

Technical Data Sheet

Innovating the Future of Global Communications

BTR-24 & TR-24

2.4GHz Wireless Intercom







The RTS RadioCom BTR-24 and TR-24 series intercom is a full-duplex (simultaneous talk and listen) wireless intercom system offering a complete stand alone solution for two (2) to ten users utilizing the full-duplex feature and nearly an unlimited number of listen-only users. The BTR-24 system offers easy setup, durable beltpacks, 64-bit audio encryption, easy system expansion and a three (3) year warranty. The RadioCom BTR-24 system operates utilizing the license free 2.4 GHz IEEE 802.11b Wi-Fi standard.

The BTR-24 system incorporates the option of two (2) individual audio channels selectable at each TR-24 beltpack. The TR-24 beltpacks also provide the user with adjustable volume control, headset microphone level and local sidetone level. The TR-24 operates with dynamic or electret headset microphones and has a built-in lithium-ion battery pack providing up to eight (8) hours of uninterrupted operation.

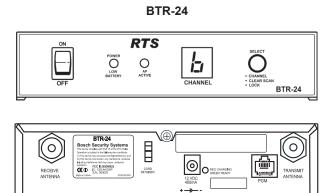
Upon startup the BTR-24 base station automatically scans and selects the best radio frequency (RF) channel for communication with a feature called ClearScan. The BTR-24 also has a built-in lithium-ion battery pack providing up to ten (10) hours of uninterrupted operation or can be operated with the included wall mount AC power supply for prolonged use. The BTR-24 also includes rack mount hardware.

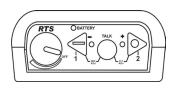
Features

- License-free operation.
- 64-bit encrypted audio.
- Full-duplex operation.
- Two (2) individual audio channels.
- Automatic RF channel selection via ClearScan.
- Independent volume control and headset mic level control.
- System supports up to 10 beltpacks (full-duplex).
- Easy setup and operation.

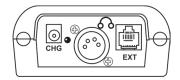
- Operates on IEEE 802.11b Wi-Fi standard.
- Operating range up to 800ft, line-of-sight (beltpack to base station).
- Low battery indicators on beltpack and base station.
- Battery charge indicators on beltpack and base station.
- Rack mount for BTR-24 included.
- Independent local sidetone level control.
- Programmable beltpacks for remote group operation.
- Built-in lithium-ion battery packs on BTR-24 and TR-24.

Line Drawings





TR-24



Specifications

Frequency Band of Operation

North America:	2.412–2.462GHz (Wi-Fi: Channels 1-11)
Europe:	2.412–2.472GHz (Wi-Fi: Channels 1-13)
Beltpack Headset Output:	
Technology:	2.4GHz, IEEE 802.11b Wireless LAN Standard Wi-Fi
FCC License:	None Required (License Free Use)
Number of Users:	2 to 10 Users per BTR-24 Base Station (Full-Duplex)
Encryption:	64-bit (DES) Encryption Key
Battery Type:	Lithium-Ion Rechargeable (Base Station and Beltpack)
Battery Life – BTR-24:	10 Hrs (charge time 10-14 Hrs)
Battery Life – TR-24:	8 Hrs (charge time 6-8 Hrs)
Frequency Response:	400Hz to 5500Hz
Dynamic Range:	>75dB Antenna supplied
TR-24 Beltpack:	Internal Dipoles
BTR-24 Base Station:	External TNC-RP Dipoles
Headsets:	Dynamic or Electret Microphone elements can be used with TR-24 Beltpack
Battery Status Indicators:	Included on TR-24 and BTR-24
Charge Status Indicators:	Included on TR-24 and BTR-24
Mic Level Adjustment:	Programmable on TR-24, with Voice Prompts
Local Sidetone Adjustment:	Programmable on TR-24, with Voice Prompts

Channel Indicators

TR-24 Beltpack:	Green LED for Audio Channel
BTR-24 Base Station:	7 Segment LED for RF Channel
Warranty:	
Product Dimensions/Weight	
TR-24	
Shipping Dimensions/Weight	
BTR-24	
(Packaged, Includes rack mo antennas and power supply) TR-24	unts, 18.20" L x 11.50" W x 3.90" H (46.23cm x 29.21cm x 9.91cm) 5lb 7oz (2.59kg)
	upply) 13.25"L x 9"W x 3.60"H (33.66cm x 22.86cm x 9.14cm) 1lb 13oz (.82kg)
SYS-243	
(Packaged system, 3 TR-24's antennas and power supply)	s, 1 BTR-24, antennas, 25.30"L x 21"W x 9.30"H (64.26cm x 53.34cm x 23.62cm) 22lbs 3oz (10.12kg)

Order Information

- BTR-24 2.4 GHz multi-channel wireless base station access point
- TR-24 2.4 GHz multi-channel wireless beltpack with A4M headset connector
- $\ensuremath{\mathsf{SYS-243}}$ 2.4 GHz multi-channel wireless beltpack and base station system
- PH-100 Single Sided Headset with A4F connector
- PH-200 Dual Sided Headset with A4F connector
- HR-1 Single Sided Headset with A4F connector
- HR-2 Dual Sided Headset with A4F connector
- PH-1 Single Sided Headset with A4F connector
- PH-2 Dual Sided Headset with A4F connector
- RA-3 Omni Antenna (3 dB), with TNC reverse polarity connector

RA-7 • Omni Antenna (7 dB), with TNC reverse polarity connector (North America)

RA-5 • Omni Antenna (5 dB), with TNC reverse polarity connector (North America) FP-11 • Flat Panel Directional Antenna (11 dB) with TNC reverse polarity connector

(North America)

ANT-FP • Dual Diversity, Flat Patch Antenna (North America)

For ordering information, contact your regional sales representative at: http://rtsintercoms.com/us/intercom/contact The specification information is preliminary and is subject to change without notification. Brand names mentioned are the property of their respective companies. RPT-3 • 3FT Coax with TNC reverse polarity connector

RPT-10 • 10ft Coax with TNC reverse polarity connector

TNC-RP • TNC reverse polarity coupler (jack-to-jack)

CC-24 • Carry case for BTR-24 system

- LG-Y Headset Y cable for Telex Legacy
- $\mathsf{LG}\text{-}\mathsf{PS}\boldsymbol{\cdot}\mathsf{US}$ power supply for BTR-24 and TR-24
- ANT-FPM Tilt and Swivel Antenna Mount Bracket

XOB • Adjustable Nylon Belt

RA-7E Kit \cdot Omni Antenna (7dB), with TNC reverse polarity connector and coax (Europe).

RA-5E Kit \bullet Omni Antenna (5dB), with TNC reverse polarity connector and coax (Europe).

FP-11E Kit Flat Panel Directional Antenna (11dB) with TNC reverse polarity connector and coax (Europe).

ANT-FBE Kit Dual Diversity, Flat Patch Antenna and coax (Europe).

