

- > Lightweight
- > Manual PTT only or VOX facility added
- > Helmet compatible
- > Good stability under combat conditions
- > Good speech quality
- > Robust, low profile, single-sided headset
- > Excellent long term comfort



# ETT123-TA & ETT123-ATA COBRA HEADSET



Cobra is a rugged, lightweight headset designed to meet the needs of military users in the harshest operating conditions. The headset is fully compatible with most infantry combat helmets and other in-service equipment.

# **Applications**

The widespread use of small, lightweight radios in strenuous combat conditions has produced a need for a small compatible headset to meet the same rigorous requirements. This headset must be robust, lightweight and unobtrusive, and it must not be dislodged by the activities of the user. Furthermore it must be acceptable to the wearers of the widest range of infantry helmets and other types of protective headgear and military uniform.



The thin, fully flexible boom arm does not interfere with peripheral vision and the "stand-off" earphone, which does not obstruct the ear, allows the clear reception of local sounds.



Designed specifically for use by the Infantry, the unobtrusive Cobra headset provides clear speech quality, combined with greater comfort and improved situational awareness in the combat role.

# PRODUCT DESCRIPTION

The Cobra single-sided headset, configured for use with PR4G family 3000 radios, has been designed to satisfy these needs, and provides a tough, unobtrusive, hands-free solution suitable for use in defence forces and law enforcement agencies worldwide.

Two different versions are currently available: the ETT123-ATA single-sided headset fitted with a manual PTT switch and the ETT123-TA single-sided headset with VOX for hands-free transmission (in addition to manual PTT).

#### The Headset

ETT123 Cobra The Headset consists of a small housing, containing the cable terminations, to which the boom microphone, headstrap and adjustable earpiece The headstrap is are attached. secured around the user's head with an adjustable fastener ensuring complete stability under the most strenuous physical activities of the The design also infantryman. ensures that comfort is not compromised when the headset is worn for long periods.

The earphone is a close-coupled, supra aural type which stands off the ear, further enhancing comfort, and as the ear is not covered, monitoring of ambient noises and adjacent conversation is also maximised.

The low mass, noise-cancelling microphone, mounted on a flexible boom arm, is an electret type.

In addition to the standard headstrap, attachments are available to fasten the headset to the side of the helmet, or for less severe conditions, to provide a simple spring headband.

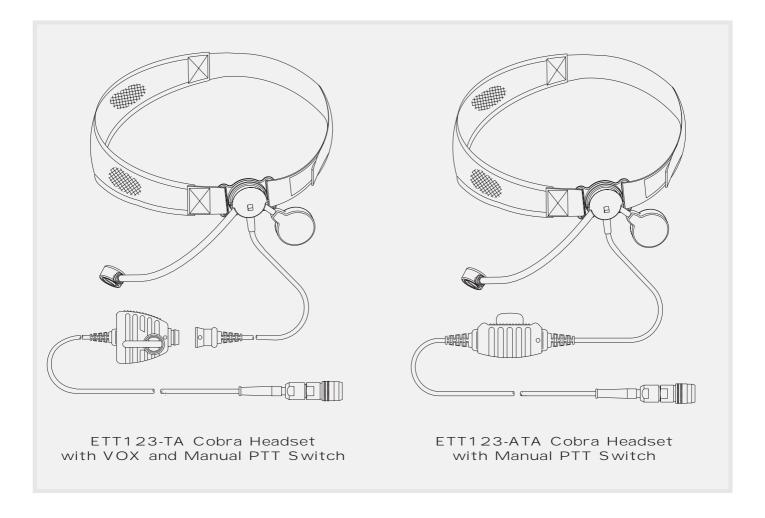
The Cobra is designed to be worn over the left ear, to avoid interference with shoulder-fired weapons for most users. The exceptionally low profile of the earpiece allows the user to wear even the most close fitting ballistic infantry helmet or other specialized headgear, such as ski-troop parka hoods, chemical and biological hoods, paratroop helmets or national head-dress. The headset is easily hidden under the helmet and, when not being worn, the Cobra is sufficiently compact to be rolled up and carried in a jacket or trouser pocket.

### The Switchbox

The Switchbox is a moulded assembly with an integral clothing clip. The box is fully waterproof and houses the tactile action PTT switch and the amplifier board. If required, the VOX circuitry is also contained within the box. The straight lower cable, which connects to the switchbox via a strain relief grommet, is fitted with a PR4G compatible 14-pin connector. The upper termination, of the ETT123-TA with VOX, is a quick release connector which interfaces with the headset downlead.

## Maintainability

Cobra is designed for high reliability and minimal maintenance. Two main replacement assemblies are available on the ETT123-TA; the headset with short downlead and mating plug; and the switchbox with main cable and radio terminating plug. The interface is a snap connector and no tools are required. In addition, the headstrap and muffler can be replaced without tools.



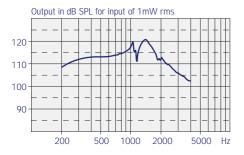
# TECHNICAL SPECIFICATIONS

#### **ELECTRO-ACOUSTIC DATA**

Earphone and microphone measurements are made as described in publication no. 9022.

#### **Earphone**

Transducer type: moving coil Typical frequency response:



Sensitivity: 117dB SPL/mW rms at 1kHz

nominally

Impedance: 300ohms at 1kHz nominally Climatic: environmentally protected

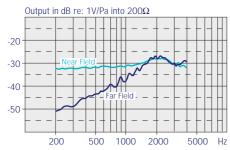
#### **Boom Microphone**

Transducer type: noise cancelling electret

Part No: 561265

Sensitivity: -31dB re 1V/Pa, for a drive voltage of 10V dc via a 200ohms load, nominally. Measured with the Pressel Box in-line

Typical frequency response:



Impedance: 200ohms at 1kHz, nominally Noise cancelling performance: difference in output level of nominally 18dB at 200Hz between near field and far field (i.e. at 1m from source)

Climatic: environmentally protected

#### **ELECTRICAL DATA**

#### **Switches**

The Press-to-talk (PTT) switch shall be capable of 500,000 make-break operations

#### **VOX Characteristics**

VOX supply voltage: 9V to 30V

**VOX current consumption**: typically 5mA **VOX selection**: by means of switch on PTT

box Autp/Manual"

Override: normal PTT switch can be used

to override VOX at any time

**EMC:** the design has been optimised to meet the RF environments of battlefield tactical radios

## PHYSICAL DATA

#### **Environmental**

Usage temperature: -30°C to +55°C Storage temperature: -40°C to +70°C Humidity range: Up to 95% RH Immersion: 2 hours at 1 metre

ETA123-ATA Mass: 200g; headset and

PTT switch assembly

ETA123-TA Mass: 400g; headset and PTT

switch with VOX assembly

### **Helmet Compatibility**

This headset is compatible with a wide range of infantry helmets, including the British Army GS Mk 6 and the US Army PASGT helmets.

<u>Authorized Distributor</u>

