

# FCS

## PICKUP AND NOISEREDUCTION COMTAC HEADSET

# COMTAC-3



High  
endurance



Multi-mode  
switch



SEO



26dB noise  
reduction



360°  
pickup system



Hearing  
protection

Falco Communications System



# COMTAC-3

## Pickup and Noise Reduction Comtac Headset

### Product Introduction

FCS headset adopts the self-developed True Sound Field Situation (TSFS) panoramic sound real-world sound processing technology. After worn by the user, it can effectively enhance the auditory judgment of the sound environment situation on the scene, such as some common sound features, and carry out enhancement, enhancement or attenuation processing (footsteps, gunfire, explosive sound). After various tests and actual combat tests, the user is allowed to obtain more acute and faster tactical responses. FCS headset have good compatibility. PTT can be adapted to various radio stations with different interfaces.

Features:

1. Through active anti-noise design, the user's hearing is protected from damage and injury, and the comfort of the user's hearing in harsh noise environment is improved.
2. Communication function, based on the advantages of active anti-noise design, can provide clear communication sound listening and picking effects from various communication systems.
3. It has the intelligent filtering function of complex environmental sound, and can intelligently and automatically select to make normal environmental sound enter the user's auditory system. It can avoid any auditory blockage caused by the active anti-noise system, and enhance the vigilance and response of soldiers in any tactical environment due to the enhancement of sound.
4. It has multi-mode switch function so that the corresponding response mode can be selected according to the different user environment.
5. As one of the accessories of communication products, it deeply considers the electromagnetic compatibility standards of EMI and EMC related industries in circuit design, which can effectively avoid electromagnetic interference.
6. Various kinds of low power consumption components are matched together, with ultra-low power consumption, so that users can use it for a long time.



## COMTAC-3

- 1 - Head beam
- 2 - Extension-type adjustment makes the headset fitter
- 3 - TSFS pickup system
- 4 - Microphone
- 5 - **+[VOL+]**
- 6 - **-[VOL-]**
- 7 - AAA (No. 7) battery compartment
- 8 - Installation position of microphone
- 9 - U-174/U plug



# PANORAMIC SOUND REAL-WORLD SOUND PROCESSING TECHNOLOGY

With no dead angle within 360°, automatic amplification of subtle sound,  
automatic adjustment to certain specific sound and  
provision of more details, it is suitable for tactical judgment



## Mode introduction

Indoor mode	In shooting gallery or indoor confined space environment, reflected noise is further eliminated
Outdoor mode	In the open space designed outdoors, short pulse noise is eliminated
Monitor mode	In extremely quiet environment, the ambient sound can be amplified several times, and long-distance radio and subtle sound amplification can be used to enhance hearing.



# 26DB NOISE REDUCTION

**NOISE REDUCTION RATE NNR: 26DB(H:34dB/M:28dB/L:16dB)**



**Table of Exponential Frequency Attenuation for Active Noise Reduction System**

Attenuation Values for Comtac III ACH							
Frequency(Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation(dB)	11.2	16.6	23.5	27.2	30.1	34.8	36.6
Standard Deviation(dB)	3	3	3	2	2	2	3
Min Attenuation(dB)	9.3	15.6	25.5	27.4	28.7	33.6	36.9
NR	NR:20dB H:27dB M:20dB L:16dB						

# **ORIGINAL SEO SHOOTING ENVIRONMENT HEARING PROTECTION OPTIMIZATION TECHNIQUE**



## **HEARING PROTECTION**

**FULLY AUTOMATIC ELECTRONIC SOUND PRESSURE PROTECTION  
CRITICAL POINT: ABOUT 85DB AUTOMATICALLY  
REDUCE HIGH-PRESSURE SOUND TO A REASONABLE SOUND PRESSURE  
LEVEL AND TRANSMIT IT TO THE AUDITORY SYSTEM (EAR).**

### **Mode introduction**

In the process of development, all the tests were carried out in indoor shooting gallery and other high noise application environments, and the data were collected, verified and analyzed. Based on the sound model of sound generation and detonation characteristics in indoor and outdoor environment in actual combat environment, the optimized SEO (shooting environmental optimization) passive sound pressure control and hearing protection technology were specially designed to optimize various indexes and data of hearing protection.

Electronic parts and components		Specifications and parameters	
Pickup elements		Sensitivity: -38dB (±3dB, average of frequencies)	
		Noise reduction value of start: ≈85dB	
		Supply power: 2 AAA dry batteries	
		Pickup characteristic: all-direction	
		Diameter: 27mm	
Loud-speaker element		Impedance characteristic: 32 OHM	
		Rated power: 30mW	
		Frequency response characteristic: full spectrum band	
Microphone element		Microphone: electret capacitance microphone	
		Loudspeaker: Dynamic	
Background noise audio sound		20-15000Hz	
Sound pressure protection		85-95dB	
Product parameters			
Interface		Nato U-174/U plug	
Battery		AAA battery * 2, used for wireless communication. The headset can still work independently without turning on the power supply or when the battery runs out.	
Compatibility		Various US army standard communication models (Such as PRC-148/152, Faclo FCS-148, PELTOR PTT) or general market products	
material		PVC	
Weight		320g	

▶ EX helmet headset holder (EX/WENDY rail) No. : TB997



▶ COMTAC-3



FG

▶ OTH headset buckle and holder (FAST rail) No. TB1292



FG



BK



DE



BK

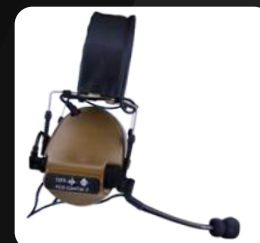
▶ Helme headset mouth holder (FAST rail)



BTB334 BK



TB347 DE



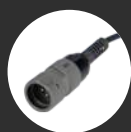
DE

## ▶ FCS exclusive launch of multi-purpose PTT, adapted to various intercom models:

FCS Comtac3 Mu PTT



▶ PTT standard version: straight out U-299 /U, suitable for PRC148, PRC152, PRC117G, etc



Kenwood interface: corresponding to Kenwood's double-space plug-in model, adapting to all kinds of domestic socket models of the same type, such as Baofeng, Shunquan, Ouxun, etc.



MTP850, MTH800 series interface: MTP850, MTH800 and other models, all types of the same type socket model.



ICOM/yeasu/alenco interface: adapting to PD780HT1000 JT1000 MTS2000 XTS2500/3000/5000



Hyter interface: adapting to PD780



XTS interface: adapting to HT1000 JT1000 MTS2000 MTS2500/3000/5000





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