

# RadioCom

**TELEX<sup>®</sup>**



**Wireless Intercom**

*wireless that works<sup>™</sup>*

# Wireless Intercom

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**Telex Communications Inc.** has been the leading manufacturer of wireless intercom systems and hardwired intercom for over 25 years. With mission critical installations in every corner of the world, Telex intercom systems provide the widest range of rugged and reliable intercommunications solutions for virtually any application.

Telex® RadioCom™ intercom systems lead the industry with a complete suite of full duplex, highly configurable and expandable wireless intercom system platforms. With multiple award-winning innovations such as the BTR-800 two-channel frequency agile wireless intercom, the TR-825 two-channel "stereo" beltback transceiver and proprietary digital encryption, Telex has led the way with innovative technology that allows users to move around freely while maintaining "wired-like" quality and reliability. Telex® RadioCom™ systems are utilized in virtually every kind of application and venue throughout the world.

Whatever your requirements may be, Telex has the intercom system that's right for you. Telex intercoms are the systems of choice among communications professionals everywhere. Why not make it yours?

What good is technology if you can't make it work for you? So often today in our industry new products come out that are more complicated to use and are consequently a hindrance rather than a tool. Telex has the answer. The new RadioCom™ BTR-1 and the BTR-800 and BTR-700 wireless intercom systems are extremely powerful and flexible, yet offer a simplified user interface that lets you get started right out of the box.

Bright, clear, readable, LCD displays put all of the features and information you need to access right at your fingertips. Without layer after layer of menus to deal with, the Graphical User Interface allows even new users to access, change and store system settings as well as frequency selections.

Basic primary screens run the entire operating system with various supplemental screens for other tasks. The status of every belt-pack in the system, as well as operating frequencies and group/channel status, is readily available.

The powerful Enhanced ClearScan™ auto frequency selection feature is easily activated and progress is easily monitored on the Clear Scan progress screen. Results are then displayed and users have the option to accept, reject or modify the results. This dynamic feature allows system frequency selection and setup in just minutes in a new or unknown venue location.

```
Group 06B R1 Off
T1 On      E Ch B
           E no tx
           H Ch A
```

```
Group 06B R1 Ch 01
T1 On      E Ch 05
           E Ch 07
           H Ch 10-
```

```
Group 06B R1 704.500
T1 554.200 E 709.600
           E 713.300
           H 714.800
```

```
ClearScan™
████████████████████
```

```
Group 01A 01 05
OK?=[SET] 02 06
↑ Prev    03 07
↓ Next    04 08
```

Screen samples of BTR-800 graphical user interface

```
00TELEX00 No 01 A
GP CH  IC 1
01 A1  Tx High
F2 2W   RF .....
```

```
BTN A  SELECT TALK
IC 1    IC_IN .....
AUX N   IC_OUT .....
```

```
Security Code
0 0 1 0
```

```
RF METER Rx: 632.200
██████████████████
1 2 3 4 5
```

```
→ ClearScan Groups
ClearScan Channels
ClearScan Band
```

Screen samples of BTR-1 graphical user interface





# BTR800

## 2-Channel UHF Synthesized Wireless Intercom



- **TR-800 Wireless Beltpacks.** Four beltpacks per base station. Each BTR-800 base station can support up to four beltpacks in fulltime transmit, full duplex operation. Multiple base station/beltpack systems can be used together to meet the needs of virtually any wireless communications application.
- **Frequency Agile.** Choose from 1440 user selectable frequencies using the 800's graphical user interface. Frequencies can be selected from factory preset groups of intermod free choices or any frequency in 25 KHz increments. Select from 720 TX and 720 RX frequencies each from independent 18 MHz operational bands.
- **UHF Operation.** The BTR-800, TR-800 and TR-825 operate in the UHF band from 470 to 740 MHz. Bases and beltpacks operate in specific 18 MHz operational bands. Contact Telex customer service for complete frequency band details.

- **Enhanced ClearScan™ Frequency Auto Selection and Graphical User Interface.** (See page 2)
- **Intermodulation-Free Factory Selected Groups.** Each 800 system comes with 24 factory selected, intermod avoiding groups that allow even the most uninitiated user to get started right out of the box. Telex has done all of the work for you!
- **Two-Channel Intercom Access From Each Beltpack.** Hardwired channels are run to the BTR-800 base station and can be 2-wire, 4-wire or mixed. The BTR-800 is fully compatible with AudioCom®, RTST™ and Clear-Com® hardwired intercom systems.
- **Dual Listen Operation.** Each TR-825 beltpack provides two volume controls; one for each intercom channel that allow for individual level control. Listen to Production in one ear and Tech in the other ear. The TR-825 can operate in either Stereo (split-feed) or Mono mode.
- **Stage Announce Output With Relay Closure.** Each beltpack can initiate the Stage Announce feature. The user's audio is routed out the back of the base station via a 3-pin XLR connector. The signal is dry,

*The most versatile wireless intercom ever!*



### Frequency agile

1440 selectable frequencies

2 independent intercom channels

ClearScan™ auto frequency selection

Stage Announce output with relay closure

Wireless talk around (broadcast ISO)

Dual Listen Operation (TR-825)

4 beltpacks per base station

Cast magnesium beltpacks

And so much more

line level +8 dB and adjustable. A convenient relay closure is provided for triggering two-way radios, IFB sends, green-room speakers or any other closure activated device.

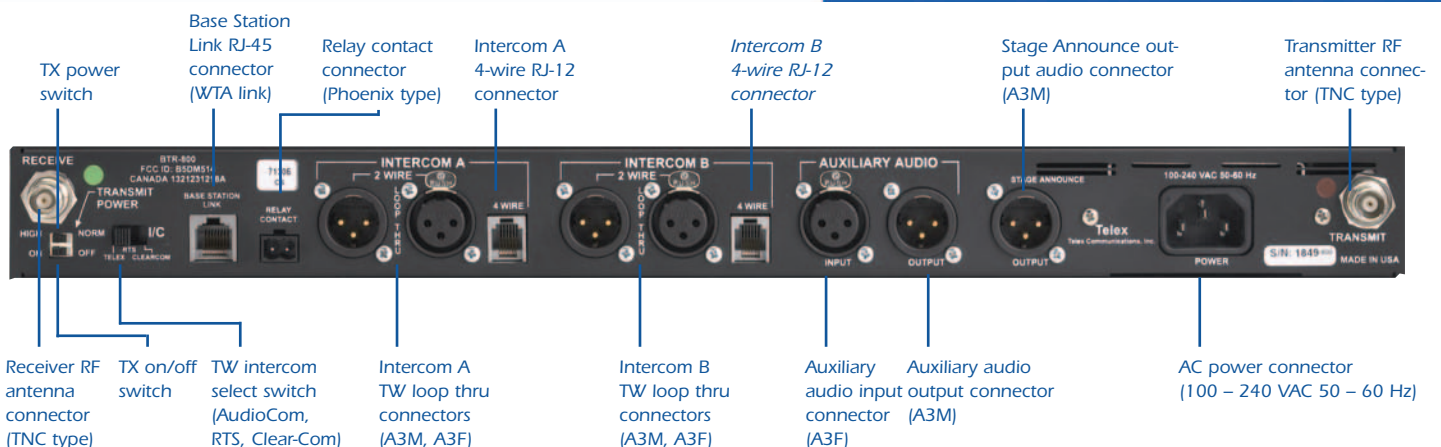
- **Wireless Talk Around (Broadcast ISO).** Each beltpack can momentarily route its audio only to the other wireless beltpacks on its current channel with the push of a button. The user's audio is lifted off of the intercom bus so that only the other wireless beltpacks can hear. This is great for private conversations in the heat of battle.
- **"Fifth Person" Talk/Listen Station At Base.** The BTR-800 base station features a full talk/listen headset station so that an additional user can communicate on one, the other or both intercom channels at once.
- **Intelligent Power Control™.** This new breakthrough technology takes system range and performance to a whole new level. Each beltpack senses when it is close to the base station and intelligently reduces its output by 10 dB. This effectively eliminates overloading the base station receiver front end which is the primary cause for the "near — far" desensing problem experienced in other wireless intercoms.
- **Cast Magnesium Beltpacks.** TR-800 and TR-825 beltpacks are constructed of extremely light, strong and durable cast magnesium. Using magnesium substantially decreases the weight of the beltpack while assuring the utmost ruggedness and durability.
- **Two Great Battery Options.** TR-800 and TR-825 beltpacks can be operated from standard Alkaline AA batteries that provide up to 14 hours of continuous duty operation. For applications where rechargeable batteries are required optional NiMH battery packs are available. NiMH batteries do not develop harmful memories like NiCads and offer up to 12 hours of operation. Drop-in chargers are also available in single and four-gang configurations.
- **Detachable Beltpack Antennas.** TR-800 and TR-825 beltpacks feature detachable antennas that utilize stud type threaded connectors that do not have a fragile center pin to break off or bend. Detachable antennas make storage or shipping a breeze.



TR-825 beltpack



TR-800 beltpack





# BTR700

*Single Channel UHF Synthesized Wireless Intercom*



- **TR-700 Wireless Beltpacks.** Four beltpacks per base station. Each BTR-700 base station can support up to four beltpacks in fulltime transmit, full duplex operation. Multiple base station/belt pack systems can be used together to meet the needs of virtually any wireless communications application.
- **Frequency Agile.** Choose from 1440 user selectable frequencies using the 700's graphical user interface. Frequencies can be selected from groups of intermod free choices, or any frequency in 25 KHz increments. Select from 720 TX and 720 RX frequencies each from independent 18 MHz operational bands.
- **UHF Operation.** Both the BTR-700 and the TR-700s operate in the UHF band from 518 to 740 MHz. Bases and beltpacks operate in specific 18 MHz operational bands. Contact Telex customer service for complete frequency band details.

- **Enhanced ClearScan™ Frequency Auto Selection And Graphical User Interface.** (See page 2)
- **Intermodulation-Free Factory Selected Groups.** Each 700 system comes with 24 factory selected, intermod avoiding groups that allow even the most uninitiated user to get started right out of the box. Telex has done all of the work for you!
- **"Fifth Person" Talk/Listen Station At Base.** The BTR-700 base station features a full talk/listen headset station so that an additional user can communicate on the intercom channel.
- **Intelligent Power Control™** This new breakthrough technology takes system range and performance to a whole new level. Each beltpack senses when it is close to the base station and intelligently reduces its output by 10 dB. This effectively eliminates overloading the base station receiver front end which is the primary cause for the "near — far" desensing problem experienced in other wireless intercoms.

*The most versatile wireless intercom ever!*

Frequency agile

1440 selectable frequencies

ClearScan™ auto frequency selection

4 beltpacks per base station

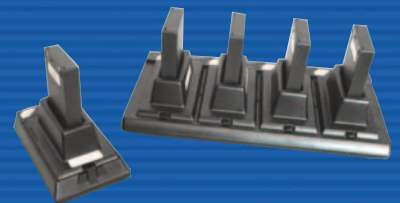
Cast magnesium beltpacks

And so much more



## TR-800/700 Beltpack

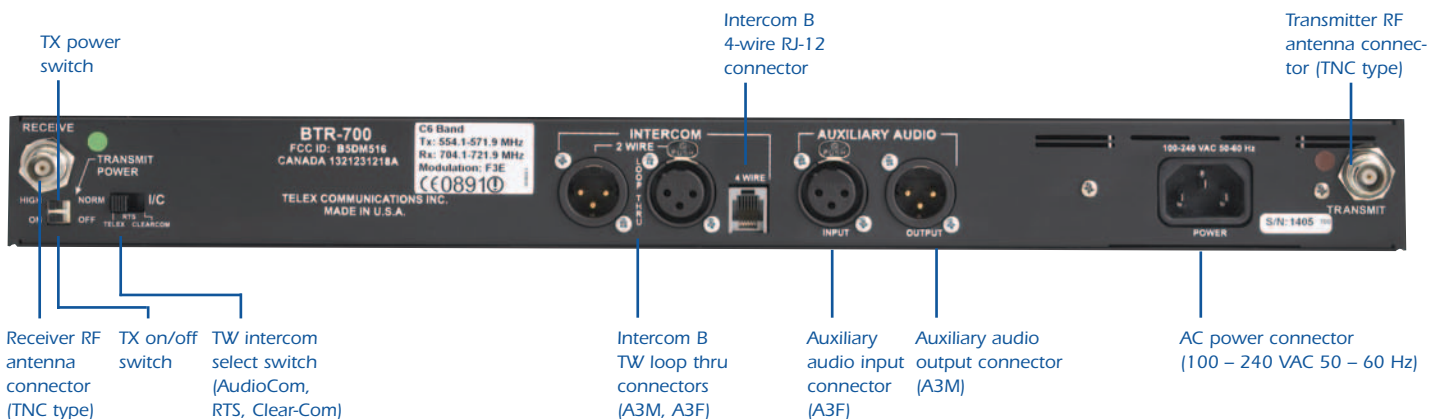
TR 800/700 beltpacks are small, lightweight and extremely rugged and reliable. All metal construction, an easy-to-read LCD status screen and field replaceable antennas are just a few of the features.



## TR-1, TR-800, TR-700 NMH Battery Charger

Available in either 1 bay or 4 bay, these chargers provide quick charging of your Nickel Metal Hydride (NMH) battery packs.

- **Cast Magnesium Beltpacks.** TR-700 beltpacks are constructed of extremely light, strong and durable cast magnesium. Using magnesium substantially decreases the weight of the beltpack while assuring the utmost ruggedness and durability.
- **Detachable Beltpack Antennas.** TR-700 beltpacks feature detachable antennas that utilize stud type threaded connectors that do not have a fragile center pin to break off or bend. Detachable antennas make storage or shipping a breeze.
- **Two Great Battery Options.** TR-700 beltpacks can be operated from standard Alkaline AA batteries that provide over 14 hours of continuous duty operation. For applications where rechargeable batteries are required optional NiMH battery packs are available. NiMH batteries do not develop harmful memories like NiCads and offer a full 12 hours of operation. Drop-in chargers are also available in single and four-gang configurations.





# BTR-1 / TR-1

**1 to 1 UHF - Full Duplex, Frequency Agile, Digitally Encrypted Wireless Intercom**

The Telex BTR-1 UHF wireless intercom system is truly unique. The BTR-1 is a One to One (one base station to one belt pack) full duplex, digitally encrypted wireless intercom that offers a list of standard features that is unparalleled in the industry. Features like UHF frequency agility, digital audio encryption, advanced ClearScan™, three audio channel capability with 2-wire line mix, signal relay closure, TR-1 battery telemetry to the base station, base station RF meter and much, much more. Combine all of these features with an easy-to-use graphical user interface that lets you get started right out of the box, and you've got the most versatile wireless intercom ever produced. The BTR-1 is packed full of the latest technology like Intelligent Power Control™, DSP Digital Audio Processing and proprietary digital audio encryption. This wireless intercom system not only sounds great but, provides secure communications at the same time. If your application requires the highest performance and the ultimate in reliability, you need the new Telex RadioCom™ BTR-1 wireless intercom system.



- **SYSTEM.** Each BTR-1 base station can support one TR-1 beltpack in fulltime transmit, full duplex operation. Multiple TR-1 beltpacks can be used in Push to Transmit mode (transmitter engaged when TALK button is active) providing half duplex operation with "First ON Latch OUT" feature.
- **UHF OPERATION.** The BTR-1 and TR-1 operate in the UHF frequency band from 482 MHz to 746 MHz. Base stations and beltpacks operate in specific 18 MHz frequency bands.
- **FREQUENCY AGILE.** Choose from 34 different frequency band splits providing 1440 user selectable frequencies per band split. OR, choose from 50 preprogrammed factory selected intermod avoiding frequency groups that are provided for each frequency band split. Either way, the BTR-1 will allow the user to get started right out of the box. Telex has done most of the work for you.
- **ADVANCED ClearScan™.** INCLUDES THREE OPTIONS ClearScan™ Group: Scans all Factory and User defined Channel Groups and produces a list of open groups in order of maximum number of Channels available for a given Group. Once the Group is selected, pressing SET with that Group showing starts the ClearScan™ Channel function ClearScan™ Channel: Scans the channels in the selected Group and produces a list of open Channels within the



## Frequency Agile

1440 Selectable Frequencies

Available on 34 Different Frequency Band Splits

Advanced ClearScan™ Auto Frequency Selection

1 Beltpack to 1 Base Station (Full Duplex)

Multiple Beltpacks to 1 Base Station (Half Duplex)

Digital Audio Encryption

Three Audio Channel Capability with 2-Wire Line Mix

Signal Relay Closure

Cast Magnesium Beltpacks

And so much more



Group in order of best Channel first ClearScan™ Band: Scans the entire 18 MHz band for clear frequencies regardless of Groups or Channels and is used to find one frequency in a tough RF environment.

■ **THREE-CHANNEL INTERCOM ACCESS FROM BELTPACK.** Each TR-1 can select their own mix of up to six 2-wire intercom lines on each (up to three) beltpack selected audio channels. You can program the system to TALK, LISTEN ONLY, or MUTE any of the six intercom lines on any of the beltpack audio channels and you have complete control of the level settings for each intercom channel. The BTR-1 is fully compatible with AudioCom®, RTST™, and Clear-Com® hardwired intercom systems.

■ **BATTERY OPTIONS.** The TR-1 beltpack can be operated from standard Alkaline AA batteries that provide up to 10 hours of continuous duty operation. For applications where rechargeable batteries are required, optional NiMH battery packs are available and offer up to 9 hours of continuous duty operation. Drop-in chargers are also available in single and four-gang configurations. The TR-1 also has an audible alarm that can be heard in your own headset. This alarm can be turned ON or OFF with the easy to use program interface located on the back of the TR-1. Additionally, the TR-1 sends battery to the BTR-1 which is graphically displayed on the front panel.

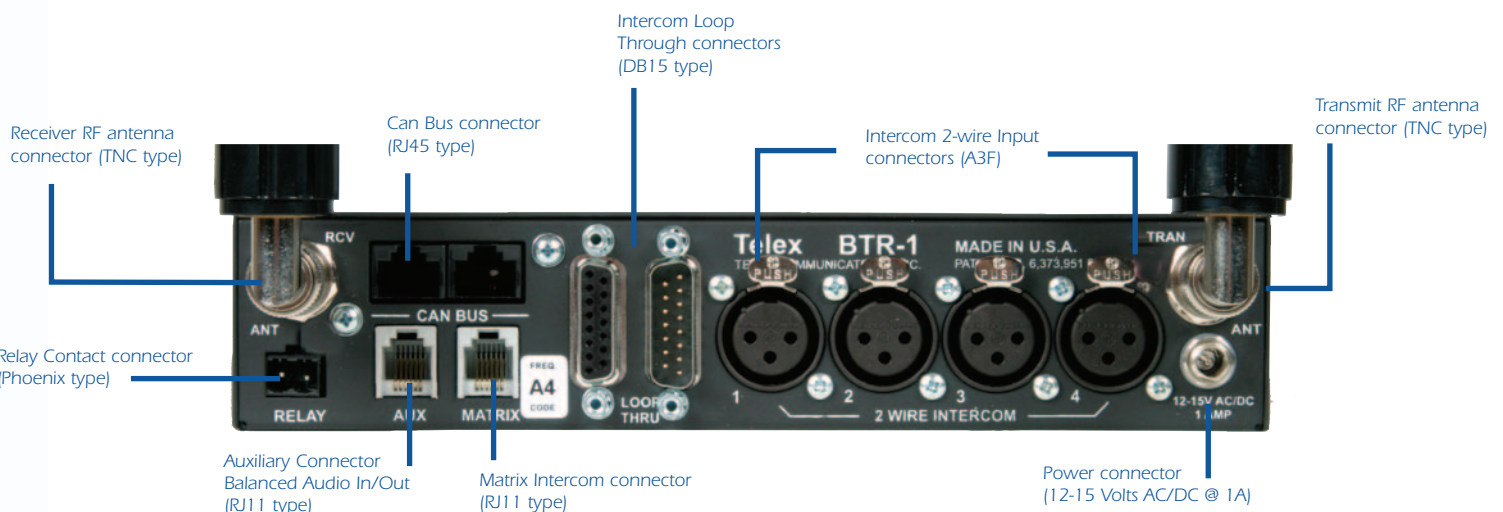
■ **RELAY CLOSURE.** Each TR-1 beltpack can trigger a relay closure that can activate a light or a horn or other closure activated device.

■ **INTELLIGENT POWER CONTROL™.** This technology takes performance to another level. Each TR-1 beltpack senses when it is close to the base station and the intelligently reduces its transmit output power by 10 dB. This effectively eliminates overloading the station receiver front end which is the primary cause of the "near -far" desensing problem experienced in other wireless intercoms. The TR-1 can be configured to be use the Intelligent Power Control™ (AUTO) or the transmit power can be set to HI power only or LO power only.

■ **CAST MAGNESIUM BELTPACKS.** TR-1 beltpacks are constructed of extremely light, strong and durable die cast magnesium. Using magnesium substantially decreases the weight of the beltpack while assuring the utmost ruggedness and durability.

■ **GRAPHIC USER INTERFACE.** The BTR-1 and TR-1 have easy to use user interfaces utilizing LCD displays. Custom graphic menus on the BTR allow access to all of the powerful features and system operational parameters. The menu structure has been specifically designed to be intuitive and easy to use right out of the box.

■ **SYSTEM CONFIGURATIONS.** Telex has worked hard to provide the right equipment when configuring large wireless intercom systems. When configuring BTR-1's in a ten-drop system, the ACS-101 Antenna Combiner/Splitter will provide antenna feeds from the ten BTR-1's to one transmit antenna and one receive antenna. Additionally, the FM-1 System Manager will assist in managing your systems frequency and intercom settings with the use of a System Manager Program (SMP). This easy to use, Windows® based program allows the



# FM-1

## Intercom System Manager



The FM-1, along with the QSB-1 Card Reader and the SMP (System Manager Program), work together as a system that allows a user to easily manage frequency and intercom settings for a system of up to ten BTR-1's along with their TR-1 beltpacks.



- **System Manager Program (SMP).** The SMP software enables a user to set-up multiple events on a computer and manage the frequency and intercom settings for each individual BTR-1 base station in each event. These events are easily downloaded to a DataFlash® 2MB memory card via the QSB-1 Card Reader.

- **QSB-1 Card Reader.** The QSB-1 is a serial bus device that interfaces with the SMP via a USB connection to a computer. The QSB-1 is designed for a DataFlashR memory card. The user is able to save events, programmed on the SMP, to the DataFlash® memory card via the QSB-1.

- **FM-1 Interface.** The FM-1 interfaces with up to ten BTR-1 base stations and communicates to the BTR-1's via a CAN bus system. Once the SMP program information has been sent and saved to the DataFlash® memory card, the memory card is inserted into the Card Reader slot on the front panel of the FM-1. The FM-1 reads the events from the memory card and allows the user to select an event to download the BTR-1 base stations.

- **Snap Shot.** The FM-1 can also record the settings of a given system via the Snap Shot function on the front of the FM-1. This convenient and easy to use feature records all frequency and intercom setting parameters of the system on the DataFlash® memory card. The memory card can then be uploaded to the SMP software via the QSB-1 card reader.

[Convenient system management](#)

[Easy system configuration with SMP software](#)

[Compatible with BTR-1 intercom systems](#)

[CAN bus](#)

[Snap Shot record of system settings](#)

# ACS-101/SC600

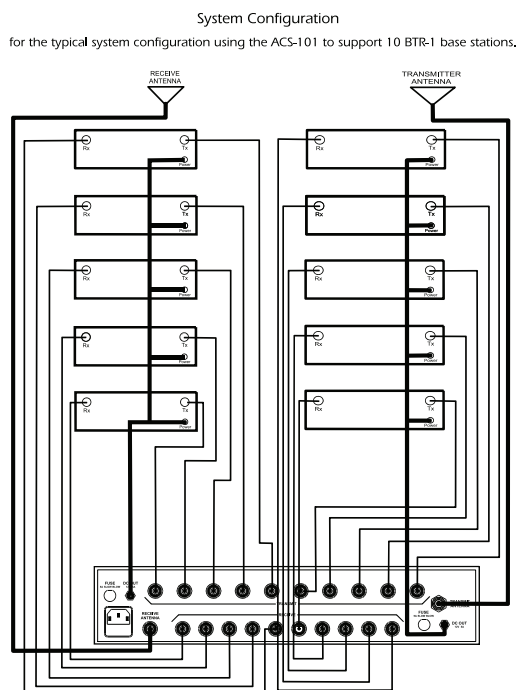
## Broadband Antenna Combiners - Splitters

### ACS-101

The ACS-101 Amplified Broadband Combiner-Splitter makes it possible to operate 10 UHF wireless intercom base transceivers using only two antennas. In addition to accommodating ten transmit and 10 receiver antennas, it provides power connection for up to 10 base transceivers. It also features excellent output isolation (better than SC-600). The ACS-101 is necessary in multi-frequency systems to prevent intermodulation. The ACS-101 is an ideal complement to your BTR-1, BTR-700 or BTR-800 (BTR-800 set to normal output power).

### SC-600

The SC-600 Amplified Broadband Splitter-Combiner makes it possible to operate eight UHF wireless intercom base transceivers using only two antennas. In addition to accommodating eight transmit and eight receiver antennas, it provides power connection for up to eight base transceivers. It also features good output isolation. The SC-600 is necessary in multi-frequency systems to prevent intermodulation. The ACS-101 is an ideal complement to your BTR-500, BTR-600, BTR-700 or BTR-800 (BTR-800 set to normal output power).



Two models to choose from

Reduces 20 antennas to 2 (ACS-101) or Reduces 16 antennas to 2 (SC-600)

Extremely low intermod production

Compatible with BTR-1, BTR-500, BTR-600, BTR-700 and BTR-800 Systems

Handles both transmit and receive

Rugged and durable construction

One year warranty

Made in the USA



# BTR300

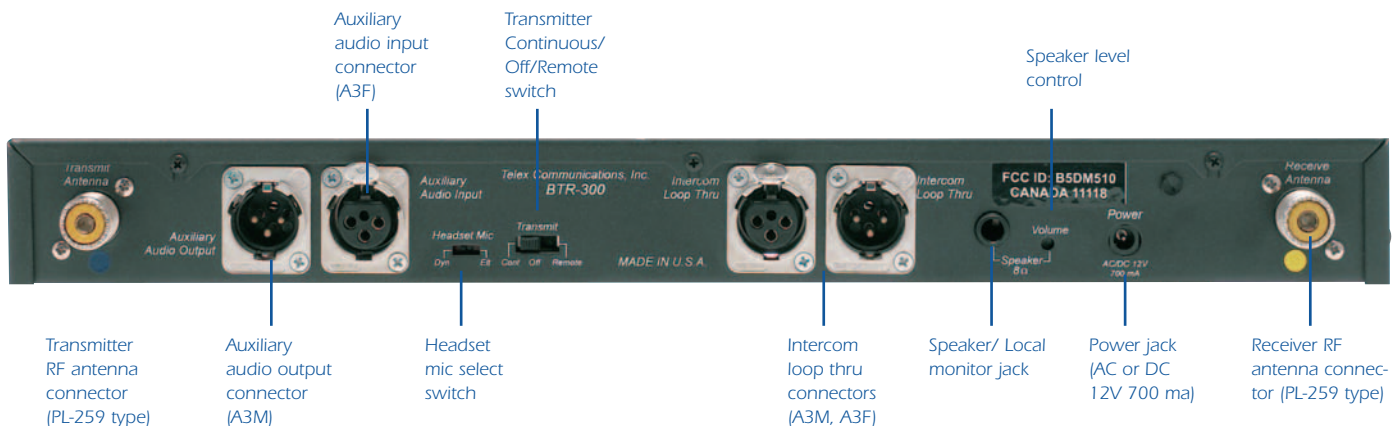
## Single Channel VHF Fixed Crystal Wireless Intercom

*The BTR-300 wireless intercom system is the first wireless intercom to be designed specifically with DTV band allocations in mind. Improved front end filtering allows the BTR-300 to be used in RF environments where other wireless intercoms simply can't function. Additional filtering capabilities and unique channel assignments allow up to four base stations and 16 individual beltacks to be used simultaneously. Break the chains of wired communications without breaking the budget. Get the reliable, affordable RadioCom™ BTR-300.*



- **Quality Audio.** Unique audio shaping circuitry and superior RF design combine to give the BTR-300 wired intercom quality sound.
- **Front End Filtering.** The BTR-300 utilizes sophisticated "high Q" front end technology to filter out potentially harmful RF signals before they get the chance to cause harmful interference even in hostile RF environments.
- **Band Allocation.** The BTR-300 operates in the High VHF frequency range avoiding most DTV transmissions. In addition, a computerized frequency selection scheme ensures maximum channel operability.
- **Operating Range.** Beltacks can operate at ranges of up to 2000 feet line of sight (beltack to beltack), even in hi RF environments where interference plagues other systems.
- **More Beltacks.** With improved front end filtering and an innovative frequency selection plan, the BTR-300 now supports up to four base stations and 16 beltacks in simultaneous operation. That's two times the number previously available.

- **Extended Battery Life.** Optional NiMH (Nickel Metal Hydride) batteries provide 17 hours of continuous transmit operation. 24 hours of continuous operation is available with alkaline AA's. The longest battery life of any professional wireless intercom available today.
- **In Pack Charging.** Convenient charging jack on the TR-300 beltack allows optional NiMH batteries to be recharged without removing them from the beltack. (External charging is also supported.)
- **Full Duplex Operation.** No more waiting! Unlike walkie-talkies, individual talk frequencies for each beltack allow all wireless users to talk and listen simultaneously for more natural communications.



# TT44/TR34

## 16 Channel Synthesized Wireless IFB Transmitter and 16 Channel Tunable Talent Receiver

### TT-44

The Telex RadioCom TT-44 is a 16 channel synthesized wireless IFB transmitter designed to provide a wireless link to on-air talent in the studio or while you are in the field. Operating in the 64-68 MHz range the units operate reliably at distances of over 750 feet.

The TT-44 transmitter has a 3 pin XLR input on the back of the unit with a selector switch to accept either RTS TW, Telex Audiocom/RadioCom, or other types of wired and wireless intercom input. there is also a 1/40 unbalanced line level signal input jack. The T-44 offers the flexibility of tuning 8 of its frequencies in the TV channel 3 band and 8 in the TV channel 4 band for ultimate agility while in the field. Up to 5 transmitters will operate simultaneously within the same environment.

### TR-34

The TR-34 is a 16 channel tunable talent receiver that is designed to be used with the standard IFB earpieces such as the Telex Telethin announcers earpiece systems or any other 8-500 ohm earphone. The TR-34 features a selectable high frequency boost control to equalize the high frequency loss associated with the use of behind the collar acoustic tubes and earphone drivers. The receiver also features a lighted bezel for easy channel identification and auto power off when the earphone is removed from the jack. The TR-34 operates on two standard AA batteries and will operate for up to 40 hours on alkaline batteries.



TT-44 Back

Good audio quality

Low band VHF operation

Compatible with all major intercoms

Lighted bezel for easy channel selection

Auto power off when earpiece is removed

Up to 5 transmitters in simultaneous use

16 channel frequency agility

Range of over 750 feet





# Accessories



TRH-2 Holster



ALP-450



ALP-600 Mast and  
Bracket Kit



ALP-600



BC-1NM  
1 Bay Charger with pack



BTR-700/800  
Battery Charger





## UHF Beltpack Accessories

BP-700	Alkaline battery holder, TR700/TR800/TR1
BP-700NM	NMH battery pack, TR700/TR800/TR1
BC-1NM	Single charger w/linear US power supply and NMH pack
BC-1NM Euro	Single charger w/switching power supply, Euro cord, NMH pack
BC-1NM4	4bay charger w/switching power supply, 4NMH packs, US cord
BC-1NM4 Euro	4bay charger w/switching power supply, 4NMH packs, Euro cord
TRH-2	Heavy duty leather swivel holster with belt lop for TR700/TR800
SBC-1	Swivel beltclip for TR700/TR800/TR1
BPA	1/4 Wave beltpack antenna (multiple frequency ranges)

## UHF Base Station Accessories

Model	Description
ALP-600	Bi-directional log periodic antenna. Covers 520-760 MHz. Includes mounting hardware and 10' (3 meters) coaxial cable with TNC connector
ALP-600B	ALP-600 antenna bracket kit
ALP-600M	ALP-600 antenna mast-telescoping
ALP-450	Directional log periodic ant. covers 450-900 MHz forward coverage pattern increases signal gain up to 5 dB. Supplied with mounting hardware for wall or mic stand, & 10' coaxial cable. Measures 9-1/2" L x 11" H painted matte black.
CLA	1/2 Wave collinear ant. (multiple frequency ranges)
AB-2	Universal bracket for model CLA-X 1/2 wave antennas w/10' coax
CXU	50 ohm low loss coaxial cable with TNC connectors (multiple lengths available)
APS-1	Two to One antenna combiner/splitter with TNC connectors
TP-2	TNC 50 ohm termination plug for SC-600 and ACS-101 antenna combiner
TP-3	XLR-3 Intercom "dummy load" plug (Audiocom),
TP-3R	XLR-3 Intercom "dummy load" plug (RTS)
P1	Replacement power supply for BTR-1
15DS	15 pin D-Sub cable assembly for BTR-1
OSBK	QSB-1 Memory card reader with USB cable and 2MB DataFlash® memory card
2DF	2MB DataFlash® memory card

## VHF Base Station Accessories

Model	Description
UX-58	Omnidirectional 5/8 wave antenna (multiple frequency ranges)
YAG	High performance directional Yagi antenna (multiple frequency ranges)
ALP-1	Directional super-performance log periodic antenna 165-216 MHz includes MNT.BRKT
CX-4	50 ohm copper stranded coax cable 4'
CX-25	50 ohm copper stranded coax cable 25'
AB-300	Combo mic stand/wall mount bracket for 5/8 WV
PA-2	Replacement wall type power supply BTR-200/300 120 volt
PA-2E	230V Euro wall type power supply for BTR-200/300
PA-2U	230V UK wall type power supply for BTR-200/300

## VHF Beltpack Accessories

Model	Description
CL-2	Replacement clip/door for TR-200/300-complete
BSL-1	Spare battery sled for TR-200/300
BC300NM1	Battery charger w/6 nickel metal hydride batteries and sled Will charge TR-300 without removing battery pack
BC300NM2	Battery charger w/6 nickel metal hydride batteries and sled Will charge batteries outside beltpack TR-200/TR-300
NMBP	Battery pack - includes 6 nickel metal hydride batteries and sled - TR-200/TR-300
TRH-1	Heavy duty leather swivel holster with belt loop for TR-200/300

# Headsets

PH-200

*Telex offers a wide variety of headsets and earsets to meet any intercom or talent monitoring need. All headsets are available in 4-pin or 5-pin configuration, and all styles are available in single or dual muff.*

## PH-100 ▪ PH-200

The PH-100R and PH-200R are premium medium-weight noise reduction headsets with dynamic microphones. Similar to the HR-1R and HR-2R headsets, the PH-100R and PH-200R feature a unique, comfortable headband design that distributes pressure evenly. This headset comes with high quality moleskin cushions and offers a 21 dB noise reduction rating. The PH-100R and PH-200R are portable and able to fold into an extremely compact shape. Available in 4- or 5-pin XLR connectors (male or female) and pigtail.

## HR-1 ▪ HR-2

Medium-weight passive noise reduction headsets with dynamic noise canceling microphone. The headset has a noise reduction rating of 21 dB; suitable for moderately noisy environments. The ergonomic headband design distributes the ear cushion pressure evenly over the entire ear, insuring hours of comfortable wearing. The headset folds into compact form for ease of storage. HR-1R is single muff, HR-2 is dual muff.

## PH-44 ▪ PH-88

Super light-weight headsets with dynamic noise canceling microphone. Adjustable mic boom for precise positioning. High quality wide band earphones. PH-88R is single muff mono; PH-44 is dual muff mono. Available in 4- or 5-pin XLR connectors (male or female) and pigtail.

## PH-1 ▪ PH-2 ▪ PH-3

Medium-weight headset with foam filled cushions offers a light feel with moderate isolation from ambient noise. Dynamic noise canceling mic is easily positioned with unique continuously adjustable ball joint. Available with 4- or 5-pin XLR connectors. PH-1 is single muff mono; PH-2 is dual muff mono, and PH-3 is dual muff stereo. Available in 4- or 5-pin XLR connectors (male or female) and pigtail.

## PH-10

The maximum in passive noise reduction. The PH-10 offers an EPA rated NRR of 24 dB. Perfect for industrial and concert applications. Dynamic noise canceling microphone, dual muff mono, available with 4- or 5-pin XLR connectors. Available in 4- or 5-pin XLR connectors (male or female) and pigtail.

## PH-120

Earset is a simple and comfortable, as well as a discreet headset option, using an earplug with an inline clip-on electret microphone. The microphone, which is omnidirectional, has a built-in cough switch, which puts no limitations on the user. Weighing less than 2 ounces, this earset gives the freedom of maneuverability and comfort. Available with 4 pin male or female XLR connectors.

## PH-150

Earclip is a simple and comfortable alternative to the headband headsets and is ideal for hands free use. The adjustable mouthpiece allows the user to adjust the electret microphone for personal preferences. Includes male/female convertor.

PH-100



PH-200



HR-1



HR-2



PH-44



PH-88



PH-1



PH-2



PH-10



PH-120



PH-150



## BTR-1

The BTR-1 system operates in TV channels 16 to 36 and 38 to 44 frequency range of 482 to 608 MHz and 6 bands are typically 18

Frequency

BTR-1 Transmit Bands	BTR-1 Receive Bands
F	1, 2, 3, 4, 5, 6, 7
H	1, 2, 3, 4, 5, 6, 7
A	2, 3, 4, 5, 6, 7
B	3, 4, 5, 6, 7
C	4, 5, 6, 7
D	5, 6, 7
E	6, 7

## BTR-800 and BTR-700

The BTR-800 and BTR-700 systems operate in TV channels 47 to 58. This is the frequency range of 470 to 608 MHz and 12 bands are typically 18

Frequency

BTR-800 Transmit Bands	BTR-800 Receive Bands
A	2
B	4
C	6
E	88

BTR-700 Transmit Bands	BTR-700 Receive Bands
A	2
B	4
C	6

RadioCom™ UHF Frequency Band Chart					
BTR-1	TV CHANNEL	START FREQUENCY	END FREQUENCY	TV CHANNEL	BTR-800 BTR-700
<b>F</b>	14	470	476	14	<b>88</b>
	15	476	482	15	
	16	482	488	16	
	17	488	494	17	
<b>H</b>	18	494	500	18	
	19	500	506	19	
	20	506	512	20	
	21	512	518	21	
<b>A</b>	22	518	524	22	<b>A</b>
	23	524	530	23	
	24	530	536	24	
<b>B</b>	25	536	542	25	<b>B</b>
	26	542	548	26	
	27	548	554	27	
<b>C</b>	28	554	560	28	<b>C</b>
	29	560	566	29	
	30	566	572	30	
<b>D</b>	31	572	578	31	
	32	578	584	32	
	33	584	590	33	
<b>E</b>	34	590	596	34	<b>E</b>
	35	596	602	35	
	36	602	608	36	
NOT USED	37	608	614	37	NOT USED
<b>1</b>	38	614	620	38	
	39	620	626	39	
	40	626	632	40	
<b>2</b>	41	632	638	41	<b>2</b>
	42	638	644	42	
	43	644	650	43	
<b>3</b>	44	650	656	44	
	45	656	662	45	
	46	662	668	46	
<b>4</b>	47	668	674	47	<b>4</b>
	48	674	680	48	
	49	680	686	49	
<b>5</b>	50	686	692	50	
	51	692	698	51	
	52	698	704	52	
<b>6</b>	53	704	710	53	<b>6</b>
	54	710	716	54	
	55	716	722	55	
<b>7</b>	56	722	728	56	
	57	728	734	57	
	58	734	740	58	
	59	470	476	59	



Overall	TR825/TR800/TR700	TR-1	TR-300
RF Frequency Range:	470 – 608 MHz, 614 – 740 MHz in 18 MHz TX and RX bands	482-608 MHz, 614-746 MHz in 18 MHz TX and RX bands	150 – 216 MHz
Power Requirement:	6 "AA" Cells Alkaline (NiMH optional)	6 "AA" Cells Alkaline (NiMH optional)	6 "AA" Cells Alkaline (NiMH optional)
Typical Battery Life Alkaline:	11 Hours (Continuous duty)/ 14 Hours (Continuous duty)/ 14 Hours (Continuous duty)	10 Hours (Continuous Duty)	24 Hours (Continuous duty)
Typical Battery Life Nickel Metal Hydride (1500 mAh):	9 Hours (Continuous duty)/ 11 Hours (Continuous duty)/ 11 Hours (Continuous duty)	8 - 9 Hours (Continuous Duty)	17 Hours (Continuous duty)
Current Draw:	190 mA (Push-to-Talk, A and B Talk On) 140 mA (Push-to-Talk, Talk On)	190 mA (Push-to-Talk, Talk On)	82 mA
Temp Range:	-4°F to 130°F (-20°C to 55°C)	-4°F to 130°F (-20°C to 55°C)	-4°F to 130°F (-20°C to 55°C)
Dimensions:	3.75" W X 5.35" H X 2.02" D (9.5 cm X 13.5 cm X 5.1 cm)/ 3.75" W X 5.05" H X 1.65" D (9.5 cm X 12.8 cm X 4.2 cm)	3.75" W X 5.10" H X 1.65" D (9.5cm X 12.9cm X 4.2cm)	4.25" W X 4.125" H X 2.0" D (10.8cm X 10.5cm X 5.1cm )
Weight:	21 oz. (595 g) with alkaline batteries/ 15 oz. (425 g) with alkaline batteries/ 16 oz. (454 g) with alkaline batteries	15oz (425g)	13.5 oz. with batteries (384 g)
Transmit Antenna:	1/4 Wave (supplied), Screw type	1/4 Wave (supplied) screw type	1/4 Wave (attached)
Receive Antenna:	1/4 Wave (supplied), Screw type	1/4 Wave (supplied) screw type	1/4 Wave (attached)
FCC ID:	B5DM517/ B5DM515/ B5DM515	B5DM520	B5DM513
Frequency Response:	300 Hz- 8 kHz	100 Hz - 4kHz	300 Hz – 5 kHz
Four Wire Input:	N/A	N/A	N/A
Four Wire Output:	N/A	N/A	N/A
Telex® Intercom:	N/A	N/A	N/A
RTS® Intercom:	N/A	N/A	N/A
ClearCom® Intercom:	N/A	N/A	N/A
Auxiliary Input:	N/A	N/A	N/A
Auxiliary Output:	N/A	N/A	N/A
Stage Announce Output:	N/A	N/A	N/A
Stage Announce Relay:	N/A	N/A	N/A
<b>Transmitter</b>			
Type:	Synthesized, 720 channels	Synthesized, 720 Channels	Crystal Controlled
Transmit Power:	50 mW Max. (Auto-power reduction when close to base)	50 mW (High, 5 mW Normal or Auto)	50 mW
RF Frequency Stability:	0.005%	0.005%	Crystal Controlled, 0.005%
Microphone Audio Input:	30 ohms – 3500 ohms	30 - 3500 ohms	30 ohms – 3500 ohms
Microphone Input Sensitivity:	7 mV	7.8mV	2 mV Dynamic, 4 mV Electret
FCC Acceptance:	Type accepted under FCC Part 74	Type Accepted under Part 74	Under Parts 90 and 74 Receiver
<b>Receiver</b>			
Type:	Two, Dual Conversion Superheterodyne, Synthesized, FM, 720 channels/ Dual Conversion Superheterodyne, Synthesized, FM, 720 channels/ Dual Conversion Superheterodyne, Synthesized, FM, 720 channels	Dual Conversion Superheterodyne, Synthesized, 720 Channels	Dual Conversion Superheterodyne, FM
RF Sensitivity:	<0.8 µV for 12 dB SINAD/ <0.7 µV for 12 dB SINAD/ <0.7 µV for 12 dB SINAD	<0.8 uV for 12dB SINAD	Less than 0.5 µV for 12 dB SINAD
IF Selectivity:	3 dB at 230 KHz	3 dB at 230 KHz	3 dB at 30 kHz (Ceramic Filters)
Image Rejection:	70 dB or better	70 dB or Better	70 dB or better
Squelch Quieting:	95 dB	90 dB	90 dB
RF Frequency Stability:	0.005%	0.005%	Crystal Controlled, 0.005%
Distortion:	<1% at full deviation	<1% at peak level	Less than 1% at Rated Output
Local Headset Output:	40 mW output into 600 V (1% Distortion)	40 mW Output into 150 ohms (1% Distortion)	32 mW into 600 ohms
FCC Acceptance:	Notification under FCC Part 15	Notification under FCC Part 15	Notification under FCC Part 15

Overall	BTR800/BTR700	BTR-1	BTR-300
RF Frequency Range:	470 – 608 MHz, 614 – 740 MHz in 18 MHz TX and RX bands	482-608 MHz, 614-746 MHz in 18 MHz TX and RX bands	150 – 216 MHz
Power Requirement:	100-240 VAC, 50 - 60 Hz, IEC receptacle	12 to 15 AC/DC (power supply included)	12 to 15 AC/DC (power supply included)
Typical Battery Life Alkaline:	N/A	N/A	N/A
Typical Battery Life Nickel Metal Hydride (1500 mAh):	N/A	N/A	N/A
Current Draw:	N/A	N/A	N/A
Temp Range:	-4°F to 130°F (-20°C to 55°C)	-4°F to 130°F (-20°C to 55°C)	-4°F to 130°F (-20°C to 55°C)
Dimensions:	19.0" W X 1.72" H X 14.0" D (48.3 cm X 4.4 cm X 35.6 cm)	8.25" W X 1.72" H X 9.00" D (20.9cm X 4.4cm X 22.9cm)	15.75" W X 1.75" H X 10.5" D (40 cm X 4.5 cm X 27 cm)
Weight:	7 lbs. 2 oz. (3.24 kg) / 6 lbs. 15 oz. (3.15 kg)	3lbs 8oz (1.59kg)	6 lbs. 2 oz. (2.8 kg)
Transmit Antenna:	1/2 Wave (supplied) TNC Male Connector	1/2 Wave (supplied) TNC Male Connector	5/8 Wave (supplied) S0239 connector on chassis
Receive Antenna:	1/2 Wave (supplied) TNC Male Connector	1/2 Wave (supplied) TNC Male Connector	5/8 Wave (supplied) S0239 connector on chassis
FCC ID:	B5DM514/ B5DM516	B5DM519	B5DM510
Frequency Response:	300 Hz - 8 KHz	100 Hz - 4kHz	300 Hz – 5 KHz
Four Wire Input:	Level Adjustable (2 Vrms typical)	Level Adjustable (2 Vrms typical)	N/A
Four Wire Output:	Level Adjustable (2 Vrms typical)	Level Adjustable (2 Vrms typical)	N/A
Telex® Intercom:	Input/Output Level Adjustable (1 Vrms typical), Line impedance 300 V	Input/Output level Adjustable (1 Vrms typical) Line impedance 300 ohms	Input/Output Level Adjustable (1 Vrms typical), Line impedance 300 V
RTS® Intercom:	Input/Output Level Adjustable (0.775 Vrms typical), Line Impedance 200 V	Input/Output level Adjustable (.775 Vrms typical) Line impedance 200 ohms	Input/Output Level Adjustable (0.775 Vrms typical), Line Impedance 200 V
ClearCom® Intercom:	Input/Output Level Adjustable (1 Vrms typical), Line Impedance 200 V	Input/Output level Adjustable (1 Vrms typical) Line impedance 200 ohms	Input/Output Level Adjustable (1 Vrms typical), Line Impedance 200 V
Auxiliary Input:	Adjustable (2 Vrms typical)	Adjustable (2 Vrms typical)	2 VRMS
Auxiliary Output:	Adjustable (2 Vrms typical into 600 V) (at rated deviation)	Adjustable (2 Vrms typical into 600 ohms)	2 VRMS into 600 ohm load typical (at rated deviation)
Stage Announce Output:	Internally Adjustable (1 Vrms typical at rated deviation into 100 KV) / N/A	N/A	N/A
Stage Announce Relay:	Dry contact, rated at 1Amp, 24 V Max. / N/A	Dry Contact, rated at 1Amp 24V Max	N/A
<b>Transmitter</b>			
Type:	Synthesized, 720 channels	Synthesized, 720 Channels	Crystal Controlled
Transmit Power:	100 mW Max. (High), 10 mW (Normal) / 50 mW Max. (High), 5 mW (Normal)	50 mW (High, 5 mW (Normal)	50 mW
RF Frequency Stability:	0.005%	0.005%	Crystal Controlled, 0.005%
Microphone Audio Input:	30 ohms – 3500 ohms	30 - 3500 ohms	30 ohms – 3000 ohms
Microphone Input Sensitivity:	9 mV	10mV	2 mV Dynamic, 4 mV Electret
FCC Acceptance:	Type accepted under FCC Part 74	Type Accepted under Part 74	Under Parts 90 and 74
<b>Receiver</b>			
Type:	Dual Conversion Superhetrodyne, Synthesized, FM, 720 channels	Dual Conversion Superhetrodyne, Synthesized, 720 Channels	Dual Conversion Superhetrodyne, FM
RF Sensitivity:	<0.8 µV for 12 dB SINAD	<0.8 µV for 12dB SINAD	Less than 0.5 µV for 12 dB SINAD
IF Selectivity:	3 dB at 230 KHz	3 dB at 230 KH	3 dB at 30 KHz (4 pole Monolythic Filters)
Image Rejection:	70 dB or better	70 dB or Better	65 dB or better
Squelch Quieting:	95 dB	90 dB	90 dB
RF Frequency Stability:	0.005%	0.005%	Crystal Controlled, 0.005%
Distortion:	<1% at full deviation	<1% at peak level	Less than 1% at Rated Output
Local Headset Output:	40 mW output into 600 V (1% Distortion)	40 mW Output into 150 ohms (1% Distortion)	N/A
FCC Acceptance:	Notification under FCC Part 15	Notification under FCC Part 15	Notification under FCC Part 15

Licensing of this equipment is the User's responsibility and ability to license depends on the User's classification, User's application and frequency selected.

## For information

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The Telex® AudioCom™ MS4002 and MS2002 Master Stations provide unique balanced audio design that allow users to utilize the longest TW party line cable runs in the industry. AudioCom™ Master Stations offer users the ultimate in performance and flexibility. Operators can utilize headset or speaker/mic operation and have full access to all intercom channels both individually and as “all talk”. AudioCom™ Master Station users can also utilize innovative features like the “Remote Mic Kill” function to silence any open mic on the intercom channel so that extraneous noise can be eliminated, backlit lettered buttons for darkened environments and the ability to operate in an unbalanced mode to be completely Clear-Com™ compatible. Whatever your requirements may be, Telex® AudioCom™ is the one TW intercom that sounds great!

If your application requires the highest performance and flexibility, you need the AudioCom™ balanced audio intercom system.



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Take control of your communications with Zeus Matrix intercom systems.