



## BTR-700 & TR-700

### UHF Single Channel Wireless Intercom System

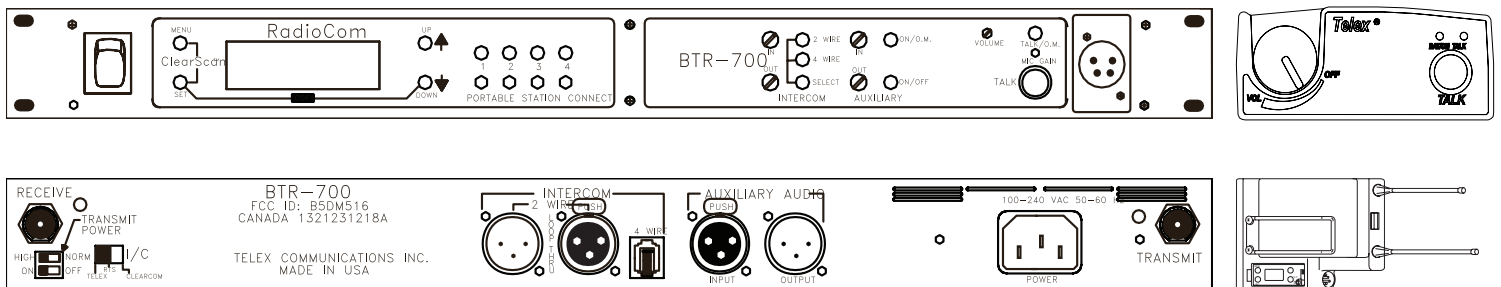
The Telex RadioCom BTR-700 UHF-synthesized wireless intercom system offers the ultimate in reliable, high performance, high fidelity full duplex communications. The BTR-700 system includes the BTR-700 frequency-agile base station, working with up to four TR-700 frequency-agile belt packs. The BTR-700 base station provides full-duplex communications with the belt packs. The BTR-700 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. The Telex RadioCom BTR series has been designed for reliable, efficient operation. Operating in the 518 to 868 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 TR-700 high efficiency belt packs provide 12-14 hours of uninterrupted operation using standard alkaline batteries.

### Features

- UHF Operation
- Frequency agile base station & belt packs.
- Backlit Base Station LCD
- ClearScan Function on Base Station & Beltpack
- Full Duplex (Simultaneous Talk & Listen) Operation
- Compatible with Audiocom (Telex RadioCom), RTS-TW, RTS Matrix, Clear-Com, and other wired intercom types.

- Belt pack 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.
- Belt pack batteries last up to 12-14 hours.
- Auto-sensing headset connector that automatically switches between electret and dynamic headset mics.

### Line Drawing



# BTR-700 & TR-700 Specifications

## Overall

### **RF Frequency Range**

518 - 608 MHz, 614 - 740 MHz, 796 - 868 MHz in 18 MHz TX and RX bands

### **BTR-700 Power Requirements**

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

### **TR-700 Power Requirements**

6 "AA" Cells Alkaline (NiMH optional)

### **Temperature Range**

-4°F to 130°F (-20°C to 55°C)

### **TX Antenna**

BTR-700: ½ Wave (supplied), TNC Male Connector  
TR-700: ¼ Wave (supplied), Screw type, Replaceable

### **RX Antenna**

BTR-700: ½ Wave (supplied), TNC Male Connector  
TR-700: ¼ Wave (supplied), Screw type, Replaceable

### **FCC ID**

BTR-700 (B5DM516), TR-700 (B5DM515)

### **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)

### **Microphone Input Sensitivity**

BTR-700 (9 mV), TR-700 (7 mV)

### **Local Headset Output**

40 mW output into 600Ω (1% Distortion)

### **TR-700 Current Draw**

140 mA (Push-to-Talk, Talk On)

## Transmitter

### **Type**

Synthesized Transmitter, 712 channels

### **Transmit Power**

BTR-700 (50 mW Max. (High), 5 mW (Normal), TR-700 (50 mW Max. (Auto-power reduction))

### **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**

BTR-700: <0.8 μV for 12 dB SINAD

TR-700: <0.7 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-700**

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

### **TR-700**

3.75"W x 5.05"H x 1.65"D (9.5cm x 12.8cm x 4.2cm),  
16 oz (454 g) with alkaline batteries

## Shipping Dimensions/Weight

### **BTR-700**

17"W x 5"H x 23"D (43.2cm x 12.7cm x 58.4cm), 10 lbs 9 oz  
(4.79 kg)

### **TR-700**

7"W x 14"H x 4"D (17.78cm x 35.56cm x 10.16cm),  
16 oz (454 g) with alkaline batteries

## Ordering Information

**BTR-700:** UHF Single Channel Wireless Synthesized Base Station with A4M headset connector • Catalog Number: 71303XX

**BTR-700-RTS:** UHF Single Channel Wireless Synthesized Base Station with A4F headset connector • Catalog Number: 71303XXR

**BTR-700-RTS 5-Pin:** UHF Single Channel Wireless Synthesized Base Station with A5F headset connector • Catalog Number: 71303XXR5

**TR-700:** UHF Single Channel Wireless Synthesized Transceiver with A4M headset connector • Catalog Number: 71304XX

**TR-700-RTS:** UHF Single Channel Wireless Synthesized Transceiver with A4F headset connector • Catalog Number: 71304XXR

**TR-700-RTS 5-Pin:** UHF Single Channel Wireless Synthesized Transceiver with A5F headset connector • Catalog Number: 71304XXR5

This specifications information is preliminary and is subject to change without notification.

Brand names mentioned are the property of their respective companies.

## Contact Information

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Form Number: LIT000269000 Rev A

Date: August 2008