to confirm it ,and then you can get to another menu setting.

Antenna Status



Indicate antenna A or antenna B are using

(3)connecting method

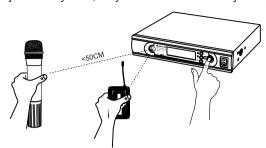


System setting

- A: Single system setting
- a. Set the receiver's channel
- b. Turn on the power, close the infrared ray transmitter window to the infrared ray receiver window. Depress the "TRAN' button to tran the frequency. After setting, the infrared ray will be turn off automatically.
- B: Multi-system setting
- a. Turn on all the receiver, and turn off all the transmitter.
- b. Set all the receiver at different frequency.
- c. Turn on the first transmitter.
- d. Next step adjustment as the "single system setting" above.

Adjust each system as above

>Notice: when adjust one system, only reveal it's infrared ray transmitter window.



(4) fixing on the frame

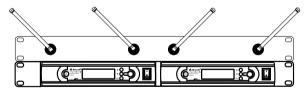
The receiver can fix on the standard 19 inch audio equiment frame as the chant below.



Setting one receiver needs(UA1100) one set.



Setting two receivers needs (UA120) one set.



(5). The most important point to gain the best sound effects:

- a. Antennas must be seen from the position of receiver.
- b. The distance between the transmitter and the receiver must be shorter.
- c. Antennas of the receiver must be lie at an angle of about 45 degrees .
- d. Antennas can't be close to metal surface and the veil.
- e. If there are several systems working at the same time ,antennas can be touched or intercross reciprocally when the receivers are overlaying .
- f. You'd better make another SCM testing before performing ,if dead corner is found, adjust the position of the receiver.

5. MALFUNCTION AND MAINTENANCE

Malfunction	Indicating	Solving method
Having no voice	Receiver signal indicating is not lighting	Turn on the transmitter power to check the battery make sure the polarity is right, if there are something wrong,change it
	Receive signal indicating is lighting, and the receive audio frequency indicating level is shining owing to the sound	Adjust the volume controler to check the connecter between output and the external equipment
	Receiver signal indicating level isn't lighting	Check the frequency between transmitter and receiver, lie the antennas at an angle of about 45 degrees, keep the antennas away from any metal subject, remove the barrier between the transmitter and the receive, antenna must be seen by the microphone user. Short the distance between the recansmitter and receiver
Having no voice while moving	Antenna signal isn't lighting while the loss of sound	Change the positon of the receiver and do another testing about system, mark the dead corner for reminding
Inteference between several systems	Receiver can receive the signal from the nonassosciated transmitter	Change the frequency of the system to avoid interference

6. TECHNICAL DATA (1). General features: Working frequency: 684.7MHz Adjusting: FM Frequency response: 50Hz~15Hz Distortion: 95dB Working distance: 100M (without disturbance) Working temperature: 5celsius~45celsius (2). Handle style transmitter RF transmit power: 3.54mW Transmitting stable frequency: within 30ppm Dynamic range:*100dB, A-weighing Frequency response:50Hz~15KHz Maximum output voice:130dB SPL moving coil dynamic Element: Battery: 9V Current consumption: below 35mA Dimension: 235mm*51mm (3).body pack transmitter RF transmit power: 0.019mW Transmitting stable frequency: within 30ppm Dynamic range:*100dB, A-weighing Frequency response:50Hz~15KHz Maximum output voice:130dB SPL Element: moving coil dynamic Battery: 9V Current consuption: below 35mA Demension:62mm*91mm*30mm (4).antenna diversity receiver received method: diversity antenna receive channel number:30 received sensitivity:10dB&V image frequency:minimum55dB moderate frequency:65.75MHz, 10.7MHz S/N ratio: 105dB Hamonic distortion:*1% Audio output attenuation: 2 switch 0/-12 dB Output :unbelance 6.3mm TS socket output Balance:XLRM-3M male output Power: 120VAC 60Hz 12V~18V DC, 500mA, transformer connected outside Demension:210m*48m*230m FCC NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the

user's authority to operate the equipment.