### Occupational Health and Environmental Safety Division 3M<sup>™</sup> Peltor<sup>™</sup> COMTAC Tactical Communication Headsets





# avanced Communication Headsets

### **COMTAC Tactical Communication Headsets**

The 3M<sup>™</sup> Peltor<sup>™</sup> COMTAC family of headsets provides tactical communication and hearing protection for today's modern warfighter. COMTAC has been designed specifically for use with firearms and ballistic combat helmets. The headsets feature external microphones for "talk-thru" capability so today's warfighter can maintain situational awareness while still protecting their hearing. The COMTAC III Advanced Communication Headset has been fielded and standardized by various DOD agencies, specifically U.S. SOCOM and U.S. Army PEO Soldier.

### COMTAC III Advanced Communication Headset (ACH)

- · Level-dependent surround sound for "talk-thru" function
- External communications and "talk-thru" are battery independent for Rx/Tx fail safe (more information on page 5)
- · Ambidextrous noise-canceling boom mic (that can be mounted on either left or right side by operator) angled to minimize interference with peripheral vision
- Single and Dual COMM variants available
- · Adjustable sizing to fit different users



Gel Cushion Option P/N· HY80A



Boom Mic LED P/N·LEDMT31-BG\_LEDMT31-NV







Neckband Version U.S. Army PEO Soldier TCAPS

#### National Stock # (NSN) Kit Description

5965-01-572-7941 5965-01-572-7829 5965-01-572-7946 5965-01-572-7797 5965-01-572-7803

Single COMM Olive Drab (0.D.) Green, One 6-Pin Radio PTT

Single COMM Coyote Brown, One 6-Pin Radio PTT Dual COMM Olive Drab (0.D.) Green, Two 6-Pin Radio PTT's Dual COMM Coyote Brown, Two 6-Pin Radio PTT's Boom Mic (spare)

### COMTAC III ARC Mounted Headset

3M is pleased to introduce our new COMTAC III ARC configuration for use with the Ops-Core<sup>™</sup> FAST<sup>™</sup> Helmet. The integrated solution addresses the challenges associated with donning and doffing of the helmet, eliminates "hot spots" and reduces the need to modify the internal padding of the helmet for proper fitting. The system utilizes 3M's mounting mechanism which connects the headset to the helmet Accessory Rail Connector.





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### **COMTAC IV Hybrid Communication Headset**

- Same features and functionality as COMTAC III
- Hybrid approach addresses customer demand for in-ear hearing protection while retaining the advantage of the COMTAC III over-the-ear style
- Headband mechanically stabilizes the headset to relieve issues of earplugs dislodging due to cable snags and body movement
- Electronics are contained completely inside the headset housing, eliminating the need for a large, heavy radio control push-to-talk
- Headsets are interchangeable with previous versions of COMTAC and backwards compatible with pre-existing PTT adapters
- Same operation as current Peltor COMTAC Headsets no additional training required
- No software loads or outside power required; complete self-contained headset with Rx/Tx fail safe (more information on page 5)

### **Eartip Options**

E-A-R<sup>™</sup> UltraFit<sup>™</sup> reusable eartip

- Triple-flange design
- · Washable, reusable
- For desert/sand environments

E-A-R<sup>™</sup> Classic<sup>™</sup> foam eartip

- The original roll-down foam earplug
- Resistant to sweat and moisture
- Reduced earcanal pressure





### Push-To-Talk Adapters

- Single and dual COMM PTT's available
- For use with both COMTAC III and COMTAC IV
- PTT's are designed to fit the size and shape of either hand
- PTT's can be used with a gloved hand
- Designed to reduce accidental activation
- TP-120 Connection to the unit serves as a break-away connector for removal in emergency situations
- MIL-C-9177 U94/A PTT available



P/N: FL-U/94A







### **Communication Headsets**



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### **Communications Management**

COMTAC III and COMTAC IV both have Single and Dual Comm variants for streamline cable management. The downleads separate left and right audio traffic. Each COMTAC downlead terminates in a standard U/174 NATO wired "Quick Disconnect" plug. The U/174 Plug is a standard military aviation plug and will plug directly into most military aviation intercom systems.



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### Talk-Through

Level-Dependant Functionality, commonly referred to as "talk thru," is a means of allowing safe audio sounds to bypass the individual hearing protection while still protecting against harmful noises. This is accomplished with a proprietary digital audio circuit integrated into the headset. A microphone receives the sounds outside the headset and transmits them to a speaker inside the headset. The Level-Dependant digital audio circuit senses noise levels above the desired threshold and compresses them to a safe decibel level or amplifies weak sounds to an audible level.

### **Compression vs. Clipping**

3M has incorporated compression technology to remove the "clipping" effect heard in common talk-thru systems. "Clipping" can result in missing the first syllable of important commands. This technology resolves that issue and dramatically improves speech intelligibility.

### Fail Safe

COMTAC external communication (i.e. radio or intercom) and "talk thru" are completely independent of one another. In the unlikely event of electronic failure or battery depletion, external communications will continue to function.

### Environmental

- MIL STD 810F, Department of Defense Test Method Standard for Environmental Engineering Considerations and Laboratory Tests
- Submersion: 3 feet, 30 minutes, salt-water-survivable

### EMI

- MIL STD 461E, Department of Defense Interface Standard, Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment
- CS114, RE101, RE-102-4, RS101, and RS103 requirements

### Noise Reduction Ratings (NRR)

(per ANSI S3.19-1974; NAVLAP certified - tested internally at 3M's NAVLAP-accredited facility)

- COMTAC III ACH (headband version, standard foam cushion): NRR 23 dB
- COMTAC IV: Classic foam eartip NRR 30 dB; UltraFit reusable eartip NRR 18 dB

### **Product Classifications**

Our products generally meet government procurement requirements in most applications. Contact your 3M Sales Representative or Customer Service Representative to obtain product certifications for the following:

- Buy American Act for Department of Defense
- Trade Agreement Act
- Berry Amendment
- Headsets classified as ECCN: 5A991.G



#### **COMTAC Product Preference Selector**

Use the options below to identify which COMTAC headset may be preferred for your application. Multiple communication management configurations are available; please contact 3M Technical Assistance at 800-665-2942 for help in customizing for your mission.





### **COMTAC Part # Selector**

Use the categories below to identify which COMTAC headset part # to use for ordering purposes.

COMTAC headsets and accessories can be bought separately. If your configuration is not identified here, please call 3M Technical Assistance at 800-665-2942.

Pre-assembled COMTAC kits include: headset, adapter (PTT), bag, batteries and gel ear cushions. Headband kits also include two Oblong ZORBIUM<sup>®</sup> ACTION PADS (ZAP<sup>™</sup>) to accommodate headband headset integration within ground combat helmets.

COMTAC ACH	COMTAC IV	Single Comm (1 PTT)	Dual Comm (2 PTT's)	Foliage Green	Covert Black	Coyote Brown	OD Green	PRC/153 Motorola XTS Series	AN/PRC- 148, 150, 152, 119, 117	Part # Prefix (Suffix at bottom of table)
٠		٠		•					•	88060-
•			•	•					•	88061-
٠		•			•			•		88063-
•		٠				•			•	88078-
٠			•			•			•	88079-
•		٠					•		•	88080-
٠			•				•		•	88081-
	•	٠					•		•	88401-
	•		•				•		•	88402-
	•	•				•			•	88403-
	•		•			•			•	88404-

Part # suffix options:					
-00000	headband kit				
-B	backband kit				
-ARC	Arc Rail attachment				
(valid part # example: 88060-00000)					



#### **A** WARNING!

These hearing protectors help reduce exposure to hazardous noise and other loud sounds. **Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury.** For proper use, see supervisor, User Instructions, or call 3M in U.S.A. at 1-800-243-4630. In Canada, call Technical Service at 1-800-267-4414. If there is any drainage from your ear or you have an ear infection, consult with your physician before wearing ear plugs. Failure to do so may result in hearing loss or injury.

\*Research suggests that many users will receive less noise reduction than indicated by the NRR due to variation in earplug fit and wearing time. It is recommended that the NRR be reduced by 50% for estimating the average amount of noise reduction provided.

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Occupational Health & Environmental Safety Division 3M Center St. Paul, MN 55144-1000 www.3M.com

For More Information: Sales Assistance: 1-800-328-1667 Technical Assistance: 1-800-665-2942 Website: www.3M.com/military Email: peltor.comms@mmm.com

#### Repairs and Warranty Items: 3M Peltor 5457 West 79th St

5457 West 79th St. Indianapolis, IN 46268 Attn: Repairs

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