

## BTR-30N Series

### Narrow Band 2-Channel VHF/UHF Synthesized Wireless Intercom System

The RTS BTR-30N Narrow Band 2-Channel VHF/UHF Synthesized Wireless Intercom System is a revolutionary product offered in today's ever-changing and shrinking RF environment. Providing a 25kHz of modulated bandwidth, the BTR-30N narrow band system allows more users per channel in the relatively unused VHF spectrum and a reduced footprint in the cramped UHF band.

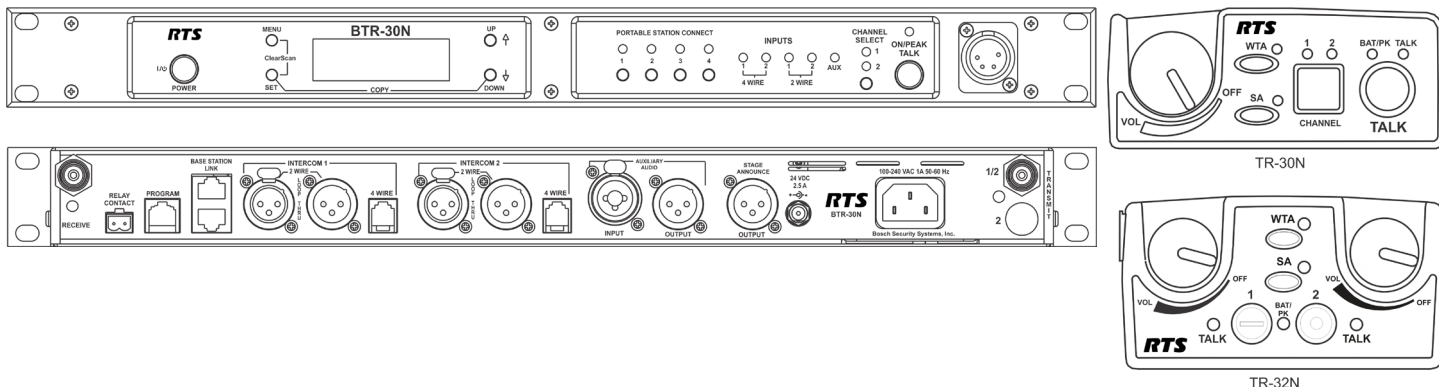
While providing excellent audio performance, the Narrow Band system provides all of the standard features of the RTS RadioCom BTR-80N system, such as DSP digital processing and Intelligent Power Control. Additional features include multiple selectable transmitter power outputs, selectable receiver squelch control, RF meter display on base station and beltback displays, remote battery indicators on base station display, beltback battery percentage display, low battery tone indicator on beltback, AC or DC power input on base station, simultaneous 2-Wire and 4-Wire operation and the ability to expand a system to an unlimited number of users in half-duplex with the First-On-Latch-Out feature. The BTR-30N fits in a standard 19-inch equipment rack and is 1 (1) rack unit high. The TR-30N and TR-32N beltbacks are constructed of durable and lightweight magnesium and provide up to 10-12 Hours of operation on AA alkaline batteries.



## Features

- Base RX and Beltback TX is in the VHF range, greatly reducing the system's footprint in the congested UHF spectrum.
- Frequency-agile base station and beltbacks. No external computer/device required to select frequencies.
- Flexible number of beltback users per base station.
- 2-Channel intercom.
- Selectable output power on the base station.
- User adjustable receiver squelch control.
- RF meter on BTR-30N, TR-30N, and TR-32N.
- Beltback battery gauge on BTR-30N display.
- Simultaneous 2-wire and 4-wire operation.
- Beltback low battery indicator with tone warning.
- Ability to turn off remote beltback talks from base station.
- BTR-30N is easily adapted for two (2) transmitter output.
- BTR-30N is designed for AC or DC power input.
- Auxiliary audio input is assignable with level control.
- BTR-30N has selectable DC power feed on RX Line.
- Beltback dark mode (no LEDs on).

## Line Drawings



# Specifications

RF Frequency Range	Four (4) Independent IF's
Base TX : .....482-572 MHz in 18 MHz bands	RF Sensitivity:..... <0.6 micro Volts for 12dB SINAD
Base RX : ..... 174-216 MHz in two 24 MHz bands	Squelch Threshold:.....Adjustable
BTR-30N Power Requirements:.....(AC and DC)	Squelch Quieting: ..... 90dB
100–240VAC,50-60Hz	Distortion: ..... 1% at full deviation
24 Volts DC	
TR-30N/TR-32N Power Requirements:..... 6 AA Cells	<b>Product Dimensions/Weight</b>
Alkaline (NiMH optional)	BTR-30N:..... 17.5" L w/o ears 19" w/ears x 13.75" W x 1.75" H
Temperature Range:..... -4°F to 130°F (-20°C to 55°C)	(44.45 cm L w/o ears 48.26 cm w/ears x 34.93 cm x 4.45 cm)
Frequency Response: .....200Hz to 4000Hz	7 lb 8 oz (3.5 kg)
4-Wire Input and Output: ..... Level Adjustable	TR-30N: ..... 5" L x 3.63" W x 1.5" H
(2Vrms typical)	(12.7 cm x 9.22 cm x 3.81 cm)
AudioCom.RTS 2-Wire Intercom	0.95 lb (0.43 kg) with batteries
Input and Output:..... Level Adjustable (1Vrms typical)	TR-32N: ..... 5" L x 3.63" W x 1.88" H
Line Impedance 300Ω	(12.7 cm x 9.22 cm x 4.78 cm)
RTS 2-Wire Intercom Input and Output: ..... Level Adjustable	1 lb 10 oz (0.50 kg) with batteries
(0.775Vrms typical)	
Line Impedance 200Ω	<b>Shipping Dimensions/Weight</b>
Clear-Com TW Intercom	BTR-30N:..... 23" L x 16.25" W x 4.88" H
Input and Output:..... Level Adjustable (1Vrms typical)	(58.42 cm x 41.28 cm x 12.40 cm)
Line Impedance 200Ω	10 lb 2 oz. (4.63 kg)
Auxiliary Audio Input:.....Adjustable	TR-30N: ..... 13.75" L x 6.38" W x 3.88" H
(2Vrms typical)	(34.93 cm x 16.21 cm x 9.86 cm)
Auxiliary Audio Output: .....Adjustable	1 lb 55 oz (0.70 kg) without batteries
(2Vrms into 600 Ω)	TR-32N: ..... 13.75" L x 6.38" W x 3.88" H
Stage Announce Output: .....Adjustable	(34.93 cm x 16.21 cm x 9.86 cm)
(2Vrms typical at rated deviation into 600Ω)	1 lb 70 oz (0.77 kg) without batteries
Stage Announce Relay: ..... Dry contact, rated at 1 Amp	
24V Max	
Transmitter Type:..... Synthesized Transmitters	
Transmit Power Selectable:	
BTR-30N:..... Off, 10, 50, 100, 249 mW	
TR-30N/TR-32N: .....Auto (10 or 50 mW), 10, 50 mW	
Modulation Type: ..... FM	
Deviation:..... 4kHz	
Receiver Type:..... Triple Conversion Superheterodyne	

**NOTICE:**  
 This wireless microphone system can be configured for both FCC Part 15 (unlicensed) and FCC Part74 (licensed) operation. When shipped from the factory, this wireless microphone system is configured for unlicensed operation, and will operate at a power level not to exceed 50 milliWatts, which meets FCC Part 15 requirements. If unlicensed users operate this device in excess of 50 milliWatts, harmful interference may result and the unlicensed user will be subject to substantial monetary forfeitures and other FCC sanctions. The wireless microphone system may be operated by holders of a valid FCC license in the Low Power Auxiliary Radio Service under Part 74 of FCC Rules, at power levels between 50 milliWatts and 250 milliWatts.

**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/wireless-microphones](http://www.fcc.gov/cgb/wireless-microphones).

# Order Information

- BTR-30N • Narrow Band VHF/UHF Base Station
- TR-30N • Narrow Band VHF/UHF 2 Channel Beltpack
- TR-32N • Narrow Band VHF/UHF 2 Channel Stereo Beltpack

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.

