

RA4000

High Noise Headset



Ultimate hearing protection in high noise environments

The RA4000 Magna™ headset delivers best-in-class hearing protection, communications intelligibility and situational awareness for any vehicle platform.

As a complete and digital solution, it offers modular, customisable, and upgradeable features and accessories to match specific mission requirements and extend useful life.

The RA4000 Magna has built-in power for stand-alone operation and complies to industry standards.

Key benefits

- Active Noise Reduction (ANR) SNR 36dB
- Communications intelligibility and adjustable talk-through
- Upgradeable software-defined features
- Rugged and reliable

RA4000 Headset























Headset wearing options
Wearing options include over-the-head headband, adjustable soft helmet liner with chin strap, behind-the-head neckband with over-head strap, or combinations of these plus a range of optional helmets.

Ultimate hearing protection in high noise environments

- Safer longer missions - Active Noise Reduction (ANR) SNR 36 dB
- High intelligibility binaural communications in high noise
- Binaural talk-through - for accurate situational awareness
- Remain protected when dismounted - runs on AA battery
- High reliability in harsh and wet environments - IP68 immersible
- Easy to use - ergonomic PTT, mode and volume controls
- Connect to any communication system with detachable downloads
- Common hardware with software defined feature set - upgradeable

Extras & Specifications

Accessories & spareparts

 Soft liner 701403-Small/medium 701404-Medium/large	 Chin strap 701649-Small/medium 701565-Medium/large	 Ear cushion kit 701008	 Microphone muffler 700947-Standard 565623-Large	 Neckband cover 701444
 Flexi boom mics 700567-Standard 701150-Large	 Ear cup assembly 700597-X Colours available	 Battery cover 701264-X Colours available	 Foam kit 701204	 Neckband assembly 701384
 Usb programming 701043	 Respirator adaptor 700429	 Throat microphone 568930	 Extension cable On Request	 Clothing clip 700950
 Stirrups guide clip 700583	 Ballistic helmet v50 Rating 650m/s 701140-X Colours available	 Ballistic helmet v50 Rating 650m/s 701142-X Colours available	 Bump helmet (Non-ballistic) 701019-X Colours available	 Headset/helmet Storage bag (padded) 701145

Specifications

Weight on the head	650 g (23 ounces)
Neckband force (adjustable)	12.2/14.5 N (2.7/3.3 pounds)
Communication modes	Mono, stereo, programmable
Frequency response	100 Hz to 10 kHz
Input impedance	500 Ω
Input range	Programmable up to 5V
Comms sensitivity	Programmable up to 114 dB SPL
Removable boom microphone	150 Ω dynamic noise cancelling, anti-magnetic, immersible
Microphone sensitivity	Sensitivity -90 dB
Microphone output range	Programmable up to 1.5 V
Active noise reduction (ANR)	Advanced digital anr, battery or external powered
Binaural talk-through	Digital compression to 85 dBA, battery or external powered
PTT switch	3 Positions, located on left earshell
Talk-through volume control	Off/on, adjustable -6/0/+6/+12 dB
Comms volume control	Adjustable -6/0/+6/+12 dB
External power	4.5 to 36 VDC, 1 W (3.5 W peak inrush)
Internal power	1 × AA 1.5 V cell operation when dismounted
Interface cable	Detachable, configured and terminated to suit equipment requirements

Compatibility	Radios, intercoms, smart phones
Temperature	-40° / +65°C operating -57° / +71°C storage
Immersion	IP68, 1.1 meter for 2 hours
Electromagnetic conformity	MIL-STD-461F 50 V/m, EN55022, EN55024
Safety	EN60950-1
Noise attenuation	EN352, ANSI S3.19, ANSI S12.42, AS/NZS 1270
MTBF	42,710 hours
Approvals, directives	CE (LVD, RoHS and PPE), WEEE
Environmental tests	MIL-STD-810G and the equivalent standards

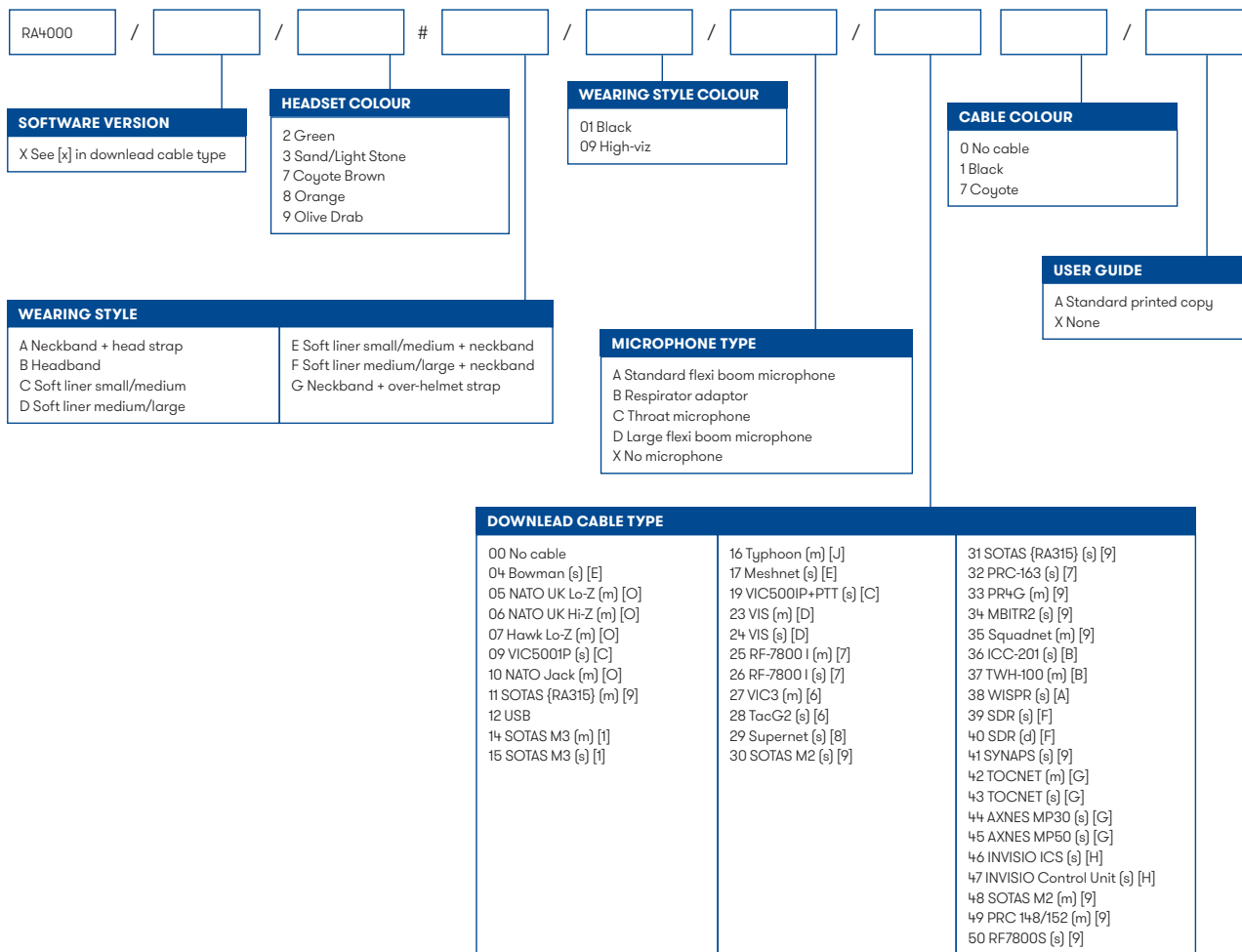
Certified to: shock, bump, impact, vibration, dust, sand, humidity, mist, salt fog, driving rain, immersion, solar, altitude, fungal and fluid contamination.
Hearing protection could be affected by the presence of any items worn between ear cushions and the ear.

Attenuation RA4000 MAGNA™ headset with soft liner and neckband

Frequency	HZ	63	125	250	500	1000	2000	4000	8000
Mean	dB	22.5	24.7	30.8	33.8	38.0	40.9	43.2	41.3
STDEV	dB	3.5	3.8	2.6	2.8	3.6	3.5	3.1	2.9

SNR=36, H=38, M=34, L=28, NRR=31

Product part numbering system



KEY: (m) Mono (s) Stereo (d) Differential [x] Software version



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Racal Acoustics Ltd. – part of the INVISIO Group

Racal Acoustics provide situational awareness, hearing protection and communication solutions. Our products are customised specifically for end-user applications and offer exceptional situational awareness, hearing protection in a range of noise environments, and deliver reliable, versatile audio communications while maintaining the highest levels of user safety and comfort. Sales are made via our UK facility and sales office in the US, as well as a global network of partners.

racalacoustics.com

