US-8010D/US-8010/Mh-700D/Mh-700/Mh-800
PT-900BD/PT-900B

JTS® PROFESSIONAL CO., LTD.
No. 148, 9th Industry Road, Ta-Li Industrial Park,
Taichung City, Taiwan, R.O.C.
Tel: 886-4-24938803 Fax: 886-4-24914890
E-mail: jts@jts.com.tw
www.jts.com.tw

JTS PROFESSIONAL CO., LTD.

US-8010

US-8010D Series

Instruction Manual

Thank you for choosing the JTS wireless 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.

INDEX

1. Important Caution 1

2. Features 1

3. Specification 2

3-1 Receiver// US-8010D/ US-8010 2

3-2 Handheld Transmitter // Mh-700 / Mh-800 / Mh-700D 2

3-3 Body-pack Transmitter // PT-900B / PT-900BD 3

3-4 Optional Condenser Microphone 3

4. Part Identification & Accessories 6

4-1 Receiver// US-8010D/ US-8010 6

4-2 Handheld Transmitter // Mh-700 / Mh-800 / Mh-700D 6

4-3 Body-pack Transmitter // PT-900B / PT-900BD 7

4-4 Optional Condenser Microphone 7

4-5 Accessories 11

5. Preparing Procedures & Basic Operation 12

5-1 Receiver// US-8010D/ US-8010 12

5-2 Rack Mounting 13

5-3 System Operation 13

5-4 Handheld transmitter // Mh-700 / Mh-800 / Mh-700D 14

5-5 Body-pack Transmitter // PT-900B / PT-900BD 15

5-6 Installation of Condenser Microphones 16

6. Recommendation 18

7. Important Notice 19

1. Important Caution

- Always makes all connections before plugging the unit into an AC power outlet.
- Do not leave the device in a place neither with high temperature nor high humidity.
- Always do not handle the power cord with wet hands!
- Keep the devices away from fire and heat sources.

2. Features

- Operated in UHF band where there is less RF interference than the VHF band.
- Equipped with a SAW filter can benefit to reducing spurious RF content.
- Including balanced XLR output and unbalanced 1/4" output.
- Integrated antenna of the handheld transmitter benefits less hindrance for performer.
- Built-in noise mute and squelch circuit mode can validly resist extraneous noise.
- Body-pack transmitter is available to work together with a lavalier mic. or headset mic.
- Space-saving half-rack housing design.

3. Specification

3-1 Receiver

Model No.	US-8010D / US-8010
Frequency Preparation	Crystal
Carrier Frequency Range	470~960 MHz
Frequency Stability	±10KHz
S/N Ratio	> 105dB
T.H.D.	<0.6%@1KHz
Display	LED
Display Contents	Antenna, RF/AF Status
Controls	Power On/Off, Audio Level
Audio Output Level	-12dB
AF Output Impedance	600Ω
Squelch	Pilot Tone, Noise and Mute
Operation Voltage	12-18 VDC, 150mA
Output Connector	1 XLR Balanced Socket 1 Unbalanced Ø6.3mm Phone Jack
Dimension(m/m)	210mm (W)* 40mm (H)* 171mm (D)

3-2 Handheld Transmitter

Mode No.	Mh-700 / Mh-800 / Mh-700D
Frequency Preparation	Crystal
Carrier Frequency Range	470~960 MHz
RF Outputs	10mW
Stability	±10KHz
Frequency Deviation	±48KHz
LED Display	Low Battery, Power On/Off
Controls	Power On/Off
Spurious Emissions	<-50 dBC
Audio Frequency Response	50~16,000 Hz
Battery	UM3, AA 1.5V*2

3-3 Body-pack Transmitter

Model No.	PT-900 / PT-900BD
Frequency Preparation	Crystal
Carrier Frequency Range	470~960 MHz
RF Outputs	10mW
Stability	±10KHz
Frequency Deviation	±48KHz
LED Display	Power On/Off, Low Battery
Controls	Power On/Off, AF Level
Spurious Emissions	<-50 dBC
Audio Frequency Response	40~18,000 Hz
Battery	UM3, AA 1.5V*2

3-4 Optional Condenser Microphone

Lavaliere Microphone

Model No.	CM-501	CM-201i	CM-125i
Connector	4P Mini XLR	4P Mini XLR /	4P Mini XLR
Frequency Response	100~15,000 Hz	60~15,000 Hz	50~18,000 Hz
Polar Pattern	Cardioid	Omni-directional	Omni-directional
Sensitivity (at 1000Hz)	-60±3 dB	-60±3 dB	-53±3 dB
Impedance	2.2kΩ	2.2kΩ	4.4kΩ
Max. SPL for 1% THD	130dB	130dB	130dB
Dimension(mm)	Ø10.1mm(W) * 26.4mm(H)	Ø5mm(W) * 9mm(H)	Ø4mm(W) * 11mm(H)
Net Weight	21.5g	20.7g	7g (cable excluded)

Headset Microphone

Model No.	CM-214i	CM-214Ui	CM-214ULi
Connector	801C4 (4P Mini XLR)	4P Mini XLR	801C3 (3P Mini XLR) 801C4 (4P Mini XLR) 801CS (3.5 stereo plug)
Option Connector	801C3 (3P Mini XLR) 801CS (3.5 stereo plug) 801CR		801CR
Frequency Response	60~15,000 Hz	30~18,000 Hz	100 ~ 18,000Hz
Polar Pattern	Omni-directional	Cardioid	Cardioid
Sensitivity (at 1000Hz)	-60±3 dB	-68±3 dB	-65±3 dB
Impedance	1.8kΩ	680Ω	1.8kΩ
Max. SPL for 1% THD	130dB	130dB	120dB
Dimension(mm)	125mm(W) * 134mm(H) * 157mm(D)	205mm(W) * 134mm(H) * 157mm(D)	125mm(W) * 134mm(H) * 157mm(D)
Net Weight	32.9g	38.4g	18g (cable excluded)

Model No.	CM-235i	CX-504
Connector	4P Mini XLR	4P Mini XLR
Frequency Response	50~18,000 Hz	30~18,000 Hz
Polar Pattern	Omni-directional	Cardioid
Sensitivity (at 1000Hz)	-53±3 dB	-68±3 dB
Impedance	1.8kΩ	680Ω
Max. SPL for 1% THD	130dB	130dB
Dimension(mm)	155mm(W) * 134mm(H) * 157mm(D)	285mm(W) * 55mm(H) * 111.3mm(D)
Net Weight	17g (cable excluded)	56.3g

Ear-hook Microphone

Model No.	CM-801/CM-804i	CM-8015/CM-825i
Connector	801C4 (4P Mini XLR)	801C4 (4P Mini XLR)
Option Connector	801C3 (3P Mini XLR) 801CS (3.5 stereo plug) 801CR	801C3 (3P Mini XLR) 801CS (3.5 stereo plug) 801CR
Frequency Response	60~15,000 Hz	50~18,000 Hz
Polar Pattern	Omni-directional	Omni-directional
Sensitivity (at 1000Hz)	-64±3 dB	-53±3 dB
Impedance	1.8kΩ	1.8kΩ
Max. SPL for 1% THD	130dB	130dB

Compatible Instrument Microphone

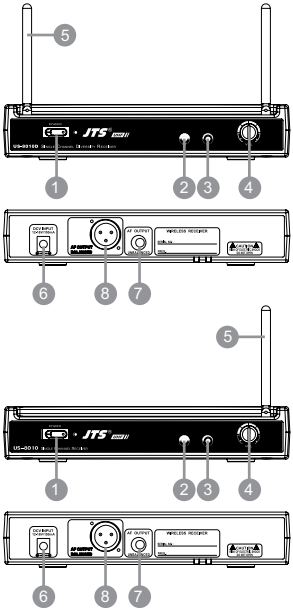
Model No.	CX-500	CX-500F	CX-520
Connector	4P Mini XLR	4P Mini XLR	4P Mini XLR
Frequency Response	20~20,000 Hz	20~20,000 Hz	50~16,500 Hz
Polar Pattern	Omni-directional	Omni-directional	Supercardioid
Sensitivity (at 1000Hz)	-58±3dB	-58±3dB	-78±3dB
Impedance	1.5kΩ	1.5kΩ	600Ω
Max. SPL for 1% THD	130 dB	130 dB	148 dB
Good For	Violin	Flutes	Harmonica

Model No.	CX-508W	CX-516W
Connector	4P Mini XLR	4P Mini XLR
Frequency Response	50~18,000 Hz	30~18,000 Hz
Polar Pattern	Cardioid	Cardioid
Sensitivity (at 1000Hz)	-67±3 dB	-67±3 dB
Impedance	220Ω	220Ω
Max. SPL for 1% THD	130 dB	130 dB
Good For	Winds	Accordion

4. Parts Identification & Accessories

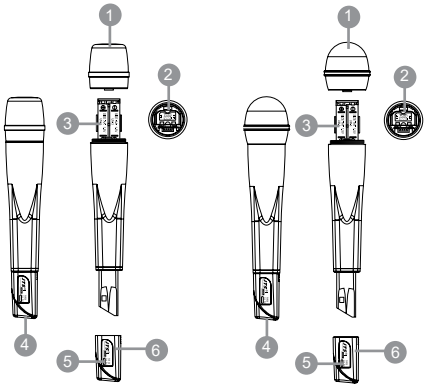
4-1 Receiver // US-8010D / US-8010

1. Power On/Off
2. RF indicator
3. AF indicator
4. Volume control
5. Antenna
6. DCV Input (12-18V DC/150mA)
7. Unbalanced 6.3mm jack socket
8. Balanced XLR socket



4-2 Handheld Transmitter // Mh-800 / Mh-700D / Mh-700

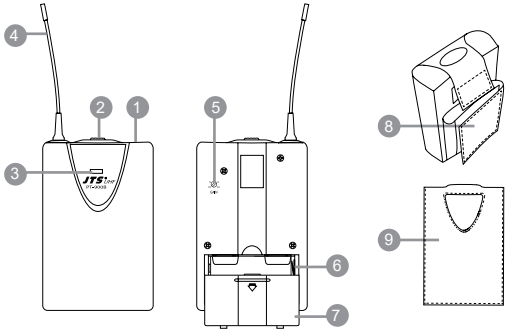
1. Interchangeable capsule module
2. Battery tray release knobs
3. Battery tray
4. Power On/Off switch
5. LED Indicator
6. ID housing



Mh-800 Mh-700 / Mh-700D

4-3 Body-pack Transmitter // PT-900B / PT-900BD

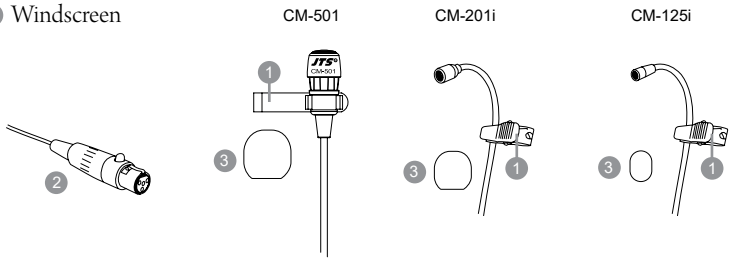
1. Mic. input
2. Power On/off switch
3. Power Indicator
4. Antenna
5. AF level control
6. Battery tray
7. Battery tray cover
8. Carry case
9. Belt-loop



4-4 Optional Condenser Microphone

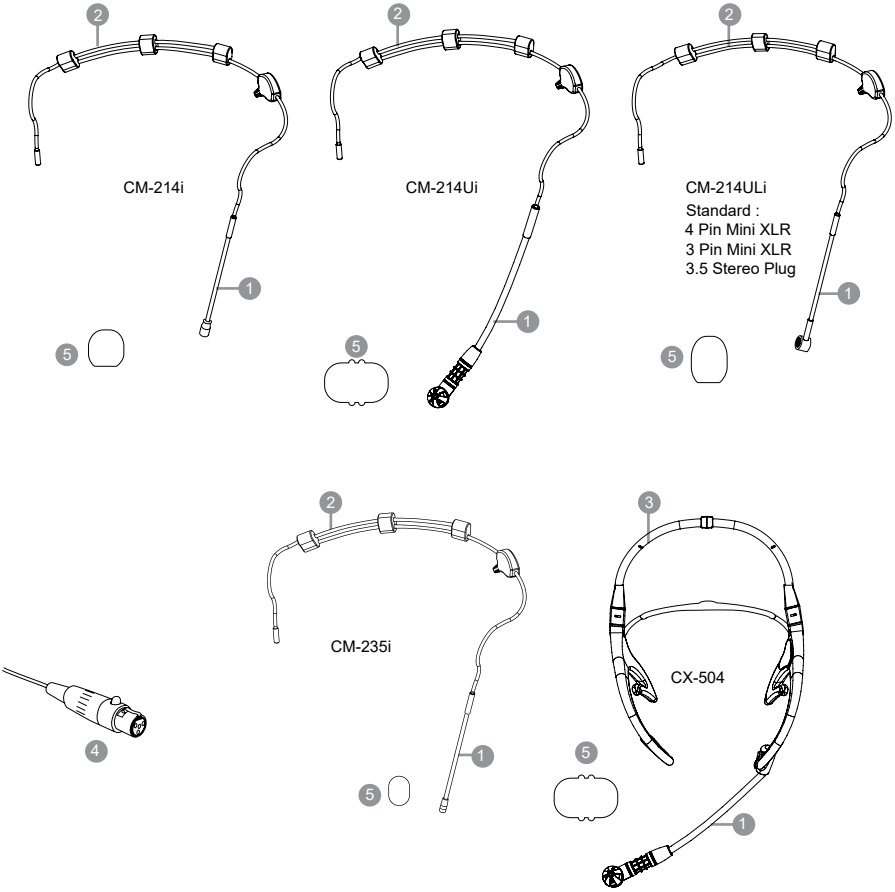
Lavaliere Microphone // CM-501 / CM-201i / CM-125i

1. Clip
2. 4 Pin Mini XLR
3. Windscreen



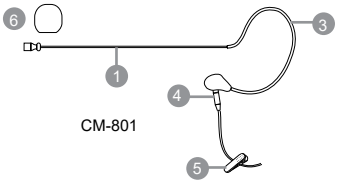
Headset Microphone // CM-214i / CM-214Ui / CM-214ULi / CM-235i / CX-504

1. Gooseneck
2. Adjustable headband
3. Headband
4. 4 Pin Mini XLR
5. Windscreen

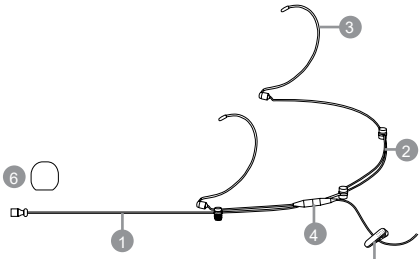


Ear-hook Microphone // CM-801 / CM-804i / CM-8015 / CM-825i

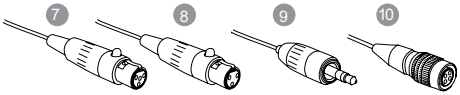
1. Boom
2. Adjustable Headband
3. Adjustable ear hook
4. Detchable Cable
5. Cable Clip
6. Windscreen
7. 4 Pin Mini XLR
8. 3 Pin Mini XLR Option
9. 3.5 Stereo Plug Option
10. 4Pin Hirose connecter Option

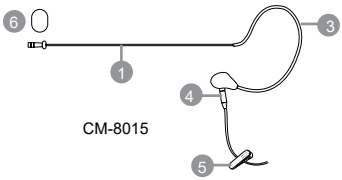


CM-801

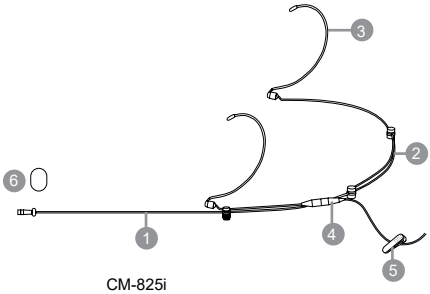


CM-804i





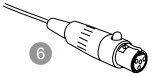
CM-8015

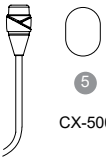


CM-825i

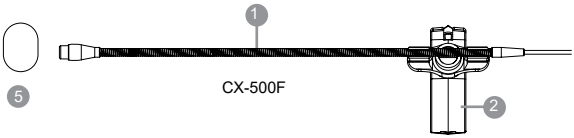
Compatible Instrument Microphone // CX-500 / CX-500F / CX-520 CX-508W / CX-516W

1. Gooseneck
2. Clip
3. Bracket
4. Volume Control
5. Windscreen
6. 4 Pin Mini XLR

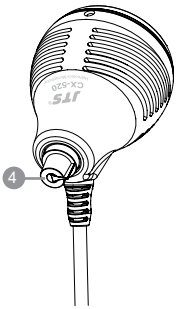




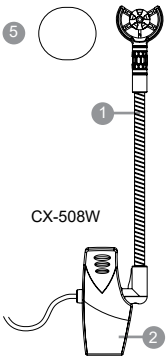
CX-500



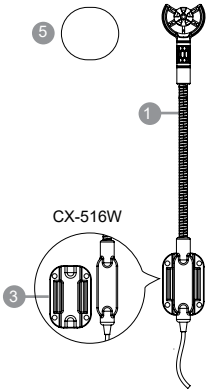
CX-500F



CX-520



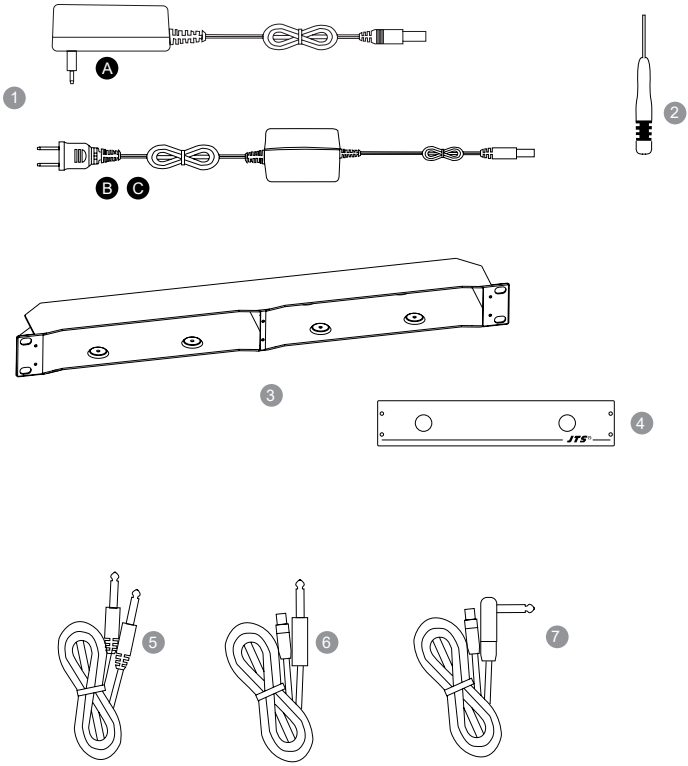
CX-508W



CX-516W

4-5 Accessories

1. AC/DC adaptor
   - A Switching Power Supply(100V~240V , 50~60Hz)
   - B Linear Power Supply (220V , 50Hz) Option
   - C Linear Power Supply (220V , 60Hz) Option
2. Screwdriver
3. DR-900 dual rack adaptor Option
4. RP-900 panel cover Option
5. AF output cable (with Φ6.3 plug at both ends)
6. GC-80/GC-100 Guitar Cable Option
7. GC-80L/GC-100L Guitar Cable Option



5. Preparing Procedures & Basic Operation

5-1 Receiver // US-8010D / US-8010

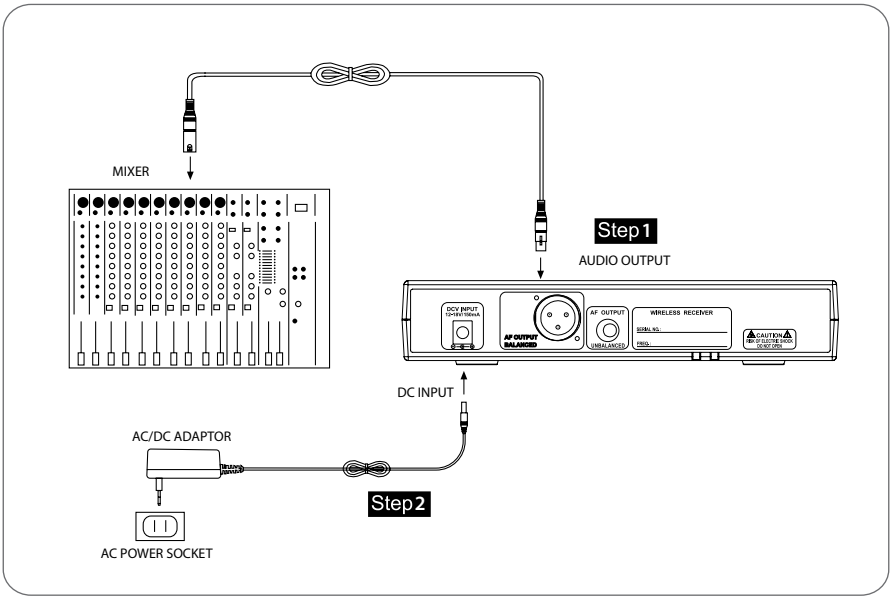
(1) Audio Output Connector

The receiver equipped with both balanced XLR output and unbalanced φ 6.3mm jack output; you can choose the proper way for using.

Connect one end of the Audio cable to the AF output socket in the rear panel of the receiver and plug another end to the "MIC IN" input socket of a mixer or amplifier. (Step 1 of Figure 1)

(2) 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. (Step 2 of Figure 1)



5-2 Rack Mounting

(1) Before mount receivers onto DR-900 rack adaptor, please release any cables from the rear of the receiver.

(2) Turn over receiver and DR-900 rack adaptor simultaneously, there are 4 threaded holes each in the bottom of receiver and rack adaptor for inserting screws.

(3) Single receiver
Insert in a receiver through the front of DR-900 until it is firmly attached to the rack, then screw on a RP-900 to another side of the rack.

(4) Dual receivers
The same way as above, put one receiver to each rack space.

5-3 System Operation

Be sure to mute the audio signal of mixer or amplifier before turning on the receiver and transmitter.

5-4 Handheld transmitter // Mh-700D / Mh-700 / Mh-800

(1) Mh-700D & Mh-700 & Mh-800 Handheld Transmitter

1. Turn the microphone ball grille counter-clockwise (Figure 1), press both release knobs to remove the battery tray from the mic. housing (Figure 2).

2. Insert two 1.5V batteries according to the correct polarity (Step 1 of Figure 3) and return the battery tray back to housing (Step 2 of Figure 3).
   Aim the connecting pins exactly toward the cavities on the bottom side of detachable mic. capsule module (Figure 4) and tighten it clockwise!

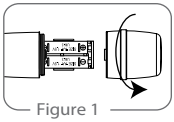


Figure 1

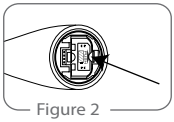


Figure 2

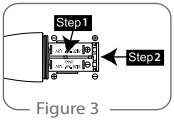


Figure 3

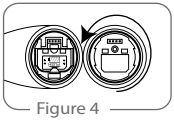
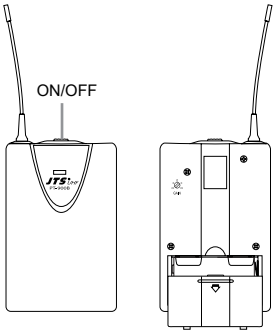


Figure 4

5-5 Body-pack Transmitter // PT-900B / PT-900BD

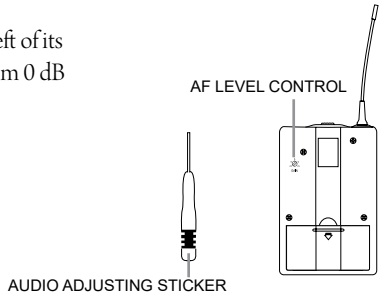
(1) Basic operation

1. Slide the battery tray cover in the direction of the arrow to open it, insert two 1.5V batteries according the correct polarity, and return the cover.



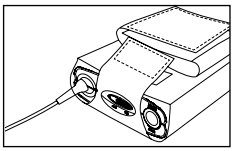
2. Switch the transmitter On
   The On/Off switch is located on the top of the transmitter.

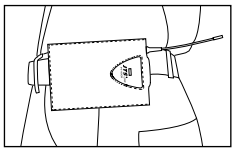
3. Sensitivity adjusting
   There is a gain control adjustor in the up-left of its back, you can adjust the level in 3 steps from 0 dB to 30 dB.



(2) Wearing the Body-pack transmitter

The carry case allows body-pack transmitter to be attached on performer's belt, place the antenna towards the back of his body. The Velcro tag around the belt and fix it.

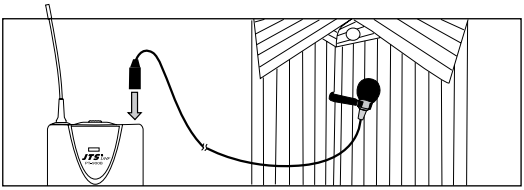




5-6 Installation of Condenser Microphones

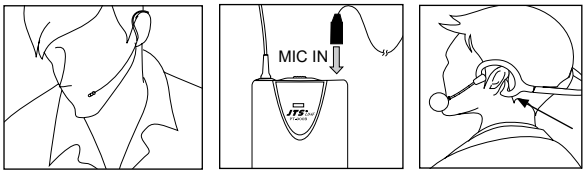
(1) Lavaliere microphone

Attach lavaliere microphone to a tie, lapel, where is suitable for sound pick-up. Plug the connector into input socket on the body-pack transmitter.



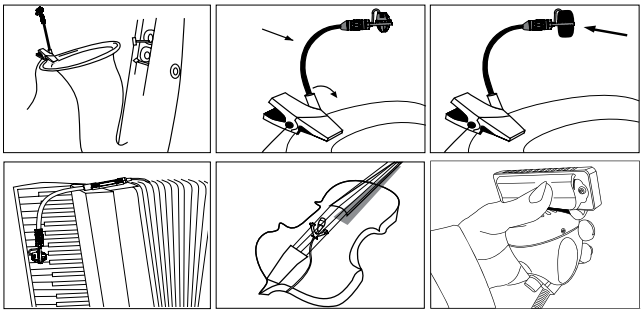
(2) Headset microphone

Put the headband behind your head, and fix the temples on your ears as shows, then adjust the gooseneck to have best miking. Plug the connector into input socket on the body-pack transmitter.



(3) Instrument Microphones

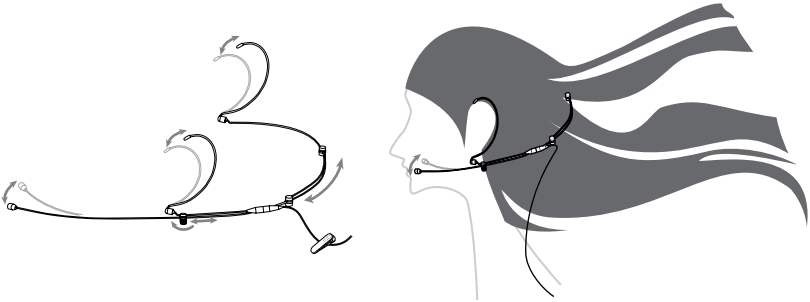
The system is compatible with JTS various instrument microphones.
For detail please refer to user's manuals of these microphones.



(4) Ear-hook Microphone

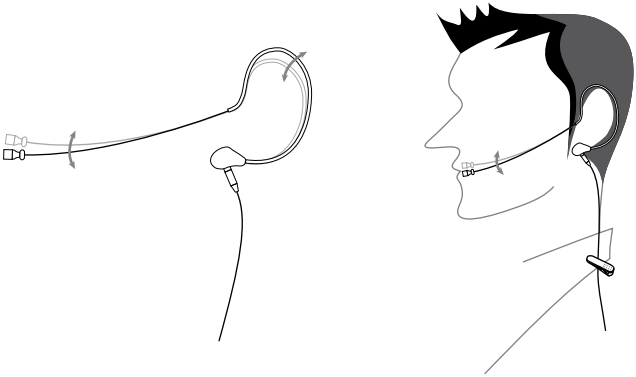
1. Lightweight Dual Ear Hook Microphone

Try on whether the headset is fit.
Adjust the headband to a suitable width.
Tighten or loosen the curve of the ear-hook by twisting the loop or expanding it.
Curve and bend the boom to fit your face.
Attach the detachable cable to a suitable place by a cable clip.



2. Lightweight Single Ear Hook Microphone

Try on whether the original curve is tight or loose.
Re-try and push the fixed curve against your earlobe.
Curve and Bend the boom to fit your face.
Attach the detachable cable to a suitable place by a cable clip.



6. Recommendation

(1) In order to achieve the optimum reception condition and also extend the operating distance, please leave a “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) To avoid the feed-back effect, don’t leave the mic. to aim at the speakers directly.
(4) For best pick-up pattern, please hold the middle of the mic. body.
(5) Remove batteries from the battery compartment when the transmitter will not be used for a long time.
(6)When you need to replace the batteries, please replace both batteries at the same time with new ones.

7. 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).

(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.