

U-SERIES

UHF Wireless Systems

User Manual



Version 2.0

Introduction

Thank you for choosing the Chord UHF-series wireless system. This professional wireless set provides a high quality microphone with UHF radio system for freedom of movement without loss of audio quality. Please read this manual before using this equipment in order to avoid damage through incorrect operation and to get the best performance from your purchase.

Contents

Please take care when unpacking this product. Inspect for any damage and ensure you have the following components...

- UHF wireless receiver
- Mains power adapter
- 6.3mm mono jack lead
- 2 x 1.5V AA battery (4 pieces for UH2, UN2 or UHN2)
- Microphone / transmitter(s) – see table below

Model	Stock code	Microphone 1	Microphone 2
UH1	171.822 / 171.823	Handheld transmitter	-
UH2	171.825 / 171.826	Handheld transmitter	Handheld transmitter
UN1	171.838 / 171.839	Neckband mic. + bodypack	-
UN2	171.827 / 171.828	Neckband mic. + bodypack	Neckband mic. + bodypack
UHN2	171.820 / 171.821	Handheld transmitter	Neckband mic. + bodypack
UL1	171.846 / 171.847	Lavalier mic. + bodypack	-

Warning

To prevent the risk of fire or electric shock, do not expose any of the components to rain or moisture. If liquids are spilled on any component, stop using immediately, allow unit to dry out and have checked by qualified personnel before further use.

Avoid impact or heavy vibration to any components, dropping the microphone can cause capsule failure. No user serviceable parts inside transmitter or receiver - refer servicing to qualified service personnel.

Safety

- Ensure that the correct adaptor is used, ensuring that the mains voltage is as stated on the adapter.
- Avoid ingress of water or particles into the transmitter(s) or receiver
- Use alkaline or NiMH batteries in the transmitter(s) and remove if unused for long periods.
- Observe the correct polarity when replacing batteries

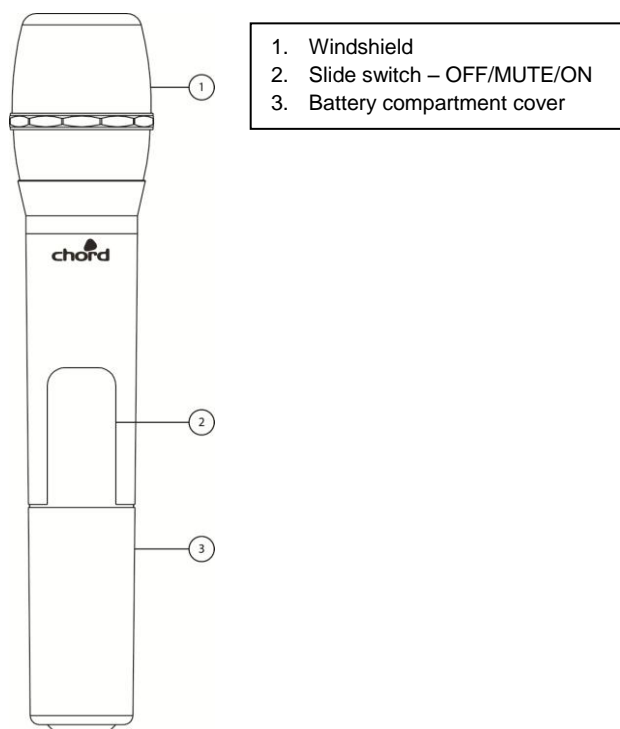
Placement

- Keep all components out of direct sunlight and away from heat sources.
- Do not place heavy objects on top of the receiver or transmitter(s)
- If rack-mounting, secure the receiver to a 1U rack tray and do not place heavy items above the receiver.
- Keep the transmitter(s) and receiver away from damp or dusty environments.

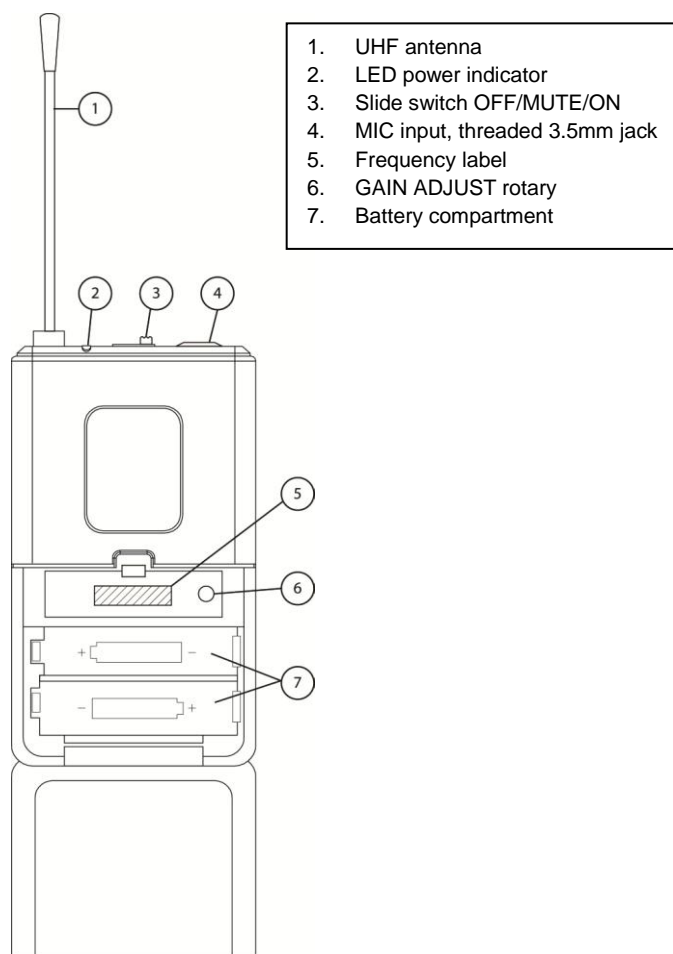
Cleaning

- Use a soft cloth with a neutral detergent to clean the body of the microphone/transmitter and receiver.
- Lightly damp sterile wipes may be used on the microphone grille for hygiene purposes
- To avoid damage, do not use solvents to clean the components

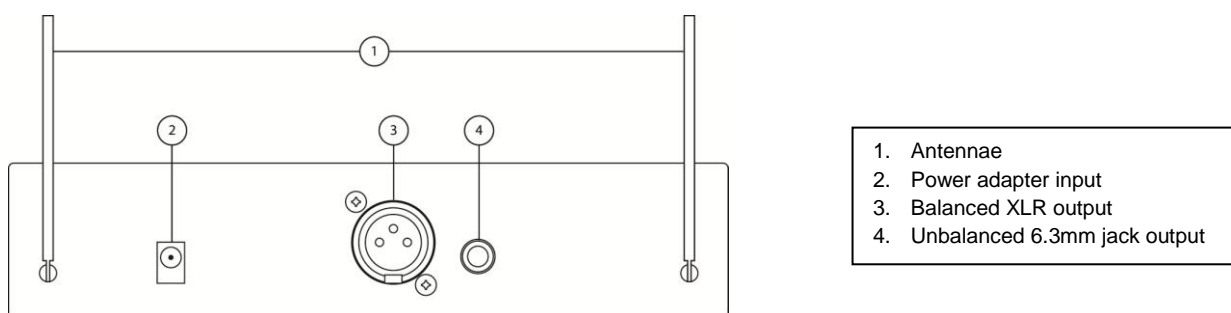
Handheld Transmitter



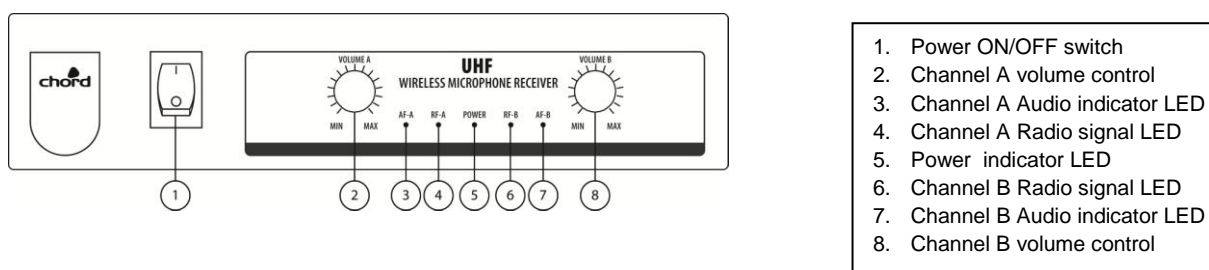
Bodypack Transmitter



Receiver Rear Panel



Receiver Front Panel



Operation

For handheld transmitters, insert the supplied 2 x AA batteries by carefully unscrewing the base to reveal the battery compartment inside the microphone body, connect the batteries (ensure + and - are the correct way round for each cell) and carefully screw the base back on.

For bodypacks, squeeze down the clip in the centre of the front panel of the bodypack to unfasten the lower half, which hinges outwards to reveal the battery compartment. Position the supplied 2 x AA batteries inside (ensure + and - are the correct way round for each) and then close the battery compartment flap until clipped back into position.

Position the receiver within the best available line of sight to the transmitter(s) and connect the DC jack of the supplied power adapter to the receiver and the plug-top to the mains outlet. Extend both antennae fully upwards and outwards slightly and switch the power on. Turn microphone level(s) down on the receiver. Note: for dual sets (with 2 transmitters), both microphones' outputs will be mixed and fed to both balanced and unbalanced outputs.

Connect the jack or XLR (optional) lead to the receiver's audio output connector, turn down the volume of any equipment (mixer, amplifier etc.) that the signal will be fed into and then connect the jack or XLR to the equipment.

Warning! - take care not to point microphones towards speakers – this can cause damaging feedback (loud whistle or howling noise) – try to point microphones away from the speaker cabinets.

Move the switch on the handheld or bodypack transmitter to the first notch (MUTE) – the LED should light momentarily. If the LED stays on, this is indicating that the battery is low or discharged. Move on another notch (ON) and gradually increase the microphone level(s) on the receiver, then increase the volume on the mixer or amplifier until the sound from the microphone can be heard through the equipment.

During use, it may be useful for the reception of the microphone to be muted for a short period of time (e.g. to avoid feedback when walking across the front of a speaker or avoid handling noise when placing the microphone down momentarily or adjusting a neckband microphone). In these circumstances, it may be better to move the transmitter switch to the "MUTE" position, which maintains the radio frequency carrier signal but mutes the microphone input. When this switch is moved back to the "ON" position, the sound will be immediately restored without waiting for the radio signal to be reinstated.

If the wireless system is not to be used for more than a few seconds, it is preferable to slide the transmitter switch to the "OFF" position, which mutes and deactivates the radio signal and powers down the transmitter. Be sure to turn down the volume of the mixer or amplifier and then switch off the receiver.

Unplug signal leads from the receiver and mixer or amplifier when moving or packing away. If the system is not to be used for long periods of time, remove the batteries from the transmitter and unplug the power adapter from the receiver and the mains outlet. Retracting the antennae can also help avoid damage when the system is not in use.

Specifications

Carrier type	UHF 863 - 865MHz
Frequency stability	±0.005%
Maximum deviation	±25kHz
Audio frequency response	40Hz – 20kHz
Signal to noise ratio	>105dB
Audio dynamic range	>80dB
T.H.D.	<0.5% @ 1kHz
Maximum range	50m
Operating temperature	-10°C to +50°C
Receiver	
Power supply	12 - 18Vdc 500mA (mains adapter supplied)
Audio outputs	XLR (balanced), Jack (unbalanced)
Controls	Power On/Off, Mic. Volume(s)
Indicators	Power (main), RF and AF (for each channel)
Dimensions	45 x 210 x 180mm
Weight	573g
Handheld Transmitter (UH1, UH2, UHN2)	
Battery	3Vdc (2 x AA)
Switch	Power / Mute / On
RF emission	>10mW
Capsule type	Dynamic - cardioid response
Dimensions	242 x 45mmØ
Weight (without battery)	238g
Bodypack Transmitter (UN1, VN2, UHN2, UL1)	
Battery	3Vdc (2 x AA)
Switch	Power / Mute / On
Connector	3.5mm mono jack- threaded
Compatible microphones	171.855, 171.856, 171.857
RF emission	>10mW
Dimensions (not inc. antenna)	110 x 68 x 25mm
Weight (without battery)	76g
Neckband Microphone (UN1, UN2, UHN2)	
Capsule type	Condenser - cardioid response
Power supply	3V phantom from bodypack
Connector	3.5mm mono jack - threaded
Dimensions	140 x 180 x 60mm
Weight	25g
Lavalier Microphone (UL1)	
Capsule type	Condenser - cardioid response
Power supply	3V phantom from bodypack
Connector	3.5mm mono jack- threaded
Dimensions	40 x 27 x 20mm
Weight	20g

Frequency Chart (all regions)

Model	Stock code	Mic 1	Mic 2
UH1	171.822	863.1MHz	-
	171.823	864.1MHz	-
UH2	171.825	863.3MHz	864.3MHz
	171.826	863.8MHz	864.8MHz
UN1	171.838	863.1MHz	-
	171.839	864.1MHz	-
UN2	171.827	863.3MHz	864.3MHz
	171.828	863.8MHz	864.8MHz
UHN2	171.820	863.3MHz	864.3MHz
	171.821	863.8MHz	864.8MHz
UL1	171.846	863.1MHz	-
	171.847	864.1MHz	-

Troubleshooting

"POWER" LED does not light on receiver	Ensure power adapter is connected to mains and working properly
	Ensure receiver is switched on
"POWER" LED is lit but no "RF" or "AF" LEDs	Ensure transmitter is switched on
	Check that transmitter is not out of reception range
	Check that transmitter batteries are good / charged
"POWER" and "RF" LEDs are lit but no "AF" and no sound	Check if transmitter switch is in "MUTE" position
	Check if neckband or lavalier microphone is connected to bodypack
	Ensure transmitter has good / charged batteries
	Check if there is another nearby transmitter with the same frequency
All LEDs lit but no sound from microphone	Make sure receiver is connected to mixer / amplifier
	Make sure that receiver and amplifier / mixer channel volumes are turned up
Microphone output is very loud or distorted	Turn down GAIN ADJUST on bodypack transmitter
	Turn down VOLUME on receiver
	Reduce Gain on mixer / amplifier
	Ensure that XLR output is not fed to a Line input
Microphone output is very low	Turn up GAIN ADJUST on bodypack transmitter
	Turn up VOLUME on receiver
	Increase Gain on mixer / amplifier
	Ensure that Jack output is not fed to a Mic input
	Check transmitter batteries