Tactical Interoperability: Ruggedized Design for Extreme Environments

Waterproof ICRI-E

The C-AT ICRI-E provides a reliable, lightweight, waterproof and rapidly deployable solution to radio and phone interoperability with responding agencies or enhancing coverage of an agency’s existing portable radios in areas of marginal or complete loss of radio communications.

Designed for maximum ruggedness and flexibility, the ICRI-E meets all Mil-810 environmental specifications; is compatible with an H-250/350 handset and operates on voltage range from 7-24 VDC.

ICRI-Es are field deployable in under five minutes and require no overpacking.

The ICRI-E provides an elegantly simple and highly effective and decon-able kit operating on 8 “AA” batteries for 24+ hours. As with all ICRI models, the ICRI-E uses an agency’s existing radios and is frequency and radio agnostic, permitting use as cross-band, cross-platform and cross-encryption repeater. Radios and phones may be connected directly to the ICRI-E and is plug ‘n play compatible with MBITR, PRR, PSC-5, SINCGARS, Motorola XTS5000 and XTVA, Scope Shield, STU phone, and all commercial radios and satellite phones.

ICRIs have undergone extensive field testing and deployment by federal, state, and municipal law enforcement agencies including: SPAWAR, NORTHCOM Joint Task Force - Civil Support, National Guard WMD - Civil Support Teams, National Guard CERFP and HRF, USDHS Federal Emergency Management Agency (FEMA) Urban Search and Rescue (USAR) teams.

C-AT, ICRI and ICRI-E are trademarks of Communications-Applied Technology.
ICRI-E Specifications

RX Audio Input

- Input Impedance: Unbalanced, 80 ohms nominal.
- Input level: -32 dBm to +12 dBm, no adjustment required.
- Frequency Response: 280 Hz to 3400 kHz ± 2dB.

TX Audio Output

- Output Impedance: Unbalanced, 1000 ohms nominal.
- Output Level: -40 to -18 dBm, adjustable (preset: -25dBm).
- Frequency Response: 280 to 3400 Hz ± 2dB
- Audio Delay: adjustable; 0 to 500 ms (preset: 250 mSec).

Cellular/Auxiliary Input

- Input Type: Unbalanced
- Input Range/VOX: Threshold: -50 to +10 dBm, adjustable (preset: -50dBm).
- Output Type: Unbalanced.
- Output Range: -40 to +3 dBm, adjustable (preset: -30dBm)
- Input VOX

General/Environmental

- Indicators: Power “OK” LED, power “LOW” LED, channel active LEDs (7).
- Controls: Guarded, power on/off switch; handset volume control.
- DC Input Power: +6.5 to +24 VDC @ 0.07A maximum
- AC Input Power: 115 to 230 VAC ± 15%, 47-63 Hz, 3 VA maximum (with 320.0431 AC adapter).
- Weight: 5 lbs. without adapters and accessories.
- Size: 11.0’’x11.0’’x6.0’’ (28.95x28.95x14.7 cm) excluding control panel connectors/switch protrusions.
- Temperature: Operating: -20 to +60 degrees C; storage: -40 to +85 degrees C.
- Humidity: Up to 95% @ 55 degrees C.
- Shock and Vibration: Suitable for mobile and portable environments; MIL 810 compliant.
- FCC Part 15: Unintentional radiators (CISPR 22) compliant.

Handset

- Compatibility: Compatible MIL-H-350/1H-250 handset
- Handset Volume Control: 70 dB range.
- Initiation: PTT bar.
- Option: Variety of headsets and remote P-T switches

Warranty

- Provide product support for 10 years after purchase and a 2 year parts/labor warranty.

Deployed Radios currently tested for compatibility (partial list)

- Harris 5800 with ALE
- Harris UNITY
- Thales LIBERTY
- Thales MBITR, PRC-148
- Thales TRC-9015, PR4G
- Codan with remote PTT access
- PRC-148
- SINCgars
- PSC-5D
- Motorola XTS5000
- Motorola XTL 1500, 2500, 5000
- Motorola APX
- PRC-117, 150, -521
- Motorola GP300
- Motorola GP338
- Scope Shield
- Bowman
- Iridium 9500
- GlobalStar
- ICOM F43-GS
- ICOM F80
- STU and STE secure telephones
- Motorola SECTERA encrypted cell phone
- TMC SRP 8030/8031
- AN/ARC-164, 186
- ARC-201
- Vertex VX-424
- MICOM F3
- ICOM F33
- Cell phones, land-line phones