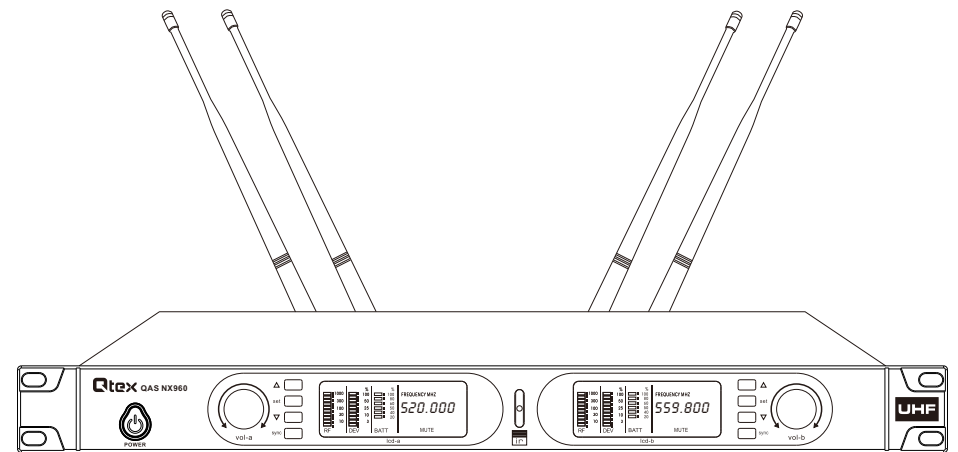




Qtex TRUE DIVERSITY WIRELESS MICROPHONE



QAS NX960 series USER MANUAL

QTEX Wireless Microphone

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	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>To prevent electric shock, do not remove top or bottom covers. No user serviceable parts inside. Refer servicing to qualified service personnel. Disconnect power cord before removing rear input module to access gain switch.</p>		



WARNING <p>To reduce the risk of electric shock, do not expose this equipment to rain or moisture!</p>
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Troubleshooting

Problem	Possible cause	Corrective action
Receiver won't power up	Bad connection	Check your power cord to make sure Power supply adaptor is plugged into the outlet and receiver correctly
Transmitter will not power up	Batteries	Make sure they are installed correctly and check the battery life indicator on the transmitter
No RF (radio signal)	Transmitter is not synced to receiver	Sync transmitter to receiver (page 9-10)
	Receiver is out of range	Reduce the distance
RF signal is weak	Antennas may not be connected correctly	Adjust antennas or use remote antennas
	Possible frequency interference from another wireless device	Re-scan and sync to another frequency (page 8)
No AF (audio signal)	Transmitter batteries are low or dead	Replace battery
	Receiver not hooked up properly	Check cable connections on both receiver and console (mixer, amp.), also check cables for continuity with a cable tester
	Transmitter is too far from receiver or the Squelch control is set too high	Check the distance and also receiver squelch settings
No AF (audio signal)	Receiver volume setting adjustment is too high	Reduce output level on receiver
	Sound level of source is too high for microphone	Move the microphone-transmitter away from the source of sound
	Interference comes from radio frequency sources located near	Check for presence of other wireless microphones, TV/ radio repeaters etc. being used in the area

Thank you for purchasing this QTEX product. This PLL synthesized, True Diversity wireless microphone system operates in the UHF band frequency, with two groups of frequencies (one frequency bank for each channel). Please read this manual carefully before operating the QAS NX960 series system. This manual covers the function and operation of the wireless microphone set.

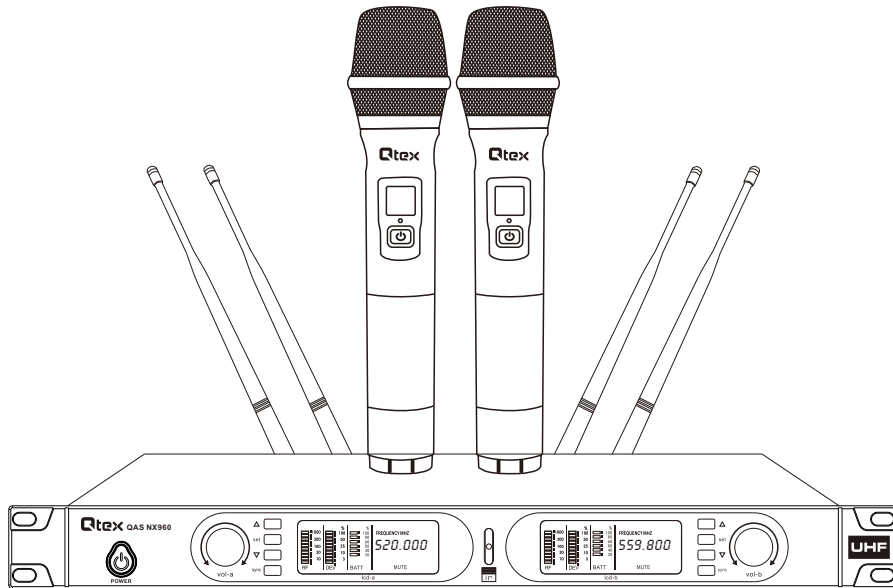
Safety

- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- To prevent fire, do not cover the ventilation of the receiver with paper, plastic film, etc.
- Do not expose this set to drips or splashes.
- Do not place any objects filled with liquid, such as cups, on the components of the kit.
- Do not install this appliance in a confined space, such as on a closed shelf or in a box.
- The receiver should be located close enough to the AC outlet so that you can easily grasp the AC adapter at any time. In case of emergency, disconnect the AC adapter quickly.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- If the transmitter is not in use for an extended period, remove the batteries to avoid damage.
- Do not dispose of used batteries with domestic rubbish. Be sure to dispose of batteries in accordance with your local waste disposal rules.

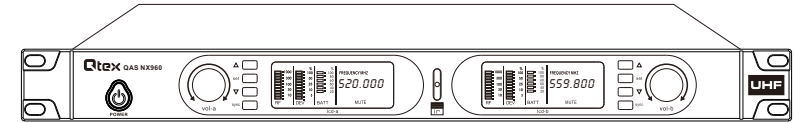
The circuits inside the receiver and transmitter have been precisely adjusted to ensure optimal performance and compliance with government regulations. Do not attempt to open the receiver or transmitter. This will void the warranty and may result in improper operation.

Product Feature

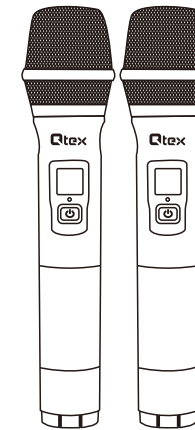
1. Adjustable dual channel UHF wireless system, 200 selectable frequencies totally (100 presets in each channel).
2. Two true diversity receivers, each with independent signal (A/ B) selection system for occurrence of sound interruption minimizing.
3. The receiver and transmitter are synchronized in a pair through one-button with IR (infrared) frequency-binding technology.
4. Professional performance-level phase lock circuit with squelch control for noise protection.
5. Back light LED display indicates RF and AF signal levels, battery status, receiver active diversity channel indication (A/ B), frequency/ channel, etc.
6. Patented Audio Compression and Expansion technology for better dynamic response and excellent sound quality.



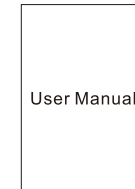
Accessories



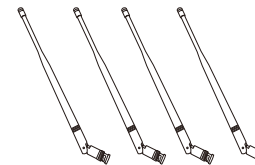
Dual channel receiver: 1 pc



Microphone with transmitter: 2 pcs
(Handheld/Lapel/Headset/Desktop)



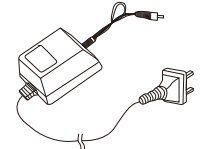
User Manual: 1 pc



Antenna: 4 pcs



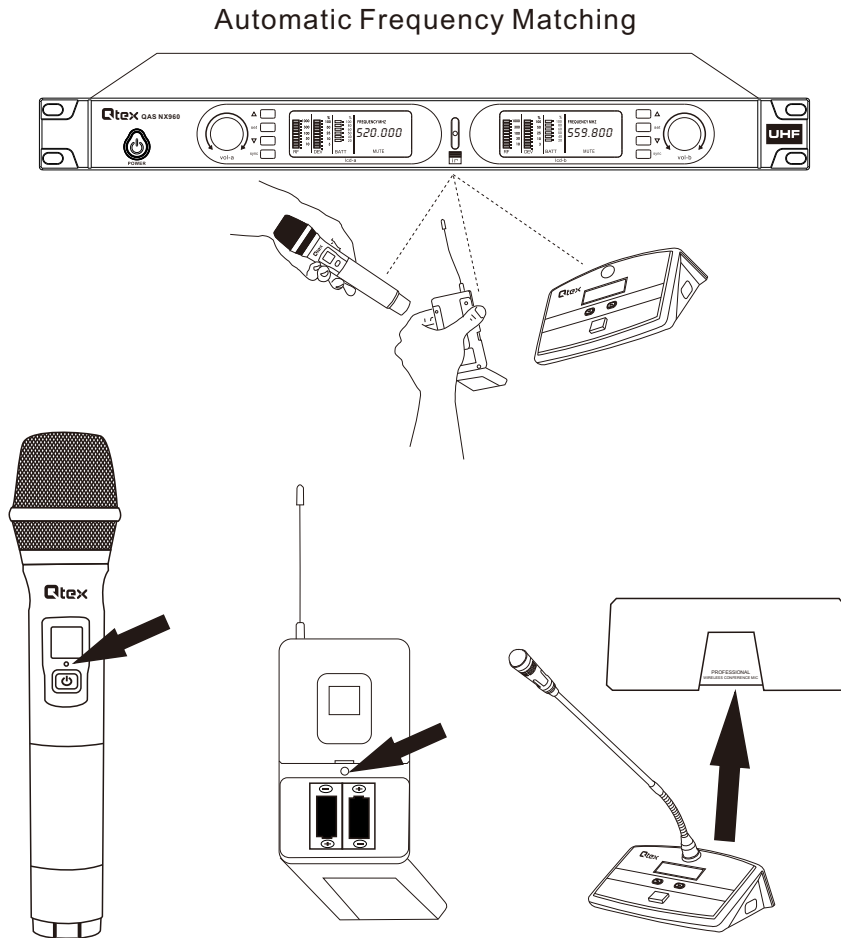
Jack 6,3 mm Audio cable: 1 pc



Power supply: 1 pc

Frequency Setting

6. Aim the transmitter IR window to the receiver IR window for pairing (the Handheld mic transmitter has IR window under the LCD display; the Lapel and Headset body pack transmitters need the lid of their battery compartment to be open for IR access; the conference unit IR window is located on the transmitter rear panel; the receiver has IR window by the middle of its front panel). Follow the recommendations as shown in the picture below.



Technical Specifications

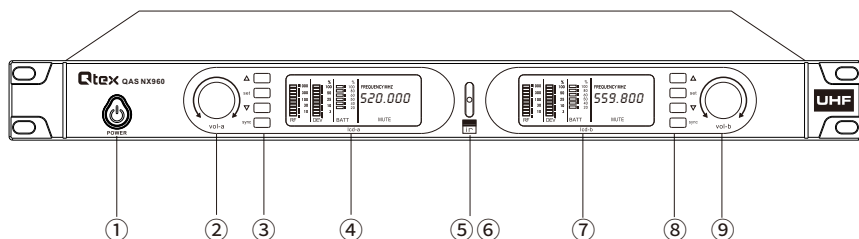
System specification:

Frequency Range: 520.000 - 559.800 MHz
Channel "a": 520.000 - 539.800 MHz (100 frequency channels)
Channel "b": 540.000 - 559.800 MHz (100 frequency channels)
Total number of channels: 200
Frequency Interchannel step: 200 kHz
Modulation type: FM
Maximum deviation of FM modulation frequency: 45 kHz
Frequency stability: $\pm 0.002\%$
Dynamic Range: > 110 dB
Frequency response: 60 Hz-18 kHz
S/N Ratio: > 105 dB
Distortion: $< 0.5\%$
Operating temperature: $-18^{\circ}\text{C} \sim +50^{\circ}\text{C}$
Receive distance: 80-100 meter (line of sight)

Receiver specification:

Oscillation mode: PLL (Phase Locked Loop)
Antenna interface: BNC Connector
Receiver sensitivity: -100 dBm (40 dB S/N)
Spurious suppression: > 80 dB
Audio output level: $+4$ dB(1.25V)/ 5 kOhm (unbalanced)
Audio output level: $+10$ dB (1.5V)/ 600 kOhm (balanced)
Sound level gain adjustment knob: -20 dB to $+ 35$ dB
Supply Voltage: 12 V DC
Supply Current: 450 mA
Power consumption: 3 W

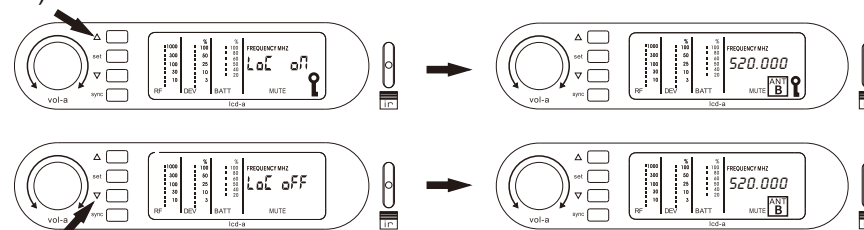
Front Panel



- ①.Power switch
- ②.Channel "a" volume adjustment
- ③.Channel "a" menu buttons (upward, down, set and sync functions)
- ④.Channel "a" LCD display
- ⑤.Channel "a" infrared (IR) emitter window
- ⑥.Channel "b" infrared (IR) emitter window
- ⑦.Channel "b" LCD display
- ⑧.Channel "b" menu buttons (upward, down, set and sync functions)
- ⑨.Channel "b" volume adjustment

3.Frequency change Lock

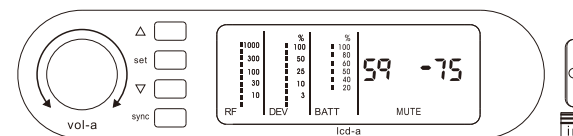
- 1)Press 4 times "set" key for a lock setting;
- 2)Press "△" to lock the frequency or press "▽" to unlock the frequency;
- 3)Press "set" to confirm.



4.Squelch sensitivity setting

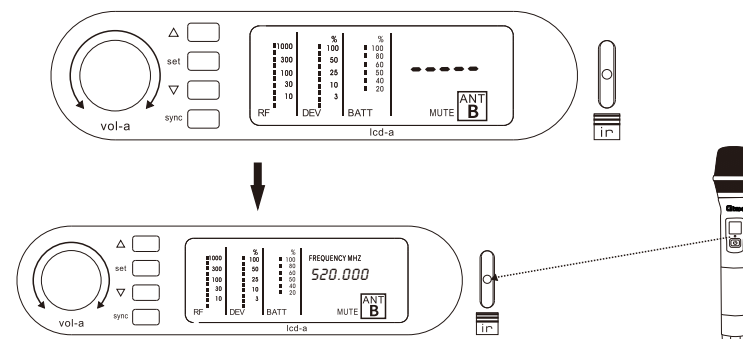
Press the "set" key 3 times to enter a sensitivity setting of the noiseless MIC mute system for weak signal, then press the "△" and "▽" key to select the Squelch sensitivity level.

3 Squelch levels are available for different application ("Sq-95"/"Sq-85"/"Sq-75")



5.Frequency setting

Press the "sync" key and check that the IR light is flashing. Then bring the transmitter IR sensor window to the receiver IR window. The frequency value appearance on the LCD screen means that the frequency matching has been completed successfully.



Function Instructions

1. Automatic frequency scanning/ choosing

- 1). Press “set” key 2 times to activate “scan” mode (as shown on chart 1), then press the “Δ” key to initiate searching a free (empty) frequency channel automatically (chart 2).
- 2). A little bit later, when the LCD display shows a dashed line (as on chart 3) and the IR window indicator starts flashing, aim the transmitter IR sensor to the host IR emitter window. When the frequency value appears on the LCD (see chart 4), the frequency matching is completed successfully.



Chart 1

Chart 2

↓ Scanning clean frequency

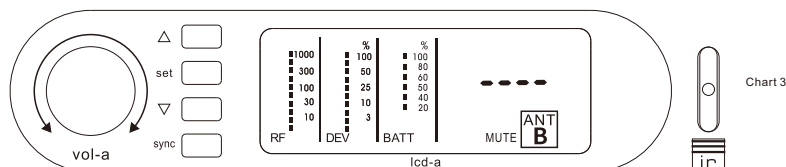


Chart 3

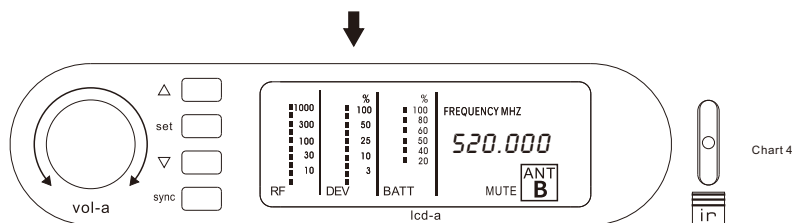
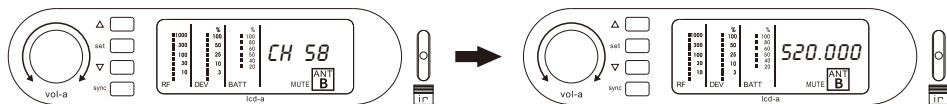


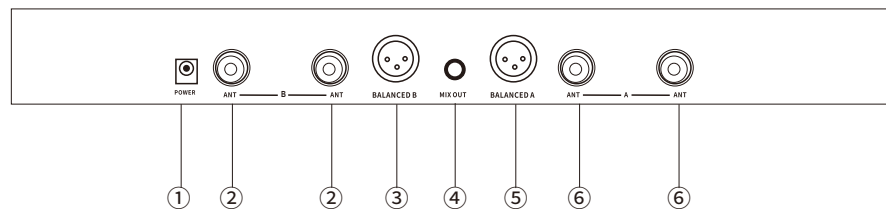
Chart 4

2. Manual channel setting

- 1) Press the “set” key on the receiver front panel to activate the channel adjustment.
- 2) Press the “Δ” and “▽” key to choose the channel.
- 3) When the channel is selected, the frequency will be confirmed automatically in 5 seconds. cted,the frequency is automatically confirmed after 5 seconds.

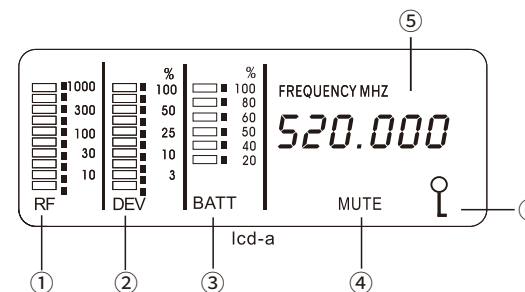


Rear Panel



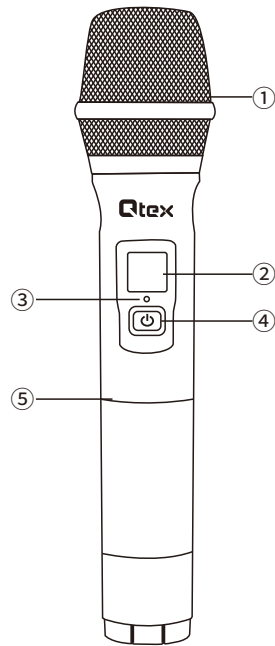
- ① Power supply socket, 12V DC input voltage
- ② Antenna B sockets (BNC)
- ③ Channel "b" balanced output (XLR)
- ④ "a" + "b" audio channels mixed output (Jack 6,3 mm)
- ⑤ Channel "a" balanced output (XLR)
- ⑥ Antenna A sockets (BNC)

LCD display parameters and symbols



- ① RF signal level bar
- ② DEV audio signal level bar
- ③ Battery level indicator
- ④ Mute status symbol
- ⑤ RF transmission frequency
- ⑥ Frequency lock status

Handheld Microphone



Handheld mic transmitter

- ① Mic capsule with grill
- ② LCD display
- ③ Infrared sensor window
- ④ Power button
- ⑤ Housing with a compartment for batteries

Transmitter specification:

Oscillation mode: PLL Phase Locked Loop

Output Power: 16mW (Handheld/Desktop Microphone)
20mW (Lapel/Headset Microphone)

Transmitted Power: 1.6mW (Lo-Handheld Microphone)
13mW (Hi-Handheld Microphone)
13mW (Lapel/Headset Microphone)
10mW (Desktop Microphone)

Frequency accuracy: <10PPM

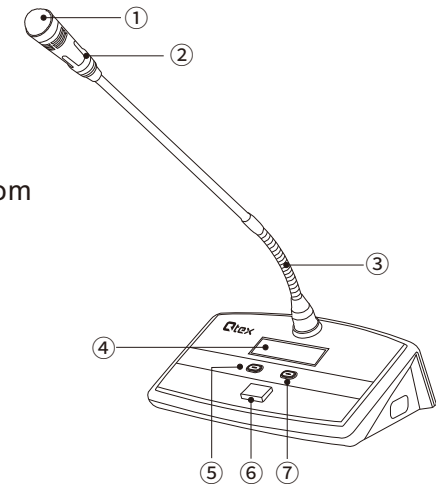
Power supplye : 2 AA batteries 1,5V

Conference Microphone

1. Conference Microphone unit control

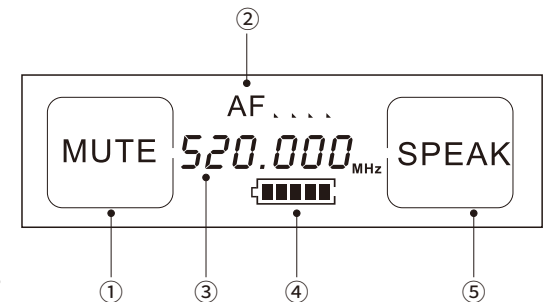
1.1 Panel Instrcution

- ① Microphone capsule
- ② Microphone light ring
- ③ Microphone gooseneck boom
- ④ Microphone status display
- ⑤ Volume down button
- ⑥ ON/ OFF and Speak button
- ⑦ Volume up button



2. Info on display

- ① Mute status display
- ② Audio signal level bar
- ③ RF transmission frequency
- ④ Battery level indicator
- ⑤ Microphone ON status



3. Operation Instructions

- 1) Turn on the transmitter by long press ON/OFF button for few seconds. The same operation to turn off the transmitter.
- 2) Conference transmitter prevents RF interference, especially for mobile phone interference effect is obvious.