

# **AWM-490VHL** Professional PA Wireless Microphones



AHUJA introduces AWM-490VHL as an affordable high performance VHF Wireless Microphone System. It consists of two types of wireless microphones, a hand-held microphone and a tie-clip microphone, alongwith a highly sensitive dual channel non-diversity receiver. This ensures an effective long distance coverage of more than 150 feet, under ideal working conditions.

## **Features**

- Compact, lightweight, Dual Channel VHF Wireless Microphone System available in 5 different frequencies.
- Operates at Quartz Crystal Locked VHF High Band frequency. Two microphones with separate frequencies and one non-diversity receiver.
- Combination of a hand-held dynamic microphone & a tie-clip condenser microphone for a wide variety of applications.
- Internal Antenna in the Microphone and two telescopic Antennas in the Receiver for clear and distortion free reception.
- Receiver operates on 9V DC through an AC Adaptor supplied along with the system. Microphone operates with a 9V Dry Battery.
- Microphone with 3-position slide switch for 'Audio On' 'Audio Mute' 'Off' positions.
- Green LEDs for Channel-1 & Channel-2 signal indication on receiver.
- Audio output from receiver available at OUT 1 & OUT 2 individually and as mixed output at OUT 1 + 2.

#### Front Panel



- 1. Power Switch
- 2. Power Indicator

Red LED glows when receiver is switched 'ON'.

3. Channel-1 Volume Control

#### 4. Signal Indicator Channel-1

Green LED glows when MIC of Channel-1 is switched 'ON'.

5. Signal Indicator Channel-2

Green LED glows when MIC of Channel-2 is switched 'ON'.

6. Channel-2 Volume Control



- 7. Antenna 2
- 8. Frequency Sticker for Channel 2
- 9. Audio Out Channel 1+2 Mixed output of Channel 1 and Channel 2.
- 10. Audio Out Channel 2

11. Audio Out Channel 1

**12. DC Socket** For connecting a DC plug of AC Adaptor.

- 13. Frequency Sticker for Channel 1
- 14. Antenna 1

#### Receiver

 Insert the DC Plug of AC Adaptor in to the receiver. Insert AC Adaptor into the socket of AC mains supply.



 Insert one end of connecting cable to Audio Output socket of Receiver and other end of the cable to the Mic input of an amplifier.



 Ensure both the telescopic antennas are fully extended vertically.



 Switch on Power Switch of Receiver. Red LED on front panel will glow.

### Hand-held Microphone

Insert a 9V battery in the battery compartment of the hand-held microphone by unscrewing the lower part of the microphone body.



- Ensure the 9V battery is inserted with correct polarity.
- The microphone has a 3-position slide switch:



- In top position, the microphone is ON and Red LED glows.
- The centre of the switch is 'Standby' or 'Audio Mute'. In this position Red LED will glow, RF Carrier frequency will be transmitted, but 'Audio' will be muted.
- When the switch is at the lowest position, the microphone will be completely switched off.

#### **Tie-clip Microphone**

 Slide open the top lid of the transmitter body-pack and insert a 9V battery in the battery compartment.



- Ensure the 9V battery is inserted with correct polarity.
- Insert tie-clip microphone plug into the microphone input socket.



The body-pack has a 3-position slide switch:



- Top position is 'ON' which is indicated by one time flickering of Green LED in the body-pack.
- The centre of the switch is 'Standby' or 'Audio Mute'. In this position, Green LED will flicker once, RF Carrier frequency will be transmitted, but 'Audio' will be muted.
- When the switch is at the lowest position, the tie-clip microphone will be completely switched off.
- Adjust the volume control in the body-pack for desired output levels.



Always keep the receiver antennas away from metal and other reflecting surfaces and obstructions.

## **Specifications**

Microphones	Hand-held Microphone (operates through Channel-1 only)	<b>Tie-clip Microphone</b> (operates through Channel-2 only)
RF Output Power	15mW (Max.)	10mW (Max.)
RF Carrier Frequencies	Available in five different VHF High Band frequencies of 225.2MHz, 227.9MHz, 229.2MHz, 247.2MHz and 249.2MHz	Available in five different VHF High Band frequencies of 201.8MHz 209.5MHz, 205.3MHz, 215.2MHz and 219.2MHz
Modulation Mode	FM (F3E)	FM (F3E)
Microphone Element	Dynamic, cardioid	Condenser, omnidirectional
Dynamic Range	100dB	80dB
Spurious Emission	=45dB	=45dB
Maximum Deviation	±25kHz	±25kHz
Frequency Response	50-15,000Hz	80-12,000Hz
Antenna Type	Internal dipole	_
Current Consumption	<60mA	<60mA
Battery Life	6-8 hrs. with 9V battery	6-8 hrs. with 9V battery
Controls	Microphone On / Mute / Off Switch	Microphone On / Mute / Off Switch, Volume Control
Indication	Red LED for indicating microphone ON	Green LED for indicating power of cells
Dimensions	ø52 (L242) mm	W65 × H32 × D107 mm
Weight	0.20kg (w/o battery)	0.11kg (w/o battery)
Receiver		
RF Carrier Frequencies	Available in five different VHF High Band fre 201.8MHz, 225.2MHz and 219.2MHz, 249.2 209.5MHz, 227.9MHz	quencies of 215.2MHz, 247.2MHz and MHz and 205.3MHz, 229.2MHz and
Frequency Stability	± 0.005% Quartz Crystal Controlled	
Receiving Method	Non-diversity	
Audio Output	Channel 1: 0-55mV / 1k? Channel 2: 0-55mV / 1k?	
	Channel $1+2: 0.55m \frac{1}{2}$	
S/N Ratio	Channel 1+2: 0-55mV / 1k?	
S/N Ratio	Channel 1+2: 0-55mV / 1k? =100dB =0.5%	
S/N Ratio Distortion Erequency Response	Channel 1+2: 0-55mV / 1k? =100dB =0.5%	
S/N Ratio Distortion Frequency Response	Channel 1+2: 0-55mV / 1k? =100dB =0.5% 50-15,000Hz +25kHz	
S/N Ratio Distortion Frequency Response Maximum Deviation	Channel 1+2: 0-55mV / 1k? =100dB =0.5% 50-15,000Hz ±25kHz Telescopic	
S/N Ratio Distortion Frequency Response Maximum Deviation Antenna Power Requirement	Channel 1+2: 0-55mV / 1k? =100dB =0.5% 50-15,000Hz ±25kHz Telescopic 240V AC 50Hz for AC adaptor (supplied alor	ng with)
S/N Ratio Distortion Frequency Response Maximum Deviation Antenna Power Requirement Controls	Channel 1+2: 0-55mV / 1k? =100dB =0.5% 50-15,000Hz ±25kHz Telescopic 240V AC 50Hz for AC adaptor (supplied alor Power On / Off Switch, Volume Control for C	ng with)
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S/N Ratio Distortion Frequency Response Maximum Deviation Antenna Power Requirement Controls Indications Dimensions Weight	Channel 1+2: 0-55mV / 1k? =100dB =0.5% 50-15,000Hz ±25kHz Telescopic 240V AC 50Hz for AC adaptor (supplied alor Power On / Off Switch, Volume Control for O Red LED for Power ON, Green LED for RF reception on Channel-1 Green LED for RF reception on Channel-2 W210 x H42 x D152 mm 0.70kg	ng with) Channel-1, Volume Control for Channel-2

Licensing Information:

IMPORTANT: Licensing invalues of the selected frequency. Ahuja strongly urges the user to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies.

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