

## BTR-700 & TR-700

### UHF Single Channel Wireless Intercom System

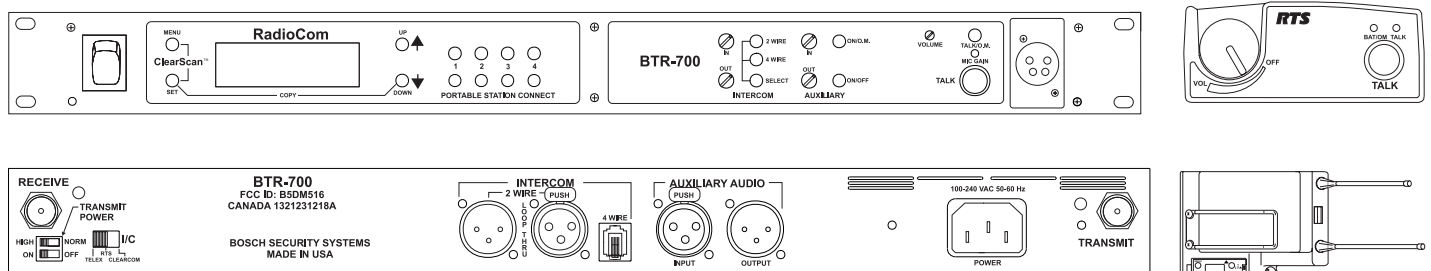


The RTS RadioCom BTR-700 UHF-synthesized wireless intercom system offers the ultimate in reliable, high performance, high fidelity full duplex communications. The BTR-700 system includes the BTR-700 frequency-agile base station, working with up to four (4) TR-700 frequency-agile beltpacks. The BTR-700 base station provides full-duplex communications with the beltpacks. The BTR-700 system is perfectly suited for stand-alone operation and can interface with RTS 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 RTS RadioCom BTR series has been designed for reliable, efficient operation. Operating in the 518 to 722 MHz range, the units operate reliably at line-of-sight distances of 1,000 feet. With available antenna systems from RTS 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 Drawings



# Specifications

RF Frequency Range:.....	518–608MHz, 614–722MHz 518-722MHz in 18MHz TX and RX bands	Transmit Power BTR-700:.....	(50mW Max. (High), 5mW (Normal), TR-700 (50mW Max. (Auto-power reduction))
BTR-700 Power Requirements:.....	100–240VAC, 50–60Hz IEC receptacle	Modulation Type:.....	FM
TR-700 Power Requirements:.....	6 “AA” Cells Alkaline (NiMH optional)	Deviation:.....	40kHz (35kHz Europe)
Temperature Range:.....	-4°F to 130°F (-20°C to 55°C)	RF Frequency Stability:.....	0.005%
TX Antenna BTR-700:.....	½ Wave (supplied), TNC Male Connector	Modulation Limiter:.....	Peak-Responding Compressor
TR-700:.....	¼ Wave (supplied), Screw type, Replaceable	Radiated Harmonics & Spurious:.....	Complies with FCC Specifications
RX Antenna BTR-700:.....	½ Wave (supplied) TNC Male Connector	Receiver Type:.....	Dual Conversion Superheterodyne four (4) Independent Synthesized IFs FM, 712 channels each
TR-700:.....	¼ Wave (supplied), Screw type, Replaceable	RF Sensitivity BTR-700:.....	<0.8 µV for 12dB SINAD
FCC ID:.....	BTR-700 (B5DM516), TR-700 (B5DM515) Frequency Response 300Hz–8kHz	TR-700:.....	<0.7 µV for 12dB SINAD
4-Wire Input and Output:.....	Level Adjustable (2Vrms typical)	Squelch Threshold:.....	20dB SINAD
AudiCom/Telex Intercom:.....	Input/Output Level Adjustable (1Vrms typical), Line Impedance, 300Ω	IF Selectivity:.....	3dB at 230kHz
RTS Intercom:.....	Input/Output Level Adjustable (0.775Vrms typical), Line Impedance 200Ω	Image Rejection:.....	70dB or better
Clear-Com Intercom:.....	Input/Output Level Adjustable (1Vrms typical), Line Impedance 200Ω	Squelch Quieting:.....	90dB
Auxiliary Input:.....	Adjustable (2Vrms typical)	RF Frequency Stability:.....	0.005%
Auxiliary Output:.....	Adjustable (2Vrms typical into 600Ω)	Distortion:.....	<1% at full deviation
Microphone Input Sensitivity:.....	BTR-700 (9 mV), TR-700 (7 mV)	<b>Product Dimensions/Weight</b> BTR-700:.....	19" W x 1.72" H x 14" D (48.3cm x 4.4cm x 35.6cm), 6lb 15oz (3.16kg)
Local Headset Output:.....	40mW output into 600Ω (1% Distortion)	TR-700:.....	3.75" W x 5.05" H x 1.65" D (9.5cm x 12.8cm x 4.2cm) 1lb 2oz (511g) with alkaline batteries
TR-700 Current Draw:.....	140mA (Push-to-Talk, Talk On)	<b>Shipping Dimensions/Weight</b> BTR-700:.....	16.25" W x 5" H x 22.5" D (41.3cm x 12.7cm x 57.2cm) 10lb 11 oz, (4.86kg)
Transmitter Type:.....	Synthesized Transmitter 712 channels	TR-700:.....	6.5" W x 13.75" H x 3.75" D (16.5cm x 34.9cm x 9.5cm) 1lb 6oz (625g) without batteries

# Order Information

- BTR-700 • UHF Single Channel Wireless Synthesized Base Station with A4M headset connector
- BTR-700-RTS • UHF Single Channel Wireless Synthesized Base Station with A4F headset connector
- BTR-700-RTS 5-Pin • UHF Single Channel Wireless Synthesized Base Station with A5F headset connector
- TR-700 • UHF Single Channel Wireless Synthesized Transceiver with A4M headset connector
- TR-700-RTS • UHF Single Channel Wireless Synthesized Transceiver with A4F headset connector
- TR-700-RTS 5-Pin • UHF Single Channel Wireless Synthesized Transceiver with A5F headset connector

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.

**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](http://www.fcc.gov/cgb/wirelessmicrophones).