

## **BTR-800**

## **UHF Two-Channel Wireless Synthesized Base Station**

The Telex RadioCom BTR-800 UHF-synthesized wireless intercom systems offer the ultimate in reliable, high-performance, high fidelity full-duplex communications. The BTR-800 system includes the BTR-800 frequency-agile base station, working with up to four TR-800 or TR-825 frequency-agile beltpacks. The BTR-800 base station provides full-duplex communications with the beltpacks.

The BTR system incorporates two audio channel operation, permitting the beltpack operator to choose between two separate audio channels of communications, with the base station tracking the beltpack selection. This allows the user the flexibility to create a party line and a private line within the same beltpack.

The BTR-800 system is perfectly suited for stand-alone operation and can interface with Telex Audiocom, RTS Two-Wire Intercom, Clear-Com as well as RTS Digital Matrix Intercom systems and other four-wire communications systems. In addition to the external intercom systems interfaces listed above, the system provides connections for auxiliary balanced audio input and output, as well as wireless talk-around (WTA) and stage announce (SA) features.

The Telex RadioCom BTR series has been designed for reliable, efficient operation. Operating in the 470 to 740 MHz range, the units operate reliably at line-of-sight distances of 1,000 feet. With available antenna systems, from Telex RadioCom, the effective operating range can be extended. The high-efficiency beltpacks provide up to 12 hours of uninterrupted operation using standard alkaline batteries.

### **Features**

Frequency-Agile Base Station & Beltpacks

**Backlit Base Station LCD** 

ClearScan Function

**Full-Duplex Operation** 

Compatible with Audiocom, RTS TW, Matrix, Clear-Com, and other wired intercom types.

**Two Channels of Intercom Audio** 

WTA (Wireless Talk About) Beltpack Control

SA (Stage Announce) Beltpack Control

Relay contract closure on the base when the SA button is pressed

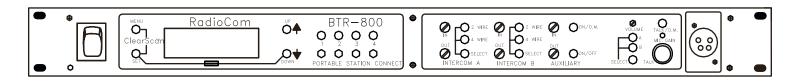
TR-825 features two audio channel binaural operation in either stereo or mono mode

Beltpack units contained in a weather and shock resistant die cast magnesium case

Convenient IEC power connector on the base station.

Base station comes with rack ears for easy rack mounting.

## **Line Drawing**





# **BTR-800 Specifications**

**Overall** 

RF Frequency Range

470 - 608 MHz, 614 - 740 MHz in 18 MHz TX and RX bands

**Power Requirements** 

100-240 VAC, 50-60 Hz, IEC receptacle

**Temperature Range** 

-4°F to 130°F (-20°C to 55°C)

TX Antenna

1/2 Wave (supplied), TNC Male Connector

**RX Antenna** 

1/2 Wave (supplied), TNC Male Connector

FCC ID

B5DM514

Frequency Response

300 Hz-8 kHz

4-Wire Input and Output

Level Adjustable (2 Vrms typical)

**Telex RadioCom Intercom** 

Input/Output Level Adjustable (1 Vrms typical), Line Impedance  $300\Omega$ 

**RTS Intercom** 

Input/Output Level Adjustable (0.775 Vrms typical), Line Impedance  $200\Omega$ 

**Clear-Com Intercom** 

Input/Output Level Adjustable (1 Vrms typical), Line Impedance  $200\Omega$ 

**Auxiliary Input** 

Adjustable (2 Vrms typical)

**Auxiliary Output** 

Adjustable (2 Vrms typical into  $600\Omega$ )

**Stage Announce Output** 

Internally Adjustable (2 Vrms typical at rated deviation into  $600\Omega$ )

Stage Announce Relay

Dry contact, rated at 1 Amp, 24V Max

Microphone Input Sensitivity

9 mV

**Local Headset Output** 

40 mW output into  $600\Omega$  (1% Distortion)

**Transmitter** 

Type

Two Synthesized Transmitters, 712 channels each

### **Contact Information**

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

Form Number: LIT000270000 Rev B

Date: February, 2010

**Transmit Power (each transmitter)** 

100 mW Max. (High), 10 mW (Normal)

**Modulation Type** 

FM

**Deviation** 

40 kHz (35 kHz Europe)

RF Frequency Stability

0.005%

**Modulation Limiter** 

Peak-Responding Compressor

Radiated Harmonics & Spurious

Exceeds FCC specifications

**Receiver** 

**Type** 

Dual Conversion Superheterodyne, four Independent Synthesized IFs, FM, 712 channels each

**RF Sensitivity** 

<0.8 µV for 12 dB SINAD

**Squelch Threshold** 

20 dB SINAD

**IF Selectivity** 

3 dB at 230 kHz

**Image Rejection** 

70 dB or better

**Squelch Quieting** 

90 dB

RF Frequency Stability

0.005%

**Distortion** 

<1% at full deviation

**Product Dimensions/Weight** 

**BTR-800** 

19"W x 1.72"H x 14"D (48.3cm x 4.4cm x 35.6cm), 7 lbs 2 oz (3.24 kg)

**Shipping Dimensions/Weight** 

**BTR-800** 

17"W x 5"H x 23"D (43.2cm x 12.7cm x 58.4cm), 12 lbs (5.43 kg)

### CONSUMER ALERT

Most users do not need a license to operate this wireless microphone system. Nevertheless, operating this microphone system without a license is subject to certain restrictions: the system may not cause harmful interference; it must operate at a low power level (not in excess of 50 milliwatts); and it has no protection from interference received from any other device. Purchasers should also be aware that the FCC is currently evaluating use of wireless microphone systems, and these rules are subject to change. For more information, call the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC) or visit the FCC's wireless microphone website at www.fcc.gov/cgb/wirelessmicrophones.

#### **Ordering Information**

BTR-800 • UHF Two-Channel Wireless Synthesized Base Station with A4M headset jack • Catalog Number: 71305XX

**BTR-800-RTS** • UHF Two-Channel Wireless Synthesized Base Station with A4F headset jack • Catalog Number: 71305XXR

**BTR-800-RTS 5-Pin •** UHF Two-Channel Wireless Synthesized Base Station with A5F headset jack • Catalog Number: 71305XXR5

This specifications information is preliminary and is subject to change without notification. Brand names mentioned are the property of their respective companies