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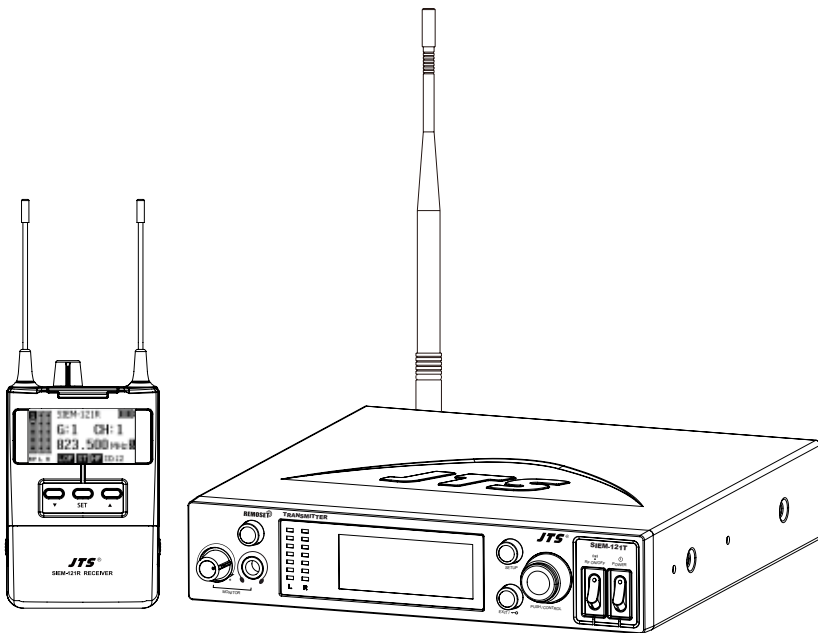
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59508-137-02



**JTS®**



## **SIEM-121T/SIEM-121R**

UHF PLL Stereo In-Ear Monitoring System

Instruction Manual / 操作手冊



### 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.

Sound Level (dB)	Duration per day (hrs)
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

#### IMPORTANT NOTE

- The UHF PLL Miniature Headworn Wireless Transmitter model HW-2 complies with the following requirements: FCC (Federal Communications Commission) Part 74. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operations. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. FCC ID can be found inside the battery compartment.

# Table of Content

1.Features	1
2.Specification	2
2-1 UHF PLL Single Channel Transmitter // SIEM-121T	2
2-2 UHF PLL Body-Pack Receiver // SIEM-121R	2
3.Parts Identification	3
3-1 UHF PLL Single Channel Transmitter // SIEM-121T	3
3-2 UHF PLL Body-Pack Receiver // SIEM-121R	5
3-3 Accessories	6
4.Connection	6
4-1 Connecting the SIEM-121T	6
4-2 Installing the SIEM-121R	7
4-3 Optional Accessory	8
5. Operation	9
5-1 Operation // SIEM-121T	9
5-2 Operation // SIEM-121R	11
6. Installation Assignment	14
6-1 Basic Operation	14
6-2 Loop Out Application	15
7. Recommendations	15

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 few minutes to read this instruction manual carefully.

# 1.Features

## **SIEM-121T**

- » Your ultimate solution to affiliate the problems of interference and dropouts.
- » Designed with JTS exclusive 2.4GHz REMOSET technology, making data synchronization as simple as a one-button-touch to enable quick setup and easy operation.
- » Reliable wireless coverage that extends up to 300 meters.
- » Digital Volume control/adjustment at -40 to +20dB.
- » 6 programmable groups, each up to 24 channels.
- » Username programmable.
- » Rugged, all-metal construction for lasting durability.
- » Complete the system with our compact-sized SIEM-121R body-pack receiver.

## **SIEM-121R**

- » The SIEM-121R is a wireless stereo body-pack receiver for use with the SIEM-121 monitoring system.
- » Allow you to shape the sound of your monitor mix with stereo & mono, HF booster and volume limiting.
- » Adjustable volume limiter sets the maximum level range for the volume knob.
- » Enables adjustment of left/right balance.
- » Updated high-contrast LCD screen optimizes user visibility.
- » Compact design (lighter and thinner) optimizes your wearing experience.
- » Up to 6-hours continuous use from 2 x AA batteries keep you going all night.
- » Complete the system with our compact-sized SIEM-121T wireless transmitter.

## 2.Specification

### 2-1 UHF PLL Single Channel Transmitter // SIEM-121T

Carrier Frequency Range	470~960 MHz
RF Output Power	10 mW
Nominal Frequency Deviation	±40KHz (MAX)
Audio Input Impedance	20kΩ
Nominal Input Level	-12 dBu
Maximum Input Level	AUX:12dBu, LINE:22 dBu
LCD Display	Key lock, Stereo/Mono, RF power, User Name, Group/Channel, Frequency, Input Selection, Sensitivity, Remoset ID
Audio input Connector	2 x Balanced XLR / Ø6.3mm phone Combo Socket
Audio Output Connector	1 x 6.3mm Stereo Phone Jack
Loop Out Connector	2 x 6.3mm Balanced Loop Out Socket
Switching Power Supply	100-240V
Dimensions	210mm(W)*42mm(D)*225mm(H)
Weight	1140g

### 2-2 UHF PLL Body-Pack Receiver // SIEM-121R

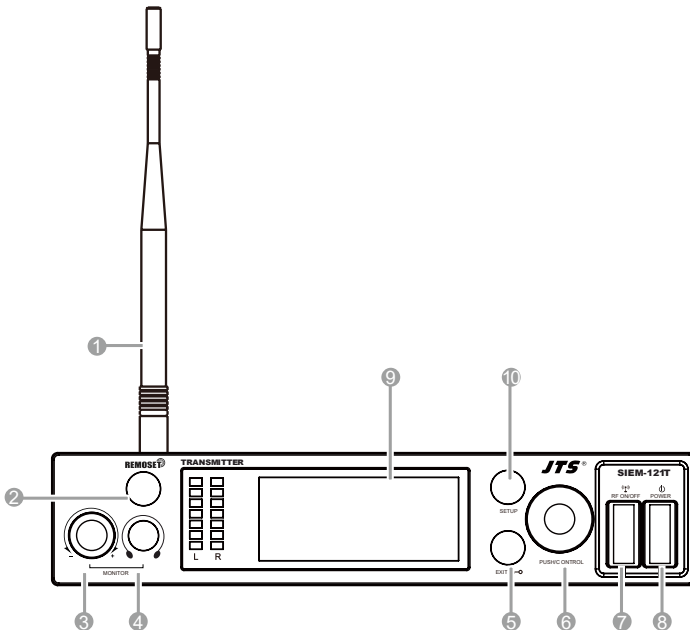
Carrier Frequency Range	470~960 MHz
Earphone Output.	60 mW
Minimum Load Impedance	16Ω
LCD Display	Antenna, RF, AF Level, User Name, Key lock, Battery Fuel Gauge, Stereo/Mono, HF booster, Limiter, Group/Channel, Remoset ID, Frequency
Output Connector	3.5mm Stereo Phone Jack
Battery	2*AA batteries or 2*MiNH rechargeable battery
Operation Hour.	Over 8 hours
Dimensions	65mm(W)*20mm(D)*95mm(H)
Weight	130g(without batteries)

# 3.Parts Identification

## 3-1 UHF PLL Single Channel Transmitter // SIEM-121T

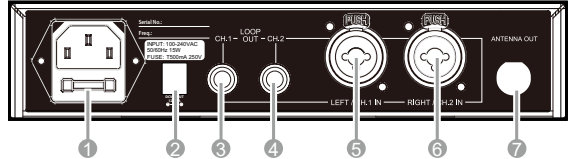
### 3-1-1 Front Panel

- ① Antenna
- ② REMOSET : When the setting is done on the transmitter, push REMOSET to transmit the settings to the receiver .
- ③ Volume Control
- ④ 6.3mm Stereo Phone Jack
- ⑤ EXIT/Lock Button: When the “Setup Menu” is displayed, you can press the EXIT Button to cancel the selection of any item or exit the menu. When the Setup Menu is not displayed, press and hold the EXIT Button for 3 seconds to lock/unlock the buttons. You can press the EXIT button to cancel the pairing when the device is in the process of pairing.
- ⑥ Knob: When in the “Function Setting Menu,” the Knob allows the selection of the desired functions up and down; push the rotary switch (or the SETUP) to enter the selection, rotate the Knob to select the desired setting and push SETUP to save it.
- ⑦ RF Power Switch
- ⑧ Power Switch
- ⑨ LCD Display
- ⑩ SETUP: Push and hold for 2 seconds to enter the “Setting Menu;” when the selection and setting is done with [ 6.Knob ], push SETUP to save the setting.



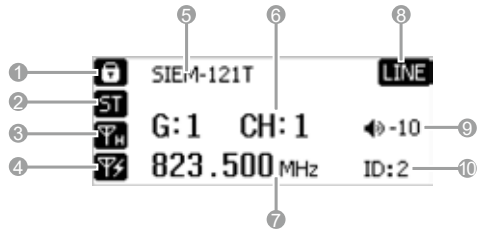
### 3-1-2 Rear Panel

- 1 AC Power Socket and Fuse
- 2 DC power socket: for 12V/1A DC power supply
- 3 Balanced Loop Out Connector CH.1
- 4 Balanced Loop Out Connector CH.2
- 5 Balanced XLR/φ6.3mm Combo Input Left / CH.1
- 6 Balanced XLR/φ6.3mm Combo Input Right / CH.2
- 7 BNC Antenna Output Socket



### 3-1-3 LCD Display

- 1 Key lock status
- 2 Stereo/Mono Indication: **ST**:Stereo, **Mo**:Mono
- 3 RF Power: **TH**: High; **TL**:Low
- 4 RF Switch status: **TR**:RF ON, **TR**:RF OFF
- 5 User Name
- 6 Current Group / Channel
- 7 Current Frequency
- 8 Input Selection: **LINE**:LINE input, **AUX**:AUX input
- 9 Sensitivity: -40 ~ +20 dB
- 10 Remoset ID

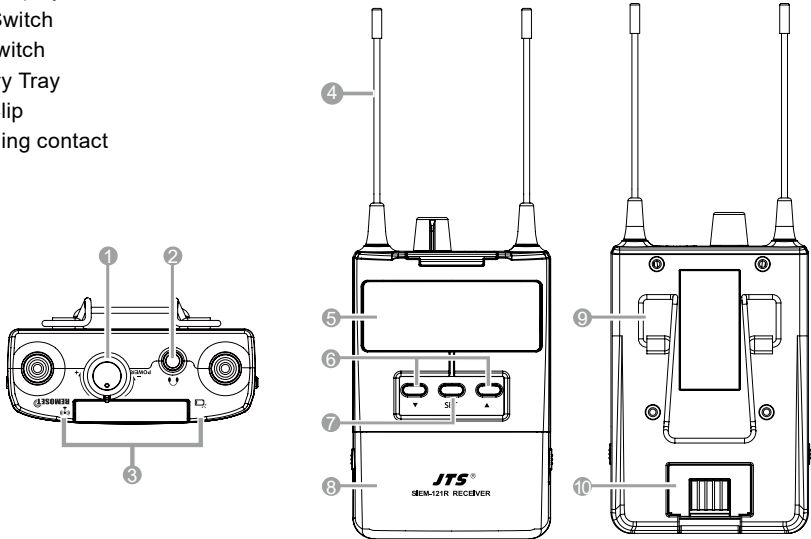




## 3-2 UHF PLL Body-Pack Receiver // SIEM-121R

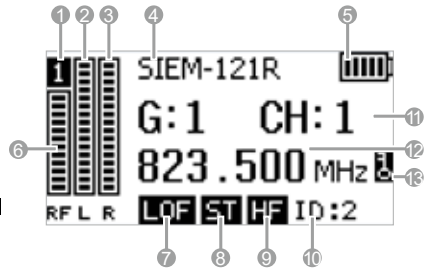
### 3-2-1 Receiver

- ① Power Switch and Volume Control
- ② 3.5mm Stereo Phone Jack
- ③ REMOSET/Battery indication
- ④ Antenna
- ⑤ LCD Display
- ⑥ ▲/▼Switch
- ⑦ Set Switch
- ⑧ Battery Tray
- ⑨ Belt Clip
- ⑩ Charging contact



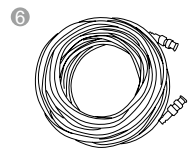
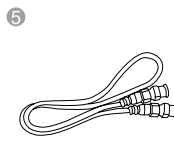
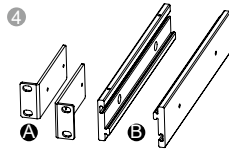
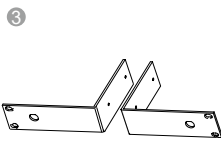
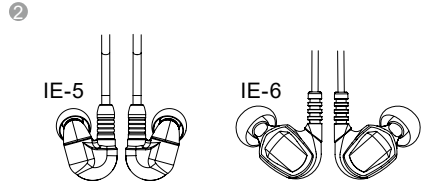
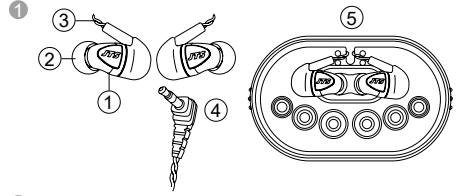
### 3-2-2 LCD Display

- ① Antenna indication 1 or 2
- ② AF Level Indication L-Channel
- ③ AF Level Indication R-Channel
- ④ User Name
- ⑤ Battery Indication
- ⑥ RF Level Indication
- ⑦ Limiter Indication: OFF **LOF** and LEVEL 1 **LT1** to 6 **LT6**
- ⑧ Stereo/Mono Indication: **ST** Stereo, **Mo**: Mono
- ⑨ High Frequency Booster Indication
- ⑩ Remoset ID
- ⑪ Current Group / Channel
- ⑫ Current Frequency
- ⑬ Key lock status



### 3-3 Accessories

- ① IE-1
  - 1. Earphone
  - 2. Silicon Sleeve
  - 3. Cord
  - 4. 3.5mm Stereo Phone Plug
  - 5. Case
- ② IE-5 / IE-6 (Optional)
- ③ RM-901 Rack Mount Kit (Optional)
- ④ RM-10 Rack Mount Kit (ARM-10E RM-10M) (Optional)
- ⑤ RTF-1 /RTF-3/RTF-10 Antenna Extension Cable (Optional)
- ⑥ RTF-20 Antenna Extension Cable (20 meters) (Optional)



## 4.Connection

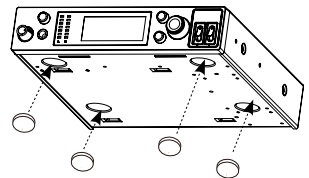
### 4-1 Connecting the SIEM-121T

#### 4-1-1. 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.

#### 4-1-2. Attach the antenna

The user-friendly antenna comes with BNC connector. Connect the antenna on the rear of the transmitter and align it upward.



#### 4-1-3. Connect the main unit (Step 1)

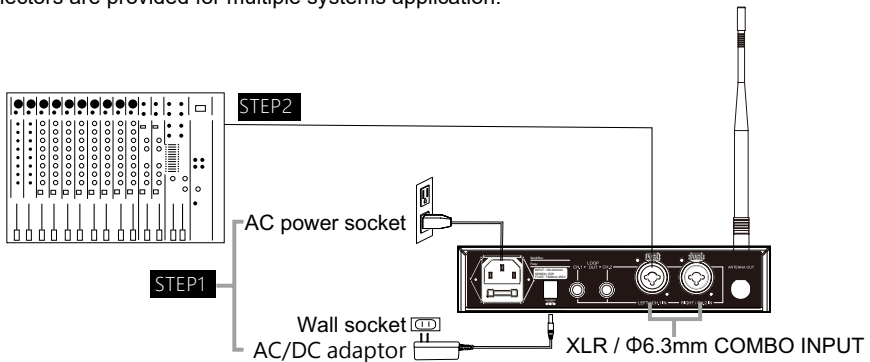
1. AC INPUT: Connect the AC INPUT in the rear panel of SIEM-121T to an AC power socket with the supplied AC power cord.
2. DC INPUT: Check that the DC current and voltage ratings of the adapter match the label on the unit. Connect the DC terminal to the "DC input" port on the unit, and the AC end to an AC socket.

#### 4-1-4. Connect the audio source, such as a mixer (Step 2)

Connect the mixer output to the XLR /  $\Phi 6.3\text{mm}$  combo input in the rear panel of SIEM-121T with the AF input cable.

NOTE1: Select either AC INPUT or DC INPUT to connect the main unit.

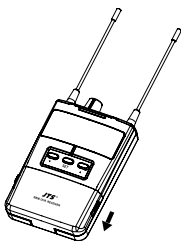
NOTE2: Two balanced XLR/  $\Phi 6.3\text{mm}$  combo inputs are provided. You may use either one input or both for a stereo source. Also, two balanced  $\Phi 6.3\text{mm}$  loop out connectors are provided for multiple systems application.



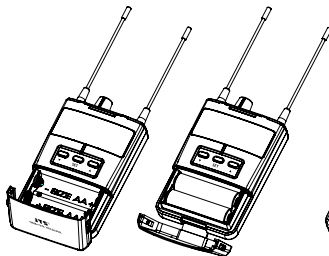
## 4-2 Installing the SIEM-121R

### 4-2-1 Receiver Battery Installation

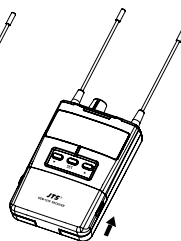
1. Open the battery cover by pulling down the magnetic latch on the side of the device. (Figure 1)
2. Place two AM3 batteries into the battery holder according to the polarity indication on it. (Figure 2)
3. Close the battery cover. (Figure 3)
4. Insert the headphone plug into the 3.5mm stereo headphone jack of the receiver to complete the installation.
5. Turn the power and volume knob to turn on the device/adjust its volume.
6. Set the parameters for the transmitter according to the instruction manual.



(Figure 1)



(Figure 2)

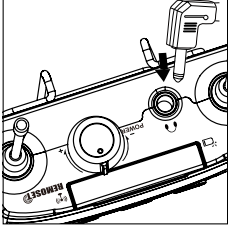


(Figure 3)

#### 4-2-2 Connect with the earphone

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 channels respectively.

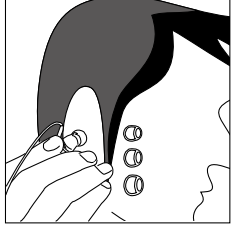
(Figure 1)



(Figure 2)



(Figure 3)



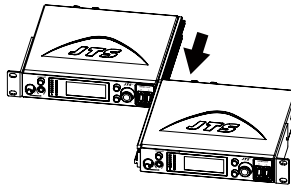
### 4-3 Optional Accessory

#### 4-3-1. RM-901/RM-10 Rack Mount Kit

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

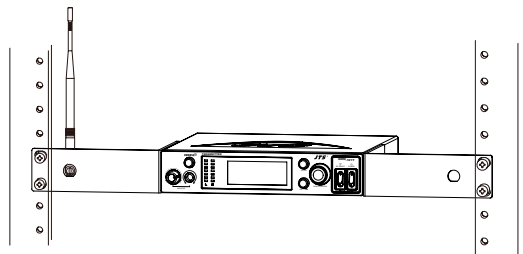
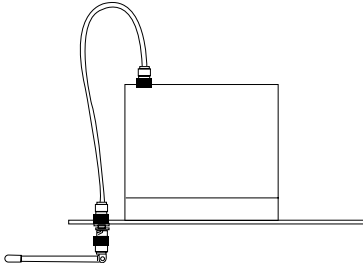


RM-10E/M



#### 4-3-2. RTF-1/RTF-3/RTF-10/RTF-20 Antenna Extension Cable

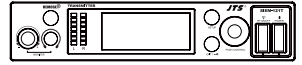
Antenna extension cable enables front mounting antenna which benefits reduction of RF interference.



# 5. Operation

## 5-1 Operation // SIEM-121T

1. Power On / Off: Turn on or turn off the transmitter by pressing the "POWER" switch.
2. Volume: Adjust the volume to a proper level.
3. Monitor Volume: Adjust the monitor volume to a proper level.



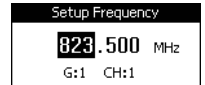
### Parameter setting

Push and hold "SETUP" for 2 seconds to enter the setting mode. Turn the Knob to select the desired item. Push the Knob (or SETUP) to enter the setting page. Spin the switch to select the desired value or function. Push SETUP to save the settings. Push EXIT to return to the previous page.

1. Frequency
2. Group
3. User Group
4. Stereo/Mono
5. Sensitivity
6. Input Selection
7. Remoset
8. RF Power
8. User Name
10. System Options
11. Exit

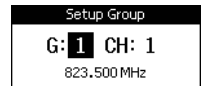
#### 1. FREQ: frequency setting

1MHz per unit	Select with ▲/▼
0.025MHz per unit	Select with ▲/▼



#### 2. Group: group/channel setting

G (group)	Select default group1~6
CH (channel)	Select default channel(s)



#### 3. User Group: groups and channels defined by user

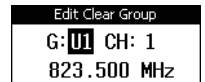
##### (1) Edit

G	U1~U6 (group no.)
CH	1~24 (channel)
---.---MHz (frequency setting)	

1. Edit
2. Clear Group
3. Return

##### (2) Clear Group

- #1 Turn the knob to select the group you want to delete and then press the knob to delete the group.
- #2 The frequency values of all channels in the group become "----.--- MHz".



Group: **U1**  
 Rotary to select  
 Push **[knob]** to clear  
 Push **[EXIT]** to return

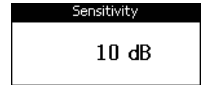
#### 4. Stereo/Mono

Turn the knob to select Stereo Mode or Mono Mode.



## 5. Sensitivity

Turn the knob to adjust the sensitivity, and the adjustable range is from -40 to +20 dB.



## 6. Input Selection

Turn the knob to select LINE/AUX input level.

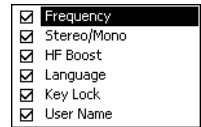
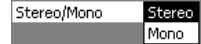
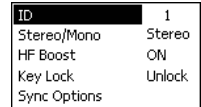


## 7. Remoset

Turn the knob to select an item to be set, and then press the knob to set its value. Press the knob again to return to the menu. After setting, press the SETUP Button to save the set value, or press the EXIT Button to cancel the setting.

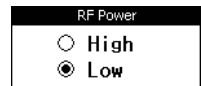
You can set the parameters for the receiver in this menu. After setting, return to the main menu and press the REMOSET Button to synchronize the pre-set receiver parameters to the receiver.

- » ID: Set the Remoset ID : 0~255
- » Stereo/Mono: Stereo/Mix setting of the receiver.
- » HF Boost: Set the high frequency boost function of the receiver.
- » Key Lock: Set the key lock of the receiver.
- » Sync Options: Selects the REMOSET synchronous transmission setting item. Rotate the knob to select the item, and press the knob to check the item; REMOSET only apply the sync transmission setting for the checked item.



## 8. RF Power

High	High transmitted power
Low	Low transmitted power



## 9. Edit User Name

Rotate the knob to select letters, numbers or symbols, then press the knob to enter and set the next word. 10 characters can be entered in total.



## 10. System Options

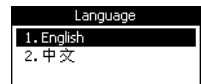
### (1) Display Options

Contrast	0~9 (default 5)
Brightness	0~9 (default 5)



### (2) Language

Rotate the knob to select "Language" in Chinese or English.



### (3) Factory Reset

YES	Restore factory settings
NO	Cancellation

This will erase all data from receiver's Internal Storage.

**No** **Yes**

## 5-2 Operation // SIEM-121R

### Parameter setting

Press the SET button for 2 seconds to enter the setting mode. By pressing the SET button repeatedly, you can enter different setting items in order, then you can press ▲/▼ button to set the parameters, and press SET again to save the setting and leave.

1. Frequency
2. Group/Channel
3. Scan
4. Stereo/Mono
5. HF Boost
6. Balance
7. Limiter
8. Audio Output
9. Remoset
10. User Name
11. Key Lock
11. System Options
13. Exit

#### 1. Frequency

1MHz per unit	Select with ▲/▼
0.025MHz per unit	Select with ▲/▼

Setup Frequency

**823.500** MHz  
G:1 CH:1

#### 2. Group/Channel

G (group)	Select default group1~6
CH (channel)	Select default channel(s)

Setup Group

G: **1** CH: **1**  
823.500 MHz

#### 3. Scan Settings

##### (1). Scan All Groups

To stop scanning at any time, just press the SET button.

Start Scanning	Press SET
To return to the menu	Press ▼

1. All Group
2. Scan Result
3. Current Group
4. Return

Scan All Group

**Return** **Start**

Scan All Group

Scanning... 10%

**Stop**

##### (2) Checking Scan Results

Once you've scanned all groups, you'll see the results on the screen.

Use the ▲ or ▼ button to pick a group. Press SET, then choose a channel with ▲ or ▼.

Press SET again to save your choice (G/CH).

\*Remember, you need to scan all groups first to do this.

Scan Result

G: **1** CH: **1**  
Open Channel : 14

Scan Result

G: **1** CH: **1**  
Open Channel : 14

Scan Result

No Scan Data,  
Scan All Group First.

**Return**

### (3).Scan Current Group

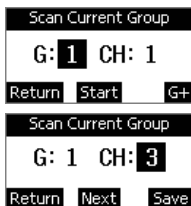
Choose a group with the ▲ button and press SET to start scanning it.

When it's done:

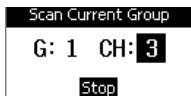
Press SET to go to the next channel.

Press ▲ to save your Group/Channel.

Press ▼ to go back to the main menu.



(4) If it's taking too long to find a channel, press SET to stop scanning.



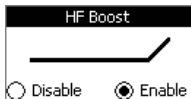
### 4. Stereo/Mono

Stereo	Select ▲
Mono	Select ▼



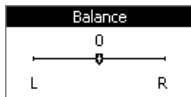
### 5. HF Boost

Enable	Select ▲
Disable	Select ▼



### 6. Balance

Adjust left and right channel volume balance: L10 ~ 0 ~ R10



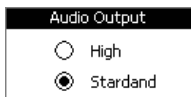
### 7. Limiter

Press ▲/▼ to turn off the function, LEVEL 1~6



### 8. Audio Output

High	Select ▲
Standard	Select ▼





## 9. Remoset

### (1) Remoset

Enabled (En)	Frequency can be matched to the transmitter.
Disabled (Dis)	No frequency can be matched to the transmitter.

### (2) Use ID

Enable	The ID must be the same as the transmitter in order to pair with the transmitter.
Disable	Pair with the transmitter regardless of the transmitter ID.

(3) Remoset ID : Press ▲/▼ button to select 0~255

(4) Save and leave: Save the setting value and return to the main menu.

(5) Leave without saving: Do not save the setting value and return to the main menu.

Note: Make sure the ID is the same on both receiver and transmitter.

1. Remoset	En
2. Use ID	Yes
3. ID	1
4. Save and Exit	
5. Exit without Save	

## 10. User Name

Press ▲/▼ key to select letters, numbers or symbols, press Set key to enter and set the next word.

Edit User Name	
SIEM-121R	1/10
NOPQRSTUWXYZ	

## 11. Key lock

Lock	Select ▲
Unlock	Select ▼

Key Lock	
<input type="radio"/>	Lock
<input checked="" type="radio"/>	Unlock

## 12. System Options

### (1) Display Options

Contrast	0~9 (default 5)
Brightness	0~9 (default 5)

1. Display Options	
2. Light time	
3. Language	
4. Factory Reset	
5. Return	

Display Options	
Contrast	5
Brightness	5

### (2) Light Time

Off, 5/10/15/20/25/30/60Sec, and Keep ON.

Light Time	
10 Sec	

### (3) Language

Rotate the knob to select "Language" in Chinese or English.

Language	
English	
中文	

### (4) Factory Reset

YES	Restore factory settings
NO	Cancellation

This will erase all data from receiver's Internal Storage.	
<input type="radio"/>	<input checked="" type="radio"/>
No	Yes

# 6. Installation Assignment

## 6-1 Basic Operation

### 6-1-1.Stereo

Set up the installation when two outputs from the mixer are left and right channels of a stereo mix. The left channel goes to the left ear, while the right channel goes to the right ear. Adjust the volume by using the balance control on the SIEM-121R.

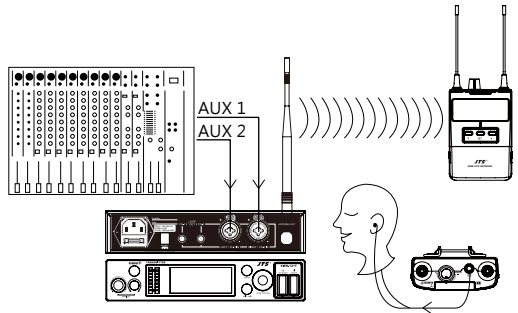
- 1.Connect the mixer outputs to the transmitter inputs.
- 2.Set SIEM-121 T to Stereo mode. (See 5-1)
- 3.Set SIEM-121 R to Stereo mode. (See 5-2)

### 6-1-2.Mix

Set up the installation when two outputs from the mixer are different mono mixes that go to both left and right earphones.

Make one mix louder than the other by using the balance control on the SIEM-121R. The total volume keeps at the same level in both ears.

1. Connect the mixer outputs to the transmitter inputs.
2. Set SIEM-121 T to Stereo mode. (See 5-1)
3. Set SIEM-121 R to Mix/Mono mode. (See 5-2)

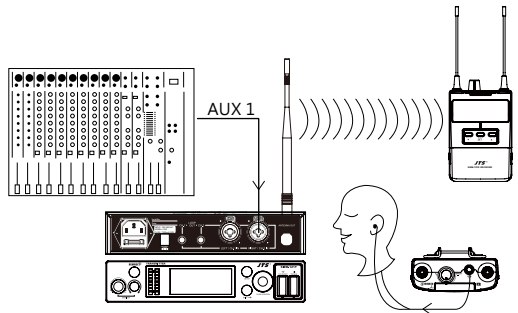


### 6-1-3.Mono

Set up the installation when only one output from the mixer.

1. Connect the mixer output to the transmitter input.  
( Either LEFT/CH.1 or RIGHT/CH.2 )
2. Set SIEM-121T to Mix/Mono mode. (See 5-1)

NOTE: Stereo or Mix/Mono mode of SIEM-121R will be no effect in this setup.

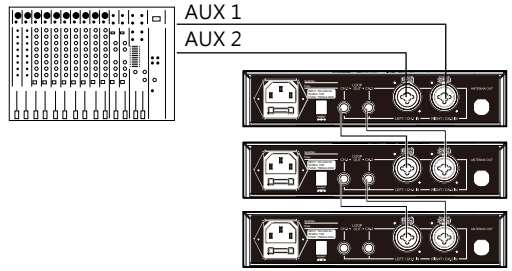


## 6-2 Loop Out Application

### 6-2-1. Stereo for Multiple Systems

Make use of the loop out connectors to deliver one stereo signal from the mixer to multiple SIEM-121T.

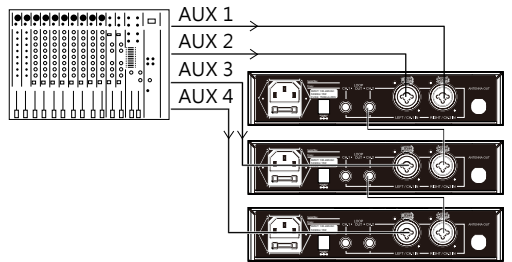
1. Connect the mixer outputs to inputs of the first transmitter.
2. Connect loop out connectors of the first transmitter to the second one.
3. Connect subsequent systems in the same way.



### 6-2-2. 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(AUX-1).
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(AUX-2/AUX-3/AUX-4/...).



## 7. Recommendations

- » In order to achieve the optimum reception condition and also extend the operating distance, please leave an "open space" between the receiver and transmitter.
- » Keep the devices away from the metal objects or any interference sources, at least 50 cm.
- » Remove batteries from the battery compartment when the receiver will not be used for long time.
- » When you need to replace the batteries, please replace both batteries at the same time with new ones.
- » 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.
- » Caution : The suitable environment for this product is with a temperature between  $-10^{\circ}\text{C}$  ( $14^{\circ}\text{F}$ ) and  $+50^{\circ}\text{C}$  ( $122^{\circ}\text{F}$ ).



請詳閱以下重要資訊

由美國職業安全衛生署 (OSHA) 所公布的準則指出，長時間過大的音量可能會造成您聽力的損傷。以下參考資料是一些聲音位準下的最大曝露時間，以免造成聽力傷害。

聲音位準 (分貝)	每天持續時間 (小時)
90	8
92	6
95	4
97	3
100	2
102	1.5
105	1
110	0.5
115	0.25
140	請避免以免造成聽力損害

# 目錄

1. 特點	1
2. 規格	2
2-1 UHF PLL 單頻道發射器 // SIEM-121T	2
2-2 UHF PLL 腰掛式接收機 // SIEM-121R	2
3. 零件說明	3
3-1 UHF PLL 單頻道發射器 // SIEM-121T	3
3-2 UHF PLL 腰掛式接收機 // SIEM-121R	5
3-3 配件	6
4. 連接方式	6
4-1 發射器連接方式 // SIEM-121T	6
4-2 接收機連接方式 // SIEM-121R	7
4-3 配件安裝	8
5. 操作	8
5-1 單頻道發射器設定 // SIEM-121T	8
5-2 接收機設定 // SIEM-121R	11
6. 安裝串接操作模式	14
6-1 聲道操作模式	14
6-2 環路輸出應用	15
7. 產品注意事項	15

# 1. 特點

## SIME-121T

- » 優異電路設計達到最佳信噪比，是舞台演出常見雜訊干擾與信號丟失的最佳解決方案。
- » 搭載 JTS 全球獨家 2.4GHz REMOSET 專利技術，一鍵同步資料傳輸，無線對頻讓您快速設定輕鬆操作。
- » 有效工作範圍最高可達 300 公尺。
- » 音量數位控制幅度 -40 至 +20dB 可調。
- » 6 個自定群組，每組最多 24 個頻道。
- » 可編輯用戶名稱。
- » 全金屬機身設計，質感強度兼具。
- » 可搭配 SIEM-121R 腰掛接收器，完備您的無線監聽系統。

## SIME-121R

- » SIEM-121R 為 SIEM121 系統專用之無線腰掛接收器。
- » 可根據演出需求調節立體音 / 混音，高音提升及音量限幅器。
- » 使用者可自行調整切換音量限幅器，聲音穩定舒適有效減低聽覺疲勞，全面守護您的聽力。
- » 左右聲道平衡可調。
- » 新一代高對比 LCD 顯示幕，提升視覺清晰度。
- » 精巧機身更薄更輕，大幅提升配戴舒適性。
- » 兩顆標準 AA 電池最多可連續使用 6 小時。
- » 可搭配 SIEM-121T 發射器，完備您的專業無線監聽系統。

## 2. 規格

### 2-1 UHF PLL 單頻道發射器 // SIEM-121T

載波頻率範圍	470~960 MHz
射頻輸出功率	10mW
頻率偏移	±40kHz( 最大值 )
音源輸入阻抗	20kΩ
標準輸入電平	-12 dBu
最大輸入電平	AUX:12dBu, LINE:22 dBu
LCD 顯示	按鍵鎖定、立體聲 / 混音、射頻功率、用戶名稱、群組 / 頻道、頻率、輸入選擇、靈敏度、對頻 ID
音頻輸入接頭	2 個平衡式 XLR/Ø6.3mm Combo 接頭
音頻輸出接頭	1 個 6.3mm 立體接頭
環路輸出接頭	2 個 6.3mm 平衡式環路輸出接頭
電源供應	100~240 V
尺寸	210mm( 長 )*225mm( 高 )*42mm( 深 )
重量	1140 克

### 2-2 UHF PLL 腰掛式接收機 // SIEM-121R

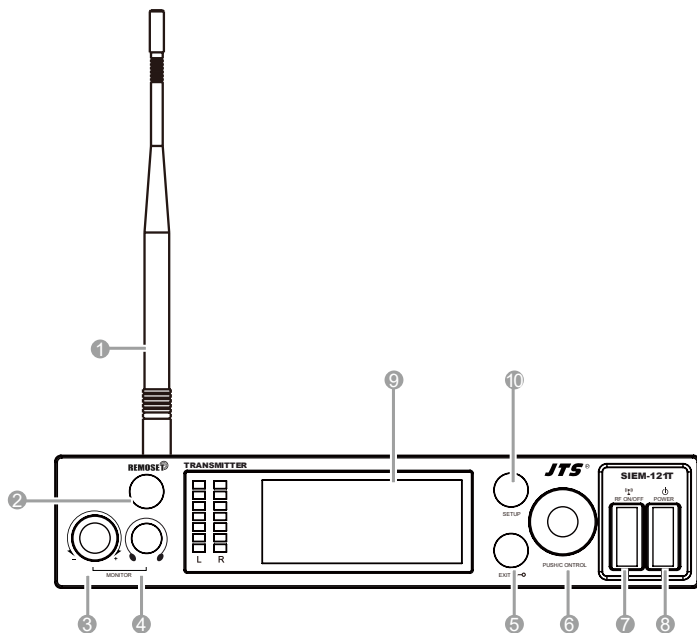
載波頻率範圍	470~960 MHz
耳機輸出	60mW
最小負載阻抗	16Ω
液晶顯示	天線、射頻、AF 左右聲道音量、用戶名稱、按鍵鎖定模式、電量、立體聲 / 混音、高音提昇、限幅器、群組 / 頻道、對頻 ID、頻率
輸出接頭	3.5mm 立體聲插座
電池	兩顆 AM3 電池或充電電池
電池壽命	8 小時以上
尺寸	65mm( 長 )*95mm( 高 )*20mm( 深 )
重量	130 克 ( 不含電池 )

## 3. 零件說明

### 3-1 UHF PLL 單頻道發射器 // SIEM-121T

#### 3-1-1 前面板

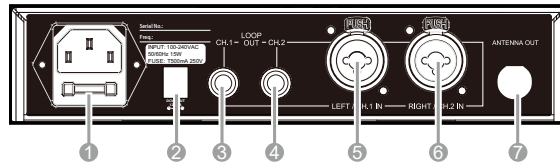
- ① 天線
- ② REMOSET 鍵：發射器設定完成後，按一下 REMOSET 鍵，傳送設定資訊到接收機。
- ③ 耳機音量控制
- ④ 6.3mm 立體聲耳機插口
- ⑤ EXIT/ 鎖定鍵：當「設定選單」模式時，按 EXIT 可取消選擇或退出選單。非設定模式時，長按 EXIT 3 秒可鎖定 / 解鎖按鍵。正在對頻時，按 EXIT 可取消對頻。
- ⑥ 飛梭旋鈕：當「功能設定選單」模式時，旋轉飛梭旋鈕可上下選擇欲設定項目；按一下飛梭旋鈕（或 SETUP 鍵）進入選項，旋轉飛梭旋鈕調整設定值，按 [SETUP] 鍵儲存設定。
- ⑦ RF 射頻開關
- ⑧ 電源開關
- ⑨ LCD 顯示
- ⑩ SETUP 鍵：按住不放約 2 秒，進入「設定選單」；依「飛梭旋鈕」選擇與設定完成後，按 SETUP 鍵儲存設定值。





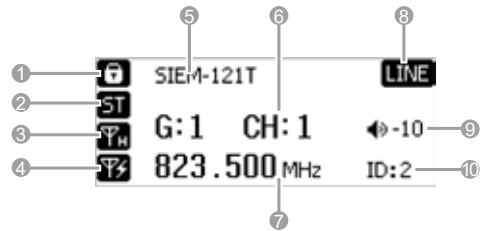
### 3-1-2 後面板

- 1 交流電源插座和保險絲
- 2 DC 電源輸入插座：直流電源輸入插座 DC 12V/1A
- 3 平衡環路連接器 CH.1
- 4 平衡環路連接器 CH.2
- 5 平衡式 XLR/Φ6.3mm 組合輸入 / 左 / CH.1
- 6 平衡式 XLR/Φ6.3mm 組合輸入 / 右 / CH.2
- 7 BNC 天線輸出插座



### 3-1-3 LCD 發射器液晶螢幕

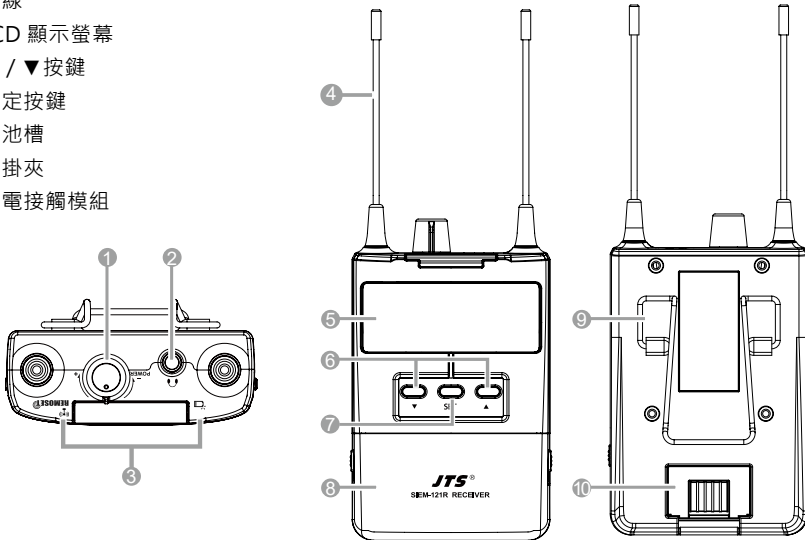
- 1 按鍵鎖定
- 2 立體音 / 混音：ST: Stereo, Mo: Mono
- 3 射頻功率：H: 高功率；L: 低功率
- 4 射頻開關指示：Tx: 發射開啟；Tx: 發射關閉
- 5 用戶名稱
- 6 當前的預設群組頻道
- 7 當前的頻率
- 8 輸入選擇：LINE: LINE 輸入；AUX: AUX 輸入
- 9 靈敏度：-40 ~ +20 dB
- 10 對頻 ID



## 3-2 UHF PLL 腰掛式接收機 // SIEM-121R

### 3-2-1 接收機

- ① 電源開關和音量控制
- ② 3.5mm 立體聲耳機插口
- ③ REMOSET/ 電量 指示燈
- ④ 天線
- ⑤ LCD 顯示螢幕
- ⑥ ▲ / ▼ 按鍵
- ⑦ 設定按鍵
- ⑧ 電池槽
- ⑨ 腰掛夾
- ⑩ 充電接觸模組



### 3-2-2 LCD 接收機液晶螢幕

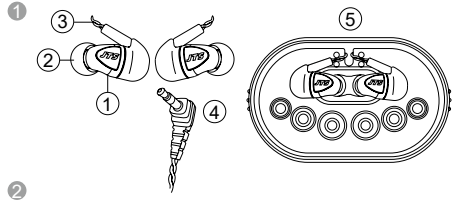
- ① 天線指示 1 or 2
- ② AF 左聲道音量
- ③ AF 右聲道音量
- ④ 用戶名稱
- ⑤ 電池電量
- ⑥ 接收機射頻訊號強度指示
- ⑦ 限幅器顯示: 限幅器關閉 **LOF**, LEVEL 1 **LT1** 到 6 **LT6**
- ⑧ 立體音 / 混音: **ST** 立體音, **Mo** 混音
- ⑨ 高音提昇
- ⑩ 對頻 ID
- ⑪ 當前的預設群組頻道
- ⑫ 當前的頻率
- ⑬ 按鍵鎖定



### 3-3 配件

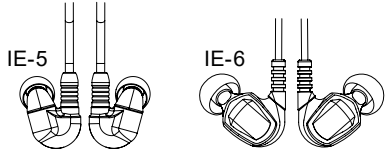
#### ① IE-1

1. 耳機
2. 矽膠套
3. 耳機線
4. 3.5mm 立體聲插頭
5. 包裝盒

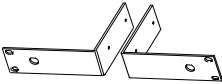


#### ② IE-5 / IE-6 (選配)

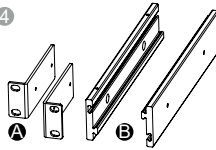
- ③ RM-901 機架安裝套件 (選配)
- ④ RM-10 安裝套件 (▲ RM-10E ⑤ RM-10M)(選配)
- ⑤ RTF-1 /RTF-3/RTF-10 天線延長線 (選配)
- ⑥ RTF-20 天線延長線 (20 米)(選配)



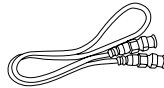
③



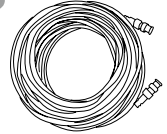
④



⑤



⑥



## 4. 連接方式

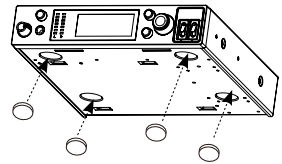
### 4-1 發射器連接方式 // SIEM-121T

#### 4-1-1. 安裝橡膠墊

本機提供四個自粘性橡膠墊，以確保穩定性。位於發射器的底部。

#### 4-1-2. 安裝天線

方便使用者天線配有 BNC 接頭。將天線連接到發射器後面板，並向上調整。



#### 4-1-3 連接發射器 (步驟 1)

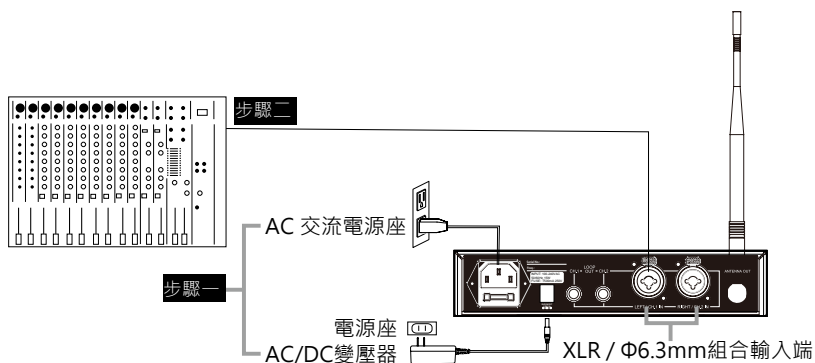
1. 使用 AC 輸入：將 SIEM-121T 後面板上的 AC 輸入以電源線接上電源插座。
2. 使用 DC 輸入：確認變壓器 DC 輸出額定電壓 / 電流符合機器標示。一端插發射器“DC IN-PUT”座，再將 AC 端插入 AC 電源座。

#### 4-1-4. 連接音源，例如混音器 (步驟 2)

用 AF 輸入電纜將混音器輸出端連接到 SIEM-121T 後面板的 XLR/Φ6.3mm 組合輸入端。

注意 1. AC 輸入與 DC 輸入須二擇一使用。

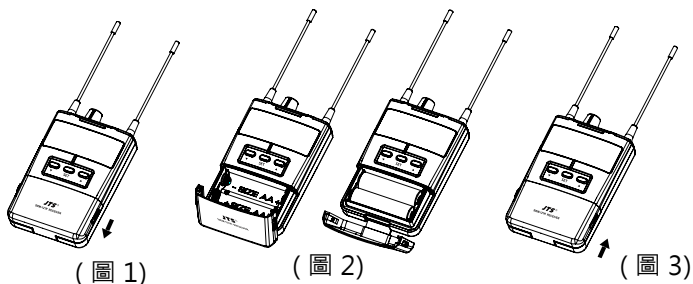
注意 2. 此處提供兩個平衡式 XLR/Φ6.3mm 組合輸入端，您可以使用其中一個或兩個輸入端作為立體聲音源。另外，還提供了兩個平衡的 Φ6.3mm 環路輸出接頭，供多系統應用。



## 4-2 接收機連接方式 // SIEM-121R

### 4-2-1 接收機電池安裝

1. 將側邊磁吸卡準向下，拉起即可打開電池蓋。(圖 1)
2. 將兩顆 AM3 號電池依極性標示置入電池槽內。(圖 2)
3. 將電池蓋闔上即可。(圖 3)
4. 將耳機插頭插入接收機 3.5mm 立體聲耳機插口的位置，完成安裝。
5. 旋轉電源旋鈕即可開機 / 調整音量。
6. 配合操作說明設定發射器參數。



### 4-2-2 連接耳機安裝

1. 將耳機插入接收機的插孔。(圖 1)
2. 確保音量調低，以免傷害聽力。
3. 正確戴好耳機。(圖 2)
4. 檢查矽膠套是否適合您的耳朵。如果不符合，請更換其他尺寸，以確保舒適度和最佳隔音效果。(圖 3)
5. 請確認是否選擇正確的聲道。耳機上的字母 "R" 和 "L" 分別表示右聲道和左聲道。

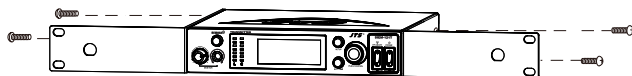


## 4-3 配件安裝

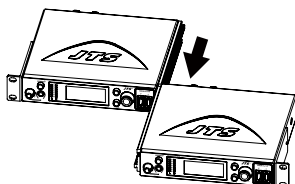
### 4-3-1.RM-901/RM-10 機架安裝套件

機架安裝套件可以將半機架發射器安裝到標準的 EIA 機架上。

RM-901

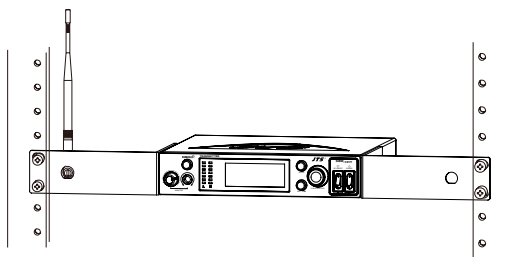
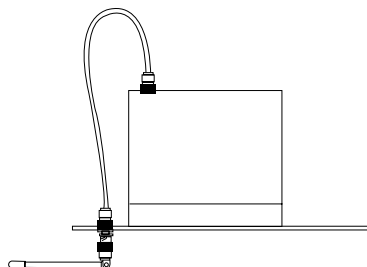


RM-10E/M



### 4-3-2. RTF-1/RTF-3/RTF-10/RTF-20 天線延長線

天線延長電纜可啟用前置天線，從而有利於減少 RF 干擾。



## 5. 操作

### 5-1 單頻道發射器設定 // SIEM-121T

1. 電源開關：按下 "POWER" 按鈕打開或關閉發射器電源。
2. 音量：請將音量調整到適當的大小。
3. 監聽音量：請將顯示器音量調節到適當的大小。



#### 參數設定

按 **SETUP** 鍵 2 秒，進入設定模式。利用飛梭旋鈕選擇要設定的項目，按一下飛梭旋鈕（或按 **SETUP** 鍵）進入設定畫面，旋轉飛梭旋鈕調整所需數值或功能，按一下 **SETUP** 鍵儲存設定值。按 **EXIT** 鍵可返回上一頁。

1. 頻率設定
2. 預設群組
3. 自定群組
4. 立體音／混音
5. 靈敏度
6. 輸入選擇
7. 對頻設定
8. 射頻功率
9. 用戶名稱
10. 系統設定
11. 離開設定

## 1. 頻率設定

以 1MHz 為單位	按 ▲ / ▼ 鍵設定頻率
以 0.025MHz 為單位	按 ▲ / ▼ 鍵設定頻率



## 2. 預設群組

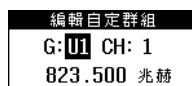
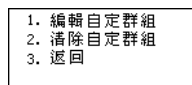
G 群組	選擇預設群組 1~6
CH 頻道	選擇預設頻道



## 3. 自定群組

### (1) 編輯自定群組

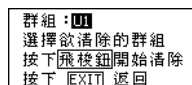
G	U1~U6 ( 群組編號 )
CH	1~24 ( 頻道 )
---	---MHz ( 頻率設定 )



### (2) 清除自定群組

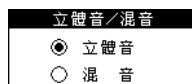
#1 旋轉飛梭旋鈕選擇欲清除的群組，再按一下飛梭旋鈕，清除該群組。

#2 該群組的所有頻道的頻率值都變成『---.---MHz』



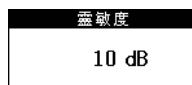
## 4. 立體音／混音切換

旋轉飛梭旋鈕選擇立體音或混音。



## 5. 靈敏度調整

旋轉飛梭旋鈕調整靈敏度調，可調整範圍 -40~+20 dB。



## 6. 輸入選擇

旋轉飛梭旋鈕選擇 LINE 或 AUX 輸入電平。



## 7. 對頻設定

旋轉飛梭選擇要設定的項目，然後按一下飛梭旋鈕可以設定數值，再按一下飛梭旋鈕可返回選單項目，設定完按一下 SETUP 儲存設定值，按 EXIT 取消設定。

可以在這個選單裏設定接收機的參數，設定完成後，返回主畫面，並按下 REMOSET 鈕，可以將預先設定好的接收機參數同步到接收機中。

- › ID：對頻 ID 設定對頻 ID：0~255。
- › 立體 / 混音：接收機的立體音 / 混音設定。
- › 高音提升：設定接收機的高音提升功能。
- › 按鍵鎖定：設定接收機的按鍵鎖定。

- › 同步選項：選擇 REMOSET 同步傳送設定項目。旋轉飛梭旋鈕選擇項目，按一下旋鈕做勾選；REMOSET 只對勾選項目做同步傳送設定。

ID	1
立體音 / 混音	立體
高音提升	關閉
按鍵鎖定	解鎖
同步選項	

ID	1
立體音 / 混音	立體
高音提升	關閉
按鍵鎖定	鎖定
	解鎖

<input checked="" type="checkbox"/> 頻率
<input checked="" type="checkbox"/> 立體音 / 混音
<input checked="" type="checkbox"/> 高音提升
<input checked="" type="checkbox"/> 語言
<input checked="" type="checkbox"/> 按鍵鎖定
<input checked="" type="checkbox"/> 用戶名稱

## 8. 射頻功率

高	高發射功率
低	低發射功率

射頻功率
<input type="radio"/> 高功率
<input checked="" type="radio"/> 低功率

## 9. 編輯用戶名稱

旋轉飛梭旋鈕選擇字母、數字或符號，按下飛梭旋鈕填入並設定下一個字，共可輸入 10 個字元。

編輯用戶名稱
S I E M - 1 2 1 T 1 / 1 0
M N O P Q R S T U V W X Y

## 10. 系統設定

### (1) 顯示設定

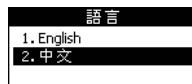
對比	0~9 (預設值 5)
亮度	0~9 (預設值 5)

1. 顯示器設定
2. 背光時間
3. 語言 (Language)
4. 回復原廠設定
5. 返回

顯示設定
對比 5
亮度 5

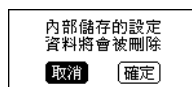
## (2) 語言

旋轉飛梭旋鈕選擇「語言」中文或 English。



## (3) 回復原廠設定

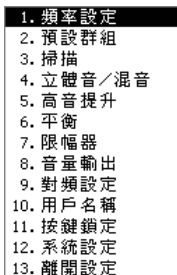
確定	回復原廠設定
取消	取消



## 5-2 接收機設定 // SIEM-121R

### 參數設定

按 SET 鍵 2 秒，進入設定模式，重複按 SET 鍵，可依序進入不同設定項目，此時可按▲ / ▼鍵做參數設定，再按一次 SET 鍵可儲存設定並離開。



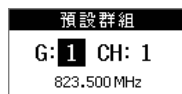
### 1. 頻率設定

以 1MHz 為單位	按▲ / ▼鍵設定頻率
以 0.025MHz 為單位	按▲ / ▼鍵設定頻率



### 2. 群組 / 頻道設定

G 群組	選擇預設群組 1~6
CH 頻道	選擇預設頻道

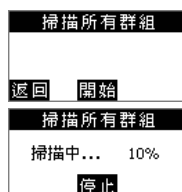
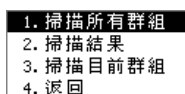


### 2. 掃描設定

#### 1. 掃描所有群組

在掃描時，可按下 SET 鍵停止掃描

開始掃描	按 SET 鍵
返回	按 ▼ 鍵

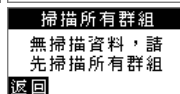
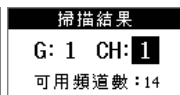
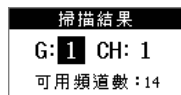




## 2. 掃描結果

掃描所有群組結束後，螢幕會跳到掃描結果  
按▲或▼鍵選擇群組，再按一下 SET 鍵後，  
按▲或▼鍵選擇頻道，  
最後再按 SET 鍵儲存選擇的 G/CH

\*在使用掃描結果前須先執行掃描所有群組



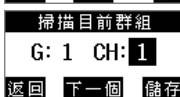
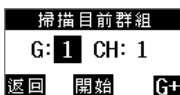
## 3. 掃描目前群組

按▲鍵選擇欲掃描群組，再按下 SET 鍵開始掃描。掃描停止後：

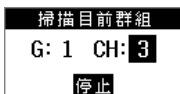
按下 SET 鍵掃描下一個頻道

按下▲鍵儲存選擇的 G/CH

按下▼鍵返回選單



4. 若連續掃描不到可用頻道，可以按 SET 鍵停止掃描



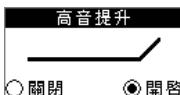
## 3. 立體音／混音切換：

立體音	按▲
混音	按▼



## 4. 高音提升：

開啟	按▲
關閉	按▼



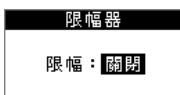
## 5. 平衡：

調整左右聲道音量平衡：L10 ~ 0 ~ R10



## 6. 限幅器：

按▲ / ▼選擇關閉功能。LEVEL 1~6



## 7. 音量輸出：

增強音量輸出	按▲
標準音量輸出	按▼



## 8. 對頻設定

### 1. 對頻功能

允許	可以與發射器對頻
禁止	不與發射器對頻

### 2. 使用 ID

允許	ID 與發射器相同才能與發射器對頻
禁止	無視發射器 ID，都能與發射器對頻

3. ID：對頻 ID 按▲ / ▼選擇 0~255

4. 儲存後離開：儲存設定值後返回主選單

5. 不儲存離開：不儲存設定值，並返回主選單

注意：ID 需與發射器相同才能使用 Remoset

1. 對頻功能	允許
2. 使用 ID	允許
3. ID	1
4. 儲存後離開	
5. 不儲存離開	

## 9. 編輯用戶名稱

按▲ / ▼鍵選擇字母、數字或符號，按 SET 鍵填入並設定下一個字

編輯用戶名稱	
SIEM-121R	1/10
NOPQR	STUVWX

## 10. 按鍵鎖定

鎖定	按▲
解鎖	按▼

按鍵鎖定	
<input type="radio"/>	鎖定
<input checked="" type="radio"/>	解鎖

## 11. 系統設定

### (1) 顯示設定

對比	0~9 (預設值 5)
亮度	0~9 (預設值 5)

顯示器設定	
1. 顯示器設定	
2. 背光時間	
3. 語言 (Language)	
4. 回復原廠設定	
5. 返回	

顯示設定	
對比	5
亮度	5

### (2) 背光時間

關閉、5 秒、10 秒、15 秒、20 秒、30 秒、60 秒及恆亮

背光時間	
10 秒	

### (3) 語言

旋轉飛梭旋鈕選擇「語言」中文或 English

語言	
English	
中文	

### (4) 回復原廠設定

確定	恢復原廠設定
取消	取消設定

內部儲存的設定資料將會被刪除	
<input type="button" value="取消"/>	<input type="button" value="確定"/>

# 6. 安裝串接操作模式

## 6-1 聲道操作模式

### 6-1-1 立體聲

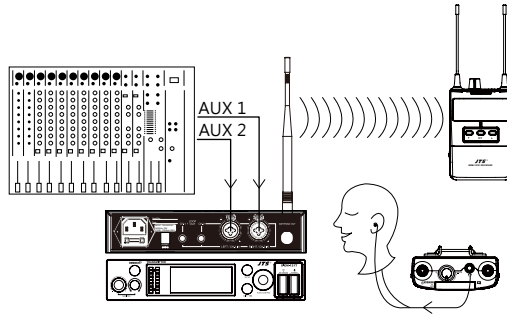
當混音器的兩個輸出是立體聲混音器的左、右聲道時，應設置使左聲道進入左耳，而右聲道進入右耳，並通過 SIEM-121R 上的平衡控制來調整音量。

1. 將混音器輸出連接到發射器輸入端。
2. 將 SIEM-121T 設置為立體聲模式。(參考 5-1)
3. 將 SIEM-121R 設置為立體聲模式。(參考 5-2)

### 6-1-2 混音

當混音器的兩個輸出端為不同的單聲道混音器，同時進入左右兩個耳機時，就可以進行設置安裝。通過使用 SIEM-121R 上的平衡控制，使其中一個混音比另一個大。兩隻耳朵的總音量保持在同一水平。

1. 將混音器輸出連接到發射器輸入。
2. 將 SIEM-121T 設置為立體聲模式。(參考 5-1)
3. 將 SIEM-121R 設置為混音 / 單聲道模式。(參考 5-2)

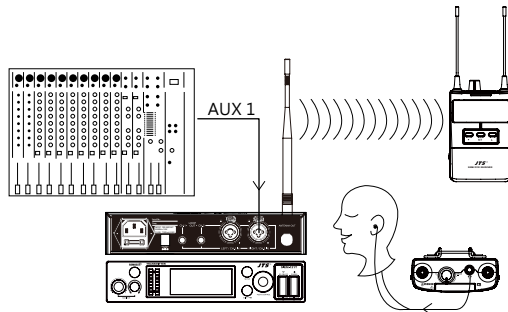


### 6-1-3 單聲道

設置安裝當混音器只有一個輸出音源時。

1. 將混音器的輸出端連接到發射器的輸入端。(LEFT/CH.1 或 RIGHT/CH.2)。
2. 將 SIEM-121T 設定為混音 / 單聲道模式。(參考 5-1)

注意：SIEM-121R 的立體聲或混音 / 單聲道模式，在此設定中並沒有影響。

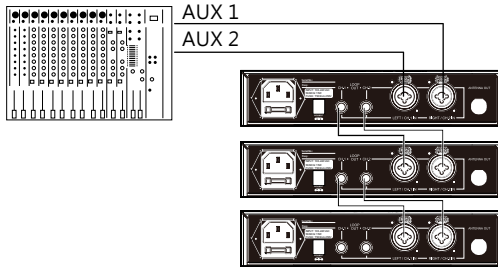


## 6-2 環路輸出應用

### 6-2-1. 多系統立體聲

利用環路輸出連接器，將一個立體聲信號，從混音器傳送到多個 SIEM-121T。

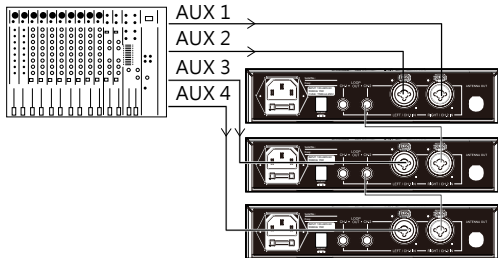
1. 將混音器輸出端連接到第一個發射器的輸入端。
2. 將第一台發射機的環路輸出連接器，連接到第二台發射器。
3. 以同樣的方式連接後續系統。



### 6-2-2. 多系統混合

本功能可讓表演者創建自己的混音。

1. 將樂隊混音 AUX-1 發送到第一台轉發器的輸入端 ( RIGHT/CH.2 ) 。
2. 將第一台發射器的迴圈輸出介面 (CH.2) 連接到第二台發射器的輸入 (RIGHT/CH.2) 。
3. 將表演者的獨奏混音 (AUX-2/AUX-3/AUX-4/...) 連接到每個表演發射器的輸入端 ( LEFT/CH.1 ) 。



## 7. 產品注意事項

- › 為使產品正常運作，請於使用麥克風時，務必開啟接收機和發射器，如麥克風無聲音，請檢查接收機和發射器是否已開啟。
- › 為了達到最佳的接收條件，並延長操作距離，請在接收機與發射機之間留出空隙。
- › 請使本機與金屬物或任何干擾源保持至少 50 cm 的距離。
- › 若接收機長時間不使用，請從電池盒中取出電池；需要更換電池時，請將兩顆電池同時更換為新電池。
- › 將設備插入 AC 電源插座之前，請先完成所有的連線作業。
- › 請勿將設備放置在高溫或高濕度的地方。
- › 請勿用濕手拿電源線。
- › 使本設備遠離火源與高溫。
- › 請避免長時間過大音量聆聽，以免傷害聽力。
- › 多台接收機同時堆疊使用時建議選用同一組內的頻點以避免頻率互相干擾。
- › 注意：本產品使用環境僅適用於  $-10^{\circ}\text{C}$  ( $14^{\circ}\text{F}$ ) 至  $+50^{\circ}\text{C}$  ( $122^{\circ}\text{F}$ ) 之間條件下安全使用。