Frequently Asked Questions

3M™ PELTOR™ ComTac™ VI NIB Headset MT20H682**-**N**

Headset Basics

What is included with the ComTac VI?

All configurations of the ComTac VI are shipped with foam ear cushions attached to the earcups, a pair of gel cushions, boom mic windscreen, and a user instruction. The folding headband version also includes a pair of ARC attachments. The backband version does not include the ARC attachments.

Is it available in headband only?

The ComTac VI has three possible suspension systems: folding headband, backband/neckband, and helmet attachment.

Can a backband be transitioned to use with ARC rail?

Yes, but it cannot be transitioned back into the backband configuration. The folding headband can be transition back and forth between headband and ARC configurations.

What is the difference between a Folding Headband and a Headband?

A folding headband allows the user to collapse the earcups into the area next to the folding band, reducing the space required to store the headset. A headband cannot be collapsed in this manner. The term “headband” alone is used in some ComTac materials. The ComTac VI utilizes a foldable headband.

Can I use with double hearing protection?

All ComTac headsets have a feature called “EarPlug Mode”. This feature allows the user to increase the volume of the headset to exceed the 82dB cutoff to help users hear radio communications more easily while wearing earplugs. It is intended to be used ONLY when the user is wearing properly fitted, in-the-ear hearing protection under the headset. Earplug mode is turned off when the headset is powered off.

Can the comms mic be moved to right side for left-handed shooters?

The comms mic on the ComTac VI has been designed to accommodate left-handed shooters without the need to move the comms mic to the right earcup. If the user prefers moving the comms mic to the right earcup, they will need to use the MT33 Flex comms mic and a comms mic guidepost that will accept the MT33 mic. You will note that the MT73 telescoping comms mic plugs into the front of the left earcup. The comms mic port on the right earcup is located on the rear of the earcup. The MT33 comms mic has a longer cable and can be plugged into the right earcup comms mic port.

If the ComTac VI is designed to accommodate left-handed shooters without the need to move the comms mic to the right earcup, why is there a comms mic DRAFT port on the right earcup?

This port was included to accommodate a Co2 mask comms mic for use during high altitude parachute operations where oxygen masks are required.

Can the headset be plugged into an aircraft intercom system?

It depends on the aircraft. The ComTac downlead can be used with a U94 PTT and will work with many military aircraft. Note that for users running dual comms, this will require disconnecting from one of their radio PTTs to free up a downlead to connect into the aircraft ICS PTT.

Can you use lithium AAA batteries?

Yes.

Is the ComTac VI water resistant?

Testing per MIL-STD 810G has shown the ComTac VI can survive water immersion to 1 meter for 1 hour.

What does "survive water immersion" mean?

Once the headset is removed from the water, it will power on and function. Please note, however, that water saturated wind screens may affect performance. If the headset needs to be used immediately, drain as much water from the headset earcups and mic windscreens as possible.

Can the headset be used in salt water?

The ComTacVI is also salt water survivable, but extra care should be taken to rinse the headset with fresh water to help reduce the harmful, corrosive issues related to salt. Salt crystal formation inside the speaker and mics can reduce headset performance if the headset is not rinsed with fresh water.

What is the best way to allow my ComTac headset to dry?

Remove the earcup cushions and ensure the earcups are situated to maximize air flow.

Should I clean and perform routine maintenance on my ComTac headset?

Yes. See the care and maintenance section of the user instruction for care and maintenance guidelines.

Why do some headsets have red rings on the downlead cable connector?

The PTT connector on split comms headsets utilizes red rings, whereas single comm downleads have black rings. Note: A split comms downlead connector will not seat fully into a single comms PTT. They should be used with a multi-comms PTT.

Natural Interaction Behavior (NIB)

What is NIB?

NIB is designed to improve near proximity communication in high noise without the need for an external communications radio nor vehicle/boat/aircraft intercom system when in transport. The NIB function allows for 4 team members to transmit simultaneously, and over 60 people to receive, within about 30 feet/10-meter radius of the talker(s). Technically, it can be described as a very low wattage, baseless, connectionless, broadcasting single hop mesh, using TDMA to create several dynamically allocated and reusable virtual communication channels.

Is it Bluetooth?

NIB is not Bluetooth, but rather a low wattage (.02mW) radio operating on a singular radio frequency.

Is this encrypted?

NIB transmissions are not encrypted but are transmitted using a TDMA protocol which makes it more challenging to decode. The low wattage, short range transmitting distance also makes the signal more difficult to intercept.

What is VOX?

VOX utilizes a voice activation technology to open a radio channel so the user can transmit. When using NIB in the NIB VOX On mode, NIB becomes voice activated in high noise environments (≈80dB SPL). If using VOX the user should ensure the comms mic is placed closely to the mouth and should speak slightly louder than normal to ensure their voice opens the radio channel.

When NIB is set to NIB VOX On mode, is the NIB powered off at noise levels less than ≈80dB SPL?

No. Unless set to NIB Off, the NIB is powered on and will receive NIB transmissions. At levels below ≈80dB, the user can still transmit on an open NIB channel by utilizing the NIB PTT button on the rear of the left earcup.

Can NIB be turned off?

When set to NIB off mode, NIB will not transmit or receive NIB transmissions.

What takes priority, NIB or Radio communication?

An incoming NIB communication and an incoming radio communication will both be heard in the headset. If the headset is set to VOX On mode and VOX is active due to the presence of noise, any outgoing radio transmission will also be heard over NIB, just as someone standing next to a person sending a radio transmission would hear the out-bound message. Incoming radio transmissions, however, will not be transmitted over NIB.

Will NIB move from one 10-meter bubble to another?

A NIB signal will travel approximately 10 meters from the sender, and that distance is what defines the “bubble.” The NIB signal is not retransmitted and/or relayed by other headsets.

Can I increase the range of the NIB?

NIB transmitting range is not adjustable. However, under certain conditions, a NIB transmission may travel further than 10 meters, and conversely, the signal may not travel 10 meters if obstructed by physical barriers.

Can more than 4 people talk at once?

NIB is designed with 4 talker slots and is therefore limited to 4 simultaneous talkers. Once a NIB transmission ends, the slot being used opens and can be filled by the next talker.

I received a busy signal. What does that mean?

NIB is designed with a warning signal to alert the user that their transmission was not sent. A user will only receive this warning signal when all four NIB slots are being used and they attempt a NIB transmission.

Should/Can I use VOX when shooting on a range?

NIB Vox is intended primarily for use in steady noise, such as aircraft and vehicle noise. Although the NIB radio is powered on and available via PTT when in NIB VOX On mode, it doesn’t become hands free until

the noise level rises to approximately 80 dB SPL. In steady state noise such as described above, the NIB can adapt to the environmental noise and not misinterpret the noise as an intended transmission from the user's voice. Impulse noise, on the other hand, is very different from steady noise in that it consists of random, very loud sounds. The randomness and intensity of the weapon firing can "trick" the NIB into thinking the user is attempting to open a channel with their voice. This can be especially challenging when there are more than 4 NIB users firing weapons. In this environment, all the headsets may produce busy channel warning signals due to channels being opened by impulse noise. When using NIB on a firing range, it is best to set NIB to NIB PTT and use the NIB PTT button to transmit.

Can VOX be adjusted to be activated for use in low noise environments?

VOX will not activate in low noise environments under 80db. However, NIB can be used in low noise, but the transmission requires the user to press the NIB PTT button to transmit. This can be accomplished in both NIB VOX and NIB PTT modes.

Mission Audio Profiles (MAP)

What is MAP?

The ComTac VI offers two modes for environmental listening: Classic and Advanced. Classic Mode is the same mode that all previous versions of ComTac headsets have used. When in Classic Mode, the volume control increases or decreases the loudness of environmental sounds picked up by the environmental microphones. Advanced Mode is a new and unique way of delivering environmental sounds to the user and includes Mission Audio Profiles or MAP. When in the Advanced Mode, a press of the "volume control" changes the headset to one of 5 Mission Audio Profiles. The five profiles are Observation, Patrolling, Conversation, Comfort and Mute. The MAP settings may or may not change the loudness of the environment but may change the frequency response of the environmental sounds being amplified to make it easier to hear.

Does the headset default to Advanced Mode?

No. The headset is shipped in Classic Mode. The user must access the menu to change from Classic to Advanced Mode. See the user instructions for details.

What is the difference in the 5 MAP settings?

Overwatch: Best when the user is motionless in low or no noise and sound detection is most important. Overwatch offers the most DRAFT amplification and widest frequency response of the MAP settings. It is reached by pressing the (+) button until a beep is heard.

Patrolling: Similar to overwatch in loudness level but with reduced high frequency amplification to decrease sounds of footsteps or equipment moving on the body when walking.

Conversation: Optimized for face-to-face conversations in low to moderate noise when not using NIB. This setting is also ideal for when sound localization is critical.

Comfort: Designed for use in high noise for extended periods of time such as during air movement, but when some environmental listening is still desired.

Mute: The environmental microphones are muted and is ideal for monitoring and communicating by radio or NIB when in high levels of noise such as during helicopter movement.

For more information on the Peltor ComTac VI and other Peltor products, please visit www.3M.com/peltortactical**.**

Always read and follow all User Instructions. For assistance, contact 3M Technical Service at 1 (800) 243-4630.

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