



3M™ PELTOR™ ComTac™ VIII Headsets (USAC Version)



Product Description

The 3M™ PELTOR™ ComTac™ VIII Headset helps protect your hearing and can help promote auditory situational awareness and communication in challenging acoustical environments. Some versions are equipped with a download cable for connection to a radio via a push-to-talk (PTT), and a noise cancelling speech microphone for communication in noise.

Key Features

- Soundscaping to help with radio communication speech intelligibility
- Earplug mode to help maintain auditory situational awareness when used in combination with earplugs
- Advanced listening mode featuring Mission Audio Profiles (MAP) to maximize audibility based on the acoustical environment
- Noise-cancelling speech microphone (IP68) for communication in noise (select models)
- Environmental listening for auditory situational awareness
- Hearing protection to help protect from impulse and steady state noise
- Tested in accordance with applicable sections of a variety of military and other standards

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Applications

The 3M™ PELTOR™ ComTac™ Headsets are designed to be used by military and law enforcement.

In the box

- 1x ComTac VIII headset
- 1x User Instructions
- 2x AAA Alkaline batteries

Technical data specifications

General

- **Model/Region:** ComTac VIII/USAC
- **Ghost Voice Language Options:** English (default), Spanish, French, German
- **Soundscape:** Yes
- **Battery Compartment:** Sealed enclosure. Single-sided
- **Headband Style:** Adjustable low profile rubberized band. Convertible to helmet attachment.
- **Earcup Style:** Low profile. Over-the-ear
- **Speech Microphone Type:** Telescope. Dynamic. Noise-cancelling. Waterproof (IP68), 3m / 30 min
- **Speech Microphone Frequency Response:** 200 Hz ~ 7 kHz
- **Speech Microphone Impedance:** Approximately 150 Ohm
- **Download Cable Type / Length:** Straight. Kevlar® Spun / Approximately 500 mm.

Download Plug Options

- **Single Comm: NATO wired** Plug type: 4-pin U/174 (-47)
- **Dual Comm:** Plug type: 5-pin U-384/U (-92)

Environmental Listening Function

- **Advanced:** Mission Audio Profiles (MAP) Default: Observation, Patrolling, Conversation, Comfort, OFF
- **Classic:** 4 Amplification Levels and OFF
- **Ear Plug Mode:** Yes

Power / Electrical Characteristics

- **Battery Type:** 2x AAA Alkaline (LR03)
- **Operating Time:** Approximately 50 hours

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Military Test Standards

- **Environmental Performance:** Tested in accordance with applicable sections of MIL-STD-801H
- **Electromagnetic Interference:** Tested in accordance with MIL-STD-461G

Physical Characteristics

- **Weight with Batteries:** (-09): 294 g (10.37 Oz). (-47): 339 g (11.95 Oz)
- **Color Options:** Coyote Brown (CY) / Charcoal Grey (GE) / O.D Green (GN)

Environmental Characteristics

- **Operating Temperature*:** -40°F / -40°C to 131°F / 55°C
- **Storage Temperature:** ≤72h: -67°F / -55°C to 159.8°F / 71°C . >72h: -4°F / -20°C to 104°F / 40°C
- **Product Lifetime:** 5 years, excluding batteries, in room temperature
- **Salt Water Survivability:** Salt water (5%) 2m at 30 min
- **Recommended Storage Conditions:** 5 years: Indoor Controlled Climate (<90% humidity)

IMPORTANT NOTE

*In freezing temperatures, warm up the earmuffs before use.

Noise Attenuation

- **Noise Reduction Rating (NRR)** Tested in accordance with ANSI S3.19-1974
- **Impulsive Peak Insertion Loss (IPIL)** Tested in accordance with ANSI/ASA S12.42-2010
- **DA Pam 40 501 Army Hearing Program 2015** Meets the single hearing protection requirement for both steady state and impulse noise.

Laboratory Noise Attenuation STANDARDS ANSI S3.19-1974 (USA)

U.S. EPA specifies the NRR as the measure of hearing protector noise reduction. However, 3M makes no warranties as to the suitability of the NRR for this purpose. 3M strongly recommends personal fit testing of hearing protectors. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to applicable regulations and guidance on how to adjust attenuation label value(s). It is recommended that the NRR be reduced by 50% to better estimate typical protection. The attenuation rating (NRR) was obtained with the device powered off.

Table 1: MT14H418A* Headband with foam cushion

	f(Hz)										
	125	250	500	1000	2000	3150	4000	6300	8000	A:4 NRR	A:5 CSA Class
A:2 Mean	14.0	19.4	27.9	32.3	31.7	39.7	44.5	40.1	41.0	22	B
A:3 Standard	2.7	3.2	2.6	2.1	2.8	3.6	3.4	2.6	2.2		

Table 2: MT14H418A* with HY80 Headband with gel cushion

	f(Hz)										
	125	250	500	1000	2000	3150	4000	6300	8000	A:4 NRR	A:5 CSA Class
A:2 Mean	14.9	18.5	27.1	34.5	34.1	39.8	42.1	40.9	40.1	23	A
A:3 Standard	2.6	2.4	2.5	2.8	2.5	3.2	3.4	2.7	2.9		

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Table 3: MT14H418A* Helmet Attachment with foam cushion on 3M™ Combat High Ballistic Helmet C105HC

	f(Hz)										
	125	250	500	1000	2000	3150	4000	6300	8000	A:4 NRR	A:5 CSA Class
A:2 Mean	13.1	19.2	27.0	31.0	31.4	39.0	43.1	42.0	42.2	22	B
A:3 Standard	2.9	2.7	2.2	2.0	2.8	2.9	3.2	3.0	3.3		

Table 4: MT14H418A* with HY80 Helmet Attachment with gel cushion on 3M™ Combat High Ballistic Helmet C105HC

	f(Hz)										
	125	250	500	1000	2000	3150	4000	6300	8000	A:4 NRR	A:5 CSA Class
A:2 Mean	13.1	19.2	27.0	31.0	31.4	39.0	43.1	42.0	42.2	22	A
A:3 Standard	2.9	2.7	2.2	2.0	2.8	2.9	3.2	3.0	3.3		

Table 5: MT14H418A* with HY80 Headband, and TEP-300 with GRM-25 Communication Eartips Dual protection headband with gel cushions

	f(Hz)										
	125	250	500	1000	2000	3150	4000	6300	8000	A:4 NRR	A:5 CSA Class
A:2 Mean	34.4	35.9	45.2	44.6	41.7	49.4	50.9	49.3	49.3	33	A
A:3 Standard	5.5	3.9	4.8	3.8	4.5	4.1	4.3	4.8	4.9		

*Designates a product variant.

CAUTION

When worn according to the User Instructions, these hearing protectors help reduce exposure to both continuous noises, such as industrial noises and noises from vehicles and aircraft, as well as very loud impulse noises, such as gunfire. It is difficult to predict the required and/or actual hearing protection obtained during exposure to impulse noises. For gunfire, the weapon type, number of rounds fired, proper selection, fit and use of hearing protection, proper care of hearing protection, and other variables will impact performance. To learn more about hearing protection for impulse noise, visit www.3M.com/hearing.

WARNING

These hearing protectors help reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protection at all times that you are exposed to noise may result in hearing loss or injury. For correct use, consult supervisor and User Instruction, or call 3M PSD Technical Service in the USA at 1-800-665-2942.

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Impulsive Peak Insertion Loss

ComTac VIII Headband with gel cushions; MT14H418A

Table 6: Vol/Gain: Off

Test Level Nominal Impulsive Peak Level (dB SPL)	Impulsive Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	16.1	2.5
150	24.4	1.6
68	32.7	0.8

Table 7: Vol/Gain: Advance mode observation max volume

Test Level Nominal Impulsive Peak Level (dB SPL)	Impulsive Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	13.4	1.2
150	23.5	1.9
168	32.7	0.8

Table 8: Vol/Gain: Unity (Classic mode, Max volume, Down 1 step)

Test Level Nominal Impulsive Peak Level (dB SPL)	Impulsive Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	15.3	2.5
150	24.0	2.1
168	32.9	1.0

Headset Models

Table 9: ComTac Headset Models

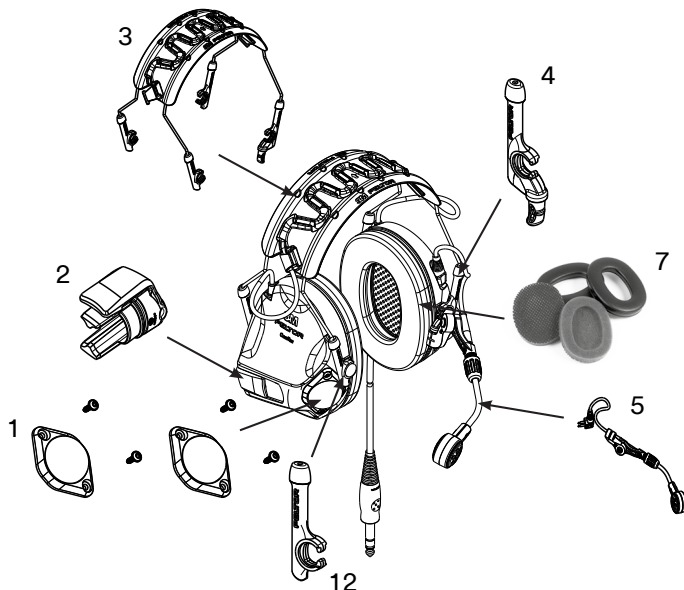
Part number	Description	Connector
MT14H418A-09 GN	3M™ PELTOR™ ComTac™ VIII Hearing Defender, O.D. Green	Hearing Defender
MT14H418A-09 GE	3M™ PELTOR™ ComTac™ VIII Hearing Defender, Charcoal Grey	Hearing Defender
MT14H418A-09 CY	3M™ PELTOR™ ComTac™ VIII Hearing Defender, Coyote Brown	Hearing Defender
MT14H418A-47 GN	3M™ PELTOR™ ComTac™ VIII Headset, O.D. Green	4-pin Single- COMM
MT14H418A-47 GE	3M™ PELTOR™ ComTac™ VIII Headset, Charcoal Grey	4-pin Single- COMM
MT14H418A-47 CY	3M™ PELTOR™ ComTac™ VIII Headset, Coyote Brown	4-pin Single- COMM
MT14H418A-92 GN	3M™ PELTOR™ ComTac™ VIII Headset, O.D. Green	5-pin Dual- COMM
MT14H418A-92 GE	3M™ PELTOR™ ComTac™ VIII Headset, Charcoal Grey	5-pin Dual- COMM
MT14H418A-92 CY	3M™ PELTOR™ ComTac™ VIII Headset, Coyote Brown	5-pin Dual- COMM

Replacement Parts and Accessories

Table 10: Replacement Parts and Accessories

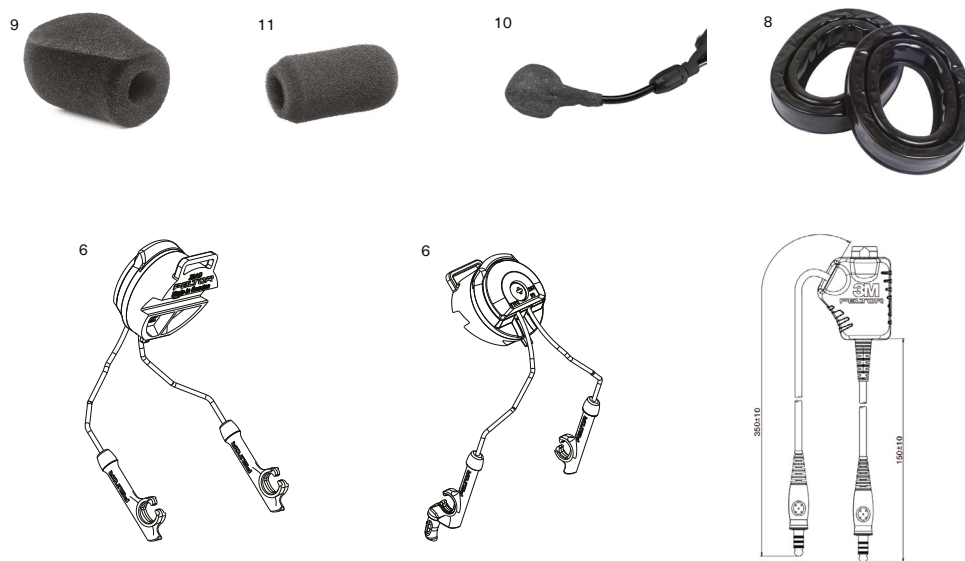
Component Number	Part Number	Description	3M SAP ID
1	M194/2	3M™ PELTOR™ ComTac™ VII,VIII, IX. Wind Shield Kit for Surround Mic, Pair	7100232688
2	1086 SV/1	3M™ PELTOR™ ComTac™ VII,VIII, IX. Battery Lid	7100232689
3	AGM/1	3M™ PELTOR™ ComTac™ VII,VIII, IX. Headband	7100227486
4	A47/1	3M™ PELTOR™ ComTac™ VII,VIII, IX. Microphone Guide	7100227492
5	MT71/1	3M™ PELTOR™ ComTac™ VII,VIII, IX. Boom Microphone dyn.	7100230581
6	P3ADG47-F SV/2	3M™ PELTOR™ ComTac™ VII,VIII, IX. ARC Rail Attachment. Pair	7100227493
7	HY68 SV	3M™ PELTOR™ Hygienekit. Pair	7000108023
8	HY80-EU	3M™ PELTOR™ Replacement Gel Cushions. Pair	7100101182
9	M42/1	3M™ PELTOR™ Large Windshield for speech microphone	7000039687
10	HYM1000	3M™ PELTOR™ Protection tape for speech microphone	7100064281
11	M171/2	3M™ PELTOR™ Wind shield for speech microphone. Pair	7100112112
12	A46/4	3M™ PELTOR™ ComTac™ VII,VIII, IX. 4 x Guides	7010044799
13	PPN: 23-0052	3M™ PELTOR™ Cable Splitter: 5-pole female to dual 4-pole (NATO) male	N/A

Figure 1: ComTac Headset Components



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Figure 2: ComTac Headset Accessories



Warranty and Important Notice

Warranty

The warranty does not cover any damage caused by neglected maintenance or careless handling. For more information on maintenance, please see the user instruction. For complete warranty condition, contact your dealer or local 3M office.

Important Notice

3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence. 3M acknowledges the respective Trademark Owners' rights in this literature.



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