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
½ Wave (supplied), TNC Male Connector
RX Antenna
½ 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 300Ω
RTS Intercom
Input/Output Level Adjustable (0.775 Vrms typical), Line Impedance 200Ω
Clear-Com Intercom
Input/Output Level Adjustable (1 Vrms typical), Line Impedance 200Ω
Auxiliary Input
Adjustable (2 Vrms typical)
Auxiliary Output
Adjustable (2 Vrms typical into 600Ω)
Stage Announce Output
Internally Adjustable (2 Vrms typical at rated deviation into 600Ω)
Stage Announce Relay
Dry contact, rated at 1 Amp, 24V Max
Microphone Input Sensitivity
9 mV
Local Headset Output
40 mW output into 600Ω (1% Distortion)

Transmitter
Type
Two Synthesized Transmitters, 712 channels each
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)
BTR-800-RTS
19”W x 1.72”H x 14”D (48.3cm x 4.4cm x 35.6cm), 7 lbs 2 oz (3.24 kg)
BTR-800-RTS 5-Pin
19”W x 1.72”H x 14”D (48.3cm x 4.4cm x 35.6cm), 7 lbs 2 oz (3.24 kg)

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: 71305XXXR5

Contact Information
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