



# INNOVATIVE INDUSTRIAL SOLUTIONS

Unreal Innovation, Real Solutions.



## 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 beltpack displays, remote battery indicators on base station display, low battery tone indicator on beltpack, 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 beltpacks are constructed of durable and lightweight magnesium and provide up to 10-12 Hours of operation on AA alkaline batteries.

#### UHF Operation

**Flexible Number of Beltpack 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**

**Beltpack Battery Guage on BTR-80N Display**

**Beltpack Low Battery Indicator with Tone Warning**

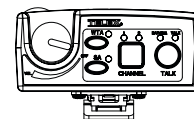
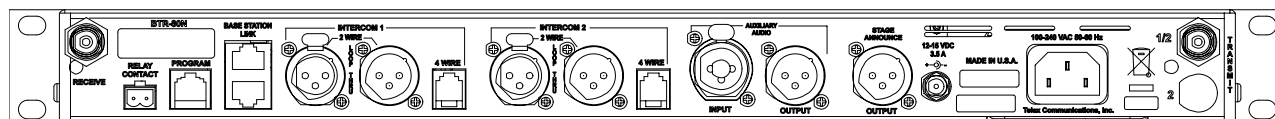
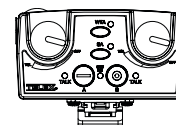
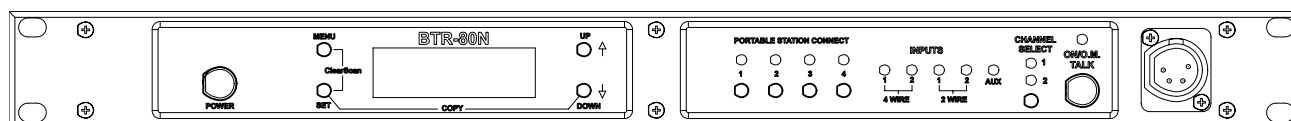
**Ability to Turn Off Remote Beltpack Transmitters from Base Station**

**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**



# 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

## 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)

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