



2 CHANNEL UHF WIRELESS MICROPHONE SYSTEM

C 8884: 2 Ch 520MHz & 540MHz Receiver With 2 Handheld Microphones



Operating Instructions

REDBACK® C 8884 2 Channel UHF Wireless Mic System

Entry level two channel fixed frequency UHF wireless microphone system, complete with two handheld transmitter microphones. Perfect for clubs, restaurants, function centres and wedding ceremonies. Voices are reproduced faithfully whilst allowing freedom of movement. This UHF Band true diversity wireless microphone kit includes many special features, including but not limited to:

- Multilevel high and mid frequency narrowband filters.
- Advanced noise detection and control.
- Tone keylinked identity to reduce interference.
- Operating frequencies 520 / 524 MHz
- RF signal presence indicator LEDs for both channels A and B.
- Range of up to 60m in ideal conditions open air.
- 6.35mm unbalanced line mix output.
- 3-pin balanced XLR mic output for both channels A and B.
- LED Screen showing operating parameters for both channels.
- 12V-18V d.c. power supply (included)
- 1/2 19" size case with RF indicators. Rack mounting option not supported.

Note: TWO OR MORE WIRELESS MICROPHONES WHICH TRANSMIT AT THE SAME FREQUENCY CANNOT BE USED IN THE SAME LOCATION. SEPARATE BY AT LEAST 100 METRES TO PREVENT INTERFERENCE.

***DESIGN AND SPECIFICATIONS SUBJECT TO BE CHANGED WITHOUT NOTICE.**

Note: Do not attempt to modify the electronics of this device. Doing so may void the warranty

SAFETY PRECAUTIONS:

- Do not spill liquid on the appliance and do not drop it on a hard surface.
- Do not place the appliance near heat sources such as radiators, stoves, amplifiers, or other electrical equipment.
- Do not expose it to direct sunlight, extremely dirty or dusty environments, excessive moisture or humidity, and significant vibration.
- Use good quality batteries, matching brand and model.
- Remove the battery from the transmitter if the appliance will not be used for a long period. Doing so will avoid any damage that may result from a defective leaking battery.
- Do not throw used batteries into a fire. Be sure to dispose of used batteries in accordance with local waste disposal rules.
- When disposing the equipment, remove the batteries, separate the case, circuit boards, and cables, and dispose of all components in accordance with local waste disposal rules.

General Usage Guidelines and Precautions:

- To avoid interference, do not put the receiver too near to metallic objects, and avoid obstructions between, the transmitter and receiver.
- Move the transmitter around the area where you propose to use the system. If you find any dead spots, change the receiver position. If that does not work, try to avoid the dead spots.
- Avoid the interference from TV, radio, other wireless appliances and etc.
- Avoid extremely dirty or dusty environments.
- Avoid areas where there is extremely high humidity.

BASIC CONNECTIONS:

REDBACK® C 8884 2 Channel UHF Wireless Mic System

Connect the receiver output to the audio mixer or amplifier input, using a standard audio cable with 3-pin XLR connectors or 6.35mm phone plugs. Never use the balanced and unbalanced audio outputs at the same time as this may cause signal loss or increased noise.

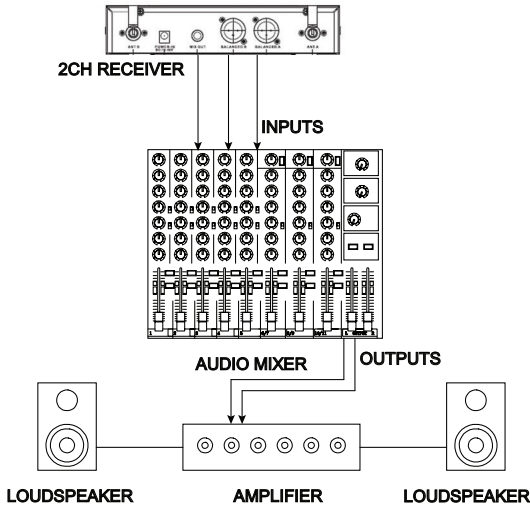
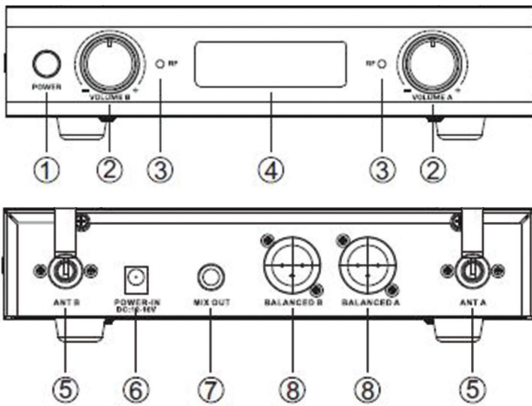


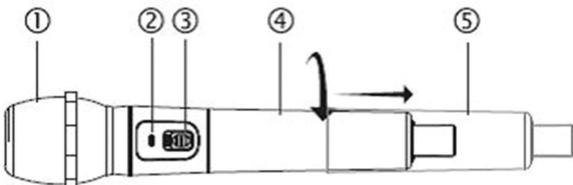
FIGURE 1: RECEIVER DIAGRAM



1. Power switch of receiver
2. CHA/CHB volume adjustor
3. CHA/CHB RF signal light
4. LED display
5. ANT A/ANT B receiver antenna (Fixed)
6. Power jack
7. Mixed output
8. CHA/CHB XLR output

FIGURE 2: HANDHELD TRANSMITTER

DIAGRAM



1. Pickup cover
 2. Low voltage indicator
 3. Power switch
 4. Compartment
 5. Bottom cover
- (screw along the clockwise)

RECEIVER INSTALLATION:

We recommend you avoid using more than one system in the same area as this will cause interference. Should you require more than one system in an installation use a multi-channel Redback UHF microphone system.

Two outputs are provided. Dual 3-pin balanced XLRs which allow each channel (A & B) to be fed into an audio mixer or individual amplifiers. (see Figure 1.)

Alternatively a 6.35mm TRS socket provides a mixed output of channels A and B, for feeding into an amplifier Line/Aux or Mic input jack socket. Do not use the both XLR and 6.35mm TRS audio outputs at the same time! This may cause signal loss or increased noise.

Connect the a.c. adaptor, turn the rocker switch to the on position and the LED Screen should illuminate.

Switch on the transmitters (see below for transmitter information). Ensure the transmitter is at least one metre from the receiver.

Check for sound by moving the transmitter around the area where you wish to use the system, to look for dead spots. If you find any dead spot, change the receiver position. Use the knobs on the front panel to adjust the volume.

HANDHELD TRANSMITTER INSTALLATION:

Insert 2 x 1.5V AA size dry or rechargeable batteries. Note that good quality dry cells will have a longer usage life than rechargeable batteries.

Note: Always use good quality batteries to avoid damage resulting from a defective leaking battery.

Switch the POWER switch to 'ON', and if the battery has sufficient power, the LED flashes once. If the LED stays on or twinkles, it indicates that the battery has insufficient power and should be changed. If the status LED fails to flash entirely, the battery is either dead or the polarity is incorrect. Replace the battery.

The microphone is designed so that the LED light remains unlit so that it will not consume power thereby extending the battery life.

Set the levels on your audio mixer or amplifier as appropriate.

GENERAL OPERATING POINTS:

This system uses multilevel high frequency and mid frequency narrowband filters to counteract signals that may cause interference.

It also employs audio compressing – expanding technology which can lower noise, increase the dynamic range, and resist echo.

The receiver has a multilevel high frequency enlarger to enhance its sensitivity. The chipset is advanced and reproduces audio with a good tone.

With the different outputs on the rear of the unit, it can be connected to a karaoke system. The frequency response is tailored for vocals, with brighter mid-range and bass roll-off.

Uniform cardioid pickup pattern from the microphone transmitters which minimises background noise. It is suitable for small and larger stages, ballrooms, auditoriums, classrooms.

Pneumatic shock-mount system cuts down handling noise. Mics also have a built-in spherical wind and pop protector.

TROUBLESHOOTING:

Problem

No Sound

- Check the power supply of the microphone and receiver.
- Check that the transmitter and receiver are tuned to the same frequency.
- Check whether the hi-fi appliance is switched on and the receiver output is connected to the audio amplifier or mixer output.
- Check whether the transmitter is too far away from the receiver, or the SQUELCH is set too high.
- Check whether the receiver is located too near metal objects or there are obstructions between transmitter and receiver.

Sound Interference

- Check the antenna location.
- When using two or more microphone sets simultaneously, ensure that the chosen frequencies for each microphone do not interfere with each other.
- Check whether the interference comes from other wireless devices, mics, TV, radio etc.

Distortion or Tone problems

- Check to see if the receiver volume is set too high or too low.
- Check whether there is any unwanted interference coming from other devices.
- Check the battery power.

SPECIFICATIONS

Receiver:

Frequency Range	520 + 524 MHz fixed UHF
Audio Output.....	Unbalanced Max output +5 dBu
Power Supply.....	12-18 V DC
Power Consumed.....	150 mA @13.5V DC
Receive Sensitivity.....	<-90 dBm

Handheld Transmitter:

Frequency Range	520 + 524 MHz fixed UHF
RF Power	10 mW
Battery.....	2 x AA size battery (1.5V each)
Frequency Response	50 - 20,000 Hz
Input Sensitivity.....	2.1 mV/Pa
Power Consumed	100mA @3V

System:

T.H.D. (Overall)	< 0.1 %
Signal to Noise.....	= 96 dB (A)
RF frequency range.....	520 + 524 MHz fixed UHF
Modulation.....	DQPSK
Bandwidth.....	300kHz
Dynamic Range.....	>90 dB (A)
Audio sampling	24 bit/48 kHz
Transmission system.....	PLL synthesized
Audio Delay.....	3 ms
Audio Encoder.....	PT Live
Frequency Response	20 - 20,000 Hz
Working Distance	up to 70m

Altronic Distributors warrants this product for one year from date of purchase from Altronics or its resellers to the consumer. If this item is part of an installation or another product, please contact the installer or supplier for your warranty.

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found, nor by use in a way or manner not intended by the supplier.

For repair or service please contact your **PLACE OF PURCHASE**.

If this item was **purchased directly from Altronics** please make a warranty claim by:

1. **FOR MAIL ORDER CUSTOMERS** (includes school and trade orders),
 - a) Ringing us on 1300 797 007 and quoting your tax invoice number.
 - b) Upon contacting Altronics, we will issue an R.A. (Return Authorisation).
As Altronics have a number of service agents throughout Australia, a copy of the R.A. will be emailed, faxed or mailed to you with full instructions of how and where to send the goods. The freight for shipping goods back to Altronics for all repairs is at the customers expense.
 - c) A copy of the R.A. form, (or at the very minimum, the R.A. number) must accompany the goods to effect the repair.
 - d) Altronics will pay the return freight to the customer where the warranty claim has been accepted.
 - e) Please quote the R.A. number in any correspondence to us.
2. **FOR OVER THE COUNTER PURCHASES** to make a warranty claim, please return the goods to us in any of our stores, with a copy of your proof of purchase (tax invoice).
 - a) Upon leaving the goods at one of our stores, an R.A. number will be issued to you.
 - b) Once repaired, you will be contacted, advising that the goods are ready to be collected from the store.

It is at Altronics discretion as to whether the goods will be repaired or replaced (whilst under warranty); and as to whether identical goods will be used to replace the item due to changes of models / products.

Note: Under no circumstances should you attempt to repair the device yourself or via a non-authorised Altronics service centre, as this will invalidate the warranty!

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.