

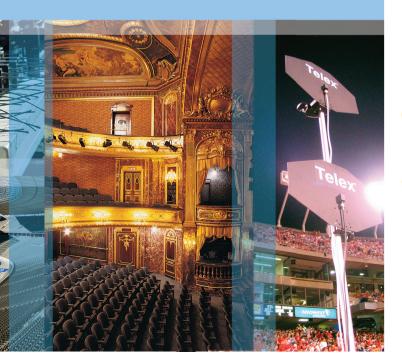


# **Table of Contents**









Category	page number
Introduction	4
RadioCom Introduction	5
System Diagram	6-7
BTR-80N	8-9
BTR-800	10-11
BTR-700	12-13
BTR-1	14-15
FM-1	16
ACS-101/APS-1	17
BTR-24/TR-24	18
Legacy	19
BTR-300	20
TT-16/TR-16	21
RadioCom Accessories	22-23
RadioCom Specifications	24-25
Frequency Band Chart	26
Audiocom Introduction	27
Master Stations	28-29
User Stations	30-31
Power Supplies	32-33
Speaker Stations	34-35
Headset Stations	36-37
Window Intercom	38
Audiocom Accessories	39-40
Audiocom Specifications	41
Headsets/Earsets/Mics	42-43
· · · · · · · · · · · · · · · · · · ·	



At Bosch Security Systems, Inc. we have been leading the world in the design and manufacture of wireless and wired intercom systems for more than 30 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 and Audiocom intercom systems lead the industry with a complete suite of fullduplex, highly configurable and expandable intercom system platforms. From the award-winning BTR series of Radiocom wireless intercom systems, to the industry leading Audiocom balanced audio wired intercom systems, we continue to lead the way with innovative technology and reliability that users depend on.

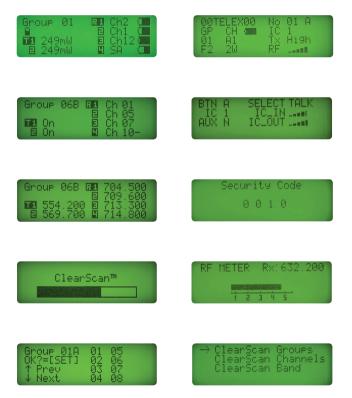
Telex intercom systems are utilized in virtually every kind of application and venue throughout the world including broadcast newsrooms, theaters, theme parks, houses of worship, casinos, sports and military venues, and much more! Whatever your requirements may be, Bosch Security Systems, Inc. has the right intercom system for you.

Telex intercom systems are the choice among communications professionals everywhere.

Why not make it yours?



# What good is technology if you can't make it work for you?



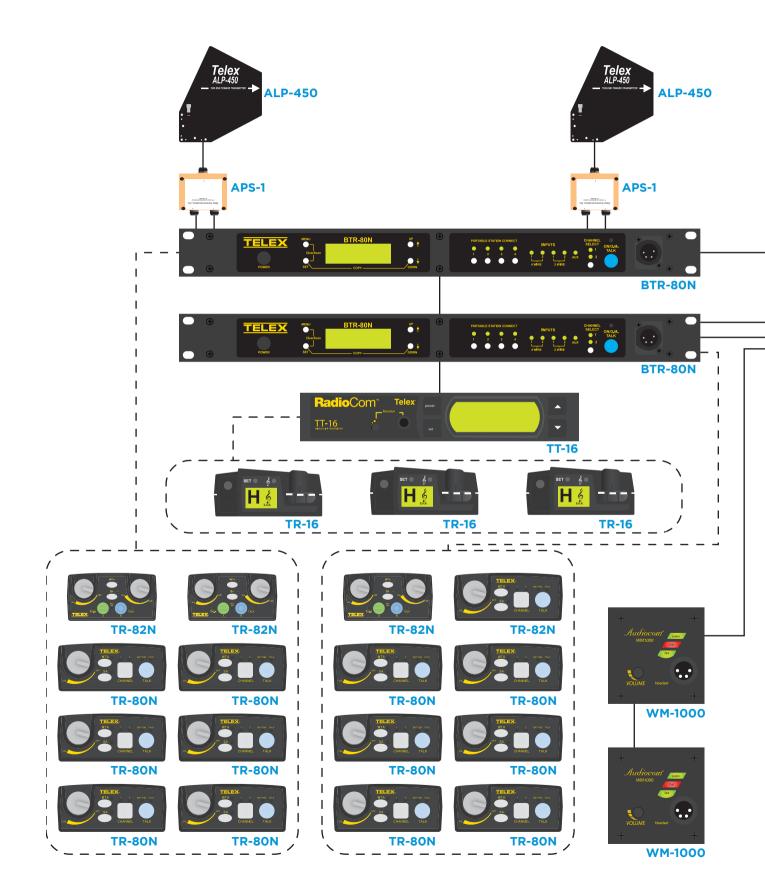
As is so often the case in our industry today, new products come out that are too complicated to use and are consequently a hindrance rather than a tool. Telex has the answer. Telex wireless intercom systems are extremely powerful and flexible, yet offer a simplified user interface to get you started right out of the box.

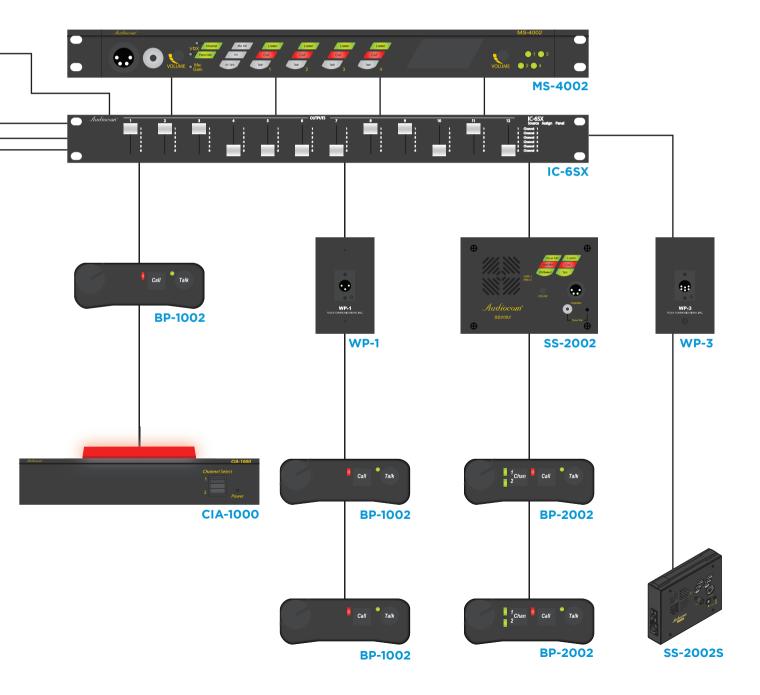
Bright, clear, readable, LCD displays put all of the features and information you need to access right at your fingertips. Without layer after layer of menus to deal with, the Graphical User Interface allows even new users to access, change and store system settings as well as frequency selections.

Basic primary screens run the entire operating system with various supplemental screens for other tasks. The status of every beltpack 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.

# System Diagram





# **BTR-80N** Narrow Band Two-Channel UHF Synthesized Wireless Intercom

User-adjustable receiver squelch control RF meter on BTR-80N, TR-80N & TR-82N Beltpack battery guage on BTR-80N display Ability to turn off remote beltpack transmitter from base station BTR-80N is designed for AC or DC power input Auxiliary audio input is assignable with level control "Fifth person" talk/listen user station at the BTR-80N base station Wireless talk-around - WTA (broadcast ISO) Stage Announce (SA) output with relay closure Intelligent power control TR-82N dual listen operation Cast magnesium beltpacks Beltpack low battery indicator with tone warning



The Telex BTR-80N Narrow Band wireless intercom system offers the most comprehensive, user-friendly, and versatile set of features available in wireless intercom systems anywhere in the world. Providing an unprecedented 25 KHz of modulated bandwidth, the BTR-80N Narrow Band system will allow more users per channel in the cramped UHF spectrum. Combining the award-winning performance of the BTR-800 wireless intercom system with revolutionary Narrow Band technology and additional innovative features, the BTR-80N is the best-performing, most versatile wireless intercom system ever made.

While providing excellent audio performance, the Narrow Band system is based on the award-winning and world-leading BTR-800 wireless intercom system and provides all of the standard features of the BTR-800 system, such as DSP digital processing and Intelligent Power Control, plus many more. The BTR-80N Narrow Band systems offers up to four full duplex wireless TR-80N or TR-82N beltpacks per base station. An unlimited number of additional beltpacks can be added in half-duplex operation. 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 many, many more.







- UHF OPERATION The BTR-80N, TR-80N, and TR-82N operate in the UHF band from 482 to 698 MHz and operate in specific 18 MHz frequency bands. An industry-leading 27 frequency band combinations are available to order.
- FREQUENCY AGILE Choose from 1,440 user-selectable frequencies in 25 KHz increments or select frequency plans from preset intermodulation avoiding groups. The independent 18 MHz frequency bands provide 720 TX and 720 RX selectable frequencies.
- SELECTABLE OUTPUT POWER The BTR-80N, TR-80N, and TR-82N provide a userselectable transmit output power. The BTR-80N has a maximum output power of 249 mW down to 10 mW, with an additional setting to turn OFF transmit power to each individual transmitter. The TR-80N and TR-82N have a maximum output power of 100 mW down to five mW, with an additional setting to turn on the AUTO "Intelligent Power Control" feature to provide outstanding near-far operation.
- ENGINEERING DEFINED FREQUENCY
   PLANS Each Narrow Band system comes with 36 engineering-selected, intermodulationavoiding groups of channel plans that allow even the most unfamiliar user to operate the system right out of the box. Telex has done the work for you!
- BATTERY OPTIONS The TR-80N and TR-82N beltpacks can operate from standard alkaline AA batteries or from the optional NiMH battery packs. Operation on alkaline batteries provides up to 12 hours of continuous duty and up to 10 hours on NiMH. Drop-in chargers are available in single and four-gang configurations.

FLEXIBLE NUMBER OF BELTPACK USERS **PER BASE STATION** — In full-duplex operation, the BTR-80N will support up to four TR-80N or TR-82N beltpacks. By placing TR-80N or TR-82N beltpacks in "Push-to-Transmit" operation (halfduplex), you can expand your system to multiple users on one BTR-80N base station. When the TR-80N or TR-82N are placed in "Push-to-Transmit" operation, the intelligence of the narrow band system provides a "First-On-Latch-Out" feature that will not allow the beltpacks to interfere with each other when operating on the same frequency. This feature provides future expansion possibilities and will allow multiple users on the same channel whose primary function is to listen all the time and talk infrequently.

### TWO-CHANNEL INTERCOM ACCESS —

Hardwired intercom channels that are run to the BTR-80N base station can be 2-Wire (Party-Line) or 4-Wire (digital matrix). These intercom inputs to the BTR-80N can be set up to be individual per channel or they can be mixed on a channel. Individual adjustment for IN and OUT I level control are provided in the BTR-80N front panel user interface.

ENHANCED CLEARSCAN™ FREQUENCY SCAN AND AUTO SELECTION — This powerful frequency scanning and selection feature is easily activated and progress is easily monitored on the TR-80N, TR-82N, and BTR-80N display screens. Results are provided and users have the option to review, accept or reject the results. This dynamic feature allows system frequency selection and setup in just minutes in a new or unknown venue.

# **BTR-800** Two-Channel UHF Synthesized Wireless Intercom

The BTR-800 wireless intercom system has set the standard for all wireless intercom systems world wide. This award winning intercom system offers two channels of full duplex audio and a versatile set of features that offer unmatched system performance. The BTR-800 has been enhanced to provide more frequency band options in the ever-changing UHF RF spectrum and continues to provide reliable wireless communications to the most demanding communications applications around the world.

- 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 systems can be used together to meet the needs of any wireless communications application.
- FREQUENCY AGILE Choose from 1,440 userselectable frequencies using the 800's GUI.
   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 in specific 18 MHz operational bands. Contact Telex customer service for complete frequency band details.
- ENHANCED CLEARSCAN<sup>™</sup> Frequency Auto Selection and Graphical User Interface.
- INTERMODULATION-FREE FACTORY SELECTED GROUPS — Each 800 system comes with 24 factory-selected, intermode-avoiding groups that allow any user to get started right out of the box!
- **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, RTS™, and Clear-Com hardwired intercom systems.

- DUAL LISTEN OPERATION Each TR-825 beltpack features one volume control for each intercom channel. Listen to Production in one ear and Tech in the other. The TR-825 can operate in Stereo or Mono.
- 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 three-pin XLR connector. The signal is dry, line-level +8 dB and adjustable. A convenient relay closure is

provided for triggering two-way radios, IFB sends, greenroom speakers or any other closure activated device.

WIRELESS TALK AROUND (BROADCAST ISO) — Each beltpack can momentarily route its audio to the other wireless beltpacks on its current channel with the push of a button. Great for private conversations in the heat of battle.

### **TR-825 beltpack**



Frequency agile 1,440 selectable frequencies Two independent intercom channels ClearScan™ auto frequency selection Stage Announce output with relay closure Wireless talk around (broadcast ISO) Dual listen operation (TR-825) Four beltpacks per base station Cast magnesium beltpacks

### **TR-800 beltpack**









- "FIFTH PERSON" TALK/LISTEN STATION AT BASE — The BTR-8000 base station features a full talk/listen headset station so that an additional user can communicate on any combination of intercom channels at once.
- INTELLIGENT POWER CONTROL<sup>™</sup> This breakthrough technology takes system 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 eliminates overloading the base station front end and the primary cause of near-far desensing problems in other wireless intercoms.

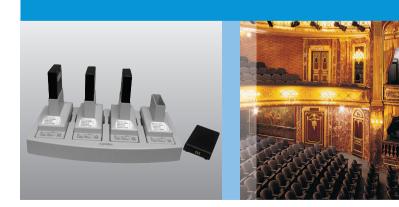
- CAST MAGNESIUM BELTPACKS TR-800 and TR-825 beltpacks are constructed of light, strong, and durable cast magnesium. Magnesium substantially decreases beltpack weight while ensuring the utmost ruggedness and durability.
- TWO GREAT BATTERY OPTIONS TR-800 and TR-825 beltpacks can be operated from standard alkaline AA batteries that provide up to 14 hours of continuous duty operation. For applications where rechargeable batteries are required, optional NiMH batteries are available for up to 12 hours of operation. Drop-in chargers are also available in single and fourgang configurations.

# **BTR-700** Single-Channel UHF Synthesized Wireless Intercom



The BTR-700 wireless intercom system is similar to the BTR-800 system and provides one channel of fullduplex audio. This simple and easy-to-use system can be configured to operate in the most demanding communication environments and is compatible with BTR-800, party-line or digital matrix intercom systems. The BTR-700 wireless intercom system is the system of choice where simple, full-duplex wireless communication is required.

- **TR-700 WIRELESS BELTPACKS** Four beltpacks per base station. Each BTR-700 base station can support up to four beltpacks in full-time transmit, full-duplex operation. Multiple systems can be used together to meet the needs of any wireless communications application.
- FREQUENCY AGILE Choose from 1,440 user-selectable frequencies using the 700's GUI. Select from 720 TX and 720 RX frequencies each from independent 18 MHz operational bands.







- UHF OPERATION The BTR-700 and TR-700s operate in the UHF band from 518 MHz to 740 MHz in specific 18 MHz operational bands. Contact Telex customer service for complete frequency band details.
- ENHANCED CLEARSCAN™ Frequency Auto Selection and Graphical User Interface.
- INTERMODULATION-FREE FACTORY SELECTED GROUPS — Each 700 system comes with 24 factory-selected, intermode-avoiding groups that allow any user to get started right out of the box!
- "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 any combination of intercom channels at once.
- INTELLIGENT POWER CONTROL<sup>™</sup>
- This breakthrough technology takes system 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 eliminates overloading the base station front end and the primary cause of near-far desensing problems in other wireless intercoms.

- CAST MAGNESIUM BELTPACKS TR-700 beltpacks are constructed of light, strong, and durable cast magnesium. Magnesium substantially decreases beltpack weight while ensuring the utmost ruggedness and durability.
- **TWO GREAT BATTERY OPTIONS** TR-700 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 batteries are available for up to 12 hours of operation. Drop-in chargers are also available in single and four-gang configurations.
- 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. Drop-in chargers are also available in single and four-gang configurations.

The most versatile wireless intercom ever!





Frequency agile 1,440 selectable frequencies ClearScan™ auto frequency selection Four beltpacks per base station Cast magnesium beltpacks

# **BTR-1** 1-to-1 UHF - Full-Duplex, 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 are unparalleled in the industry. Features like UHF frequency agility, digital audio encryption, advanced ClearScan<sup>®</sup>, three-audio-channel capability with twowire line mix, signal relay closure, TR-1 battery telemetry to the base station, base station RF meter and much, much more. Combine 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<sup>®</sup>, 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<sup>®</sup> BTR-1 wireless intercom system.

- SYSTEM Each BTR-1 base station can support one TR-1 beltpack in full-time 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 band from 482 MHz to 746 MHz in specific 18 MHz operational bands.
- FREQUENCY AGILE Choose from 1,440
   user selectable frequencies from 34 different
   frequency band splits. Or choose from 50
   preprogrammed, factory selected, intermode 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 the work for you.
- ENHANCED CLEARSCAN<sup>™</sup> INCLUDES THREE OPTIONS: ClearScan<sup>™</sup> 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<sup>™</sup> channel function. ClearScan<sup>™</sup> Channel: Scans the channels in the selected Group and produces a list of open Channels within the Group in order of best Channel first. ClearScan<sup>™</sup> Band: Scans

<image>

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 user 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<sup>®</sup>, RTS, and Clear-Com<sup>®</sup> hardwired intercom systems.
- BATTERY OPTIONS The TR-1 beltpack can operate from standard alkaline AA batteries or from the optional NiMH battery packs. Operation on alkaline batteries provides up to 10 hours of continuous duty and up to nine hours on NiMH. Drop-in chargers are available in single and fourgang 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 send battery to the BTR-1 which is graphically displayed on the front panel.

# <section-header><text><text><text><text><text>

- RELAY CLOSURE Each TR-1 beltpack can trigger a relay closure, activating a light or a horn or other closure activated devices.
- INTELLIGENT POWER CONTROL<sup>™</sup> This breakthrough technology takes system 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 eliminates overloading the base station front end and the primary cause of near-far desensing problems in other wireless intercoms.
- CAST MAGNESIUM BELTPACKS TR-1 beltpacks are constructed of light, strong, and durable cast magnesium. Magnesium substantially decreases beltpack weight while ensuring the utmost ruggedness and durability.
- GRAPHIC USER INTERFACE The BTR-1 and TR-1 have easy-to-use user interfaces with 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 CONFIGURATION Telex has worked hard to provide the right equipment when configuring large wireless intercom systems.

When configuring BTR-1s in a 10-drop system, the ACS-101 Antenna Combiner/Splitter will provide antenna feeds from the 10 BTR-1s to one transmit antenna and one receive antenna. Additionally, the FM-1 Sytem Manager will assist in managing your system's frequency and intercom settings with the use of a System Manager Program (SMP). This easy-to-use, Windows-based program allows the user to configure frequency and systems settings of the BTR-1 and TR-1.



# **FM-1** Intercom System Manager



- 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 DataFlash 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-1s 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 sytem on the DataFlash memory card. The memory card can then be uploaded to the SMP software via the QSB-1 card reader.

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

5E 02. Thi Friesency 652 000 MH2 Ended Configuration EE 04. Thi Friesency 652 000 MH2 EE 04. Thi Friesency 652 000 MH2 Re Friesency 652 000 MH2 Re Friesency 654 000 M
Tir Frequency: 482.000 NHz Rix Frequency: 614.100 MHz Enabled Configuration SE 04: Tix Frequency: 482.000 NHz Rix Frequency: 482.000 NHz Rix Frequency: 482.000 NHz
E D4: Tx Frequency: 482.000 MHz Rx Frequency: 614.100 MHz
Tx Frequency: 482.000 MHz Rx Frequency: 614.100 MHz
Enabled Configuration
iE 09: Tx Frequency: 482.000 MHz Rx Frequency: 614.100 MHz
Enabled Configuration
E 08: Tx Frequency: 482.000 MHz Rx Frequency: 614.100 MHz
Enabled Configuration
iE 10: Tx Frequency: 482.000 MHz Rx Frequency: 614.100 MHz

Name BASE	Label Intercom	•
Base Frequency Assignments Transmit Frequency 482:000 MHz • Band F •	Receive Frequency 614.100 MHz B and 1	J
Aux Input Select C Local C Biobal	Sidetone Local Beltpack	Transmit Power     High Power     Normal Power
Beltpack Dif Mode		Celauk Display

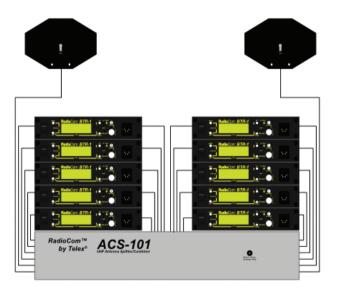
Convenient system management Easy system configuration with SMP software Compatible with BTR-1 intercom systems CAN bus Snap shot record of system settings

# **ACS-101 / APS-1** Broadband Antenna Combiners-Splitters



Two models to choose from Reduces 20 antennas to two (ACS-101) or reduces two antennas to one (APS-1) Extremely low intermode production Compatible with BTR-1, RKP-4B, BTR-700 and BTR-800 systems Handles both transmit and receive Rugged and durable construction One-year warranty Made in the USA

### ACS-101 system configuration with BTR-1



### 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 10 transmit and 10 receiver antennas, it provides power connection for up to ten 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, RKP-4B, BTR-700 or BTR-800 (BTR-800 set to normal output power).

### **APS-1 TWO-WAY COMBINER-SPLITTER**

The APS-1 is a passive broadband combiner-splitter that makes it possible to combine two antennas to one (receive), or split one antenna to two (transmit).

### **APS-1 system configuration with BTR-800**



# BTR-24 / TR-24 2.4 GHz Wireless Intercom

The Telex BTR-24 and TR-24 series intercom is a full-duplex (simultaneous talk and listen) wireless intercom system that offers a complete stand-alone solution for two to 10 users with the full duplex feature and an unlimited number of listen-only users. The BTR-24 system offers easy set-up, durable beltpacks, 64-bit audio encryption, easy system expansion and a three-year warranty. The Telex BTR-24 system operates using the license-free 2.4 GHz IEEE 802.11b "WiFi" standard.



### BTR-24 and TR-24

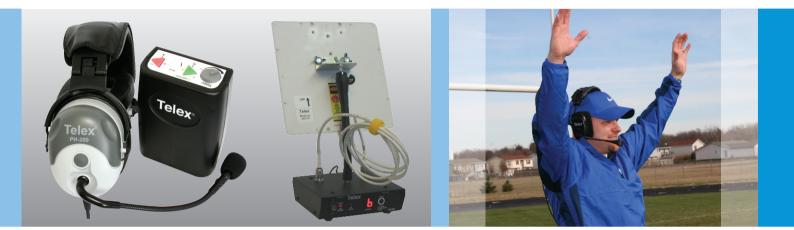
The BTR-24 system incorporates the option of three audio channels, selectable at each TR-24 beltpack. The TR-24 beltpacks also provide the user with adjustable volume control, headset microphone level and local side tone level. The TR-24 will operate with dynamic or electret headset microphones and has a built-in lithium ion battery pack providing up to eight hours of uninterrupted operation.

Upon start-up, the BTR-24 base station automatically scans and selects the best RF (radio frequency) channel for communication, using a feature called ClearScan<sup>™</sup>. The BTR-24 also has a built-in lithium ion battery pack that provides up to 10 hours of uninterrupted operation, or can be operated with the included wall mount AC power supply. The BTR-24 also includes rack-mount hardware.



License-free operation
64-bit encrypted audio
Full-duplex operation
Automatic RF channel selection via ClearScan™
Independent volume control and headset mic level control
System supports up to 10 beltpacks (full-duplex)
Easy set-up and operation
Operates on IEEE 802.11b "WiFi" standard
Operating range up to 800 ft, line-of-sight (beltpack to base station)
Low battery indicators on beltpack and base station
Battery charge indicators on beltpack and base station
Rack mount for BTR-24 included
Independent local side tone level control
Programmable beltpacks for remote group operation
Built-in lithium-ion battery packs on BTR-24 and TR-24

# **Legacy** Wireless Intercom System





### License-free operation Operating range up to 800 ft, line-of-sight (beltpack to base station) Three audio channels Automatic RF channel selection via ClearScan<sup>™</sup> Built-in lithium-ion battery packs on XO-1 and XO-AP Voice encryption Three-year warranty

### **LEGACY**<sup>™</sup>

The Legacy<sup>™</sup> series wireless intercom system is a full duplex, multichannel wireless intercom system. Three audio channels are available for each user to select and up to 14 users can be configured to operate on one Legacy<sup>™</sup> system. The system operates on the License Free IEEE 802.11b 2.4 GHz frequency range. Each Legacy<sup>™</sup> sysem is configured with a specific address and encryption code to eliminate any chance of "eaves-dropping" by other users.

- SUPPORTS UP TO 14 USERS The Telex Legacy<sup>™</sup> system will support up to 14 users in full duplex communications.
- **THREE AUDIO CHANNELS** Select between three audio channels (X, O or X+O).
- **EASY SET-UP** Simple and easy to set-up. The XO-AP base station can operate on the built in battery or from a wall power supply. Attach the antenna, turn on the XO-AP and the unit will automatically select the best operation channel. Turn on the XO-1 belpacks and begin.
- LONG BATTERY LIFE The XO-1 beltpack will operate eight to 10 hours on the built-in Lithium-Ion battery pack. The XO-AP will operate for 10 to 12 hours on the built-in Lithium-Ion battery pack.

# **BTR-300** 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 cannot function. Additional filtering capabilities and unique channel assignments allow up to four base stations and 16 individual baltpacks to be used simultaneously. Break the chains of wired communications without breaking the budget.



- **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 ultilizes 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** Beltpacks can operate at ranges of up to 2,000 feet line of sight (beltpack to beltpack), even in hi RF environments where interference plagues other systems.
- **MORE BELTPACKS** With improved front end filtering and an innovative frequency selection plan, the BTR-300 now supports up to four base stations and 16 beltpacks 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 batteries: the longest battery life of any professional wireless intercom available today.
- IN-PACK CHARGING Convenient charging jack on the TR-300 beltpack allows optional NiMH batteries to be recharged without removing them from the beltpack. (External charging is also supported).
- FULL-DUPLEX OPERATION No more waiting! Unlike walkie-talkies, individual talk frequencies for each beltpack allow all wireless users to talk and listen simultaneously for more natural communications.

# 16 channel broadcast wireless IFB transmitter & talent receiver



The TT-16 Base Station Transmitter and the TR-16 Beltpack Talent Receiver is a 16-channel synthesized wireless IFB system designed to provide a convenient wireless link to on-air talent, in the studio or in the field at remote locations. Operating in the low band VHF 64 MHz to 68 MHz range (TV channels three and four), the units operate reliably at distances of over 750 feet. In unoccupied television channels, up to five TT-16 transmitters will operate simultaneously within the same location.

### TT-16

The TT-16 base station transmitter features 16 userselectable frequencies, controlled from front panel control buttons. A backlit LCD display allows the user to select the RF channel used, change Hi-Low RF transmit power, select intercom input source and adjust the input levels. A new feature, Enhanced Dynamic Range (E.D.R.), greatly improves the signal to noise ratio, and works with the TR-16 talent receiver to provide clearer, more dynamic audio. The base station transmitter has a three pin XLR connector on the back of the unit that will accept intercom signal input and is selectable between RTS TW, Audiocom or Clear-Com. Other types of balanced audio input can also be used. The TT-16 also has 1/4-inch input jack on the back of the unit that will accept unbalanced line level signal input. Selection of the intercom type used and signal level adjustment is made from the front panel.

### **TR-16**

Like the TT-16, the TR-16 talent receiver features 16 user-selectable frequencies controlled from top panel control buttons. The TR-16 is designed with a 3.5mm earphone connector, to be used with standard IFB earpieces such as the Telex Telethin announcers earpiece systems or any other 8-500 Ohm earphone. The TR-16 receiver 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. Additionally, the TR-16 has E.D.R. for increased dynamic range. Operating on two AA batteries (up to 20 hours on alkaline cells), the TR-16 also features a low battery indicator on the backlit LCD display when 10 percent of battery life remains.

 16 user-selectable channels
 Enhanced dynamic range (E.D.R.) for improved dynamic audio
 Balanced or unbalanced audio input
 Covers TV Ch3 and TV Ch4
 20 hours of operation on two AA alkaline batteries
 One-year warranty



# Accessories



TRH-2 Leather Holster for TR-700 and TR-800



ALP-600 UHF Bi-Directional Antenna



ALP-450 UHF Directional Antenna



BC-800NM One-bay charger with NMH Battery Pack



ALP-600 Mast and Bracket Kit



### BC-800NM4 Four-bay charger with NiMH Battery Packs



AB-24 Antenna Mounting Bracket with six-foot Coax



ANT-FPM Metal Tilt and Swivel Antenna Mounting Bracket for ANT-FP



FP-11 2.4 GHz Flat-Panel Directional Antenna



LG-Y Headset Y Cable for Legacy



RA-5 2.4 GHz Omni Antenna, Magnetic Mount with TNC Reverse Polarity Connector



XOB Adjustable Nylon Belt

10	Model	Description
ie	BP-700	Alkaline battery holder, TR-700/TR-800/TR-1/RKP-4/TR-80N
S.	BP-700NM	NMH battery pack, TR-700/TR-800/TR-1/RKP-4/TR-80N
ces	BC-800NM	1 bay charger w/ linear US power supply and NMH pack
Ă	BC-800NM EURO	1 bay charger w/ switching power supply, Euro cord, NMH pack
Ť	BC-800NM4	4 bay charger w/ switching power supply, 4 NMH battery packs, US cord
Beltpack Accessories	BC-800NM4 EURO	4 bay charger w/ switching power supply, 4 NMH battery packs, Euro cord
lelt	TRH-2	Heavy duty leather swivel holster with belt loop for TR-700/TR-800/TR-80N
ш Ц	SBC-1	Swivel beltclip for TR-700/TR-800/TR-1/RKP-4/TR-80N
HH	BPA	1/4 wave beltpack antenna (multiple frequency ranges)
	Model	Description
	ALP-700	Bi-directional log periodic antenna. Covers 470-760 MHz. Includes mounting hardware and 10' (3 meters) coaxial cable
ries	ALP-600	Bi-directional log periodic antenna. Covers 520-760 MHz. Includes mounting hardware and 10' (3 meters) coaxial cable with TNC connector
os so	ALP-600B	ALP-600 antenna bracket kit
čě	ALP-600M	ALP-600 antenna mast-telescoping
Station Accessories	ALP-450	Directional log periodic antenna. Covers 450-900 MHz forward coverage pattern increases signal gain up to 5 dB. Includes mounting hardware for wall or mic stand and 10' (3 meters) coaxial cable. Measures 9.5"L x 11"H painted matte black
Sta	CLA	1/2 wave collinear antenna (multiple frequency ranges)
Base	AB-2	Universal bracket for model CLA-X 1/2 wave antennas with 10' coaxial cable
Ba	CXU	50 Ohm low loss coaxial cable with TNC connectors (multiple lengths available)
HH	TP-2	TNC 50 Ohm termination plug and ACS-101 antenna combiner
Σ	TP-3	XLR-3 intercom "dummy load" plug (Audiocom)
	TP-3R	XLR-3 intercom "dummy load" plug (RTS)
	RM800	Rackmount reinforcement for BTR-800/BTR-700/BTR-80N
5	Model	Description
E Base Station Accessories	UX-58	Omni-directional 5/8 wave antenna (multiple frequency ranges)
sor	CX-4	50 Ohm copper stranded coaxial cable 4'
las( ces	CX-25	50 Ohm copper stranded coaxial cable 25'
VHF Base Station Accessories	AB-300	Combo mic stand/wall mount bracket for 5/8 wave antenna
H	Model	Description
	CL-2	Replacement clip/door for TR-300
ss ick	BSL-1	Spare battery sled for TR-300
VHF Beltpack Accessories	BC300NM1	Battery charger with 6 NiMH batteries and sled. Will charge TR-300 without removing battery pack
Bel	BC300NM2	Battery charger with 6 AA NHM batteries and sled. Will charge outside beltpack TR-200/TR-300
щÿ	NMBP	Battery pack, includes 6 NiMH batteries and sled TR-200/TR-300
2 ∢	TRH-1	Heavy duty leather swivel holster with belt loop for TR-300
	RA-3	Omni antenna (3 dB) with TNC reverse polarity connector
ies	RA-7	Omni antenna (7 dB) with TNC reverse polarity connector
Sol	RA-5	Omni antenna (5 dB) magnetic mount with TNC reverse polarity connector
ces	FP-11	Flat panel directional antenna (11 dB) with TNC reverse polarity connector
Ac	ANT-FP	Dual diversity, flat panel antenna with dual coaxial and TNC reverse polarity connector
E	ANT-FPM	Metal tilt swivel antenna mounting bracket for ANT-FP. Use for permanent mounting of ANT-FP
ŭ	RPT-3	3' coaxial with TNC reverse polarity connector
nte	RPT-10	10' coaxial with TNC reverse polarity connector
ss	TNC-RP	TNC reverse polarity coupler (jack to jack)
<u>6</u>	CC-24	Carry case for BTR-24 system
GHz Wireless Intercom Accessories	LP-CC	Carry case for Legacy system, Inc. dual element flat panel antenna and gooseneck mount
> N	LG-Y	Headset Y cable for Legacy
НIJ	LG-PS	US power supply for BTR-24, TR-24 and Legacy
2.4	XOB	Adjustable nylon belt
N	AB-24	Antenna mounting bracket with 6' coaxial for RA-3 and RA-7; 2.4 GHz omni antennas
	<u></u>	Antenna mounting pracket with a coasta for KA 3 and KA-7, 2.4 of 12 offin antennas

# **Specifications**

General	BTR-800/BTR-700	BTR-1/RKP-4B	BTR-300	BTR-24/Legacy	BTR-80N
RF Frequency Range (Limited to 698 MHz and below in the USA)	,	482-608 MHz, 614-746 MHz in 18 MHz TX and RX bands	150-216 MHz	2412-2462 MHz	482-698 MHz in 18 MHz TX and RX bands
Power Requirement	100-240 VAC, 50-60 Hz	12 to 15 AC/DC	12 to 15 AC/DC	12 VDC	100-240 VAC, 50-60 Hz, 12 to 15 VDC
Product Dimensions	19" W x 1.72" H x 14" D (48.3 cm x 4.4 cm x 35.6 cm)	8.25" W x 1.72" H x 9" D (20.9 cm x 4.4 cm x 22.9 cm)	15.75" W x 1.75" H x 10.5" D (40 cm x 4.5 cm x 3.27 cm)	7.5" W x 1.72" H x 6" D (19.1 cm x 4.4 cm x 15.3 cm)	19" W x 1.72" H x 14" D (48.3 cm x 4.4 cm x 35.6 cm)
Product Weight	7 lbs. 2 oz. (3.24 kg) / 6 lbs. 15 oz. (3.15 kg)	3 lbs. 8 oz. (1.59 kg)	6 lbs. 2 oz. (2.8 kg)	15 oz. (0.426 kg)	7 lbs. 5 oz. (3.3 kg)
Shipping Dimensions	19" W x 5" H x 23" D (43.2 cm x 12.7 cm x 58.4 cm)	12" W x 4" H x 16" D (30.5 cm x 10.2 cm x 40.7 cm)	17" W x 5.5" H x 20" D (43.2 cm x 14 cm x 50.8 cm)	11.5" W x 3.9" H x 18.2" D (29.2 cm x 9.9 cm x 46.3 cm)	
Shipping Weight	11 lbs. 7 oz. (5.3 kg) / 10 lbs. 9 oz. (4.8 kg)	6 lbs. 3 oz. (2.8 kg)	10 lbs. 6 oz. (4.7 kg)	2 lbs. 11 oz. (1.2 kg)	11 lbs. (4.9 kg)
FCC ID	B5DM514 / B5DM516	B5DM519	B5DM510	B5DM525	B5DM528
EC Declaration of Conformity Eligible to bear CE mark	BTR-700, BTR-800	N/A	N/A	BTR-24	N/A
Frequency Response	300 Hz - 8 KHz	100 Hz - 4 KHz	300 Hz - 5 KHz	400 Hz - 5500 Hz	300 Hz - 5KHz
Transmitter					
Туре	Synthesized, 720 channels	Synthesized, 720 channels	Crystal Controlled	DSSS, 801.11b PCMCIA radio card	Two Synthesized Transmitters, 712 channels each
Transmit Power	100 mW max (high), 10 mW (normal) / 50 mW max (high), 5 mW (normal)	50 mW (high), 5 mW (normal)	50 mW	1 Watt ERP with 7 dB Omni Antenna	Selectable from 249 mW to 10 mW
Receiver					
Туре	Dual conversion superheterodyne, Sythesized, FM, 720 channels	Dual conversion superheterodyne, Sythesized, 720 channels	Dual conversion superheterodyne, FM	DSSS, 802.11b PCMCIA radio card	Triple conversion superheterodyne, Four independent IF's, 712 channels each
RF Sensitivity	< 0.8 µV for 12 dB SINAD	< 0.8 µV for 12 dB SINAD	< 0.5 µV for 12 dB SINAD	-85 dBM @ 1 X 10-5 BER @ 5.5 Mbps	< 0.8 µV for 12 dB SINAD
IF Selectivity	3 dB at 230 KHz	3 dB at 230 KHz	3 dB at 30 KHz (4 pole Monolythic Filters)	N/A	3 dB at 30 KHz
Squelch Quieting	95 dB	90 dB	90 dB	75 dB	90 dB
Distortion	< 1% at full deviation	< 1% at peak level	< 1% at rated output	< 1% at peak level	< 1% at full deviation

General	TR-825/TR-800/TR- 700	TR-1/RKP-4	TR-300	TR-24/Legacy	TR-80N/TR-82N
RF Frequency Range (Limited to 698 MHz and below in the USA)	470-740 MHz in 18 MHz TX and RX bands	482-746 MHz in 18 MHz TX and RX bands	150-216 MHz	2412-2462 MHz	482-698 MHz in 18 MHz TX and RX bands
Power Requirement	6 "AA" cells Alkaline (NiMH optional)	6 "AA" cells Alkaline (NiMH optional)	6 "AA" cells Alkaline (NiMH optional)	6 "AA" Lithium (built-in)	6 "AA" cells Alkaline (NiMH optional)
Typical Battery Life Alkaline (continuous duty)	11 hours / 14 hours / 14 hours	10 hours	24 hours	10 hours	10 hours / 8 hours
Typical Battery Life NiMH (continuous duty)	9 hours / 11 hours / 11 hours	9 hours	17 hours	8 hours (lithium)	10 hours / 8 hours
Product 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)	D (9.5 cm x 12.9 cm x	4.25" W x 4.125" H x 2" D (10.8 cm x 10.5 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 5.35" H x 2.02" D (9.5 cm x 13.5 cm x 5.1 cm)
Product Weight	with alkaline batteries: 21 oz. (595 g) / 15 oz (425 g) / 16 oz. (454 g)	15 oz. (425 g)	with batteries: 13.5 oz. (384 g)	15 oz. (0.426 kg)	14 oz. (397 g) / 16 oz. (453 g)
Shipping Dimensions	7" W x 4" H x 14" D (17.8 cm x 10.2 cm x 35.6 cm)	7" W x 4" H x 14" D (17.8 cm x 10.2 cm x 35.6 cm)	7" W x 3" H x 10" D (17.8 cm x 7.6 cm x 25.4 cm)	9" W x 3.6" H x 13.25" D (22.9 cm x 9.2 cm x 33.7 cm)	13.75" W x 3.75" H x 6.5" D (34.9 cm x 9.5 cm x 16.5 cm) / 13.75" W x 3.75" H x 6.5" D (34.9 cm x 9.5 cm x 16.5 cm)
Shipping Weight	1 lbs. 6 oz. (624 g) / 1 lbs. 5 oz. (595 g) / 1 lbs. 4 oz. (567 g)	1 lbs. 6 oz. (624 g)	1 lbs. (454 g)	1 lbs. 10 oz. (737 g)	1 lbs. 8 oz. (679 g) / 1 lbs. 10 oz. (736 g)
FCC ID	B5DM517 / B5DM515 / B5DM515	B5DM520 / B5DM523	B5DM513	B5DM526	B5DM530 / B5DM531
EC Declaration of Conformity Eligible to bear CE mark	TR-700, TR-800, TR-825	N/A	N/A	TR-24	N/A
Transmitter					
Туре	Synthesized, 720 channels	Synthesized, 720 channels	Crystal Controlled	DSSS, 802.11b PCMCIA radio card	Two Synthesized Transmitters, 712 channels each
Transmit Power	50 mW max (auto- power reduction when close to base)	50 mW (high), 5 mW (normal or auto)	50 mW	70 mW ERP S.A.R. tested and approved	Selectable from 100 mW to 5 mW (auto power reduction when close to base)
Receiver					
Туре	Two, Dual conversion superheterodyne, Sythesized, FM, 720 channels	Dual conversion superheterodyne, Sythesized, 720 channels	Dual conversion superheterodyne, FM	DSSS, 802.11b PCMCIA radio card	Triple conversion superheterodyne, Four independent IF's, 712 channels each
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 µV for 12 dB SINAD	< 0.5 µV for 12 dB SINAD	-85 dBM @ 1 X 10-5 BER @ 5.5 Mbps	< 0.8 µV for 12 dB SINAD
IF Selectivity	3 dB at 230 KHz	3 dB at 230 KHz	3 dB at 30 KHz (ceramic Filters)	N/A	3 dB at 30 KHz
Squelch Quieting	95 dB	90 dB	90 dB	75 dB	90 dB
Distortion	< 1% at peak level	< 1% at peak level	< 1% at rated output	< 1% at peak level	< 1% at full deviation

# **Telex UHF Wireless Intercom** World Wide Frequency Band Chart

Operation of radio systems in the United States should avoid 698 MHz and above due to the DTV transition and the reallocation of	BTR-80N BTR-1 RKP-4B	NTSC TV CHANNEL	START FREQUENCY	END FREQUENCY	BTR-800 BTR-700	PAL TV CHANNEL
these frequencies by the Federal		14	470	476		<b>21</b> 470-478
Communications Commission.		15	476	482	88	
BTR-80N		16	482	488		22 478-486
	F	17	488	494	F	23 486-494
The BTR-80N system is offered on 33 standard frequency band splits:		18 19	494	500		<b>24</b> 494-502
standard frequency band splits.	н	20	500 506	506 512	н	<b>25</b> 502-510
F1, F2, F3, F4, F5, F6		20	512	512	- <b>П</b>	<b>26</b> 510-518
H1, H2, H3, H4, H5, H6		22	518	524		<b>27</b> 518-526
A1, A2, A3, A4, A5, A6	Α	23	524	530	. <b>A</b>	<b>28</b> 526-534
B2, B3, B4, B5, B6		24	530	536		29 534-542
C3, C4, C5, C6 D4, D5, D6	D	25 26	536 542	542 548	- D	
E5, E6	B	20	542	548	B	30 542-550
G9 (G9 is for use in Germany)		28	554	560		31 550-558
	С	29	560	566	C	32 558-566
BTR-800 and BTR-700		30	566	572		33 566-574
	<b>D</b>	31	572	578	-	<b>34</b> 574-582
The BTR-800 system is offered on 18 different frequency band splits:	D	32 33	578 584	584 590	-	35 582-590
unterent frequency band spirts.		33	590	590		36 590-598
F1, F2, F3, F4	E	35	596	602	E	
H1, H2, H3, H4		36	602	608	-	37 598-606
A2, A3, A4	NOT USED IN USA	37	608	614	NOT USED IN USA	<b>38</b> 606-614
B3, B4, B6	-	38	614	620		<b>39</b> 614-622
C3, C4, C6 E88		<u> </u>	620 626	626 632	-	40 622-630
EOO		40	632	638		41 630-638
The BTR-700 system is offered on 5	2	42	638	644	2	<b>42</b> 638-646
standard frequency band splits:		43	644	650	-	43 646-654
	_	44	650	656	_	
A2, B4, C3, C6	3	45	656	662	3	44 654-662
G9 (G9 is for use in Germany)		46	662 668	668 674		<b>45</b> 662-670
	4	48	674	680	4	<b>46</b> 670-678
BTR-1 and RKP-4B		49	680	686		<b>47</b> 678-686
The BTR-1 systems are offered on 41 standard	5	50	686	692	_	48 686-694
frequency band splits and the RKP-4B systems are offered on 34 frequency band splits:	3	51	692	698	-	<b>49</b> 694-702
offered on 34 frequency band splits.		52 53	698 704	704 710		<b>50</b> 702-710
FE, F1, F2, F3, F4, F5, F6, F7	6	53	704	710	6	<b>51</b> 710-718
HE, H1, H2, H3, H4, H5, H6, H7	0	55	716	722	- 0	
A1, A2, A3, A4, A5, A6, A7		56	722	728		<b>52</b> 718-726
B2, B3, B4, B5, B6, B7	7	57	728	734	-	<b>53</b> 726-734
C3, C4, C5, C6, C7		58	734	740	-	<b>54</b> 734-742
D4, D5, D6, D7		59	740 746	746	-	<b>55</b> 742-750
E5, E6, E7			740	752		
			794	800		<b>61</b> 790-798
FE, HE, A1, B2, C3, D4, E5 frequency bands are for use with BTR-1 systems only.	G		800	806	G	<b>62</b> 798-806
	796-814 GERMANY		806	812	796-814 GERMANY	<b>63</b> 806-814
	GERMANT		812	818	VENIANT	
NOTE:						<b>67</b> 838-846
All "6", "7" and "G9" frequency band	9		842	848	- 9	
products are intended for sale and use	844-862		848	854	-	68 846-854
outside of the USA.	844-862 GERMANY		854	860	844-862 GERMANY	<b>69</b> 854-862
			860	866		

## Audiocom Intercom Systems Why choose Audiocom?

Telex products are designed and built using the latest and most sophisticated processes available. Audiocom intercom equipment employs superior technology compared with other TW party line intercoms. In a business where manpower, space, and cabling are at a premium, Audiocom products provide users with a competitive advantage by offering modular, open-ended designs and unparalleled reliability. Systems start with a two or four-channel master station (MS2002 or MS4002) and expand into convenient 4-channel expansion panels (EMS4001), for up to 22 individual intercom channels.

Audiocom is unique among professional intercom systems today. Our intercom systems use a technologically superior balanced audio transmission configuration. Balanced audio produces a variety of functional benefits, including lower inherent system noise, immunity to external noise sources such as RFI, dimmers and AC power, and the ability to make substantially longer cabling runs without special wiring.

The unique design of our intercom systems allows users the longest TW party line cable runs in the industry; up to 3,000 feet. This is critical when installing large or widely dispersed systems. The differential input/output guarantees excellent audio quality, even under the harshest conditions. Superior audio quality reduces user fatigue and missed cues as a result of users not wearing their headsets, or "tuning out" the noise.

Audiocom uses a distributed amplifier system structure. Each main or remote station houses its own microphone preamplifier, headset, or speaker power amplifier and signaling circuitry. Stations bridge the intercom line at a very high impedance (more than 10K Ohms), and place a minimum load on the line, ensuring that the audio level remains constant even as stations are added or removed from the system, as may occur on other professional intercom systems.

Our products provide users with valuable features such as Remote Mic OFF, backlit lettered buttons for darkened environments, and compatibility with every major intercom system. In addition to excellent Telex quality and performance, Audiocom products provide cost-effective system pricing and world-class technical support from one of the most experienced sales, engineering, and customer service teams in the intercommunication industry. Instantaneous Auto Reset<sup>™</sup> (IAR) technology is the next step in intercom performance and safety. Revolutionary new circuitry dynamically monitors line fault conditions and automatically raises individual power supply channels when a fault condition is removed.

Other systems may get extremely hot under short circuit fault conditions and take 30 or more seconds to reset—an eternity when waiting to give a critical cue. In many cases power from the affected multi-channel supply feeding non-shorted intercom channels can also be removed, taking down critical communications links that should have otherwise been completely unaffected. Such situations can also create fire hazards. To address the power supply reset problem, Telex engineers took a unique approach. Their new auto-reset technology uses the same failsafe, currentsensing circuitry currently found in existing Audiocom systems enhanced with IAR<sup>™</sup> intelligent circuitry to monitor the line and instantaneously reset power upon fault removal.

IAR<sup>™</sup> intelligent circuitry actively and continuously evaluates the line condition using advanced comparator circuits to instantaneously restore power to affected intercom channels as soon as it is safe to do so. Restoration after removing the fault condition takes less than 500 milliseconds - 60 times faster than the competition!

Telex engineers have raised the bar of power supply performance and safety by using readily available, off-the-shelf components to create this innovative Auto-reset technology. All future Audiocom power supplies will be fitted for Auto-reset. Users and facility managers can rest assured knowing that Audiocom's IAR<sup>™</sup> technology will ensure the safe and immediate return of intercom power when a fault is removed.



Actively and continuously evaluates line condition



Shuts down when fault is detected



Power supply never gets hot— because excessive current is not drawn



Restores power instantly after fault condition is removed, 60 times faster than competition

# Master Stations The ultimate in performance and flexibility

The Audiocom Master Stations provide user station flexibility with intercom system phantom power in the convenience of 1RU box. Master Stations offer users the ultimate in performance and flexiblity. Operators can utilize headset or speaker/ mic operation and full access to all intercom channels — both individually and as "all talk". 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. Can operate in an unbalanced mode to be completely Clear-Com compatible.



### MS4002 and MS2002 features

- Combined user station and power supply in a convenient 1RU package.
- Individual IAR (Instantaneous Auto Reset) control of each intercom power supply channel for quick resets and unparalleled safety.
- Balanced audio transmission system for crisp clean audio, even under the most challenging conditions.
- Headset operation for noise reduction and privacy.
- Front panel speaker/mic operation for convenience or multiple user operation.
- Remote Mic Kill feature allows users to silence any open mic on the intercom channel.
- Separate listen, call and talk buttons with digilatch<sup>™</sup> technology give users complete control of system communications while maintaining ease of operation.
- Backlit buttons with lettering right on the button allow users to see, even in darkened environments.
- Public Address (PA) output with PA key use your intercom microphone to talk over a PA system.

- Convenient 1/8-inch rear data connector allows the Master Station to be linked with one or more EMS4001 Expansion Stations for up to 22 intercom channels.
- You can connect external powered speakers and then monitor the channels.
- VOX (voice activated microphone) feature is on/ off programmable via front panel, with individual trim pots for headset and front panel microphones.
- Program input for each channel. Connect any live-level audio source for monitoring in the speaker or headset, or for routing to the intercom channel.

### Additional MS4002 features:

- The MS4002 has a built-in autosensing headset connector that will automaticallydetermine whether a dynamic or electret headset is connected to the system.
- Equipped with an Advanced Programming Mode on the front panel, eliminating the need for internal DIP switches to change operation modes.
- Four Amp Power Supply.



The Audiocom EMS4001 Master Station Expansion Panel connects seamlessly to the MS2002 or MS4002 Master Stations to increase the number of discrete intercom channels from two up to 22. All functions of the Master Station are preserved for all intercom channels by linking the EMS4001 (s) to the MS4002/MS2002 via a convenient 1/8-inch rear data connector. Headset and/ or speaker/mic operation for all intercom channels is accessed through the MS2002 or MS4002 Master Station. Can operate in an unbalanced mode to be completely Clear-Com compatible.

### EMS4001 features

- Balanced audio transmission system for crisp clean audio, even under the most challenging conditions.
- Remote Mic Kill and all talk features of the master station seamlessly operate for all intercom channels.
- Three-pin rear XLR connectors for convenient single or multiple channel cable connections.
- Backlit buttons with lettering right on the button allow users to see, even in darkened environments.
- Convenient, 1/8-inch rear data connector allows the M2002 and MS4002 Master Station to be linked with one or more EMS4001 Expansion Stations for up to 22 intercom channels.
- Individual power supply status LEDs for each intercom channel.



# **User Stations** Versatile, durable, and incredibly flexible

Using a unique modular design concept, US2002 user stations can be configured in numerous ways to suit virtually any application. User stations can be combined with power supplies of different types to form a host of master station configurations, or can be used without a power supply so that users can access multiple intercom channels with all of the features of a master station. User stations can also be combined with expansion station, like ES4000A and EMS4001, for access to even more channels. All functions of the user station are preserved for all intercom channels by linking the ES4000A (s) to the US2002 via a convenient, 1/8-inch, rear data connector. headset and/or speaker/mic operation for all intercom channels is accessed through the US2002 Master Station. Can operate in an unbalanced mode to be completely Clear-Com compatible.



### US2002 features

- Balanced audio transmission system for crisp clean audio even under challenging conditions.
- Headset operation for noise reduction and privacy.
- Front-panel speaker/mic operation for convenience of multiple user operation. (optional MCP90-3, MCP90-8, MCP90-12, and MCP90-18 panel-mount microphone required).
- Remote Mic Kill feature allows users to silence any open mic on the intercom channel.
- Separate listen, call and talk buttons with digilatch<sup>™</sup> technology give users complete control of system communications while maintaining ease of operation.

- Backlit buttons with lettering right on the button allow users to see, even in darkened environments.
- Convenient, 1/8-inch, rear data connector allows the Master Station to be linked with one or more ES4000A Expansion Stations for up to 22 intercom channels.
- VOX (voice activated microphone) feature is on/off programmable via front panel, with individual trim pots for headset and front-panel microphones.
- Rack-mountable in a variety of modular configurations with one of several optional rack-mount kits.



### **ES4000A features**

- Balanced audio transmission system for crisp clean audio even under challenging conditions.
- Remote Mic Kill feature allows users to silence any open mic on the intercom channel.
- Backlit buttons with lettering right on the button allow users to see, even in darkened environments.
- Convenient, 1/8-inch rear data connector allows the Master Station to be linked with one or more ES4000A Expansion Stations for up to 22 intercom channels.
- Rack-mountable in a variety of modular configurations with one of several optional rack-mount kits.



# **Power Supplies** The core of any professional intercom system

The power supply, whether it be a discrete component or integrated into a master station, provides system power for down line components such as beltpacks and speaker stations. All of Audiocom's new two-channel power supplies now feature as standard the revolutionary IAR (Instantaneous Auto Reset) technology for performance and safety. All Audiocom power supplies can operate in an unbalanced mode to be completely Clear-Com compatible.



### PS4001

The PS4001 power supply supplies four isolated channels of intercom system phantom power to down line components. The PS4001 may be combined with an ES4000A expansion station to create additional intercom channels when using a US2002/PS2001L or US2000A/SPS2001 master station configuration. The PS4001 can also be used as a stand-alone power supply to provide power to four independent party-line channels. Rackmountable in a variety of modular configurations with one of several optional rack-mount kits.



### **PS2001L**

The PS2001L power supply supplies two isolated channels of intercom system phantom power to down line components. Intercom power channels may be combined via the Combine/Isolate switch to form a single intercom power channel with double the capacity of large party-line applications. The PS2001L may be combined with a US2002 user station to create a two-channel master station configuration or as a stand-alone power supply. The resultant master station would be a headset only station, as the PS2001L does not have an integrated speaker. Rack-mountable in a variety of modular configurations with one of several optional rack-mount kits.





### SPS2001

The SPS2001 has all of the features of the PS2001L, but adds the power of a built-in speaker and level control for monitoring intercom lines. The SPS2001 may be used as a stand-alone power supply and monitor box or in combination with a US2002 to create a two-channel headset or speaker/mic master station (optional MCP90-3, MCP90-8, MCP90-12, and MCP90-18 panel-mount microphone required). Like the PS2001L intercom power channels, it may be combined via the Combine/Isolate switch to form a single intercom power channel with double the capacity of large party-line applications. Rackmountable in a variety of modular configurations with one of several optional rack mount-kits.

# **Speaker Stations**

Both the single channel SS1002 and the dual channel SS2002 speaker stations can be used both as speaker stations and/or as headset stations. Speaker stations can be used standalone as a faceplate only, or in conjunction with a "U", "S," or "P" box, depending on application. Wall-mount, desktop, or portable configurations can be easily formed. Can operate in an unbalanced mode to be completely Clear-Com compatible.



### SS1002 and SS2002 common features

- Balanced audio transmission system for crisp, clean audio even under challenging conditions.
- Headset operation for noise reduction and privacy.
- Front-panel speaker/mic operation for convenience of multi-user operation.
   (optional MCP90-3, MCP90-8, MCP90-12, and MCP90-18 panel-mount microphone required).
- Dual-purpose level control adjusts both the speaker volume and headset listen volume depending on which mode is enabled.
- Remote Mic Kill feature allows users to silence any open mic on the intercom channel.
- Separate listen, call, and talk buttons with digilatch<sup>™</sup> technology give users complete control of system communications while maintaining ease of operation.
- Backlit buttons with lettering right on the button allow users to see, even in darkened environments. And bi-colored, backlit channel select light indicates which channel is active (SS2002 only).
- Can be locally powered for permanent installations.
- Built-in, flush-mounted microphone.







Audiocom mounting boxes add to the flexibility of the speaker stations by allowing one type of station to be effectively used in multiple configurations. Each box is rugged and built to last.



### **U-Box**

Used for wall-mounted speaker stations. The U-Box mounts to studs and has top/bottom (depending on mounting orientation) and side access holes for permanent installations. Intercom cabling connects directly to the terminals on the back of the speaker station.

### S-Box

The S-Box offers compact design with a convenient carrying handle for portable applications. Loopthrough connectors on the side allow for easy intercom cabling. In single-channel configuration, three-pin male and female XLR. In dual-channel configuration, six-pin XLR. Inside the S-Box, loopthrough XLRs are connected to the speaker station terminal block via pre-tinned leads.

### **P-Box**

The P-Box offers three-sided configuration for desktop applications. The P-Box also has a variety of mounting holes on the back for additional flexibility. Loop-through connectors on the side allow for easy cabling. In single-channel configuration, three-pin male and female XLR. In dual-channel configuration, six-pin XLR. Inside the P-box, loop-through XLRs are connected to the speaker station terminal block via pre-tinned leads.

### **RM-Box**

The two-channel SS2002 RM (rack-mount) box is suitable for desktop use, or can be rack-mounted using the optional RM-14 rack-mount ear kit. As with all SS series, this unit features a built-in speaker and panel microphone. It is also capable of operation with a gooseneck microphone, headset, or handset.

# **Headset Stations**

The wall-mount intercom stations are designed for stationary installation in standard doublewide electrical outlet boxes (two-gang). They connect to the intercom system using commonly available 22-gauge cable. Wall-mount stations can be installed at strategic locations throughout a building. The user need only connect a headset or telephone style handset to begin communicating.



### WM1000

Wall-mount, one-channel headset station. Mounts in a standard electrical outlet box (doublewide type). High-quality audio system with mic limiter circuit. Back-lit control buttons for low-light operation. Talk and listen buttons with momentary/latching operation. Call/send button with call/receive indicator light. Call/receive beep tone with on/off selection. Mic Kill Receive with on/off selection. Side tone trimmer. Quick-connect, wire clamp terminals for party-line wire connections. Four-pin male XLR headsets (balanced or unbalanced microphone). Powered from party-line, local power optional. Clear-Com compatible.

### WM2000

Wall-mount two channel headset station. Identical to WM1000, except includes channel-select switch with two-color back-light to indicate party-line one or two.







Beltpack stations are ideal for users who will be stationed in a general work area, but who need some mobility and wish to keep their hands free. Beltpacks can be connected in a daisy chain configuration directly back to the intercom system power supply or master station using Audiocom prefabricated, low-impedance cables. This is ideal for completely portable intercom systems. Alternatively, passive wall-connector plates can be permanently installed at strategic locations, and beltpacks can then be connected to these using cables.



### **BP-1002**

Portable, one-channel beltpack headset station for mobile users. High-quality audio system with mic limiter circuit. Rugged, low-profile metal case with sturdy belt clip. Recessed volume control. Talk on/ off switch with momentary/latching operation. Call/send button with receive indicator light. Call/ receive beep tone with on/off selection. Mic Kill Receive with on/off selection. Sidetone trimmer. Three-pin male and female XLR loop-through connectors for party-line connection. Four-pin male XLR headset connector. Powered from party-line. Clear-Com compatible.

### **BP-2002**

Portable, two-channel beltpack headset station for mobile users. Identical to BP-1002 with following differences: includes party-line select switch with party-line one and two indicator lights, six-pin male and female XLR loop-through connectors for two-channel connection, powered from party-line, Clear-Com compatible.

### IFB1000

Portable, one-channel, listen-only beltpack. Highquality audio receive circuit. Rugged low-profile metal case with sturdy belt clip. Recessed volume control. Power indicator. One three-pin XLR connector for party-line connection. 1/4-inch phone jack for earphone or earset. Uses same cables and wall plates as BP-1002. Powered from party-line.

# Window Intercom

The Audiocom ICW-3 represents the ultimate in rugged, flexible security communications equipment. Unique audio shaping circuitry and VOX (voice threshold level activation) operation ensure maximum voice intelligibility for greater efficiency and few mistakes. Installation is quick and easy with our new two-piece, super-rugged, maintenancefree, polycarbonate package.



- SPEEDS TICKET WINDOW TRAFFIC FLOW No more frustrated customers waiting in long lines. Superior audio quality and level control from our unique audio shaping circuitry ensure maximum voice intelligibility for quick and accurate transactions.
- REDUCES COSTLY ERRORS Stop wasting money. Improved VOX (voice threshold level activation) and full-duplex design eliminate frustrating interruptions in audio for more natural conversations leading to a substantial reduction in costly errors.

### GOOSENECK OR HEADSET OPERATION —

Customize your user interface and maximize effiency with your choice of two hands-free operation modes. Gooseneck microphone operation enables users to move freely to access cash drawers or information sheets without being tethered by a headset. Headset operation provides a higher level of privacy and reduces ambient noise levels in multi-user environments.

### EASY INSTALLATION AND SET-UP -

Revolutionary new mechanical design concepts incorporated in the ICW-3 make installation easy. Use your choice of one 2.5-inch hole or five smaller mounting holes. Either way, you'll save precious time and money with the fastest, easiest installation in the industry.

- SUPERIOR AUDIO QUALITY You never get a second chance to make a first impression. First contact with your customer is usually at the ticket booth. Crackling, interruped, garbled audio is not what you want that impression to be. With unique audio-shaping circuitry, improved VOX (voice threshold level activation) operation, and natural-sounding, full-duplex design your customers will hear exactly what you want them to.
- IMPROVED DURABILITY With all of the things you have to worry about, your security communications system shouldn't be one of them. Super-strong, high-tech polycarbonate fiber resin material makes the ICW-3 virtually indestructible. For years of dependable, maintenance-free operation, choose Audiocom.

# **Accessories**

### **BOP-1000**







**XP-ES4000** 



US-PG







TW-5W



WP-1





WP-2



WP-3

### **BOP-1000**

Audiocom black 19-inch blank mounting-rack required for mounting the following break out panels.

- TW-7W One female XLR-3 into seven male XLR out (1/2-rack wide).
- XP-ES4000 15-pin female on ES4000A into eight XLR-3 — one male and one female for each of four channels (1/2-rack wide).
- XP-4PGM 9-pin male program input on ES4000A into four XLR-3 female (1/4rack wide).
- US-PG nine-pin male program input on US2000A into two XLR-3 male plus 1/8-inch stereo PA output into a XLR-3 female (1/4rack wide).

### CCB-1

The CCB-1 interfaces a single Audiocom balanced intercom channel to a single Clear-Com unbalanced intercom channel, with full audio and light signaling compatibility between the two intercom channels. The CCB-1 has no controls and is completely transparent to intercom system operation.

### JB-2

Junction Box is a breakout box that can take one two-channel cable and split it into two singlechannel outputs, or it can take two single-channel cables and combine them to form one single twochannel cable. It includes one male and one female XLR-3 type connector for each channel, and one male and two female XLR-6-type connectors for channels one and two combined.

### **TW-5W**

Splitter Box one in five out cable splitter - One female XLR to five male XLR.

### **WP-1**

Single-channel wall plate - male XLR-3 type connector.

### **WP-2**

Single-channel wall plate with two-channel switch male XLR-3 type connector.

### **WP-3**

Two-channel wall plate - male XLR-6 type connector.



# Accessories



### **Audiocom Gooseneck Microphones**

Audiocom black electret cardioid microphone is ideally suited for vocal sound reinforcement, public address and intercom applications. The unidirectional cardioid response makes it particularly beneficial when background noise is a problem. The microphone features a threaded trs male connector that is compatible with all "2002" Audiocom products. The removable windscreen provides pop-filtering, response-shaping, and overload protection to further enhance the acoustic performance of the microphone.

### **DSI-2008**

Dual digital hybrid interfaces two two-wire intercom lines to two four-wire lines, and also interfaces balanced and unbalanced two-wire lines. DSI-2008 is ideal for systems with varying loads. Unlike earlier analog hybrids, the DSI-2008 features advanced digital signal processing to achieve automatic nulling of the two-wire lines.

### SSA-324

System-to-system adapter interfaces two channels of two-wire to four-wire conversion. SSA-324 is also available with coupling transformers.

### **CIA-1000**

Call light indicator. Features top-mounted (standard) or front mounted (optional) red flashing call light. Offers channel select control, line and loop connectors, and spring clamp terminals for relay closure output in a 1/2-rack-wide by 1RU-high package. Ideal for high-noise applications or when users cannot monitor headsets full-time.

### IC-100

Allows the assignment of any two of six input lines to any one of twelve two-channel outputs. The six inputs are available as a loop-through output. All inputs are protected against transients and power cross.

### IC-6SX

Passive source assign-panel that allows rapid assignment of any one or six inputs to any one of twelve outputs. An expansion connector is provided to allow an additional IC6SX to be connected together for a total of 24 outputs.

### **RMK-D**

Dual rack-mount kit for two: US2002, ES4000A, PS4001, PS2001L or SPS2001 (side by side in 19-inch rack).

### **RMK-S**

Single rack-mount kit for one: US2002, ES4000A, PS4001, PS2001L or SPS2001 (center of 19-inch rack).

# **Specifications**

Products	Height	Width	Depth	Weight
BP-1002/2002	2.0" (51 mm)	3.5" (89 mm)	5.0" (127 mm)	1.5 lbs. (0.68 kg)
CCB-1	1.625" (41 mm)	2.625" (67 mm)	5.0" (127 mm)	1 lb. (0.45 kg)
EMS4001	1.735" (44 mm)	16.5" (419 mm)	10.125" (257 mm)	6.54 lbs. (2.9 kg)
ES4000A	1.75" (44.5 mm)	8.25" (210 mm)	10.0" (254 mm)	1.3 lbs. (0.59 kg)
IC-2B	1.75" (44.5 mm)	4.0" (117 mm)	5.5" (140 mm)	1.62 lbs. (0.74 kg)
IC-6SX	1.75" (44.5 mm)	19.0" (482 mm)	3.85" (98 mm)	3.44 lbs. (1.55 kg)
ICW-3	5.125" (130 mm)	5.125" (130 mm)	3.5" (89 mm)	1.75 lbs. (0.79 kg)
MS2002	1.735" (44 mm)	16.5" (419 mm)*	10.125" (257 mm)	6.56 lbs. (3.0 kg)
MS4002	1.735" (44 mm)	16.5" (419 mm)*	10.125" (257 mm)	6.56 lbs. (3.0 kg)
PS2001L	1.75" (44.5 mm)	8.25" (210 mm)	9.5" (241 mm)	8.0 lbs. (3.6 kg)
PS4000A	1.75" (44.5 mm)	8.25" (210 mm)	10.2" (259 mm)	2.25 lbs. (1 kg)
SPK-2000	1.75" (44.5 mm)	8.25" (210 mm)	10.3" (262 mm)	2.5 lbs. (1.13 kg)
SPS-2001	1.75" (44.5 mm)	8.25" (210 mm)	10.2" (259 mm)	2.25 lbs. (1 kg)
SSA-324	1.72" (44 mm)	8.19" (208 mm)	8.0" (204 mm)	2.75 lbs. (1.3 kg)
DSI-2008				
SS1002/2002P	8.5" (216 mm)	9.5" (241.5 mm)	4.1" (103 mm)	5.0 lbs. (2.2 kg)
SS1002/2002S	6.6" (168 mm)	8.46" (214 mm)	2.08" (52.5 mm)	5.0 lbs. (2.2 kg)
SS1002/2002U	6.1" (153.5 mm)	8.1" (204.8 mm)	3.15" (79.5 mm)	5.0 lbs. (2.2 kg)
US2002	1.75" (44.5 mm)	8.25" (210 mm)	10.0" (254 mm)	1.3 lbs. (0.59 kg)
WM1000/2000	4.5" (114 mm)	4.6" (117 mm)	2.3" (58 mm)	1 lb. (0.45 kg)

\* Front mounts full 19" (482 mm)

### Audiocom system specifications:

**Audio line impedance** – 300 Ohm per channel – typically supplied by system power supply – unless locally powered.

**Station bridging impedance** – 10K Ohms nominal (Individual Stations).

**DC line voltage** – 24 Vdc nominal – 17 Vdc to 30 Vdc operational.

Wiring requirements – 22-gauge stranded, twisted pair plus shield, or additional pair – per channel.

- Station inputs Microphone (electret): 2-10K Ohm (dynamic): 50-200 Ohm
- Station output Headphone 150-600 Ohm phones

**Operating distance** — Typical two station with a single 24 Vdc power supply, one mile without light signalling using 22 AWG stranded, twisted cable. System performance over long distances is directly relative to cable length, cable capacitance, wire size, and the current drain of all of the stations connected.

DC Requirements	Max. Current
24 Vdc (line only)	65 mA
24 Vdc (line only)	12 mA
12 Vdc local/24 Vdc line	150 mA
12-18 Vdc (local only)	150 mA
12 Vdc local/24 Vdc line	175 mA
12 Vdc local/24 Vdc line	150 mA
12 Vdc local/24 Vdc line	65 mA
	24 Vdc (line only) 24 Vdc (line only) 12 Vdc local/24 Vdc line 12-18 Vdc (local only) 12 Vdc local/24 Vdc line 12 Vdc local/24 Vdc line

Products	Input Requirements	Power Output
PS-1F	105-125 VAC, 50-400 Hz	0.5 Amps/12 Watts
PS2001L	105-255 VAC, 50-400 Hz	2.0 Amps/48 Watts
PS4001	95-255 VAC, 50-400 Hz	2.0 Amps/48 Watts
SPS2001	95-255 VAC, 50-400 Hz	2.0 Amps/48 Watts
MS2002	95-255 VAC, 50-400 Hz	2.0 Amps/48 Watts
MS4002	95-255 VAC, 50-400 Hz	4.0 Amps/96 Watts
EMS4001	95-255 VAC, 50-400 Hz	2.0 Amps/48 Watts



# Headsets/Earsets/Mics

### **Headsets**

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

### PH-100/PH-200

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

### 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-1 is single-muff, HR-2 is dual-muff. Available in four or five-pin XLR connectors (male or female).

### PH-44/PH-88

Super light-weight headsets with dynamic, noisecanceling microphone. Adjustable gooseneck mic boom for precise positioning. High-quality, wideband earphones. PH-88 in single-muff mono; PH-44 is dual-muff mono. Available in four or five-pin XLR connectors (male or female).

### PH-1/PH-2

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. PH-1 is single-muff mono; PH-2 is dual-muff mono. Available in four or five-pin XLR connectors (male or female).







### **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, noisecanceling microphone, dual-muff mono, available in four or five-pin XLR connectors (male or female).

### Earsets

Telex offers the widest variety of earsets, cords, ear tips, earloops and tubes, and accessories in the industry. A separate catalog of earsets and accessories is available. The most popular configurations are listed below.

### CES-1

Ideally suited for use by on-air talent, with any of the RTS IFB beltpacks. Complete with 125 Ohm Telethin driver, five-foot, low-luster, gray cord with 1/4-inch straight phone plug, and coiled acoustic eartubes, clothing clip, and S/M/L earcones.

### CES-2

Similar to CES-1 with five-foot beige cord with 3.5 mm straight phone plug.

### Handsets

### HS-6A

Telephone style handset with push-to-talk switch, dynamic earphone and dynamic mic. Terminated with A4F plug. Available in white or black.





### For information on any of the products featured in this catalog, please visit our Web sites:

RadioCom wireless intercom: www.telexradiocom.com Audiocom wired party line intercom: www.telexaudiocom.com Telex headsets: www.intercomheadsets.com

### Europe, Middle-East & Africa

Europe Bosch Security Systems, Inc. EVI Audio GmbH. Sachsenring 60, D 94315 Straubing, Germany Phone: +49 9421 706 0, Fax: +49 9421 706 265

### EMEA Tech. Support

Bosch Security Systems, Inc. Unit 26 Fiddlebridge Industrial Center Lemsford Road Hatfield, Hertfordshire AL10 ODE, UK Phone: +44 1707 280 960, Fax: +44 1707 265 083

### Middle-East & Africa

Robert Bosch Middle East FZE Dubai Airport Free Zone West Wing, 6B office 535 P.O.Box 54307, Dubai, UAE Phone: +971 4 212 3350, Fax: +971 4 212 3388