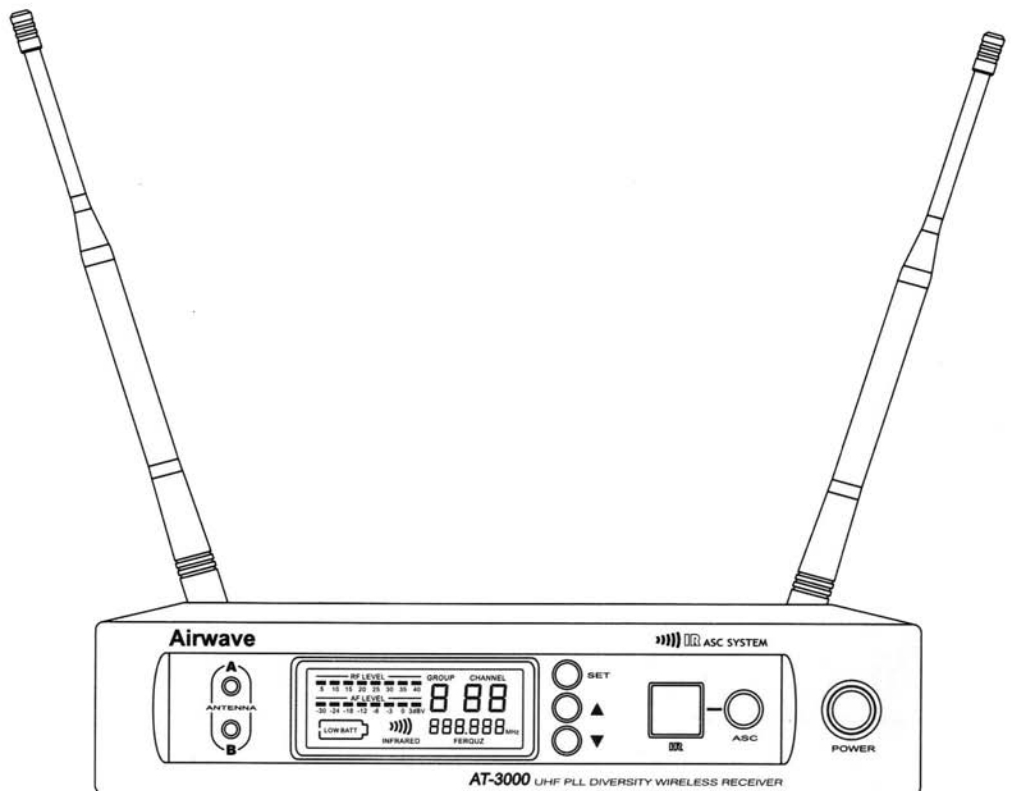


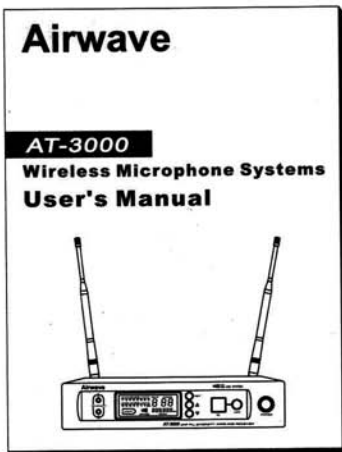
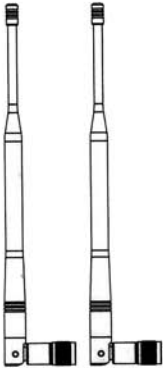
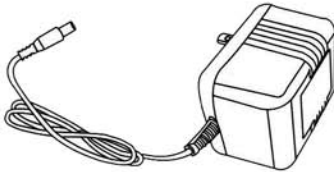
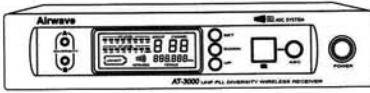


# AT-3000

## Wireless Microphone Systems User's Manual



## System Components:

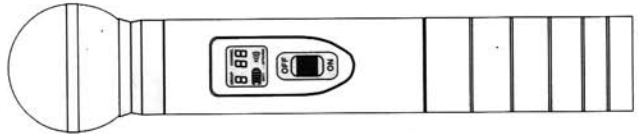


## All the systems include the following components:

- AT-3000 receiver
- Two AA batteries
- One 1/4in audio connecting cable
- Power Adapter
- Two antennas
- User's Manual

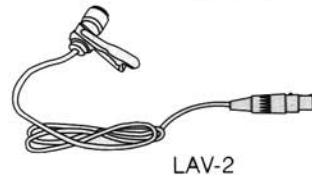
## Handheld Microphone System includes the following:

- AT-3001 handheld transmitter



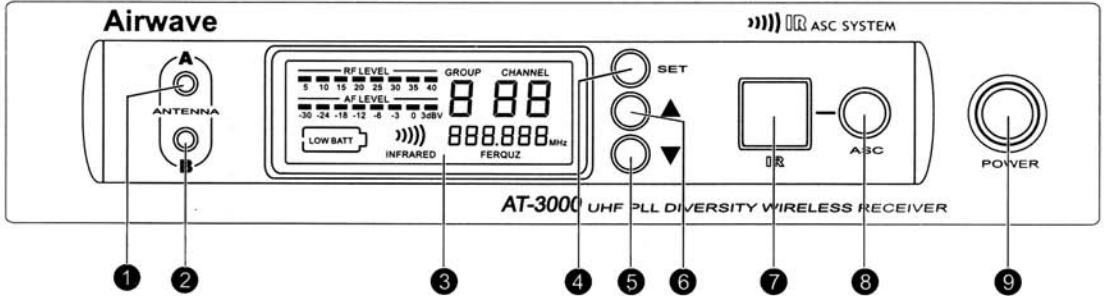
## Lavalier Microphone and Headset Microphone include the following:

- AT-3002 bodypack transmitter
- Microphone (optional LAV-2 or HSD-2)



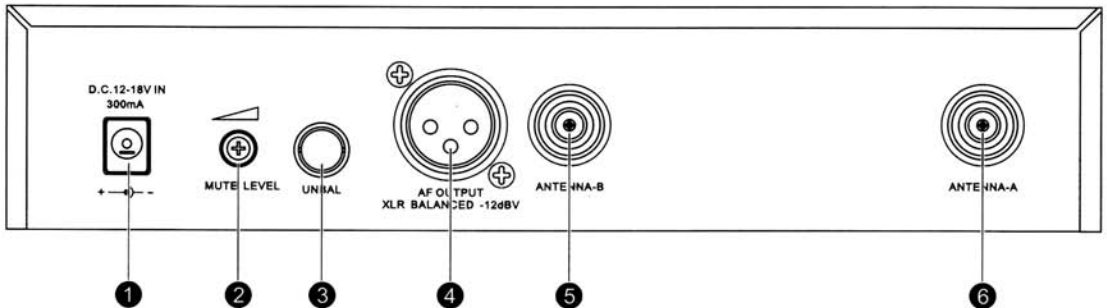
## Functions of AT-3000 Receiver:

### Front Panel



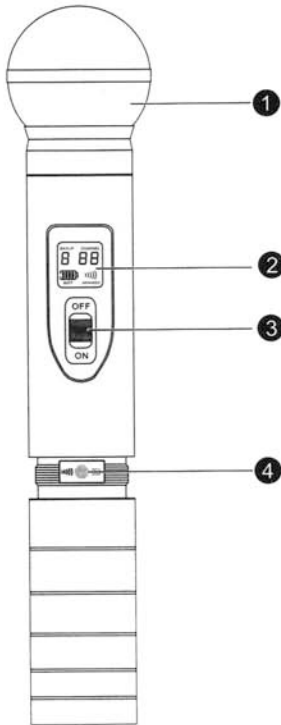
- ① Channel A antenna LED lamp  
When it is steadily lit, Channel A antenna is working
- ② Channel B antenna LED lamp  
When it is steadily lit, Channel B antenna is working
- ③ LCD panel  
Please See “system setting ” on page 5.
- ④ System setting button  
Please See “system setting ” on page 5.
- ⑤ DOWN button of the System Menu  
Please See “system setting ” on page 5.
- ⑥ UP button of the System Menu  
Please See “system setting ” on page 5.
- ⑦ IR window  
This window sends infrared signal to the transmitter for frequency synchronization.
- ⑧ Synchronizing signal transmit button  
Press this button to establish infrared connection between the receiver and transmitter.
- ⑨ Power switch  
Hold down this switch for 2 sec and then release it, and the receiver can be turned on. If it is held down for a longer time, the receiver will be turned off.

### Rear Panel



- ① AC power adapter socket
- ② Fine adjustment of mute threshold level  
It is the mute enabling threshold value, which is factory setting and usually does not need to be adjusted. If there are any interference signals, this threshold value can be increased by turning the knob clockwise until RF signal lamp goes out.
- ③ 1/4in output socket
- ④ XLR output socket
- ⑤ Antenna Jack B  
50 ohm.
- ⑥ Antenna Jack A  
50 ohm

## Handheld Transmitter

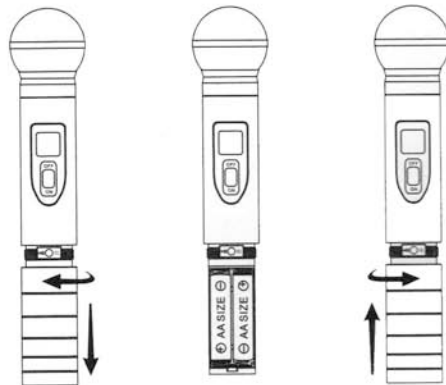
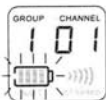


## Functions:

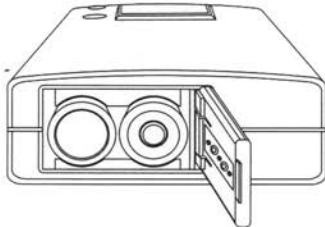
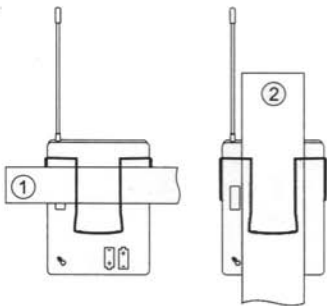
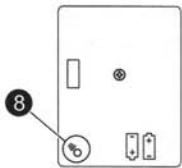
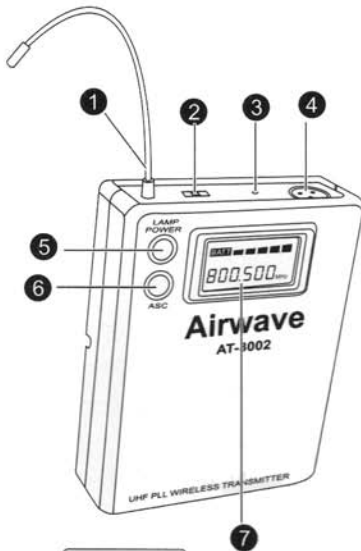
- ① Interchangeable microphone head
- ② LCD screen  
Please See “system setting ” on page 5.
- ③ Power/Mute Control switch  
Middle position is Mute.
- ④ IR Window  
This window receives infrared signal so as to keep frequency synchronization.

## Battery Replacement:

The life expectancy of two alkaline batteries is about six hours. When the power indication symbol on the display screen keeps flashing as shown in the left diagram, the batteries should be replaced immediately, as shown in the diagram below.



## bodypack transmitter



## Functions:

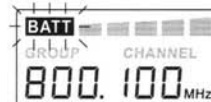
- ① Antenna
- ② Adjust gain and mute switch  
There are two gain settings on AT-3002. Please select the instrument setting most suitable to you.  
Mic.: Microphone  
0: Guitar with passive pickup  
-10dB: Transmitter mute
- ③ Low Voltage/IR Transmission LED lamp  
Red Lamp is on: the battery voltage is low  
Flashing red lamp: IR transmission is in progress
- ④ 3-pin microphone input socket
- ⑤ Power/Backlight Control button  
Hold down this switch for 2 sec and then release it, and the transmitter can be turned on. If it is held down for a longer time, the transmitter will be turned off. If it is held down for less than 2 sec, the turn-on/off of LCD backlight can be controlled.
- ⑥ Synchronizing Signal Receive button  
If this button is pressed, it is possible to establish infrared connection between the transmitter and receiver.
- ⑦ LCD screen  
Please See “system setting ” on page 5.
- ⑧ IR Window  
This window receives infrared signal so as to keep frequency synchronization.

## How to Wear the Waist Worn Transmitter:

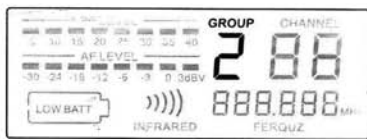
Buckle the transmitter clip to the belt ① or run the guitar strap through the transmitter clip ②, as shown in the left diagram. If best effect must be achieved, the transmitter should be pushed down ①

## Battery Replacement :

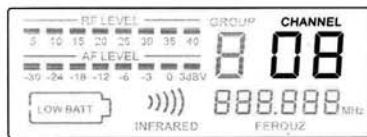
The life expectancy of two alkaline batteries is about six hours. When the power indication symbol on the display screen keeps flashing as shown in the left diagram, the batteries should be replaced immediately, as shown in the diagram on the left.



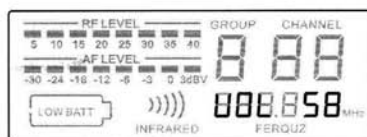
## System Setup



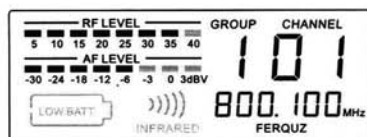
①



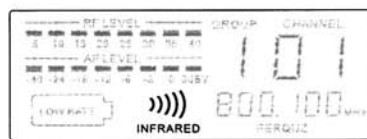
②



③



④



⑤

Handheld transmitter

Bodypack transmitter



①



②



③



## Receiving Setting:

### Frequency Group No. and channel selection:

Press "SET" key, and "GROUP" will flash. Press ▲ or ▼ key to select suitable frequency group number, as shown in Diagram ① on the left. Then press "SET" key, and "CHANNEL" flashes. Press ▲ or ▼ key to select suitable channel, as shown in Diagram ② on the left.

**Note:** when you use several systems, you had better set all the systems to the same group number, and then set a special channel for each system in this group.

### Receiver Volume Control:

This device has electronic voice volume control system. Under normal indications, press ▲ or ▼ key to control the output volume of the receiver (there are 64 volume levels) as shown in Diagram ③ on the left.

### Normal Indications on the Display:

RF level, audio level, group number, channel, and working frequency, as shown in Diagram ④ on the left.

## Setting of Automatic Transmitter :

Turn off the power switch of the handheld transmitter, and then open the battery cylinder. Point its IR window to the IR window of the receiver. Press "ASC" key of the receiver and then turn on the power switch of the handheld transmitter.

Point the IR window of the bodypack transmitter to the IR window of the receiver. Press "ASC" key of the receiver and then the "ASC" key of the bodypack transmitter.

Whenever the "ASC" key of the receiver is pressed, synchronizing signal will be transmitted continuously for 25 sec, and "INFRARED" symbol on the screen also flashes, as shown in Diagram ⑤ on the left.

When the infrared receiving circuit is enabled, "INFRARED" symbol on the handheld transmitter will flash and the entire display screen of the bodypack transmitter will flash (the infrared transmission indicator lamp will also flash at the same time).

**Notes:** when establishing infrared connection between the receiver and the transmitter, the distance between them should not exceed 0.5m. When more than one system are used, only IR window of one transmitter should be pointed to the receiver for each infrared connection.

## Transmitter Status Indications:

### Battery voltage indication:

There are five-level battery voltage indications for the handheld transmitter, and there are six-level battery voltage indications for waist worn transmitter, as shown in Diagram ① on the left.

### Group Number and Channel Indication:

After infrared connection between the receiver and the transmitter is completed, the same group number and channel as those of the receiver will be indicated on the hand-held transmitter, and the display screen of the waist worn transmitter will give a 5-sec steady indication of the group and channel numbers, as shown in Diagram ② on the left. Then it returns to normal status indications.

### Normal Indications on the Display:

Battery voltage, group number and channel are displayed on the handheld transmitter, and battery voltage and working frequency are displayed on bodypack transmitter, as shown in Diagram ③ on the left.

## Specifications

### System

#### Frequency Range and Transmitter Output Level

Band: UD

Frequency Range :800~822MHz

Transmitter Output Level: 10dBm

#### Operating Range Under Typical Conditions

50m

Note: actual range depends on RF signal absorption, reflection, and interference

#### Audio Frequency Response (+/-3dB)

70Hz~16KHz

#### Total Harmonic Distortion (+/-30KHz deviation, 1KHz tone)

<1%

#### Dynamic Range

>90dB A-weighted

#### Operating Temperature Range

-10 °C to +50 °C

Note: battery characteristics may limit this range

### Bodypack Transmitter

#### Max Audio input level

0dBV to +10dBV

#### Gain Adjustment Range

20dB

#### Input Impedance

5K $\Omega$

#### Dimensions

85mm H \* 65mm W\*24mm D

#### Weight

87 grams (without batteries)

#### Power Requirements

2 "AA" size alkaline or rechargeable batteries

#### Battery Life

>6hours

### Handheld Transmitter

#### Max Audio input level

0dBV

#### Dimensions

245mm\*51mm dia.

#### Weight

315 grams (without batteries)

#### Power Requirements

2 "AA" sizes alkaline or rechargeable batteries

#### Battery Life

>6 hours

### Receiver

#### Audio Output Level (+/-30KHz deviation, 1KHz tone)

XLR connector (into 600 $\Omega$  load) : -12dBV

1/4inch connector (into3000 $\Omega$  load) : -18dBV

#### Output Impedance

XLR connector: 200 $\Omega$

1/4inch connector: 1K $\Omega$

#### XLR output

Impedance balanced

Pin1: Ground(cable shield)

Pin2: Audio

Pin3: No Audio

#### Sensitivity

-94dBm for 30dB SINAD, typical

#### Image Rejection

>55dB

#### Dimensions

44mm H\*212mm W\*160mm D

#### Weight

960 g

#### Power Requirements

12-18 V dc at 300mA, supplied by external power supply