

## Model

### BTR-240 & TR-240 2.4GHz Wireless Intercom

The RTS BTR-240 is a digital, multi-channel, wireless intercom system offering reliable and secure, full-duplex communications supporting up to eight (8) wireless TR-240 beltpacks and an almost unlimited number of half-duplex beltpacks. Operating in the 2.4GHz 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 the intelligence called ClearScan, which automatically selects the optimal RF (Radio Frequency) channel for communication.



The BTR-240 system has the ability to configure multi-level 802.11 wireless security features, such as data encryption and MAC address filtering, as well as 64-bit audio encryption to provide a highly secure wireless intercom system. The BTR-240 system offers two (2) audio channel operation, allowing users to select between two (2) individual audio channels of communication. The system permits users 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 2-wire systems including RTS, Audiocom, and Clear-Com, as well as 4-wire intercom systems, such as the RTS Matrix system. 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 have the ability to 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, the 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 lithium ion battery pack that provides up to eight (8) 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 4-bay charger.

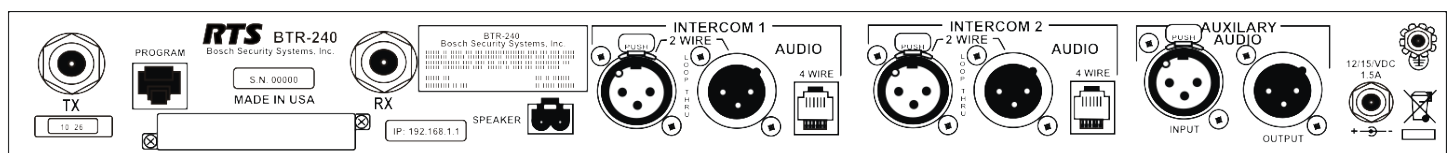
## Features

- License Free 2.4GHz, IEEE 802.11b WLAN technology
- Expand coverage using BTR-24 access points
- Multi-level security and audio encryption
- 2-wire and 4-wire intercom interface
- ClearScan channel selection
- Auto-select Electret or Dynamic microphone
- Choice of two (2) independent or simultaneous audio channels
- TR-240 beltpacks operate wired or wireless
- Eight (8) full-duplex beltpacks with virtually unlimited number of half-duplex beltpacks
- TR-240 beltpacks can operate as an access point
- Multiple antenna options and accessories
- Durable ABS construction
- Easy-to-read LCD indicates system status
- Removable Li-Ion batteries with wide temperature range and up to eight (8) hours of operation.

## Line Art



FRONT



REAR

# Specifications

**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 Transmitter Output Power:**

North America: 200mW

Europe: 70mW

**TR-240 Transmitter Output Power:** 70mW

**BRT-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:** 8

**Number of Half-Duplex Beltpacks:** ≥ 100

**Audio Frequency Range:** 350Hz to 3.5kHz

**Dynamic Range:** ≥62dB

**System Latency:** ≤ 140msec

**BRT-240 Headset Output:** 100mWrms into 300 Ohms

**TR-240 Headset Output:** 70mWrms into 300 Ohms

**4-Wire Input/Output:** Level Adjustable (2Vrms typical)

**Audiocom 2-Wire Input/Output:** Level Adjustable (0.775Vrms typical)

**Line Impedance:** 200 Ohms

**RTS 2-Wire:** Level Adjustable (1Vrms typical)

**Input/Output:** Line Impedance 200 Ohms

**Clear-Com 2-Wire:** Level Adjustable (1Vrms typical)

**Input/Output:** 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 8Ω)

**Front Panel LCD:** 122 x 32 Dot Matrix with Adjustable Contrast

**Programming Port:** Ethernet (RJ-45)

**BTR-240 Power Requirements:** 12–15VDC, 1.5 Amps

**TR-240 Power Requirements:** Lithium Ion Rechargeable Battery, 7.5VDC

**Battery Life:** Up to eight (8) hours

**Battery Recharge Time:**

Via TR-240: approx. 8 hours

Via 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)

## System Components

- BTR-240 A4F 2.4GHz multi-channel wireless base station access point with A4F headset connector.
- TR-240 A4F 2.4GHz wireless beltpack with A4F headset connector.
- BTR-240 A4M 2.4GHz multi-channel wireless base station access point with A4M headset connector.
- TR-240 A4M 2.4GHz wireless beltpack with A4M headset connector.
- BTR-24 2.4GHZ access point
- CHG-240 4-bay rapid battery charger for BP-240 batteries
- BP-240 Li-Ion battery for TR-240
- HOL-240 Holster for TR-240

These specifications are subject to change without notification.

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