

FCS COMMUNICATION, PICKUP AND NOISE REDUCTION COMTAC HEADSET

FCS TRAC



High
endurance



Multi-mode
switch



SEO



26dB noise
reduction



360°
pickup system



Hearing
protection



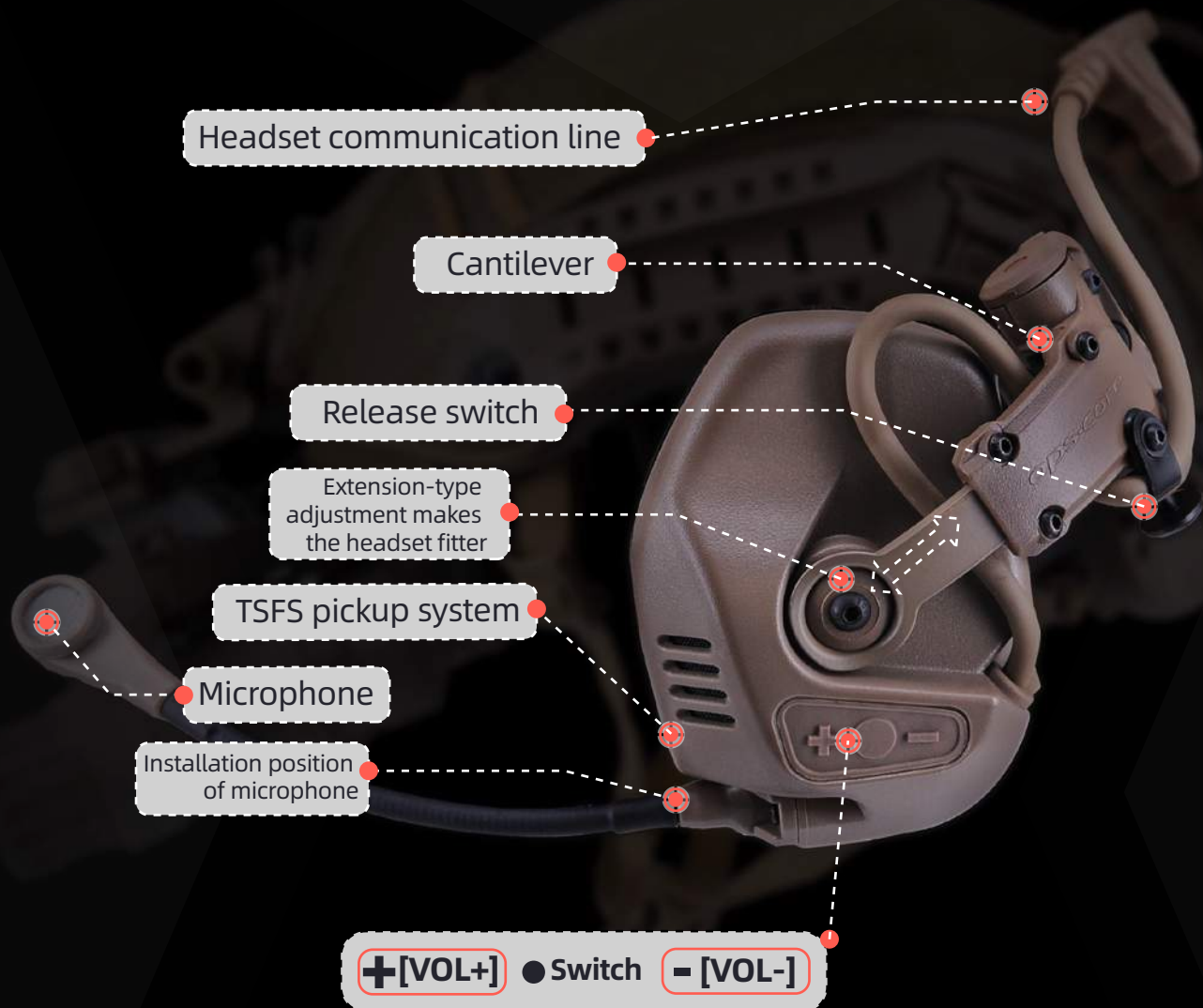
PICKUP AND NOISE REDUCTION COMTAC HEADSET

Product introduction

FCS RAC Communication, Pickup and Noise Reduction Comtac 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. The headset have good compatibility. PTT can be adapted to various radio stations with different interfaces.

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.

Button Description



 **DE Sand**



 **BK Black**



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

TSFS (True Sound Field Situation) 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 NRR:: 26dB(H:34dB/M:28dB/L:16dB)

Table of Exponential Frequency Attenuation for Active Noise Reduction System

Attenuation Values for RAC Rial Attached Communications							
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
NRR	NRR:20dB H:27dB M:20dB L:16dB						

ORIGINAL SEO SHOOTING ENVIRONMENT HEARING PROTECTION OPTIMIZATION TECHNIQUE PROTECTS AUDITORY SENSE



PROTECTION OF HEARING

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.

Product view



● Front view



● Side view



● Expand view



● Expand view



● Storage view



● Storage view

Electronic parts and components Specifications and parameters

Pickup elements	Sensitivity: -44dB (± 3 dB, average of frequencies)
	Noise reduction value of start: ≈ 85 dB
	Supply power: 2 AAA dry batteries
	Pickup characteristic: all-direction
	Size diameter: 28mm
Loudspeaker element	Impedance characteristic: 32 OHM
	Rated power: 30mW
	Frequency response characteristic: full spectrum band
Wire rod	Diameter: 5.5mm
	Wire characteristics: mixed materials
	Temperature resistance characteristics: $\approx -30^{\circ}\text{C} - 105^{\circ}\text{C}$
Product parameters	
Length	130mm
Width	500mm
Height	100mm
Weight	285g
PTT components	120g

Note: Dimensions are measured without protrusions



Falco Communications System