

# Questions & Answers

## MSA CHIPS™ Communication System



Why is this product called the CHIPS Communication System?

MSA's CHIPS System is an acronym for Communication Headset Integrated Product Suite and offers soldiers a choice of three communication headsets designed to meet their communication and hearing protection requirements. The system also offers simultaneous interface capability with three communication sources.

What three CHIPS System communication headsets are available?

The CHIPS System has two high-noise and one low-noise communication headsets. High-noise headsets are available in a Circumaural Headset and an In-Ear Headset with hearing protection/communication solutions. Low-noise headsets offer communication capability in a lightweight neckband style.

Do all three headsets maintain soldiers' situational awareness?

**Yes.** Two high-noise headsets use spy microphones positioned on the exterior surfaces of the hearing protector's left and right bodies. Spy microphones pick up ambient environment sounds, allowing soldiers to identify sound source locations. Low-noise headsets do not cover the ear, allowing soldiers to hear natural ambient sounds.

Can low-noise headsets be used in environments where noise levels exceed 85 decibels?

**Yes.** Low-noise headsets may be used in high-noise military operations that require hearing protection, **when and only when**, soldiers protect their hearing with another hearing protector, such as ear plugs. When integrated with earplugs, soldiers benefit from hearing protection while maintaining the ability to hear inbound communications through headset bone conductive speakers. This configuration offers soldiers hearing protection with communication capabilities, but sacrifices situational awareness.

Is there a choice of microphones available for the Circumaural Headset?

**Yes.** The Circumaural Headset offers four field-replaceable communication microphones, depending upon mission requirements.

Available microphones are:

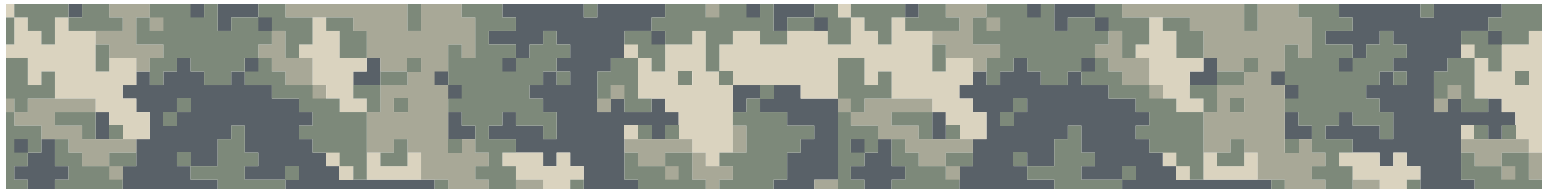
- ▶ SOS dynamic microphone
- ▶ standard dynamic microphone
- ▶ Electret microphone
- ▶ Electret throat microphone

All microphone options thread onto an adaptor located at the bottom of left or right cup assemblies.

How many inbound communication sources can users hear when using the CHIPS System?

All three headsets have the capability of receiving inbound communication from up to three independent sources. When three communication sources are active, all three headsets process communiqués the same way

- A. Radio 1 - left ear
- B. Radio 2 - right ear
- C. Intercom - left and right ears simultaneously



Does the ability to hear inbound communication from three sources require three cables leading to headsets from the PTT?

**No.** The CHIPS Communication headsets use on multi-wire cable and connector that route three inbound and single outbound communication signals through one download. There is no need for multiple cables with the CHIPS System, thereby minimizing potential snag hazards.

Does the CHIPS Communication System offer soldiers dual-hearing protection capability in situations requiring high levels of noise protection in situations such as tracked vehicles?

**Yes.** The CHIPS Communication System allows soldiers to use both high-noise communication headsets (Circumaural and In-Ear Headsets) simultaneously. Dual-headset mode provides soldiers with higher NRR performance level while maintaining situational awareness. The intelligence built into the CHIPS System detects the dual protection mode and maintains communication ability through the In-Ear Headset, maintaining situational awareness through spy microphones on Circumaural Headsets.

How does the CHIPS Communication System provide headset power?

Circumaural Headsets use two AAA alkaline batteries to power spy microphones; power is not required from headsets of the PTT for communication. Low-noise headsets do not require a communication power source. In-Ear Headset system draws power from communication radios. In situations where headsets are connected to communication sources that do not have power-out connections, headsets are powered by CR123 lithium batteries located in push-to-talk assemblies. Only In-Ear Headsets require a communication power source.

How do I know which radios are connected to the CHIPS Communication System?

The CHIPS Communication System features voice annunciation that alerts users when:

- ▶ A radio or intercom is connected or disconnected to the PTT.
- ▶ In-ear volume control for ambient and radio/intercom volume is adjusted.

What are MOD button functions on the CHIPS PTT?

The **MODE** button serves three important functions on CHIPS Systems:

1. Powers on the PTT when users push and hold the **MODE** button for three seconds.
2. Turns the In-Ear Headset ambient listening function **ON** or **OFF**. A short **MODE** button press turns ON the ambient listening feature. Pressing and holding the **MODE** button for three seconds turns OFF the ambient listening feature.
3. Selects between radio/VIC-3/intercom listening volume control and high-noise In-Ear Headset ambient volume control.

There are a number of radio and intercom interface cables available for the CHIPS System, but the cable that my radio requires is not listed. What should I do?

MSA is introducing the CHIPS System with the most common radio and intercom communication systems currently used by the U.S. Defense Department. If a required radio cable is not listed, contact your MSA sales associate to see if the cable has been added since the CHIPS System's introduction. MSA will continue to update the list of interfaces offered; custom cables can be developed upon request.

Where do I find a complete CHIPS Communication System parts list?

A complete listing of accessories and replaceable component parts appears at the back of the CHIPS Communication System instruction manual.

**Note:** This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

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