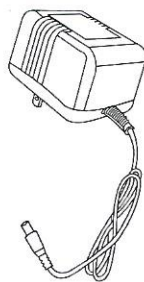


System Components



All systems include:

- VHF-290 receiver
- 2 "AA" batteries
- A 1/4" RF connector
- Power supply
- User guide

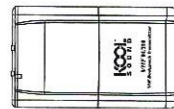
Vocalist system includes:

- VHF90/290 handheld transmitter

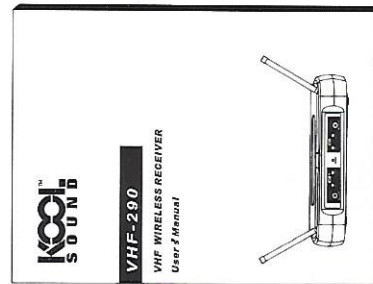


Lavalier/ Headworn system includes:

- VHF90/290 bodypack transmitter
- Microphone (choice of PL-90)

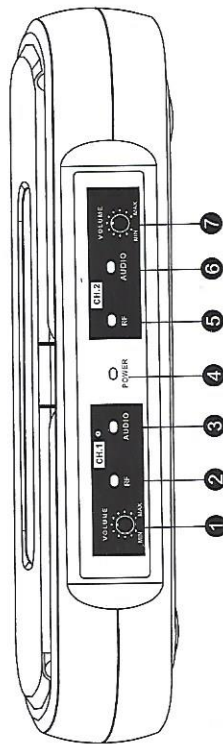


PL-90



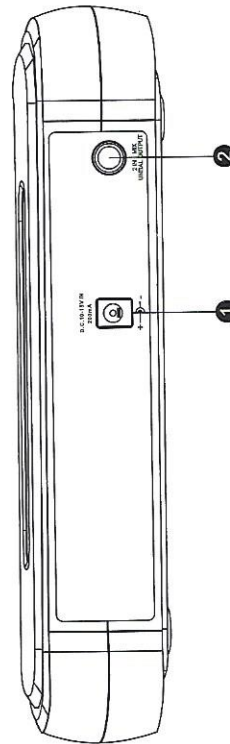
VHF-290 Receiver Features

Front Panel



- 1 Channel 1 audio output level control button
Left turn for output level decrease, right turn for output level increase.
- 2 Channel 1 RF indicator light
- 3 Channel 1 audio indicator light
- 4 Power light
- 5 Channel 2 RF indicator light
- 6 Channel 2 audio indicator light
- 7 Channel 2 audio output level control button
Left turn for output level decrease, right turn for output level increase.

Rear Panel

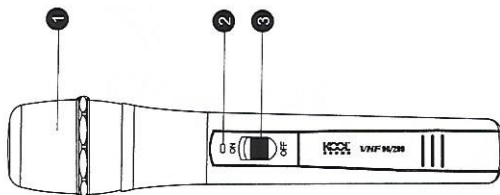


- 1 AC adapter jack
- 2 1/4 inch mix output jack

Handheld Transmitter:

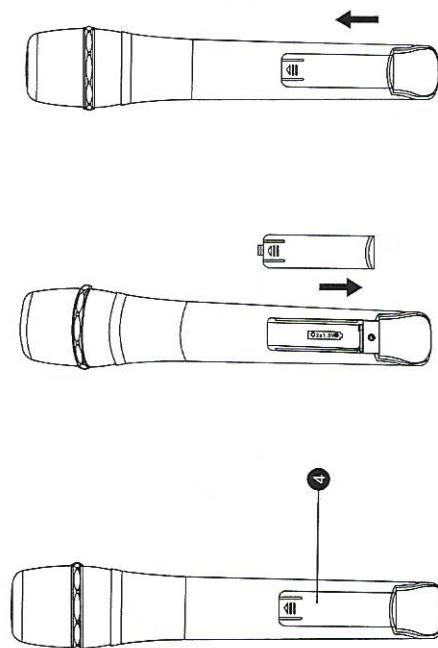
Functions:

- ① Capsule Accessories
- ② Low Battery Indicator
Light On When The Battery Low
- ③ Power Switch
- ④ Battery Door



Changing Batteries:

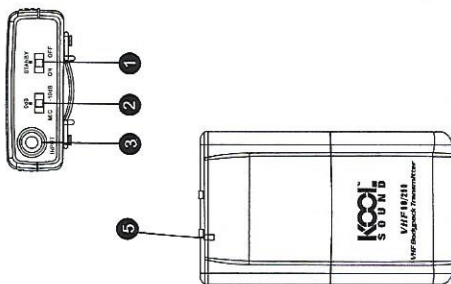
Expected life for two 1.5V AA alkaline batteries is about 8 hour.
As the battery indicator on the screen keeps glowing, the batteries should be changed immediately (as shown below).



Bodypack Transmitter

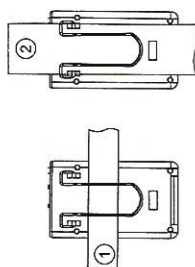
Features:

- ① On/Off switch, when it in middle, keeping mute.
Two gain settings are available on VHF90/290,
choose the appropriate setting for your instrument
Mic: microphone
0: Guitar with passive pickups
-10dB: Guitar with active pickups
- ② Gain adjustment switch and mute indicator
- ③ Microphone Input Jack
- ④ Power/Low indicator light
Turn on switch and Flashred, if the light glows red, the
batteries should be changed immediately.



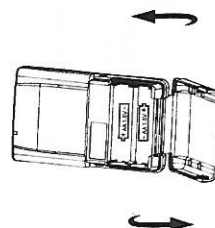
Wearing the Backpack Transmitter:

Clip the transmitter to belt ①, or slide a guitar strap through the transmitter clip ②, as shown.
For best results, slide the transmitter until the belt ① is pressed against the base for the clip.



Changing batteries:

Expected life for Two 1.5V AA Alkaline batteries is approximately 8 hour.
When the transmitter light glows red, the batteries should be changed immediately, as shown on the left.



Trips for improving System Performance

- Maintain a line of sight between transmitter and antenna.
- Avoid placing the receiver near metal surfaces or any digital equipment (CD players ,computes ,etc)
- Keep the receiver away from the wall and over 1m to the ground
- Cellular telephones and two-way radio and so on can interfering the transmitting frequencies, maintain a distance from the interfering equipments or any cause interfering.

Troubles Shooting

Issue	Indicator Status	Solution
No sound or faint sound	Transmitter ON Indicator stop flashing	Turn on transmitter Make sure the +/- indicator on battery match the transmitter terminals
	Power indicator off	Make sure AC adapter is securely plugged into electrical outlet and into DC input connector on rear panel of receiver.
	Receiver RF indicator glows	Turn the receiver up Turn up the Gain adjustment switch in the transmitter Check the power connection of the receiver and amplifier or mixer
	Receiver RF indicator off, transmitter indicator ON	Take the receiver away from the metal objects Check whether there is hamper between receiver and transmitter Move the transmitter near the receiver Check the receiver and transmitter whether use the same frequency
Distortion or unwanted noise bursts	Transmitter low battery indicator ON	Change the batteries in transmitter
	Receiver RF indicator ON	Remove nearby sources of RF interference(CD players, computers , digital effects ,in-ear monitor systems, etc.)
	Transmitter low battery indicator ON	Change the batteries in transmitter
Distortion level increases gradually		Adjust transmitter again and receiver volume as necessary

Specifications

System

Frequency Range and Transmitter Output level
160-260MHz
Operating Range under Typical Condition
50m (150 ft.)
Note: actual range depends on RF signals absorption, reflection, and interference.
Audio Frequency Response (+/-3 dB)
60Hz ~ 16KHz
Total Harmonic Distortion
(+/- 30 KHz deviation, 1 KHz tone)
<1%

Dynamic Range

>90 dB (A - weighted)
Operating Temperature Range
-10°C to +50°C
Note: battery characteristics may limit the range

Body pack Transmitter

Audio Input Level Maximum
0 dBV ~+20 dBV
Gain adjustment Range
30 dB
Input Impedance
470 kilohm
105mm H x 65mm W x 23mm D
Weight
77 grams without batteries
Power Requirement
Two "AA" size alkaline or rechargeable batteries
Battery life
>8 hours (Alkaline)

Handheld Transmitter

Audio Input Level maximum
0 dBV
Dimensions (including the microphone)
245mm x 53mm Diameter
Weight
200 grams
Battery Requirements
2 "AA" alkaline batteries or rechargeable batteries
Battery Life
>8 hours (Alkaline)

Receiver

Audio Output Level Maximum (ref. +/-30 KHz, 1 KHz)
XLR connector (into 600 Ω load): -12 dBV
1/4inch connector (into 3000 Ω load): -18 dBV
Output Impedance
XLRconnector 200ohm
1/4inch connector 1kilohm

XLR Output

Impedance balanced
Pin 1: Ground
Pin 2: (+)
Pin 3: (-)
Sensitivity (intermediate frequency adjustment)
audio noise output <-92dB)
Image Rejection
> 60dB
Dimensions
235mm H x 118mm W x 44mm D
Weight
400 grams
Power Requirements
10-15 Vdc at 200 mA , supplied by external power supply