# RTS

#### BTR-240 & TR-240 2.4GHz wireless intercom

RTS

## RTS BTR wireless intercom

The RTS BTR-240 is a digital multichannel wireless intercom system offering extremely reliable and secure full-duplex communication with up to eight wireless TR-240 beltpacks and an almost unlimited number of half-duplex beltpacks.

Operating in the 2.4 GHz frequency band, the BTR-240 system uses the widely adopted IEEE 802.11 technology and is approved for license-free use in most countries. The system also incorporates unique ClearScan<sup>™</sup> technology, allowing users to select the optimal radio frequency (RF) channel for communication at the touch of a button.

BTR-240

### Key Features:

- License-free 2.4 GHz IEEE 802.11b WLAN technology
- Multi-level security and audio encryption
- ClearScan<sup>™</sup> channel selection
- Choice of two independent or simultaneous audio channels
- Eight full-duplex beltpacks with virtually unlimited number of half-duplex beltpacks
- Multiple antenna options and accessories
- Easy-to-read LCD indicates system status
- Expand coverage using BTR-24 access points

- Two-wire and four-wire interface wired intercom interface
- Auto-select condenser or dynamic microphone
- TR-240 beltpacks operate wired or wireless and can operate as access point
- Durable ABS construction
- Removable Li-Ion batteries with wide temperature range and up to eight hours operation

For further information, visit www.rtsintercoms.com



### Performance

The BTR-240 has the ability to configure multi-level 802.11 wireless security features, including data encryption, MAC address filtering, and 64-bit audio encryption, to provide a highly secure wireless intercom system. The system allows users to select between two individual audio channels of communication, and to talk and listen or listen only to any individual audio channel or both channels simultaneously.

The BTR-240 system is perfectly suited for standalone operation and can also interface with two-wire systems, including RTS, Telex® Audiocom®, and Clear-Com®, as well as four-wire intercom systems such as the RTS matrix systems. In addition to the external intercom system interfaces, the system provides connectivity for auxiliary balanced audio input and output and speaker output.

The TR-240 beltpacks may be configured in one of three operating modes: wireless, wired, or master wireless. In wireless (normal) mode, beltpacks communicate to each other using the base station as a relay. In wired mode, beltpacks turn off their wireless ability and communicate via Ethernet cable or through a building's existing Ethernet infrastructure. In master wireless mode, a beltpack acts as a mobile access point to provide wireless coverage for other beltpacks to communicate without an actual BTR-240 base station. The TR-240 beltpack has a removable Li-lon battery pack that provides up to eight hours of uninterrupted operation. The battery pack can be charged directly in the case by plugging a power adapter into the beltpack or by placing the battery in the CHG-240 four-bay charger.

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RF Technology	IEEE 802.11b WLAN		
FCC License	None Required		
Frequency Band of Operation	North America: 2.412 to 2.462GHz Europe: 2.412 to 2.472GHz		
BTR-240 Transmitte Output Power	North America: 200mW Europe: 70mW		
TR-240 Transmitter Output Power	70mW		
BTR-240 Antennas	Multiple Omni and Directional Available		
TR-240 Antennas	Internal Dipoles		
Security and Encryption Technology	802.11 WiFi: 40-bit and 104-bit WEP Audio: 64-bit DES		
Number of Full- Duplex Beltpacks	81		
Number of Half-Duplex Beltpacks	≥ 100		
Audio Frequency Range	350Hz to 3.5kHz		
Dynamic Range	≥ 62dB		
System Latency	≤ 140msec		
BTR-240 Headset Output 4-Wire Input/Output	100mWrms into 300 Ohms Level Adjustable (2Vrms typical		
TR-240 Headset Output	70mWrms into 300 Ohms		
Audiocom 2-Wire Input/Output	Level Adjustable (0.775Vrms typical Line Impedance 200 Ohms		
RTS 2-Wire Input/ Output	Level Adjustable (1Vrms typical) Line Impedance 200 Ohms		
Clear-Com 2-Wire Input/Output	Level Adjustable (1Vrms typical) Line Impedance 200 Ohms		
Auxiliary Input	Level Adjustable (2Vrms typical)		
Auxiliary Output	Level Adjustable (2Vrms typical into 600 Ohms)		
Speaker Output	Level Adjustable (1Vrms max into 8 Ohms)		
Front Panel LCD	122 x 32 Dot Matrix w/ Adjustable Contrast		
Programming Port	Ethernet (RJ-45)		
BTR-240 Power Requirements	12–15VDC, 1.5 Amps		
BTR-240 Power Requirements	Lithium Ion Rechargeable Battery, 7.5VDC		
Battery Life	Up to eight (8) hours		
Battery Recharge Time	Via TR-240: approx. 8 hoursVia CHG-240 four bay charger: approx. 2.5 hours		
TR-240 Low Battery Indication	Approx. 15 minutes of battery life left		
Temperature Range	-4°F to 130°F (-20°C to 55°C		
BTR-240 Dimensions	1RU, 7.5" L x 19"W x 1.75"H (191mm x 483mm x 45mm)		
BTR-240 Weight	3lb. 7.5oz. (1.58kg)		
TR-240 Dimensions	1.75" L x 3.75"W x 5.25"H (45mm x 95mm x 133mm)		
TR-240 Weight	12.9oz. (0.37kg)		

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