



## BTR-80N

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

The Telex RadioCom BTR-80N Narrow Band 2-Channel UHF Synthesized Wireless Intercom System is a revolutionary product offered in today's ever-changing and shrinking RF environment. Providing an unprecedented 25 kHz of modulated band width, the BTR-80N narrow band system will allow more users per channel in the cramped UHF spectrum.

While providing excellent audio performance, the Narrow Band system provides all of the standard features of the Telex RadioCom BTR-800 system, such as DSP digital processing and Intelligent Power Control. Additional features include selectable transmitter power output, selectable receiver squelch control, RF meter display on base station and beltback displays, remote battery indicators on base station 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-80N fits in a standard 19-inch equipment rack and is 1 rack unit high. The TR-80N and TR-82N beltbacks are constructed of durable and lightweight magnesium and provide up to 10-12 Hours of operation on AA alkaline batteries.

### Features

UHF Operation

Flexible Number of Beltback Users per Base Station

Two-Channel Intercom Access

Selectable Output Power

User Adjustable Receiver Squelch Control

RF Meter on BTR-80N, TR-80N, and TR-82N

Beltback Battery Guage on BTR-80N Display

Beltback Low Battery Indicator with Tone Warning

Ability to Turn Off Remote Beltback Transmitters from Base Station

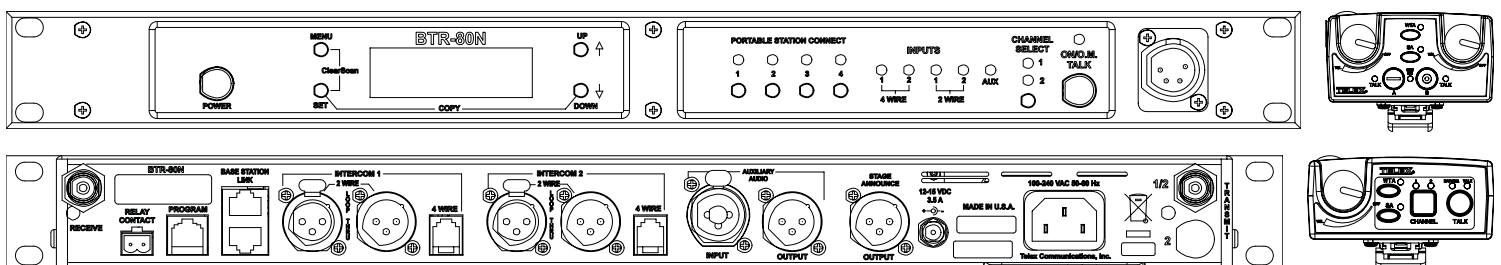
BTR-80N is Easily Adapted for Two Transmitter Output

BTR-80N is Designed for AC or DC Power Input

Auxiliary Audio Input is Assignable with Level Control

BTR-80N has Selectable DC Power Feed on RX Line

### Line Drawing



# BTR-80N Specifications

## Overall

### **RF Frequency Range**

482 – 698 MHz (TV 16 to TV 36 and TV 38 to TV 52)

### **BTR-80N Power Requirements (AC and DC)**

100-240 VAC, 50-60 Hz ; 12-15 Volts DC

### **TR-80N/TR-82N Power Requirements**

6 "AA" Cells, Alkaline (NiMH optional)

### **Temperature Range**

-4°F to 130°F (-20°C to 55°C)

### **Frequency Response**

300 Hz to 5000 Hz

### **4-Wire Input and Output**

Level Adjustable (2 Vrms typical)

### **Telex RadioCom 2-Wire Intercom Input and Output**

Level Adjustable (1 Vrms typical)

Line Impedance 300 Ohms

### **RTS 2-Wire Intercom Input and Output**

Level Adjustable (.775 Vrms typical)

Line Impedance 200 Ohms

### **Clear-Com TW Intercom Input and Output**

Level Adjustable (1 Vrms typical)

Line Impedance 200 Ohms

### **Auxiliary Audio Input**

Adjustable (2 Vrms typical)

### **Auxiliary Audio Output**

Adjustable (2 Vrms into 600 Ohms)

### **Stage Announce Output**

Adjustable (2 Vrms typical at rated deviation into 600 Ohms)

### **Stage Announce Relay**

Dry contact, rated at 1 Amp, 24V Max

## Transmitter

### **Type**

Two Synthesized Transmitters, 712 Channels Each

### **Transmit Power**

Selectable: (BTR-80N: 249 mW - 10 mW, TR-80N/TR-82N: 100 mW – 5 mW)

### **Modulation Type**

FM

### **Deviation**

4-5 kHz

## Contact Information

Bosch Security Systems, Inc. 12000 Portland Avenue South Burnsville, Minnesota 55337 Telephone: 877-863-4169 Fax: (800) 323-0498	Comtronics Nuclear 1-800-264-6021 www.wirelessworker.com www.cobaltav.com dfried@cobaltav.com
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Form Number: LIT000249000 Rev C

Date: February, 2010

## Receiver

### **Type**

Triple Conversion Superheterodyne, Four Independent IF's, 712 Channels Each

### **RF Sensitivity**

<0.8 micro volts for 12 dB SINAD

### **Squelch Threshold**

Adjustable

### **Squelch Quieting**

90 dB

### **Distortion**

1% at full deviation

## Product Dimensions/Weight

### **BTR-80N**

19.0"W x 1.72"H x 14.0"D (48.3cm x 4.4cm x 35.6cm), 7 lbs 5 oz (3.3 kg)

### **TR-80N**

3.75"W x 5.05"H x 1.65"D (9.5cm x 12.8cm x 4.2cm), 1 lbs 13 oz (822 g)

### **TR-82N**

3.75"W x 5.35"H x 2.02"D (9.5cm x 13.5cm x 5.1cm), 1 lbs 15 oz (879 g)

## Shipping Dimensions/Weight

### **BTR-80N**

22.0"W x 5"H x 16.5"D (57.2cm x 12.7cm x 41.9cm), 11 lbs (4.9 kg)

### **TR-80N**

13.75"W x 3.75"H x 6.5"D (34.9cm x 9.5cm x 16.5cm), 3 lbs 6 oz (1.5 kg)

### **TR-82N**

13.75"W x 3.75"H x 6.5"D (34.9cm x 9.5cm x 16.5cm), 3 lbs 8 oz (1.6 kg)

## **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).

## Ordering Information

### **BTR-80N**

Narrow Band UHF Base Station  
Catalog Number: PRD000083xx

### **TR-80N**

Narrow Band UHF 2 Channel Beltpack  
Catalog Number: PRD000084xx

### **TR-82N**

Narrow Band UHF 2 Channel Stereo Beltpack  
Catalog Number: PRD000085xx

xx designates specific frequency band to order. Please contact Telex RadioCom Communications for assistance.

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

Brand names mentioned are the property of their respective companies.