

**API**®

*U-8 U-9*

# **UHF WIRELESS SYSTEMS**

INSTRUCTION MANUAL



Built In Rechargeable Wireless Microphone  
Unit Must Use Rechargeable Batteries For Recharge

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Thank you for choosing the API wireless systems. In order to obtain the best efficiency from the system, you are recommended to take few minutes to read this instruction manual carefully.

### 1.Important Cautions

1. Make all connections before plugging the unit into an AC power outlet.
2. Do not leave the devices in a place neither with high temperature nor high humidity.
3. Do not handle the power cord with wet hands!
4. Keep the devices away from fire and heat sources.

### 2.Features

1. The systems operate in the UHF band, that there is less interference than the VHF band.
2. Built-in noise mute and squelch circuitry mode can resist the interference validly.
3. The turned antennas are able to benefit the optimum reception.
4. Built-in Charger can recharge the batteries of handheld microphone conveniently.

### 3.Specification

#### 3-1 Receiver

Frequency Stability.....	±0.005%
S/N Ration.....	>100dB
RF Sensitivity.....	-107dBm(12DB S/N AD)
Image Rejection.....	>60dB
TH.D.....	(1Khz)<0.6%@1 KHz
Display.....	LED
Controls.....	Power On/Off, Volume Control.
Audio Output Leve.....	-12dB
AF Output Impedance .....	2.2K $\Omega$ Unbalance
Operation Voltage.....	14-18V DC,800mA
Output Conenctor.....	2 Balanced XLR socket 1 Unbalanced $\phi$ 6.35mm Phone Jack

### 3-2 Transmitter

Carrier Frequency Range.....600~960MHz  
 RF Output.....10mW  
 Stability.....±0.005%  
 Frequency Deviation.....±45KHz  
 S/N Ration.....>102dB  
 LED Display.....Power On/Off.Low batt.  
 Controls.....Power On/Off  
 Audio Frequency Range.....50Hz~16KHz  
 Battery.....Rechargeable AA 1.2V

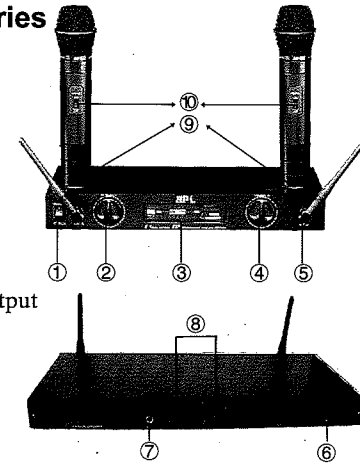
### 3-3 Condenser Microphone

Type	Lavalier	Headset
Frequency Range	100Hz~12,000Hz	500Hz~18,000Hz
Sensitivity (at 1 KHz)	-70dB±3dB	-70dB±3dB
Impedance	2.2kΩ ±30%	680kΩ ±30%
Max. SPL for 1% THD	130dB	130dB
Connector type	3.5mm mini-plug	3.5mm mini-plug

## 4.Parts Identification & Accessories

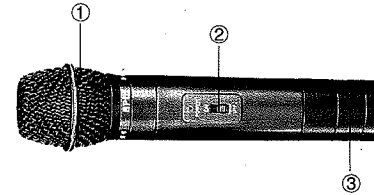
### 4-1 Receiver

- ①Power On/Off
- ②Channel A volume control
- ③LCD panel
- ④Channel B volume control
- ⑤Antenna
- ⑥Input (14-18VDC/800mA)
- ⑦Unbalanced φ 6.35mm 1/4"jack for MIX output
- ⑧Balanced XLR socket
- ⑨Charger
- ⑩Charging Position

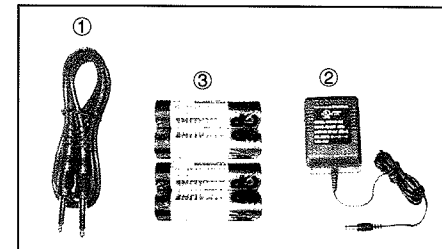


### 4-2 UHF Handheld microphone

- ①Microphone head
- ②Power On/Off switch
- ③Battery case

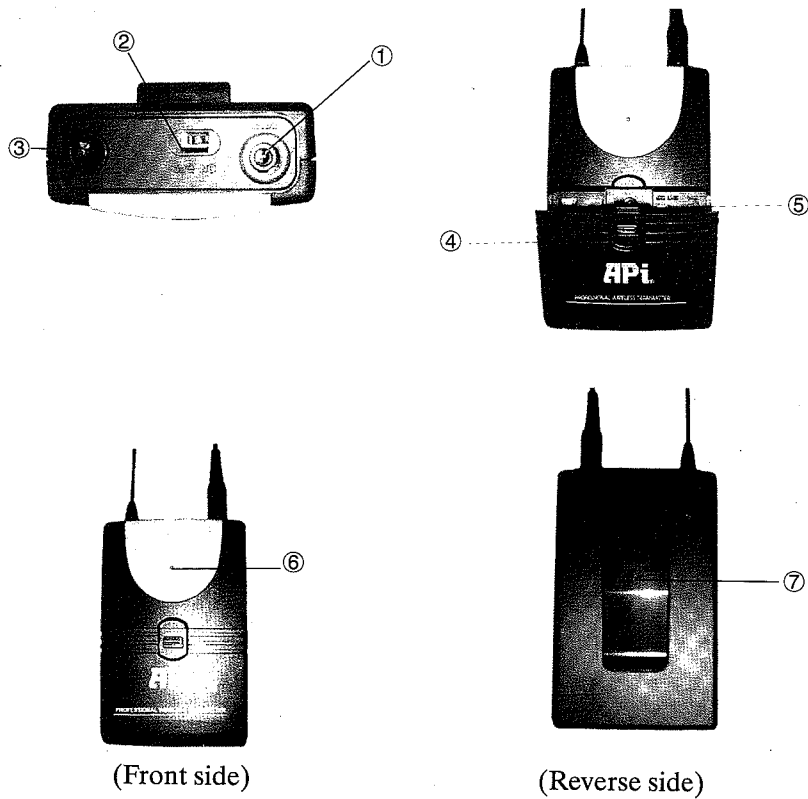


- ①AF output cable
- ②AC/DC adapter
- ③Battery



## 4-4 UHF Body-Pack Transmitter

- ① Mic. Input
- ② Power On/Off
- ③ Antenna
- ④ Battery tray
- ⑤ Gain Trimmer control
- ⑥ LED indicator for power and battery status
- ⑦ Carry clip

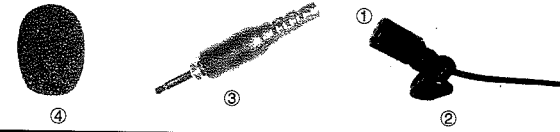


(Front side)

(Reverse side)

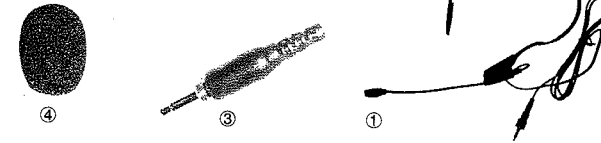
## 4-5 UHF Lavalier Microphone

- ① Microphone
- ② Clip
- ③ 3.5mm mini-plug
- ④ Windscreen



## 4-6 UHF Headset Microphone

- ① Microphone
- ② Neck-Frame
- ③ 3.5mm mini-plug
- ④ Windscreen



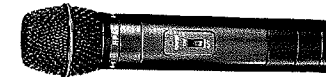
## 5. Installation Assignment

### (1) Connecting the Receiver

1. Connect one plug of the AF output cable into the Audio Output of receiver and another plug in the other side into the "MIC.IN" of the amplifier or mixer. The receiver shall provide 2 balanced microphone-level output on a male XLR-type connectors and 1 unbalanced microphone-level output on 6.35mm/m 1/4" connector.
2. Insert one plug of the AC/DC adaptor to the AC input of the receiver, then connect another plug in the other side to a AC power socket.

### (2) UHF Handheld Microphone Installation Assignment

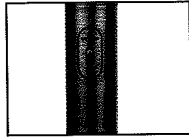
- (step 1)  
Unscrew the battery cover and put Two NIMH AA 1.2V batteries into the battery case. (Figure 1)



(Figure 1)

(step 2)

After putting into the batteries, switch on the power on/off on the microphone. (Figure 2).



(Figure 2)

### Caution:

To avoid battery leakage or explosion

- 1) Remove batteries when the wireless microphones will not be used for a long time.
- 2) When you need to replace the batteries, replace both batteries at the same time with new ones.
- 3) Don't use different types of batteries together!

### (3) Using of battery charger

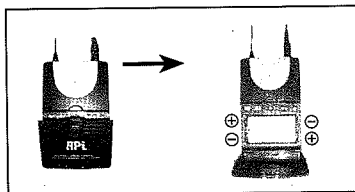
Must be recharge before you use the handheld microphone. When you are going to recharge the batteries, the switch of transmitter and the front panel must be in the same direction. It is convenient to put the handheld microphone to the charger on the receiver.

**Note: Unit must use rechargeable batteries for recharge.**

### (4) Using of UHF Body-Pack Transmitter

#### (A) Inserting and changing the battery

Open the battery tray cover in the front, insert in two 1.5V AA batteries according the correct polarity, then slide back the cover. (Figure 3)

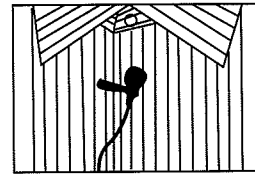


(Figure 3)

### (B) Connecting the microphone

#### (1) With Lavalier Microphone

At first, attach the Lavalier microphone to clothing, tie, lapel, where is the suitable place of sound pick-up. (Figure 4) Then plug the 3.5mm mini-pulg on the microphone cable into the "INPUT" on the body pack transmitter. (Figure 5)



(Figure 4)



(Figure 5)

#### (2) With Headset Microphone

1. Put the neck-frame behind your neck, meanwhile fix the temples on your ears.
2. Adjust the gooseneck to aim the microphone toward the suitable sound source, where is in front of your mouth about 1.5"~2" distance.
3. Plug the 3.5mm mini-plug on the microphone cable into the "INPUT" on the body-pack transmitter.
4. Turn on the power ON/OFF switch, and the red LED indicator lights up!

### 6. Operation

#### (1) Turn on the system

1. Turn on the power of the receive ad check the indicators to verify signal is well received.
2. Adjust the volume control of the receiver to a proper level.
3. Turn on the power of the amplifier and adjust the volume to a proper level. Avoid to damage the amplifier, please turn on the amplifier only after the receiver and transmitter is powered on.
4. Turn on the power of the wireless transmitter and check the battery capacity via the LED indicator. If the LED lights up, it means the wireless transmitter is switched on and the battery capacity is sufficient. As soon as the LED is flashing, it means the battery is going flat, you should replace or recharge the battery immediately!

## (2) Turn off the system

1. At first, please decrease the volume of the amplifier to a lowest level, then turn off the amplifier.
2. Turn off the wireless transmitter and the receiver.

## 7. Recommendations

1. Keep the devices away from the metal objects or any interference sources, at least 50 cm.
2. To avoid the feed-back effect, don't leave the mic. to aim at the speakers directly.
3. Remove batteries from the battery compartment when the transmitter will not be used for a long time.
4. When you need to replace the batteries, please replace both batteries at the same time with new ones.

## Cleaning

- Before servicing or cleaning the unit, be sure to disconnect the AC.
- The system can be cleaned by wiping with a soft cloth. To remove stains, wipe with a soft cloth moistened with a mild detergent, Solution and wrung dry, then wipe with a dry soft cloth.
- Do not use benzene, thinner, or any other chemical product on the system, as this may cause deterioration.

## Be careful when handling the unit

- Use with care, so that no foreign substance (dirt, rain, sand) can enter the unit, as that may cause damage.
- To prevent damage, do not drop the unit or subject it to sever shock or vibration.
- This system is not water-resistant. Do not put it in water and be careful to protect it from rain, sea water, etc..

## 8. In case of Problem

Do not use the wireless microphone if it seems not to function correctly, take the battery out or disconnect the AC immediately and consult your dealer or an authorized service center.

## 9. Licensing

In most countries around the world, wireless systems must be approved for use by the authorities and it may be necessary to obtain a licence to use it legally. Your local buyer dynamic dealer will be able to give you details on wireless system regulations for your area.

## 10. Trouble Shooting

### 10-1 Receiver

Problem	Possible Cause	Solution
No function	<ul style="list-style-type: none"><li>• Power supply is interrupted.</li><li>• Power supply unit is not connected to the receiver</li></ul>	<ul style="list-style-type: none"><li>• Connect power supply unit to the DC jack socket.</li></ul>
No reception	<ul style="list-style-type: none"><li>• Transmitter is not switched on</li><li>• Transmitter works on a different frequency</li><li>• Receiving antennae are not pulled out.</li></ul>	<ul style="list-style-type: none"><li>• Switch on the transmitter</li><li>• Make sure that the transmitter and receiver are on the same frequency</li><li>• Extend the receiving antennae.</li></ul>
Distorted sound	<ul style="list-style-type: none"><li>• Input amplifier of the connected mixer is overloaded</li></ul>	<ul style="list-style-type: none"><li>• Use the reduction of the mixer or adjust the volume</li></ul>

### 10-2 Transmitter

Problem	Possible Cause	Solution
No function	<ul style="list-style-type: none"><li>• Transmitter and receiver have different frequencies.</li><li>• Insufficient battery voltage</li><li>• Insufficient battery contact, battery inserted incorrectly.</li></ul>	<ul style="list-style-type: none"><li>• Make sure the transmitter and the receiver are on the same frequency</li><li>• Replace the battery</li><li>• Check the battery and insert it again.</li></ul>
No RF on the Receiver	<ul style="list-style-type: none"><li>• Transmission distance between transmitters and receiver is too far</li><li>• Defective antenna</li><li>• Transmitter and receiver have different frequencies</li></ul>	<ul style="list-style-type: none"><li>• Reduce the distance between transmitter and receiver</li><li>• Check the antenna and replace it, if necessary</li><li>• Make sure the transmitter and receiver are on the same frequency.</li></ul>
Noise/chirping	<ul style="list-style-type: none"><li>• Interference from other transmitters</li><li>• Two transmitters using the same frequency</li><li>• Battery of the transmitter is too weak.</li></ul>	<ul style="list-style-type: none"><li>• Switch off the other transmitters</li><li>• Avoid using two transmitters with the same frequency</li><li>• Replace the battery</li></ul>