

IM148703



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 beltpacks. The BTR-700 base station provides full-duplex communications with the beltpacks. 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 beltpacks provide 12-14 hours of uninterrupted operation using standard alkaline batteries.

Features

UHF Operation

Frequency agile base station & beltpacks.

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.

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

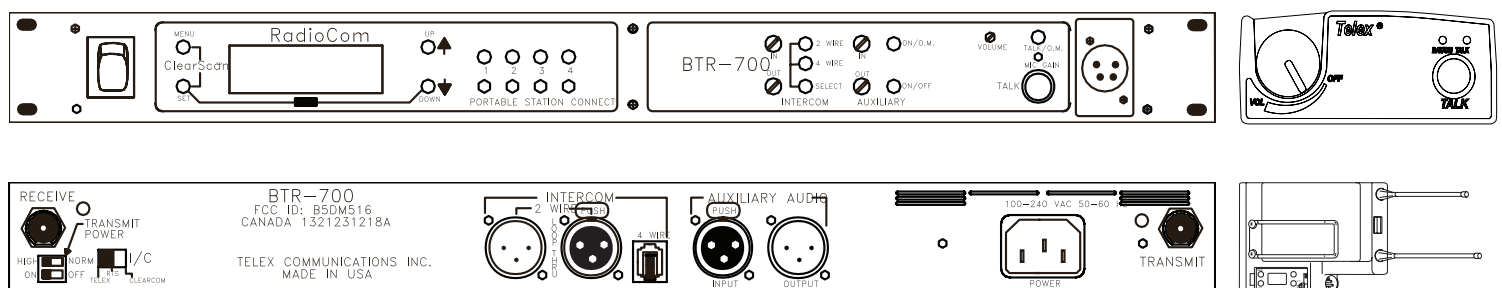
Convenient IEC power connector on the base station.

Base station comes with rack ears for easy rack mounting.

Beltpack 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%

Contact Information

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

Form Number: LIT000269000 Rev A

Date: August 2008

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.

TELEX BTR-700/800/825 -vs- BTR-80N

Feature	Telex 700	Telex 800/825		Telex 80N	
	BASE STATION AND SYSTEM FEATURES				
RF FREQUENCY RANGE	518-608, 614-740 MHz	470-608, 614-746 MHz		482-608, 614-722 MHz	
FREQUENCY BANDS	5 (A2, B4, C3, C6 , G9)	18 F1, F2, F3, F4 H1, H2, H3, H4 A2, A3, A4 B3, B4, B6 C3, C4, C6 E88		32 F1, F2, F3, F4, F5, F6 H1, H2, H3, H4, F5, F6 A1, A2, A3, A4, A5, A6 B2, B3, B4, B5, B6 C3, C4, C5, C6 D4, D5, D6 E5, E6	"6" & "G9" BANDS ARE INTENDED FOR SALE AND USE OUTSIDE OF THE USA
TRANSMITTER OCCUPIED BANDWIDTH	100 KHz	100 KHz		25 KHz	
Simultaneous 2 Wire & 4 Wire Operation	NO	YES - Either Channel		YES - Each Channel	
BASE STATION ANTENNA (Supplied)	1/2 Wave	1/2 Wave		1/2 Wave	
FREQUENCY SCANNING	YES ClearScan®	YES ClearScan®		YES ClearScan®	
BASE STATION TRANSMIT POWER	50 & 5mW	100 & 10mW		249, 100, 50 & 10mW	
BASE STATION DUAL TRANSMIT ANTENNA OUTPUT	N/A	OPTIONAL		OPTIONAL	
WARRANTY	3 YRS	3 YRS		3 YRS	
USER ADJUSTABLE SQUELCH CONTROL	NO	NO		YES	
RF METER (Rx SIGNAL STRENGTH)	NO	NO		YES	
BELTPACK BATTERY GAUGE ON BTR DISPLAY	NO	NO		YES	
ABILITY TO TURN OFF TR Tx FROM BTR	NO	NO		YES	
AC or DC POWER OPERATION	YES - KIT	YES - KIT		YES	
AUXILIARY AUDIO ASSIGNABLE	NO	NO		YES	
WIRELESS TALK AROUND - WTA	YES	YES		YES	
STAGE ANNOUNCE - SA	YES	YES		YES	
INTELLIGENT POWER CONTROL (TR Tx POWER)	YES	YES		YES	
FIRST ON - LATCH OUT OPERATION WITH TONE WARNING	NO	NO		YES Tone Defeatable	
SELECTABLE DC POWER FEED ON Rx LINE	NO	NO		YES 9 volts DC	
	BELTPACK FEATURES				
	TR-700	TR-800	TR-825	TR-80N	TR-82N
BELTPACK CONSTRUCTION	METAL DIE CAST MAGNESIUM	METAL DIE CAST MAGNESIUM	METAL DIE CAST MAGNESIUM	METAL DIE CAST MAGNESIUM	METAL DIE CAST MAGNESIUM
BELTPACK BATTERY LIFE (6 AA Alkaline)	14 Hrs	14Hrs	11Hrs	10 Hrs	9 Hrs
BELTPACK BATTERY LIFE (BP-800NM)	11 Hrs	11 Hrs	9.5 Hrs	10 Hrs	8 Hrs
PROGRAMMABLE BUTTONS ON BELTPACK	YES	YES	YES	YES	YES
PROGRAMMING AT BELTPACK	YES	YES	YES	YES	YES
BELTPACK TRANSMIT POWER	AUTO; 5 - 50mW	AUTO; 5 - 50mW	AUTO; 5 - 50mW	AUTO; 5 - 50mW	AUTO; 5 - 50mW
SELECTABLE-	NO	NO	NO	YES - AUTO, 100, 50, 5mW	YES - AUTO, 100, 50, 5mW
BELTPACK LOW BATTERY INDICATOR	YES	YES	YES	YES	YES
BELTPACK LOW BATTERY TONE WARNING	NO	NO	NO	YES	YES Tone Defeatable
ABILITY TO DISPLAY FREQUENCY AT BELTPACK	YES	YES	YES	YES	YES
EXTRA PDA DEVICE REQUIRED FOR PROGRAMMING	NO	NO	NO	NO	NO
BELTPACK TETHERED PROGRAMMING TO BASE STATION	NO	NO	NO	NO	NO
USER ADJUSTABLE SQUELCH CONTROL	NO	NO	NO	YES	YES
RF METER (Rx SIGNAL STRENGTH)	NO	NO	NO	YES	YES