

MANUAL

UN400

*THE UNICOM DIGITAL 2+ LANGUAGE
MULTI-CHANNEL WIRELESS COMMUNICATION SYSTEM*



852 Chestatee Point Road, Dawsonville, GA 30534
(800) 513-9894 FAX (706) 216-4660
EMAIL: unicom@unicomsys.com
Unicomsys.com



Thank you for purchasing a United Communication System.

Your Unicom product is engineered and designed to provide you with many years of reliable service. Unicom warrants its systems against defects in materials and workmanship for 10 years EXCEPT FOR earphones, headphones, rechargeable batteries, chargers, cables, antennas, carry cases and all other accessory products. Accessory products carry a 90-day warranty.

If the product fails within the specified warranty period, Unicom will determine whether to repair or replace the defective equipment. The warranty does not apply to physical damage, products that have been abused, misused, or modified.

If you experience difficulty with your system, call TOLL FREE for customer assistance:

(800) 513-9894

If it is necessary to return the system for service, your Customer Service Representative will give you a Return Authorization Number (RA) and shipping instructions. Pack the system carefully and send it to the address below.

Again, thank you for your purchase.



852 Chestatee Point Road, Dawsonville, GA 30534
(800) 513-9894 FAX (706) 216-4660
EMAIL: unicom@unicomsys.com
Unicomsys.com

INTRODUCTION:

The UN400 System is a portable, high-performance wireless system composed of the UN46 Transmitter, UN38 Receivers and designed for use in simultaneous interpreting applications. The system allows one-way transmission of an interpreter's voice to group members by using a FM radio signal. Using the system helps to overcome background noise and distance from the person speaking. The UNICOM system can be used for large or small groups.



UN46 Transmitter:

It is a multi-channel, battery powered belt pack that is used with a microphone to pick up the interpreter's voice. The transmitter produces a FM signal to broadcast the interpreter's voice to the receiver units. The UN46 operates on two AA disposable batteries.



Headset Microphone:

The noise-cancelling microphone helps to reduce background sounds in a noisy environment. The microphone plugs into the "Mic" jack on top of the transmitter. The microphone is positioned directly in front of the interpreter's mouth for maximum signal to noise ratio and so head movement does not affect the loudness of the signal. The microphone cord acts as the transmitting antenna.



MM50 Mini Mask: (Sold Separately)

The noise-cancelling Mini Mask helps to reduce background sounds in a small environment. The Mini Mask plugs into the "Mic" jack on top of the transmitter. The Mini Mask is positioned directly over the interpreter's mouth for maximum signal to noise ratio and so head movement does not affect the loudness of the signal. The Mini Mask cord acts as the transmitting antenna.



UN38 FM Digital Receiver:

The UN38 FM Digital Receiver has a high resolution OLED screen. Quick view of receiver status and immediate entry to all user settings. On-screen channel selection with easy access to 17 pre-set, wideband frequencies (72-76 MHz). Digitally synthesized for exceptional audio clarity and stability. Digital tuning, digital squelch and battery-saving sleep mode.



UN21 Stereo Headphones:

The UN21 on ear stereo headphones are a lightweight design that delivers full power sound. Delivering incredible sound performance, it is ideal for listeners seeking ultra-light headphones. The UN21 stereo headphones are equipped with dynamic elements for an extended frequency response. It features an over the head design with contemporary style.



HINTS FOR USING THE SYSTEM:

Normal operating distance between the transmitter and receiver is about 300 feet. The operating range will vary in different buildings and surroundings. In some locations, the signal may momentarily disappear. This is called a 'drop-out' and is due to reflection and cancellation of radio signal. Moving a few feet will restore the signal.

Keep the transmitter and receiver units at least two feet apart. If the transmitter gets too close to a receiver, it can overload the receiver, causing noisy reception or blocking of the signal.

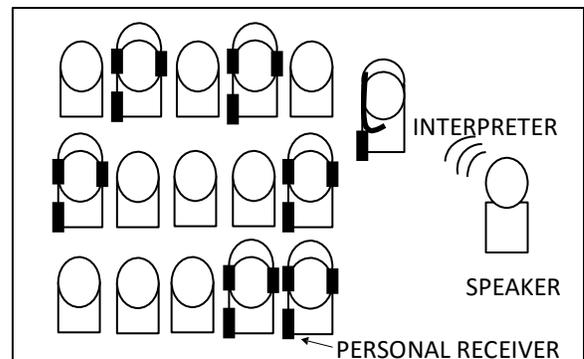
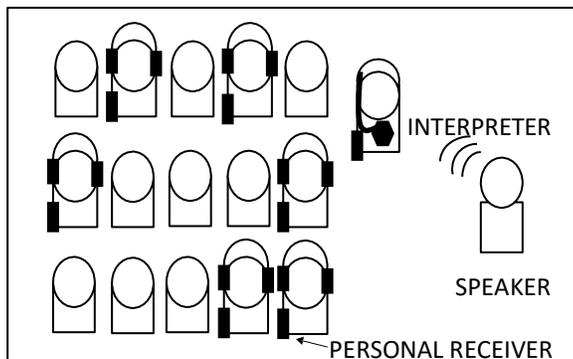
Do not coil or bunch up the microphone or headphone cords. The cords act as antennas. Let them hang at full length for the best results.

Do not use more than one transmitter on the same channel (frequency). Operating more than one transmitter on the same channel at the same time in the same place will result in interference.

Mini Mask for Small Meetings *(sold separately)*



Headset Microphone for Large Meetings



OPERATING INSTRUCTIONS UN46 Transmitter

1. Open the battery compartment. Slide the battery selection switch to the correct position for the type of batteries that will be used. Use “Alkaline” for non-rechargeable batteries. “NiMH” for rechargeable NiMH batteries (only). (FIG A)

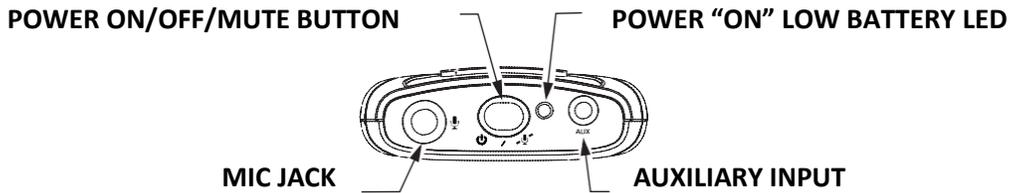
IMPORTANT: If the battery switch is not in the correct position, damage may be caused to the unit.

FIG A: Battery Compartment



2. Install the AA batteries. Be sure to observe proper polarity (+/-). Damage due to improper installation may void the warranty on the product. The “Power On” LED on top of the unit will flash when the batteries are getting low; you may continue to use until the unit quits operating, then replace or recharge the batteries (FIG A)
3. Plug in the microphone cord using the “Mic” jack on top of the transmitter (FIG B)
4. Optionally, plug in a desired audio source such as a CD or MP3 player using the “Auxiliary Input” jack (WCA 087 stereo auxiliary input cable included) If mic and auxiliary sources are used together, the audio will be mixed. If only auxiliary source is desired, the mic can be muted. **Do not remove the mic from the “mic” jack as the cable is also the transmitting antenna (FIG B)**
5. Turn the unit on: press and hold the “ON/OFF/MUTE” button for three seconds. The “Power On” indicator will illuminate green (FIG B)

FIG B: Top of Transmitter



6. Select the desired operating frequency. Refer to the following channel selection chart. Make sure the transmitter and receiver channels match. Up to eight UN46's can operate simultaneously on different channels (FIG C)

FIG C: Channel Selection Chart

UN46	Letter	Freq (MHz)	R35-8
1	A	72.1	1
2	B	72.3	2
3	O	72.6	3
4	P	72.8	4
5	I	74.7	5
6	R	75.4	6
7	G	75.7	7
8	H	75.9	8
9	C	72.5	
10	K	72.2	
11	N	72.4	
12	D	72.7	
13	E	72.9	
14	J	75.3	
15	S	75.6	
16	T	75.8	
17	F	75.5	

7. Change the transmitter to the desired operating frequency. Use the menu to select any of the 17 available channels on 72-76 MHz. To access the channel setting, push the menu button until you see the channel displayed. Change the channel by pushing the left or right arrow buttons. To access additional settings, push the menu button repeatedly until you see the setting you want. If no buttons are pushed for 30 seconds, the display returns to the main screen and then shuts off to conserve battery power. (FIG D) (FIG E)

FIG D: Menu Buttons

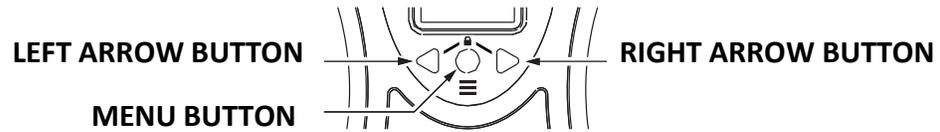
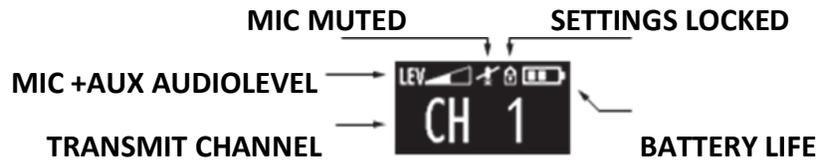


FIG E: Main Menu



8. To install the beltclip on the rear of the UN46, position the belt clip on the back of the transmitter. Turn the belt clip 180 degrees left or right to secure the clip. The transmitter can now be clipped onto a belt. To remove, turn the belt clip 180 degrees so the open end of the clip points up and gently pull the belt clip off (FIG E)

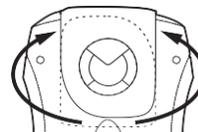


FIG E: Belt Clip Installation

9. Position the headset microphone boom as close to the speaker's mouth as possible without actually touching. Lapel clip microphones should be attached to a collar or lapel, as close to the speaker's mouth as possible.

10. When you pause from speaking, mute the microphone by pressing the "ON/OFF/MUTE" button once momentarily. The button will flash. The front display will also indicate the mic is muted. To unmute the mic, press the button once momentarily again.

11. When the UN46 transmitter is not being used, turn the unit OFF by pressing and holding the "ON/OFF/MUTE" button for three seconds. The power indicator will go off.

OPERATING INSTRUCTIONS MM50 *Optional* Mini Mask (Sold Separately)

1. Hold the Mini Mask in either hand, and do not block the fresh air inlet holes at the back of the mask with your hand.
2. Install the male plug on the end of the cable into the microphone socket on your transmitter. Place the mask against your face. When interpreting using the mask, keep the tone of your voice at its regular pitch. A word of caution: do not whisper because whispering distorts the interpretation.
3. To position the Mini Mask place your thumb on the underside of the mask allowing your fingers to cup the front.
4. Holding the Mini Mask too tightly to your face will block ventilation and cause a whistling sound.
5. The Mini Mask can be sanitized with one spray of disinfectant directly into the mask.

SAFETY INFORMATION

HEARING SAFETY

This product is designed to amplify sounds to a high volume. To protect your hearing and the hearing of others.

1. Make sure the unit is OFF or the volume is turned down before putting on the earphones.
2. Set volume level at the minimum setting you need to hear.
3. Do not allow children or other unauthorized persons to have access to this product.

BATTERY SAFETY

Do not attempt to recharge alkaline or other non rechargeable batteries, which may explode, release dangerous chemicals, cause burns, or cause other serious harm to the user or product.

MEDICAL DEVICE SAFETY

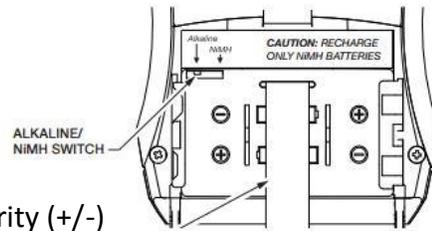
Before using this product with a pacemaker or other implantable medical device, consult your physician or the manufacturer of the device to make sure you are using this product in accordance with their safety guidelines.

OPERATING INSTRUCTIONS UN38 FM Digital Receiver

1. Open battery compartment door on back of receiver by pressing the tab down.
2. If using rechargeable NiMH batteries, slide the Alkaline/NiMH switch to the NiMH position. Default setting is Alkaline for non-rechargeable batteries.

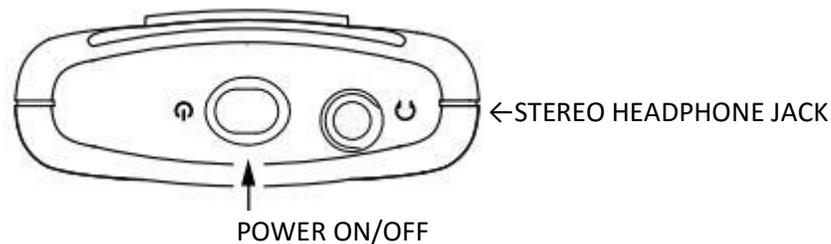
3. Make sure headphone jack is pushed in.

FIG 1: Battery selection switch



4. Insert 2 AA batteries over the fabric strip. Note correct polarity (+/-)
5. Insert earphone or neckloop into the headphone jack.
6. Turn Receiver ON by holding down the power button for 3 seconds and adjust volume control as needed.
7. **Select Channel**
 - a. Push the menu button (found under the LED display) once to show the channel set screen.
 - b. Push either arrow button to step to one of the 17 channels or push and hold either arrow button to seek the next active channel.
 - c. The receiver is seeking the next frequency so channels may appear out of order when seeking.
 - d. If no actively-broadcasting channels are found during the seek, a message is displayed (No CHANNELS FOUND). Make sure you are on the same channel as the transmitter. When finished, push the menu button once to get back to the home screen.
 - e. Receiver will retain the channel setting when the unit is turned off.

FIG 2: UN38 Controls



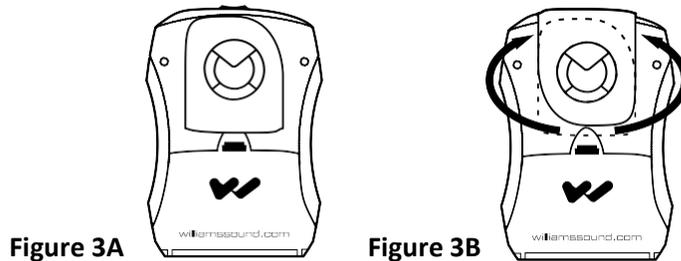
8. **Settings lock:** To lock (or unlock) the settings, you must first be on the home screen. Push-and hold the left and right arrow buttons at the same time. While holding the buttons, you will see dashed-lines appear one-by-one, then disappear one-by-one. Keep holding the buttons until all three lines disappear and the "PRESS MENU TO LOCK" screen is displayed. When the display shows "PRESS MENU TO LOCK", release the buttons. Then push the Menu button to lock. The display will show "LOCKED" and then will return to the home screen.

Belt Clip Installation: For hands-free operation of the UN38 receiver, use the provided belt clip to secure the unit on your belt, pocket or pants.

To Install: Position the belt clip on the rear of the UN38 receiver as shown in Figure 3A. Turn the belt clip 180 degrees left or right as shown in Figure 3B. The belt clip is now installed and ready to use.

To Remove: Turn the belt clip 180 degrees so the edge points toward the top of the unit as shown in Figure 3A. Gently pull the belt clip away from the unit to remove.

FIG 3: Belt Clip Installation



Battery Information

The UN38 Receivers use 2 AA batteries.

Low Battery Indicator

The “ON” indicator on top of the unit will flash to indicate low battery.

ADDITIONAL FEATURES OF THE UN38 FM Digital Receiver:

Power Save Modes

1. Display Time Out The display screen has a timer that will turn the screen off after a period with no button pushes. This period can be adjusted in the menu between 5, 30, or 60 seconds. After the screen turns off, the receiver still continues to receive and produce audio after the display screen turns off. This feature, in conjunction with the sleep mode/ auto off, serve to save battery life.

2. Sleep Mode After approximately 6 minutes with no RF signal on the current channel, the receiver goes into “sleep mode” and starts a sleep timer. During sleep mode, the receiver consumes approximately 80% less power. Periodically it checks for RF signal on the current channel. If it finds signal on the current channel, it will wake up, produce audio, and reset the sleep timer. Any button push during sleep mode will also wake the receiver up and reset the sleep timer. During sleep mode, the receiver will not be looking for signal on any other channel than the one the receiver is set to. So, it will not find another transmitter on a different channel, or wake up simply because there is RF signal present within the 72-76MHz band. It will only wake up if there is a strong broadcast on the channel/ frequency the receiver is set to.

3. Auto-Off After approximately 2 hours with no RF signal on the current channel, the receiver will turn itself off completely. Once this happens, it cannot wake up. The user must power the unit ON again with the power button.

Squelch

When low RF signal is present from the transmitter, or if the receiver is getting too far away from the transmitter, the receiver may produce static or noisy audio. If the signal is low enough, the receiver will mute the audio completely. The point at which the receiver mutes the audio is adjustable.

Soft Audio Turn On

When powered on, or if the channel is changed, the receiver will mute the audio, then gradually bring the audio level up to the current volume setting. This setting can either be the last volume used, or a specific volume level.

System Specifications

Operating Freq: 17 Channels: 72.1, 72.2, 72.3, 72.4, 72.5, 72.6, 72.7, 72.8, 72.9, 74.7, 75.3, 75.4, 75.5, 75.6, 75.7, 75.8, or 75.9 MHz.

Receiver Antenna: Integral with earphone/headphone cord

Output Connector: 3.5 mm stereo phone jack, accepts either stereo or mono plug

Approvals: FCC, Industry Canada, RoHS, WEEE

IMPORTANT

WHEN PACKING THE SYSTEM, MAKE SURE ALL
TRANSMITTERS AND RECEIVERS ARE
IN THE **OFF** POSITION.

DO NOT FORCE THE 2 AA BATTERIES IN **BACKWARDS**,
DAMAGE TO THE TRANSMITTER
AND RECEIVERS WILL RESULT.

WARRANTY

The UNICOM UN46 transmitter and the UNICOM UN37 receivers are engineered and designed to provide you with many years of reliable service. UNICOM warrants it against defects in material and workmanship for TEN (10) years EXCEPT for earphones, headphones, carry cases and all other accessory products.

Accessory products carry a 90 day warranty.

If the product fails within the specified warranty period, UNICOM will determine whether to repair or replace the defective equipment. This warranty does not apply to physical damage, abuse, misuse or products that have been modified.

If it is necessary to return the system for service, a UNICOM representative will give you a Return Authorization Number (RA).



852 Chestatee Point Road, Dawsonville, GA 30534
(800) 513-9894 FAX (706) 216-4660
EMAIL: unicom@unicomsys.com
Unicomsys.com

Troubleshooting:

Problem:

Can't hear the person speaking/
No audio

Solution:

Verify transmitter & receiver are both ON.

Verify both are on the same channel/frequency.

Verify transmitter mic is not muted.

Make sure ear/headphone plug is inserted all the way into the jack of the receiver. The cord is the receiving antenna.

Try a different ear/headphone.

Try a different receiver.

Can't hear the person speaking

Adjust the volume on the transmitter.

above the room noise

Reposition the transmitter microphone closer to the mouth.

Limited Range

The ear/headphone cord is the antenna. Make sure it is not coiled up or obstructed.

Verify the transmitter distance from the receiver-try bringing them closer.

Verify there are no other transmitters in the area on the same interfering channels.

Transmitter batteries low? Receiver batteries low? Try new ones.

Feedback (squealing)

Lower the microphone volume on the transmitter.

Increase distance between the microphone & speaker.

Screen turns off too quickly

Adjust the screen timeout in the advanced settings menu.

Won't change NIMH batteries

Make sure the Alkaline/NiMH battery switch (located in the battery compartment) is set to NiMH.

Can't change channels or access any
of the settings. Display shows LOCKED.

Refer to "unlock channel" for instructions on how to unlock the receiver.



852 Chestatee Point Road, Dawsonville, GA 30534
(800) 513-9894 FAX (706) 216-4660
EMAIL: unicom@unicomsys.com
Unicomsys.com