

# JTS®

Hear The Future.....Now !

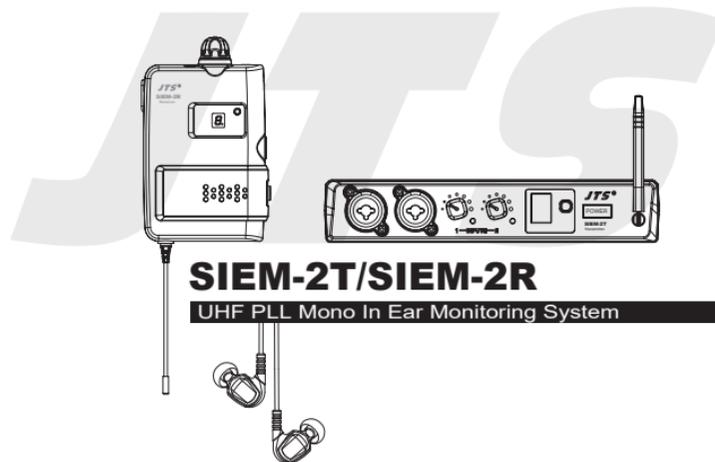
SIEM-2T/SIEM-2R can select a better earphone, **IE-5** or **IE-6**  
with Hi-dynamics, Hi-definition, Low-noise and Accurate audio reproduction.



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59508-031-05



## SIEM-2T/SIEM-2R

UHF PLL Mono In Ear Monitoring System



**ATTENTION**

**Please pay high attention to the following information.**

The guideline published by Occupational Safety Health Administration (OSHA) in United States indicates overload volume level for prolonged listening may harm your hearing. Here below are referenced data on maximum time exposure to sound level before hearing injury occurs.

<u>Sound Level (dB)</u>	<u>Duration per day (hrs)</u>
90	8
92	6
95	4
97	3
100	2
102	1.5
105	1
110	0.5
115	0.25
140	Avoid or injury may occur

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Thank you for choosing the JTS in ear monitoring system. In order to obtain the best efficiency from the system, you are recommended to take a few minutes to read this instruction manual carefully.

# 1. Important Cautions

- Make all connections before plugging the unit into an AC power outlet.
- Do not leave the devices in a place with high temperature or high humidity.
- Do not handle the power cord with wet hands.
- Keep the devices away from fire and heat sources.
- Avoid prolonged listening at overhigh volume. It may cause injury to your ears.

# 2. Features

- Developed with JTS advanced wireless technology.
- Wired and wireless design for ambience.
- UHF PLL 16 selectable channels.
- Over 80 meters of stable operation distance.
- Outstanding signal to noise ratio.
- Light weight engineering plastic chassis.
- Built in limit to protect hearing.

# 3. Specification

## 3-1 SIEM-2T/SIEM-2R

1. Carrier Frequency Range..... 502~960 MHz
2. RF Output Power..... 10 mW/50mW(depending on local regulation)
3. Nominal Frequency Deviation (modulation).....  $\pm 40\text{KHz}$
4. Audio Input Impedance.....  $20\text{k}\Omega$
5. Nominal Input Level..... -20 dBV
6. Maximal Input Level..... 0 dBV
7. LED Display..... AF Level, Channel
8. Audio Input Connector..... 2 x Balanced XLR
9. Loop Out Connector..... 2 x  $\text{\O}6.3\text{mm}$  Balanced Loop Out Socket
10. Operation Voltage..... 12-18 VDC, 300 mA

### 3-2 IE-1

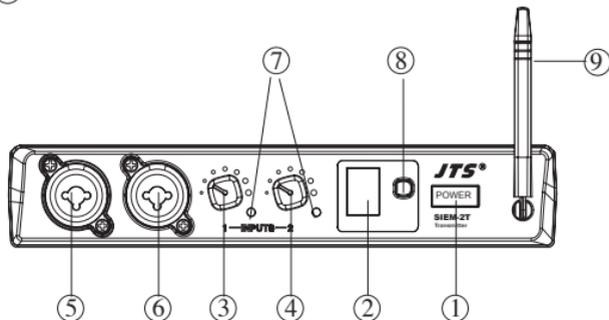
Frequency Response	20 ~ 20,000 Hz
Transducer Type	Dynamic
Impedance	16 $\Omega$
Sensitivity (at 1 kHz)	114 dB/mW
Distortion	Less than 0.3 %
Cord Length	148cm with $\varnothing$ 3.5 stereo plug
Net Weight	6 g (cable excluded)

## 4. Parts Identification

### 4-1 SIEM-2T

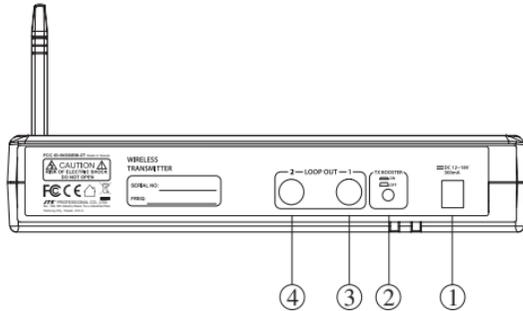
#### Front Panel

- ① Power Switch
- ② Channel LED Display
- ③ Mic.1 / LINE IN Volume Control
- ④ Mic.2 / LINE IN Volume Control
- ⑤ Mic.1 / LINE IN (Input Combo)
- ⑥ Mic.2 / LINE IN (Input Combo)
- ⑦ AF PEAK Display
- ⑧ Set Switch
- ⑨ Antenna



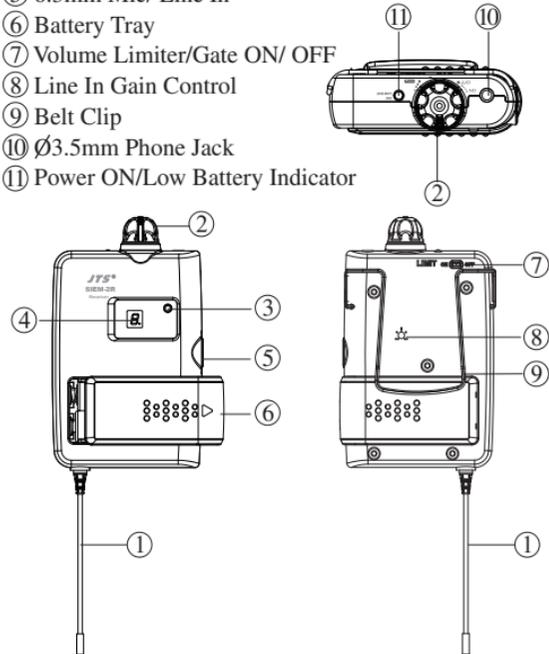
## Rear Panel

- ① DC Input (12V~18V)
- ② TX Boost
- ③ Mic.1 / LINE IN LOOP OUT
- ④ Mic.2 / LINE IN LOOP OUT



## 4-2 SIEM-2R

- ① Antenna
- ② Power Switch and Volume Control
- ③ Channel Selector
- ④ Channel LED Display
- ⑤ 6.3mm Mic/ Line In
- ⑥ Battery Tray
- ⑦ Volume Limiter/Gate ON/ OFF
- ⑧ Line In Gain Control
- ⑨ Belt Clip
- ⑩ Ø3.5mm Phone Jack
- ⑪ Power ON/Low Battery Indicator

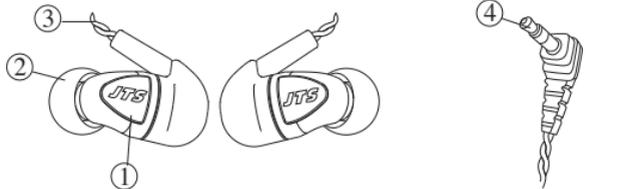


# 5. Preparing Procedures

## 4-3 Accessory

### 1. IE-1

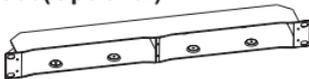
- ① Earphone
- ② Silicon Sleeve
- ③ Cord
- ④ 1/8" Stereo Phone Plug
- ⑤ Case



### 2. Power Supply



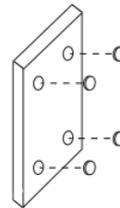
### 2. DR-900(Optional)



## 5-1 SIEM-2T

### 1. Set the rubber pad

Four self-adhesive rubber pads are provided to ensure the stability. They are to be placed on the bottom of the transmitter.



### 2. Connect the audio source, such as a mixer.

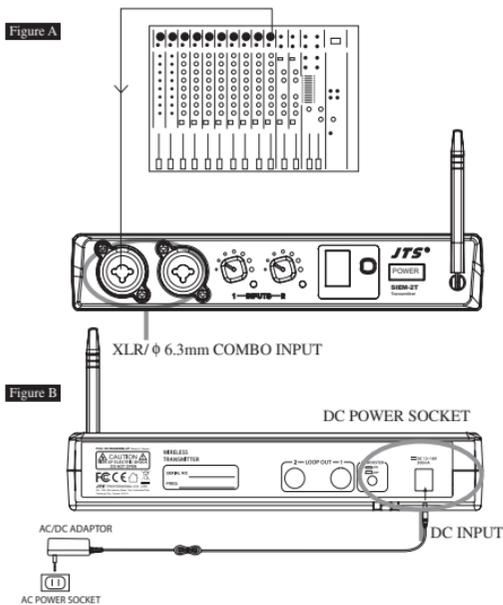
Connect the mixer output to the XLR /  $\phi$  6.3mm combo input in the Front panel of SIEM-2T with the AF input cable.

NOTE: Two balanced XLR /  $\phi$  6.3mm combo inputs are provided. You may use either one or both for a stereo source. Also, two balanced  $\phi$  6.3mm loop out connectors are provided for multiple systems application.

(Figure A / P9)

### 3. Power connection.

Connect one end of AC/DC adaptor cable to DC input socket in the rear panel of the receiver, and plug another end into an AC outlet. (Figure B)



## 5-2 SIEM-2R

### 1. Insert and replace batteries

- (1) Slide the lid of battery tray. (Figure 1)
- (2) Uncover the lid and insert two pieces of 1.5V AA batteries according to the polarity indication. (Figure 2)
- (3) Cover back the lid.(Figure 3)

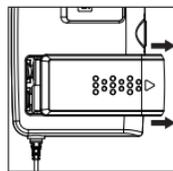


Figure 1

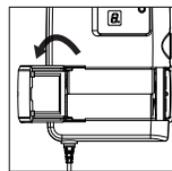


Figure 2

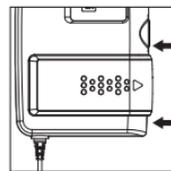


Figure 3

## 2. Connect with the earphone IE-1

- (1) Plug the earphone into the jack of the receiver.  
(Figure 1)
- (2) Make sure the volume is at low level to avoid injury to your ears.
- (3) Insert earphones into your ear at a correct position.  
(Figure2)
- (4) Check if the silicon sleeve is suitable for your ear. If not, replace with other sizes of sleeves for comfort and best isolation. (Figure 3)
- (5) Make sure correct channels are chosen. The letter “R” and “L” on the earphones indicate the right and left ear respectively.

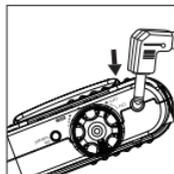


Figure 1



Figure 2

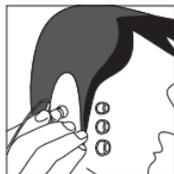
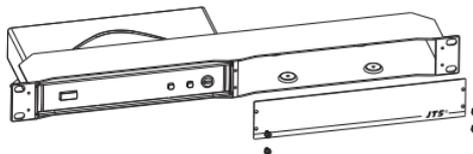
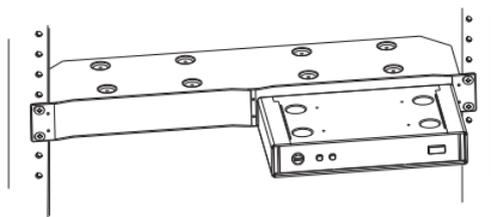


Figure 3

## 5-3 Optional Accessory

### 1. DR-900/RP-900 Rack Mount Kit

Rack mount kit is available to install the half rack transmitter into a standard EIA rack.

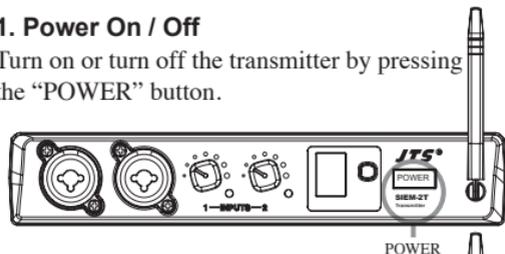


# 6. Basic Operation

## 6-1 SIEM-2T

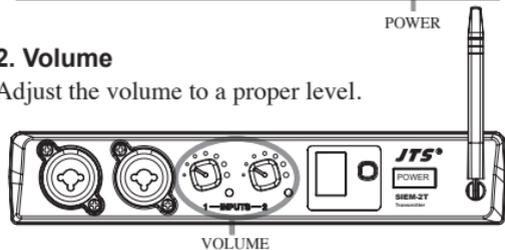
### 1. Power On / Off

Turn on or turn off the transmitter by pressing the “POWER” button.



### 2. Volume

Adjust the volume to a proper level.

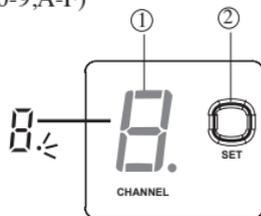


### 3. Setting LED Display

- ① Channel LED Display
- ② Channel Selector

#### Select Channel

Hold “Channel Selector” for about 3 seconds, the decimal point in LED Display starts flashing, allowing you to change the channel. Then, cycling press “Channel Selector” to select a desired channel from preset 16 channels. (0-9,A-F)



Notice.1 : The channel of the transmitter must match that of the receiver .

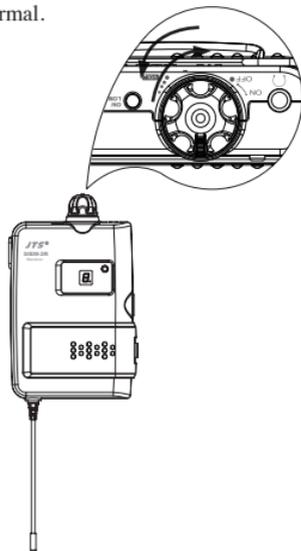
Notice.2 : The LED Display will stop flashing if no operation for about 6 seconds

## 6-2 SIEM-2R

### 1. Power On / Off and Volume

Turn on or off the receiver and adjust the volume by rotating the volume control clockwise and reversely.

**NOTE:** Please turn off the receiver before replacing batteries to ensure all functions normal.

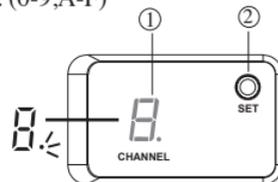


### 2. Setting LED Display

- ① Channel LED Display
- ② Channel Selector

#### Select Channel

Hold “Channel Selector” for about 3 second, the decimal point in LED Display starts flashing, allowing you to change the channel. Then, cycling press “Channel Selector” to select a desired channel from preset 16 channels. (0-9,A-F)



Notice.1 : The channel of the transmitter must match that of the receiver .

Notice.2 : The LED Display will stop flashing if no operation for about 6 seconds

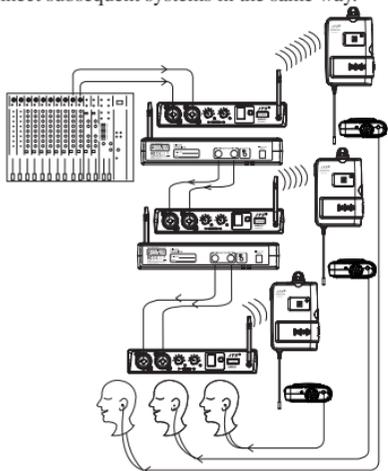
# 7. Installation

Here are some basic operation modes for your reference. Also, you may make use of the loop out connectors for multiple systems application.

## 7-1 Loop Out Application

### 1. Set for Multiple Systems

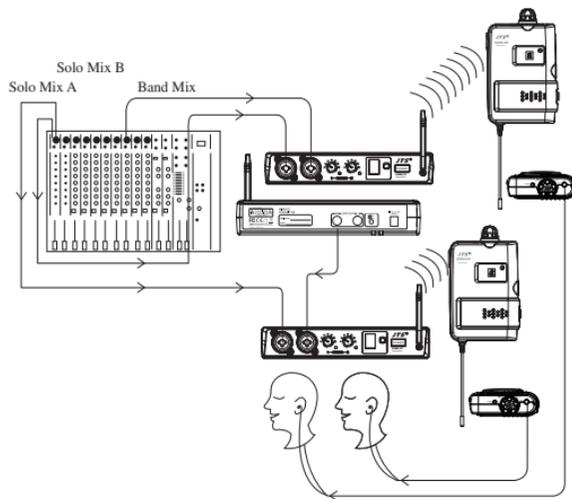
1. Connect the mixer outputs to inputs of the first transmitter.
2. Connect loop out connectors of the first transmitter to the second one.
3. Connect subsequent systems in the same way.



### 2. Mix For Multiple Systems

This installation enables each performer to create their own mix.

1. Send the band mix to input (Right / CH.2) of the first transmitter.
2. Connect loop out connector (CH.2) of the first transmitter to input (Right/CH.2) of the second transmitter.
3. Connect individual solo mix to input (Left/CH.1) of each performer's transmitter.



## 8. Recommendations

1. In order to achieve the optimum reception and also extend the operating distance, please leave an “open space” between the receiver and transmitter.
2. Keep the devices away from the metal objects or any interference sources, at least 50 cm.
3. Remove batteries from the battery compartment when the receiver will not be used for long time.
4. When you need to replace the batteries, please replace both batteries at the same time with new ones.

## 9. Important Notice

1. JTS offers wireless systems in a selection of bands that conform to the different government regulations of specific nations or geographic regions. These regulations help limit radio frequency (RF) interference among different wireless devices and prevent interference with local public communications channels, such as television and emergency broadcasts.
2. For information on bands available in your area, consult your local dealer or phone JTS. More information is also available at JTS's website ([www.jts.com.tw](http://www.jts.com.tw)).
3. This Radio apparatus may be capable of operating on some frequencies not authorized in your region. Please contact your national authority to obtain information on authorized frequencies and RF power levels for wireless microphone products.