

RadioCom

# **Technical Data Sheet**

Innovating the Future of Global Communications

#### BTR-700 & TR-700

## **UHF Single Channel Wireless Intercom System**

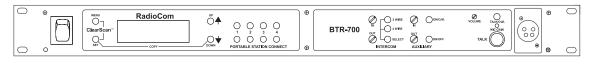


The RTS RadioCom BTR-700 UHF-synthesized wireless intercom system offers the ultimate in reliable, high performance, high fidelity full duplex communications. The BTR-700 system includes the BTR-700 frequency-agile base station, working with up to four (4) TR-700 frequency-agile beltpacks. The BTR-700 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



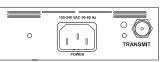


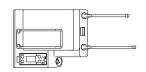












# Specifications

RF Frequency Range:518–608MH 518-722Ml	z, 614–722MHz Hz in 18MHz TX and RX bands	Transmit Power BTR-700:(50m\	V Max. (High), 5mW (Normal), TR-700 (50mW Max. (Auto-power reduction))
BTR-700 Power Requirements:100–240VAC, 50–60Hz IEC receptacle		Modulation Type:	FM
		Deviation:	40kHz (35kHz Europe)
TR-700 Power Requirements:		RF Frequency Stability:	
		Modulation Limiter:	Peak-Responding Compressor
TX Antenna		Radiated Harmonics	
BTR-700:½ Wave (supplied), TNC	Male Connector	·	Complies with FCC Specifications
TR-700:		Receiver Type:	Dual Conversion Superheterodyne four (4) Independent Synthesized IFs FM, 712 channels each
RX Antenna		RF Sensitivity	
BTR-700:	½ Wave (supplied) TNC Male Connector	BTR-700:	<0.8 µV for 12dB SINAD
TR-700:		TR-700:	<0.7 µV for 12dB SINAD
74 vvave (Supplik		Squelch Threshold:	20dB SINAD
FCC ID: BTR-700 (B5DM516), TR-	700 (B5DM515)	IF Selectivity:	3dB at 230kHz
Frequency Response 300		Image Rejection:	70dB or better
4-Wire Input and Output:l		Squelch Quieting:	90dB
	(2Vrms typical)		
AudiCom/Telex Intercom: Input/Output Level Adjustable (1Vrms typical), Line Impedance, 300Ω		Distortion:	<1% at full deviation
RTS Intercom: Input/Output Level Adjustable		Product Dimensions/Weight BTR-700:19" W x 1.72" H x 14" D	
$(0.775 Vrms typical)$ , Line Impedance 200 $\Omega$		B1R-700:	(48.3cm x 4.4cm x 35.6cm),
Clear-Com Intercom: Input/Output I			6lb 15oz (3.16kg)
(1Vrms typical), Line Ir	•	TR-700:	3.75" W x 5.05" H x 1.65" D
Auxiliary Input:Adjustable			(9.5cm x 12.8cm x 4.2cm) 1lb 2oz (511g) with alkaline batteries
Auxiliary Output: Adjustable (2Vrms ty		Shipping Dimensions/Weig	•
Microphone Input Sensitivity:		· · ·	16.25" W x 5" H x 22.5" D
Local Headset Output:40mW c		51111001	(41.3cm x 12.7cm x 57.2cm)
	(1% Distortion)		10lb 11 oz, (4.86kg)
TR-700 Current Draw:	to-Talk, Talk On)	TR-700:	6.5" W x 13.75" H x 3.75" D (16.5cm x 34.9cm x 9.5cm)
Transmitter Type:Synthes	,		1lb 6oz (625g) without batteries
Transmitter TypeSynthes	712 channels		· <del>-</del> ·

### 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

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