RadioCom

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.

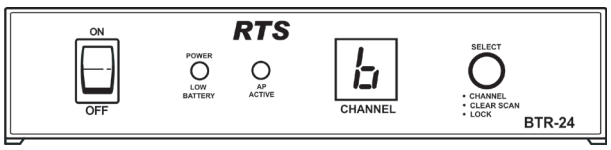
Upon startup the BTR-24 base station automatically scans and selects the best radio frequency (RF) channel for communication with a feature called ClearScan. The BTR-24 also has a built-in lithium-ion battery pack providing up to ten (10) hours of uninterrupted operation or can be operated with the included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

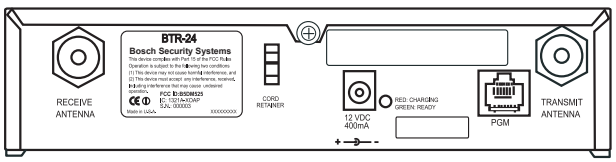
Features

- 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.

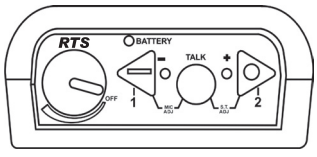
Line Drawings

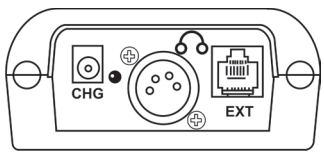
BTR-24





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: 70mW into 300Ω (1% distortion)

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: 3 Year Warranty

Product Dimensions/Weight

BTR-24 6.00” L x 7.50” W x 1.72” H (15.24cm x 19.05cm x 4.27cm), 2lb 5oz (1.05kg)

TR-24 5.25” L x 3.75” W x 1.68” H (13.34cm x 9.53cm x 4.27cm),13oz (0.37kg)

Shipping Dimensions/Weight

BTR-24
(Packaged, Includes rack mounts, antennas and power supply) 18.20” L x 11.50” W x 3.90” H (46.23cm x 29.21cm x 9.91cm) 5lb 7oz (2.59kg)

TR-24
(Packaged, Includes power supply) 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, 1 BTR-24, antennas, antennas and power supply) 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
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)
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
LG-PS • US power supply for BTR-24 and TR-24
ANT-FPM • Tilt and Swivel Antenna Mount Bracket
XOB • Adjustable Nylon Belt
RA-7E Kit • Omni Antenna (7dB), with TNC reverse polarity connector and coax (Europe).
RA-5E Kit • Omni Antenna (5dB), with TNC reverse polarityconnector 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).

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.

Bosch Security Systems, Inc. | 12000 Portland Avenue South | Burnsville, Minnesota 55337
Telephone: 877·863·4169 | Fax: (800) 323-0498
Form Number: F01U247437 Rev 03
Date: February 2013

RTS
www.rtsintercoms.com

RadioCom™ Wireless that Works™

BTR-24

Base Station

TR-24

Beltpack

BTR-24 & TR-24

2.4 GHz Wireless Intercom

The Telex® RadioCom™ BTR-24 and TR-24 series intercom is a full duplex (simultaneous talk and listen) wireless intercom system that offers a complete stand alone solution for 2 to 10 users utilizing the full duplex feature and an unlimited number of listen-only users. The BTR-24 system offers easy set-up, durable beltpacks, 64 bit audio encryption, easy system expansion and a 3 year warranty. The Telex® RadioCom™ BTR-24 system operates utilizing the license free 2.4 GHz IEEE 802.11b "WiFi" standard.

The BTR-24 system incorporates the option of three audio channels that are selectable at each TR-24 beltpack. The TR-24 beltpacks also provide the user with adjustable volume control, headset microphone level and local side tone level. The TR-24 will operate with Dynamic or Electret headset microphones and has a built-in lithium ion battery pack that will provide up to 8 hours of uninterrupted operation.

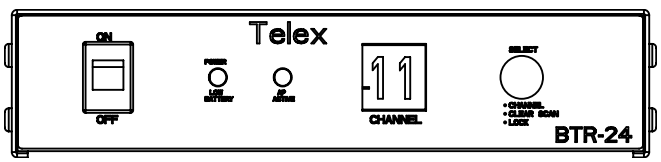
Upon start-up the BTR-24 base station automatically scans and selects the best RF (radio frequency) channel for communication with a feature called ClearScan™. The BTR-24 also has a built-in lithium ion battery pack that will provide up to 10 hours of uninterrupted operation or can be operated with the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

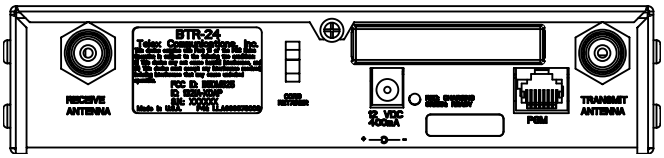
Features

- **License Free Operation**
- **64 Bit Encrypted Audio**
- **Full Duplex Operation**
- **3 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 Set-Up and Operation**
- **Operates on IEEE 802.11b "WiFi" Standard**
- **Operating Range Up To 800 ft, 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 Side Tone Level Control**
- **Programmable Beltpacks for Remote Group Operation**
- **Built In Lithium-Ion Battery Packs on BTR-24 and TR-24**

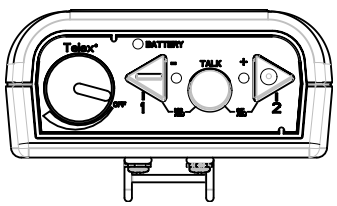
Line Drawing

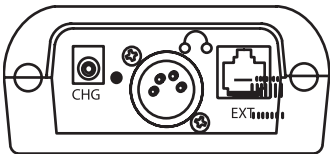
BTR-24





TR-24





BTR-24 & TR-24 Specifications

Frequency Band of Operation
North America: 2.412-2.462 GHz
Europe: 2.412-2.472 GHz
Beltpack Headset Output
200 mW into 300 ohms (1% distortion)
Technology
2.4 GHz, IEEE 802.11b Wireless LAN Standard (WiFi)
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
400 Hz to 5500 Hz
Dynamic Range
>75 dB
Antenna
TR-24 Beltpack = Internal
BTR-24 Base Station = External TNC-RP
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 – YES, Green LED
BTR-24 Base Station – YES, 7 Segment LED
Warranty
3 Year Warranty

Product Dimensions/Weight

BTR-24
6.00”L x 7.50”W x 1.72”H (15.24cm x 19.05cm x 4.27cm),
2 lbs 11 oz (.95 kg)
TR-24
5.25”L x 3.75”W x 1.68”H (13.34cm x 9.53cm x 4.27cm), 12 oz (.45 kg)

Shipping Dimensions/Weight

BTR-24 (Packaged, Includes rack mounts, antennas and power supply)
18.20”L x 11.50”W x 3.90”H (46.23cm x 29.21cm x 9.91cm), 5 lbs 7 oz (2.59 kg)
TR-24 (Packaged, Includes power supply)
13.25”L x 9”W x 3.60”H (33.66cm x 22.86cm x 9.14cm), 1 lb 10 oz (.49 kg)
SYS-243 (Packaged system, 3 TR-24’s, 1 BTR-24, antennas, antennas and power supply)
25.30”L x 21”W x 9.30”H (64.26cm x 53.34cm x 23.62cm), 22 lbs 3 oz (10.12 kg)

Contact Information

Telex Communications, Inc.
12000 Portland Avenue South
Burnsville, Minnesota 55337
Telephone: 877-863-4169
Fax: (800) 323-0498

Form Number: LIT000093000 Rev B
Date: August 2008

Ordering Information

BTR-24 2.4 GHz multi-channel wireless base station access point
Catalog Number: PRD000066000
TR-24 2.4 GHz multi-channel wireless beltpack with A4M headset connector
Catalog Number: PRD000065000
SY3-243 2.4 GHz multi-channel wireless beltpack and base station system
Catalog Number: SYS000007000
PH-100 Single Sided Headset with A4F connector
Catalog Number: 301581007
PH-200 Dual Sided Headset with A4F connector
Catalog Number: 301581002
HR-1 Single Sided Headset with A4F connector
Catalog Number: 300534007
HR-2 Dual Sided Headset with A4F connector
Catalog Number: 300534000
PH-1 Single Sided Headset with A4F connector
Catalog Number: 64438100
PH-2 Dual Sided Headset with A4F connector
Catalog Number: 64437100
RA-3 Omni Antenna (3 dB), with TNC reverse polarity connector
Catalog Number: 302054003
RA-7 Omni Antenna (7 dB), with TNC reverse polarity connector
Catalog Number: 302054004
RA-5 Omni Antenna (5 dB), with TNC reverse polarity connector
Catalog Number: 302054005
FP-11 Flat Panel Directional Antenna (11 dB) with TNC reverse polarity connector
Catalog Number: 302054006
RPT-3 3FT Coax with TNC reverse polarity connector
Catalog Number: 302054007
RPT-10
10ft Coax with TNC reverse polarity connector
Catalog Number: 302054008
TNC-RP TNC reverse polarity coupler (jack-to-jack)
Catalog Number: 302054009
CC-24 Carry case for BTR-24 system
Catalog Number: 302054010
LG-Y Headset Y cable for Telex Legacy™
Catalog Number: 302054012
LG-PS US power supply for BTR-24 and TR-24
Catalog Number: 532091000
ANT-FP Dual Diversity, Flat Patch Antenna with Coax
Catalog Number: 302054001
ANT-FPM Tilt and Swivel Antenna Mount Bracket
Catalog Number: 302054000
XOB Adjustable Nylon Belt
Catalog Number: 302054002

Telex Legacy™ Systems do not include headsets. Headsets must be ordered separately. Only Telex® Headsets with dynamic microphones are compatible for use with Telex Legacy™ systems.

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