Condenser

U3C SET MANUAL

MICROPHONE
WIRELESS SYSTEM

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK: DO NOT REMOVE SCREWS.
NO USER-SERVICEABLE PARTSINSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE APPLIANCE TO RAIN OR MOISTURE.

CERTIFICATION

Radio Approvals: FCC Part 15.249, FCC Part 15 B, RSS-210 (Canada), EN 300 440 (Europe), EN 301.489 (Europe), MIC Notice No.88 Appendix No.43(Japan)

This Class B digital apparatus complies with Canadian ICES-003.

IC Caution: RSS-Gen Issue 4 December 2014"&"CNR-Gen 4e Décembre 2014:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) This device may not cause interference, and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présentappareilestconforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitationestautorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareildoit accepter tout brouillageradioélectriquesubi, mêmesi le brouillageest susceptible d'encompromettre le fonctionnement.

FCC CERTIFICATION

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

WARNING:

Changes or modifications not expressly approved in writing by Xvive may void the users authority to operate this equipment.

RF EXPOSURE STATEMENT:

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

MEASURES:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IMPORTANT SAFETY INSTRUCTIONS
PLEASE READ THESE INSTRUCTIONS
IN A SAFE PLACE

WARNING: BEFORE USING YOUR XVIVE U3C MICROPHONE WIRELESS SYSTEM, CAREFULLY READ THE OPERATING INSTRUCTIONS.

1. Observe all instructions carefully in the U3C set manual.
2. Do not to perform service operations beyond those described in the U3C set manual. Services required when the apparatus has been damaged in any way, such as:
   - Liquid has been spilled or objects have fallen into the apparatus
   - The unit has been exposed to rain or moisture
   - The unit does not operate normally or changes in performance in a significant way
   - The unit is dropped or the enclosure is damaged
3. Do not place near heat sources, such as radiators, heat registers, or appliances which produce heat.
4. Guard against objects or liquids entering the device. Do not use or place unit near water.
5. Clean only with a dry cloth.
6. Only use attachments/accessories specified by the manufacturer.
7. Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice “safe listening.”

U3C SET PRODUCT INTRODUCTION

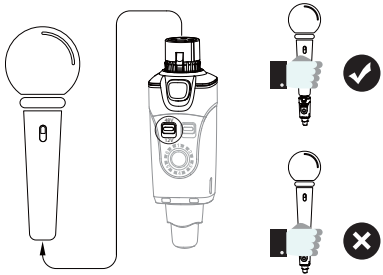
- 2.4Ghz band is optimal for condenser microphone wireless system, Approved for use in worldwide.
- Less than 5ms Latency, Simultaneous broadcasts on 6 channels.
- Broad 20Hz – 20KHz frequency response
- Up to 90 feet (actual range depends on RF signal absorption, reflection and interference)
- 3~7 Hours of battery life (It depends on the microphone phantom power current. Rechargeable battery for both Transmitter & Receiver)
- Only work with XLR balanced condenser microphone.
- High Resolution 24-bit/48kpbs Audio
- Dynamic Range 110dB
- Signal to Noise Ratio is 110dB
- U3C wireless aims to take the complexity and frustration, out of traditional wireless microphone systems. Creating a flexible, all-in-one solution that makes any your favorite condenser microphones into wireless.
- Provides 12V or 48V phantom power to the condenser microphone.

* Never plug single-ended (unbalanced) or dynamic microphones into U3C, can be permanently damaged if phantom power is applied to them.

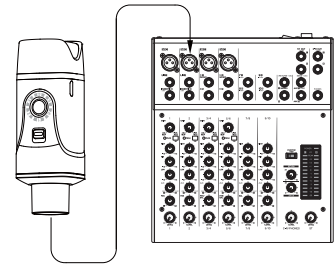
PACKAGE DETAILS

U3C Transmitter	1PCS
U3 Receiver	1PCS
USB Cable	1PCS
Manual	1PCS
Bag	1PCS

QUICK START

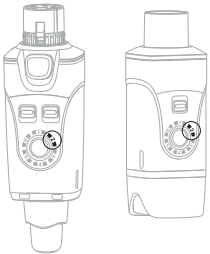


1. Plug the U3C Transmitter condenser microphone.
   Switching phantom power 12V or 48V
   WARNING: Never plug single-ended (unbalanced) or dynamic microphones into U3C

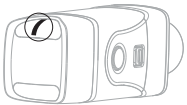


2. Plug the U3 Receiver into the Mixer.

QUICK START



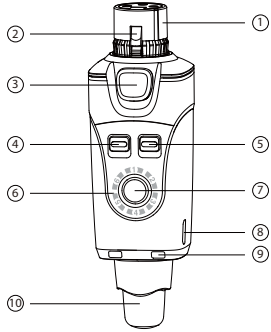
3. Turn on the U3C Transmitter and the U3 receiver and check the Channel is same.



4. After connecting successfully, the LED lights on U3 receiver will stay on.

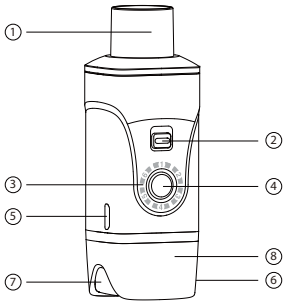
5. Check the connection by talking through the microphone.

BASIC OPERATION
U3C TRANSMITTER



① Mic In: XLR balanced condenser microphone input jack
② Spring: Circumferential ground spring providing an accurate connection to the mating shell
③ Mic Lock: secures transmitter to the microphone
④ Output phantom power voltage switching: 12V and 48V
⑤ Power switch: switches unit on/off
⑥ Channel status LED: indicates selected channel
⑦ Channel switch: selects Channels 1-6
⑧ USB charging port
⑨ Power status LED: indicates power status:
Led off = 100% ~ 30%
Solid red = 29% ~ 11%
Flickering red = less than 10%
⑩ Antenna.

BASIC OPERATION
U3 RECEIVER



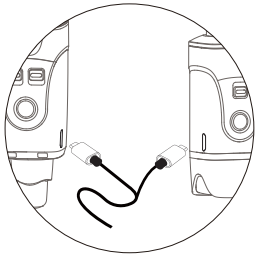
① XLR OUT: XLR microphone input jack
② Power switch: switches the unit on and off
③ Channel status LED: indicates selected channel
④ Channel switch: selects Channels 1-6
⑤ USB Port: For charging the battery
⑥ RF Status LED:
ON = Transmitter is on and link is established
Flashing = Signal connection interference
OFF = Transmitter off or unlinked
⑦ Power status Led: indicates power status.
Led off = 100% ~ 30%
Solid red = 29% ~ 11%
Flickering red = less than 10%
⑧ Antenna.

SPECIFICATIONS

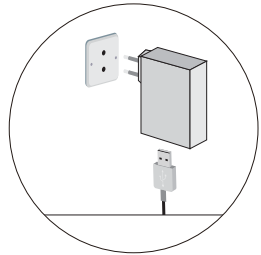
U3C MICROPHONE WIRELESS SYSTEM	
Tuning Bandwidth	2400 – 2483.5MHz
Working Range	Up to 90ft Actual Range Depends On Rf Signal Absorption, Reflection And Interference.
Audio Frequency Response	20Hz – 20KHz(-3dB). Dependent On Microphone Type Or Input Signal.
Dynamic Range	110dB
Battery Life	Up To 3~7 Hours of battery life (It depends on the microphone current.
RF Sensitivity	-88dBm
Total Harmonic distortion	0.2%
RF Output Power	10 mW E.I.R.P. max
Operating Temperature Range	-18℃ to 57℃. Battery Characteristics May Limit This Range.
Channel Count	Up To 6 Channels

	U3C TRANSMITTER	U3 RECEIVER
Dimensions	31 X 29 X 98 mm	31 X 29 X 98 mm
Weight	108g	92g
Housing	Molded Plastic And Cast Metal	Molded Plastic And Cast Metal
Battery	3.7V Rechargeable Li-Ion, 1000mA	3.7V Rechargeable Li-Ion, 860mA
Impedance	Input 15kΩ(1KHz)	Output 470Ω(1KHz)
Audio Input Connector	Balanced XLR Male Input	
Audio Output Connector		Balanced XLR Female Output
Maximum Input Level	2.8Vp-p	
Maximum Output Level		2.8Vp-p
Battery Life	phantom power: 12V 2mA – 7hours 48V 2mA – 6hours 48V 5mA – 3hours	Up To 5 Hours
Support Microphone Type	Condenser Microphones.	
Antenna Impedance	50Ω	50Ω
Antenna Type	1/4 Wave Sleeve Dipole, Non-removable	1/4 Wave Sleeve Dipole, Non-removable
Number Of Antenna	1	2

BATTERIES AND CHARGING



Connect Power



Connect to the socket

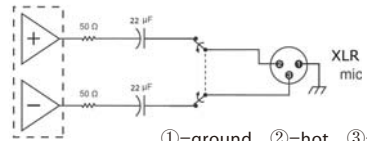
* LED lights up when you charge the U3C, and LED goes off automatically once charge is finsihed.
* Turn off the power switch while charging. Please do not use U3C when charging, which may reduce battery life.

U3C set

CHARGING TIMES		BATTERY LIFE
U3C Transmitter	2:00	12V 2mA – 7hours 48V 2mA – 6hours 48V 5mA – 3hours
U3 REVEIVER	2:00	Up to 5 hours

* Always store U3C at room temperature
* When storing the unit, please check the battery state regularly and charge if necessary.

U3C Phantom Power Connections



①=ground ②=hot ③=cold

2.4 GHz SPECTRUM OVERVIEW AND INTERFERENCE

U3C operates within the 2.4GHz ISM band which is utilized by Wi-Fi, Bluetooth, and other wireless devices. 2.4GHz is an open band and, as such, does not require a license to be used worldwide.

Tips and Methods to Improve Wireless System Performance

1) Keep more than 3 meteres distance between Receiver unit and other WiFi transmitters such as routers.
2) Change channels to avoid interference with other WiFi products.
3) In case of environmental interference from other WiFi systems, shorten the distance between the receiver and transmitter units.

2.4Ghz Frequency Tables

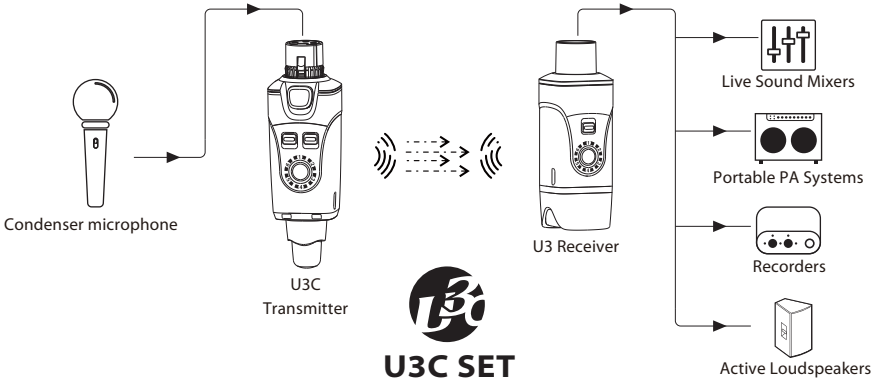
CHANNEL 1	2402MHz, 2480MHz, 2482MHz
CHANNEL 2	2408MHz, 2472MHz, 2474MHz
CHANNEL 3	2416MHz, 2464MHz, 2466MHz
CHANNEL 4	2434MHz, 2440MHz, 2442MHz
CHANNEL 5	2427MHz, 2448MHz, 2450MHz
CHANNEL 6	2422MHz, 2456MHz, 2458MHz

* U2 1~4 channels are the same as U3/U3C 1~4 channels, U2 and U3/U3C use in sametime max is 6 sets.

TROUBLESHOOTING

ISSUE	SOLUTION
No Sound	• Check that the Receiver's RF LED is lit. • Check that the microphone is turned on and receiving signal from the U3C Transmitter. • Check that the power switch is turned on for both the Transmitter and the Receiver. • Ensure that the U3C Transmitter and Receiver are on the same channel. • U3C will provide 12V or 48V phantom power to condenser microphone. Please select your microphone phantom power volts. • If used in dynamic microphone, the current consumption will be the same as that of a condenser microphone. • The receiver can be paired with one Transmitter at a time.
Distortion or Faint Sound	• If you connect the device with a receiver, check if the device is balanced XLR interface
Signal instability: RF LED flickering, or off completely	• See, "Tips and methods to improve wireless system performance" page 12
Unable to switch the channel	• The channel switch locks after 15 seconds. Double-click the channel button to unlock and reset.
Multiple connect	• Use one transmitter can connect with more than 2 receivers.
Phantom Power	• Never plug single-ended (unbalanced) or dynamic microphones into U3C, can be permanently damaged if phantom power is applied to them.

APPLICATION SCENE



U3C SET

CONDENSER MICROPHONE
WIRELESS SYSTEM

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