TELEX ®

Tele⌄ Communications Inc.
12C ortland Ave. S.
Burnsville, MN 55337

Professional Intercom Product Guide

Audiocom®
Party-line Intercom Systems

RadioCom™
Wireless Intercom Systems

Zeus
Digital Matrix Intercom Systems

What's Inside

What is Intercom?
A back to basics primer

Balanced Audio
important in comms too

Wireless Intercom
Break the chains of cabled comms

Zeus DSP Audio Matrix
It's not just for intercom any more!

Product Guide

Why Buy a Telex Intercom System?

Telex Communications offers the widest range of hardwired and wireless intercommunications products in the world. Telex intercoms can be found behind the scenes at Broadway plays, on the sidelines of professional football games, in television broadcast facilities, at the Chicago Board of Trade, in nuclear power plants and in countless other mission critical applications throughout the world. From broadcast television to aerospace to live performance applications, Telex intercoms have the flexibility and performance you need. With legendary reliability, intersystem compatibility and audio quality, Telex hardwired and wireless intercoms are the systems of choice among communications professionals everywhere. Why not make it yours?

AudioCom®, Innovative Solutions

AudioCom products provide users with a competitive advantage by offering modular open-ended designs and unparalleled reliability. Systems start with a two-channel master station (MS-2000) and expand with convenient 4-channel Expansion panels (EMS-4000) up to 18 individual intercom channels. A unique balanced audio design allows AudioCom intercom systems to utilize the longest TW party line cable runs in the industry, while the differential input/output guarantees excellent audio quality even under the harshest show conditions. Superior audio quality reduces user fatigue and missed cues as a result of users not wearing their headsets, or "tuning out" the noise.

RadioCom™, Wireless That Works!

RadioCom wireless intercom products are designed and built with RF performance and audio quality in mind. RadioCom offers wireless systems in a variety of feature sets to meet every application and budgetary need. The BTR-300 VHF wireless intercom supports up to four beltpacks per base station and can function with up to four base stations and 16 beltpacks in simultaneous operation. The BTR-500 and BTR-600 UHF wireless systems are one-to-one beltpack to base station units that allow each beltpack to be individually addressed. Both systems offer two intercom channels of operation and the BTR-600 system is digitally encrypted for the ultimate in secure communications. With RadioCom wireless systems you can break the chains of cabled communications without breaking the budget!

Zeus™ Digital Matrix Opens New Doors

Most people think that a digital matrix intercom system is either too complicated or too expensive for their application. They think it's something only large television broadcasters or the rocket scientists at NASA need. That may have been true before Zeus, but now everyone can get in on the incredible power and performance digital intercom provides! Zeus is more than just an intercom. With 90dB audio SNR it is just the ticket for audio routing, multi-zone paging and any other application that needs to get an audio signal from here to there.

What is Intercom? A Back to Basics Primer.

There are two basic types of hardwired intercom, TW/party-line and four-wire/point to point. This primer will deal with the TW/party-line side of the intercom world. For an overview of four-wire as it refers to the Telex Zeus product please see the article on the facing page.

The term two-wire or TW as it is commonly referred, is a description of the number of actual conductors necessary for the operation of an intercom system. two-wire systems, as the name implies, work on a single pair of wires to produce fully bidirectional audio. This is somewhat of an anomaly as normally TW systems in the field on three-conductor micro- are run phone cable. The third "wire", the shield, provides a DC and/or audio return path, depending on system type. in addition to the two "working" wires. It is important to note that the shield, or third wire is necessary for proper operation.

The idea behind two-wire intercom systems is simple, provide two way, hardwired communications throughout widely varying situations and venues using the minimum number of conductors necessary. Since microphone cable is relatively inexpensive and normally very common in many different types of venues, it serves as the primary form of cabling for most two-wire intercom systems today.

All TW systems provide DC power to down-line devices so that each individual piece of communications gear does not need to be plugged in or have batteries. In quality intercom systems such as AudioCom, each intercom channel has its own isolated power supply so that trouble on one channel does not affect other intercom channels. The ability to distribute power and call signals while maintaining high quality, low noise audio is the primary difference between modern intercommunications systems.

two-wire intercom systems, in their most basic form, are one channel or a party-line systems. Each user who is connected to the intercom system can hear all of the

conversation that happens between any other users. The name party-line comes from the days when you (and a hundred of your closest friends) could call a "party" number and talk to everyone at once. This system was easy to use, but had a serious problem. It was very difficult to understand what was being said with multiple conversations about several different topics happening at once.
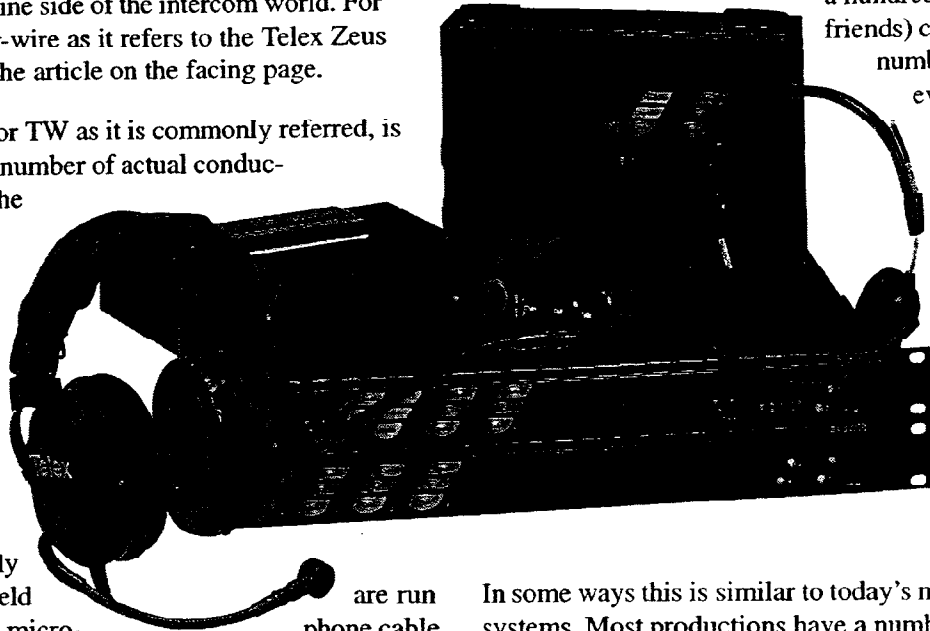
In some ways this is similar to today's modern interc systems. Most productions have a number of groups of people that need to talk about very different topics. On a one-channel party-line intercom all of these conversations coexist and everyone hears each one. The solution to this problem is multiple intercom channels.

Intercom channels divide the audio from specific users into groups. Each channel has an individual power source and is completely electrically isolated from every other channel. In this way audio, lighting, video, engineering, production, security and so forth can all have their own communications forum simultaneously without interfering with any other group.

Users who need to access multiple intercom channels may do so by utilizing multichannel remote stations or beltpacks. These stations and beltpacks allow users to switch between two or more intercom channels so that they may be involved in more than one conversation. This is especially important for technical management and production staff.

Modern two-wire intercom systems are cost effective, and flexible enough to handle a vast array of different app' tions and budgets. Using a modular design scheme, AudioCom products allow users to enter the intercom game at an affordable price point while still providing the ability to step up to larger systems utilizing their existing gear.

⌐us Digital Matrix

Zeus Applications
August 2, 1999
Revised November 13, 2000

Ralph K. Strader
Vice President & General Manager
Intercom Products
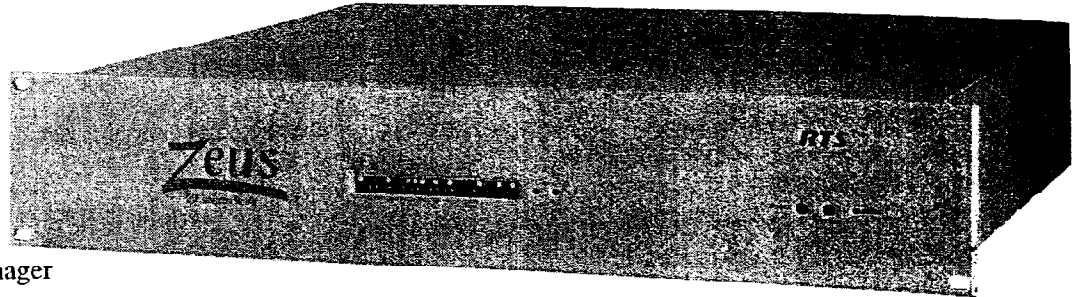
One of the newer intercom products from Telex is the ZEUS Matrix Intercom System. Similar to the established ADAM (Advanced Digital Audio Matrix) in many ways, the low price and high performance of the unit allow it to be used in many situations where matrix intercom has not been practical in the past.

Zeus is a 24 port matrix, meaning that there are 24 inputs and 24 outputs available for balanced analog audio. 20 bit, 44.1 kHz converters are used for input and output, typically yielding in excess of 90 dB dynamic range from 20 Hz to
 kHz. Routing of professional quality audio signals for sound reinforcement, paging, and traditional communications are all possible within the same matrix.

To fully explore some of the possibilities, we will need to translate some broadcast specific terms into concepts more common to professional sound. IFB (Interrupted Fold Back) is used in broadcast applications to temporarily interrupt (or "duck" by a preset level) a program feed with cues from a director. Replace the program feed with music, replace the director with a paging station, and you have paging over background music; up to 24 zones! IFBs can have multiple priorities, allowing certain stations to interrupt other interrupting stations, just the ticket for emergency or higher priority announcements.

Special Lists allow a single button to call an entire group of outputs - a perfect solution to zone paging.

Software control of individual cross-point level controls is available for setting relative volumes for listening to different sources in a broadcast application; for professional sound applications, this feature turns ZEUS into a complete 24 x 24 mixing matrix!!

GPI (General Purpose Interface) inputs and outputs can easily be programmed to allow certain events to trigger other events. For example, a contact closure from a PBX can be connected to a GPI input to activate a specific input fed from a chime generator, to broadcast an alert of an incoming call. A GPI output can be connected to a 2-way radio transmitter to automatically activate the transmitter anytime that someone calls the transmitter via their panel.

ZEUS has provisions for RS-232 control via Command Line Protocol, a high level language with very simple commands for controlling and querying the status of the system. Add an AMX or Crestron control system, and you have one touch access to any function, from creating conferences to reconfiguring whole setups for room combining, to simple paging.

ZEUS is the only intercom on the market with UPL (User Programmable Language). UPL allows the user or contractor to create very complex control schemes using very simple pull-down menus in Windows. UPL can act upon changes of any key status, GPI status, time of day, or cross-point status to change setup of the intercom, activate GPI outputs, adjust levels, or reroute signals - all in real-time, without operator intervention!

ZEUS comes with a wide variety of user panels to meet every need. From low cost 4 button desk top units perfect for paging to 32 button panels for dispatch to level control panels for matrix mixing, any function can be quickly and easily implemented.
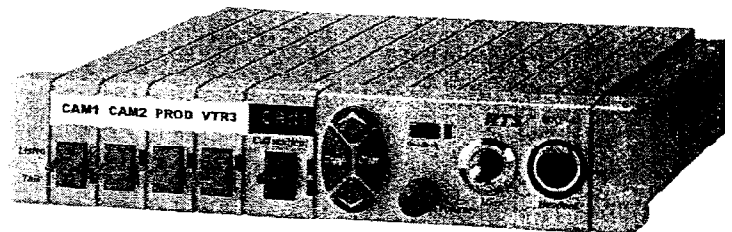
MKP-4 four position modular keypanel with full function intercom key and alphanumeric call waiting window.

Balanced Audio, It's Important in Communications Too!

AudioCom is unique among professional intercom systems today. AudioCom intercom systems utilize a technologically superior balanced audio transmission configuration. The use of 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.

(Note: Audio pros can skip this paragraph!) The term "balanced audio" refers to the way in which audio is passed down the cable. In a balanced audio system the desired audio signal is split and sent out of phase down two separate conductors in the cable. The key to the balanced audio concept is that any noise that is induced on the line during transmission will be in phase on the transmission line. This is important because since the two audio signals are out of phase on the transmission line, when the desired audio signal is put back in phase on the "receive" side, the noise will then be out of phase and cancel leaving only the desired audio.

Transformers and differential amplifiers are normally used to facilitate the balanced audio concept in professional audio products. AudioCom uses the same components with a unique dual ended power supply design to produce full duplex balanced audio across all intercom channels on only two working wires per channel. Don't be fooled! Just because other intercom systems use 3-pin XLR connectors does not mean that their system utilizes balanced audio. Even though balanced audio is standard fare in professional audio gear using 3-pin XLR connectors, AudioCom is the only intercom system to offer this technology to professional communications users. There are two key benefits from using balanced audio in a communications system, reduction of induced system noise and longer cable runs.

Noise reduction. Intercom lines typically run in and around equipment and cables that produce electrical noise. On unbalanced systems that noise can be, and quite often is, passed through the system and reproduced in the user's headset causing fatigue and loss of intelligibility. Equipment

that can cause this type of noise is numerous. A few examples are lighting dimmers, electrical motor/generators, radio frequency transmitters (such as two way radios and wireless audio equipment), neon and fluorescent lighting, and many others.

Noise generating equipment is almost always present in production and industrial locations where intercom lives. With AudioCom's unique balanced audio system design, induced line noise is virtually eliminated for the cleanest most intelligible audio in the communications industry at both high and low ambient noise conditions.
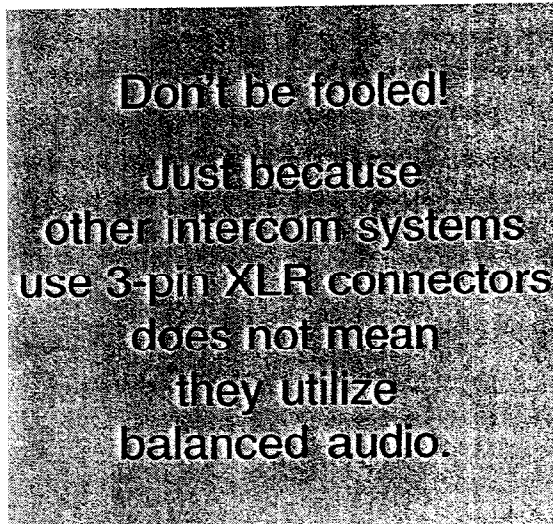
Longer cable runs. Making long cable runs is one of the primary challenges of intercom system layout and design. AudioCom intercom systems run a "wet" balanced system which floats the audio on both conductors at the system power voltage of 24VDC. Because the audio is floating 24Volts above the noise floor and because the system is balanced, dramatically longer cable runs may be achieved without resorting to special cable configurations. Cable runs of up to 3000 feet may be utilized using standard microphone cable under most conditions.

While balanced audio is critical to quality professional communications, it isn't the only reason for AudioCom's superior audio performance. AudioCom system design utilizes 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 (greater than 10K Ohms), and place a minimum load on the line. High bridging impedance plus special load sensing circuitry ensures that the audio level always remains constant and does not fluctuate as stations are added or removed from the system as may occur on other intercom systems. Low impedance mic input lines (50-150 Ohms) and specially designed filtering and audio shaping circuitry in conjunction with our unique differential input/output system make AudioCom virtually immune to outside noise sources of any type and ensure the ultimate in clarity.

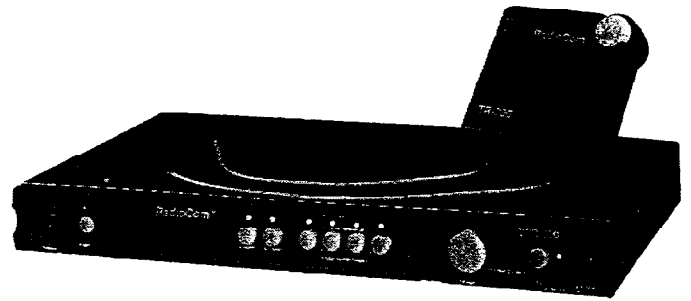# Wireless Intercom Breaks the Chains of Cabled Comms

Wireless intercoms have been a communications staple for more than 25 years, but the systems in use today bear little resemblance to their predecessors. The first systems employed a separate beltpack for both transmitter and receiver and were awkward to use. These are important considerations in production environments often requiring mobility and ease-of-use. As wireless technology has evolved, systems have been designed that more closely meet the real-life needs of the working communications professional.

Perhaps the biggest benefit of wireless intercoms is they allow users to "cut the cable" of hardwired party-line systems and move about freely within the system's operational range. A wireless intercom is a party-line intercom system and good quality systems can be seamlessly attached to existing hardwired communications systems commonly used in modern facilities. Quality wireless intercoms offer a distinct advantage over traditional two-way radios in that they offer a more natural full-duplex operation. This enables all users on the system to speak and hear other users simultaneously without "covering" other ' transmissions.

The demands of modern productions make the full-duplex operation of wireless intercom systems an absolute necessity for stage managers, lighting and audio technicians or any professional who has to deal with the breakneck speed and complexity of today's productions. In this business the few seconds you have to wait while another user finishes his transmission can be the difference between success or failure.

There are many factors to consider when evaluating potential wireless intercom systems. The spread of digital television (DTV) and the ever-increasing number of wireless users has made the available frequency spectrum a much more difficult place in which to find available channels for wireless intercoms. The spectrum has also gotten a lot smaller, especially considering that four channels have been reallocated for public safety use and the upcoming reallocation of UHF TV channels 60 through 69.

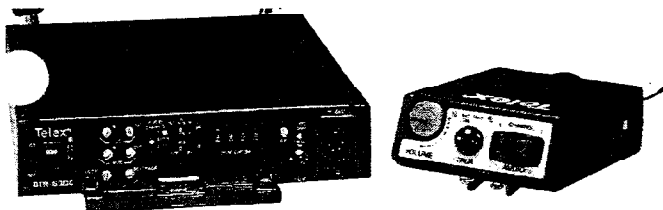Unlike wireless microphones that operate only in one direction, wireless intercoms have more specific frequency spectrum requirements because of the relationship between the transmitter and receiver frequencies. Each intercom (if it is to be full duplex) must have at least one system transmitter frequency that broadcasts to all beltpacks and one receiver frequency for each individual beltpack in the system. For a four beltpack system (known as a four up) that means a minimum of five total frequencies.

Each beltpack must have a receiver set to the base transmit frequency and a transmitter set to its own unique receiver in the base. Due to a phenomenon called desensing, these two frequencies must have a fairly large frequency separation, typically at least 12 MHz (two full TV channels), or the transmitter will interfere with the receiver's operation and poor range will result.

Telex RadioCom wireless intercom systems have been specifically designed to make the best use of available spectrum and offer unique features that allow users to make the most of their wireless communications. For instance the new BTR/TR-300 wireless intercom system is the first intercom system to be designed specifically with DTV allocations in mind. Increased filtering and new unique band allocations now allow the system to support up to four base stations and 16 beltpacks in simultaneous operation. That's twice the number of it's predecessor. The most amazing thing though, is with all that increased capacity it still costs about half of what the competition charges!

In some cases it is desirable for one or more users to have access to two different intercom channels. A stage manager for instance may need to speak to users on the lighting and the audio intercom channels. The BTR-500 system allows users to do just that. The BTR-500 utilizes a unique one-to-one base station to beltpack design with auto switch technology so that wireless users can switch from one channel to another with the flip of a switch. Independent level controls at the base station provide the ability to match virtually any system level setting while allowing the user to hear exactly what they need to.

With superior design and unparalleled features, a Telex wireless intercom system truly is wireless that works.

MS-2000
Master Station

Two channel, full featured user station with integrated power supply in one convenient box. Expandable to 18 channels.

Selling Features:

Superior Audio Quality - The MS-2000 incorporates a Balanced Audio design and uses only the highest quality electronic components for the ultimate in clarity and intelligibility.

Modular Design - The MS-2000 is a part of the unique AudioCom modular design system that allows smaller systems to be upgraded as the need occurs without having to scrap the existing components.

Integrated Power Supply - The MS-2000 offers unparalleled convenience by incorporating all of the features of an advanced user stations and a 2 amp power supply in a 1RU rack mountable package.

Headset or Speaker/Mic Operation - The MS-2000 offers users the flexibility of a built in speaker and mic connection to compliment the headset connection.

EMS-4000
Expansion Module

Four channel expansion station with integrated power supply for easy system upgrades. Links to the MS-2000, US-2000A or other EMS-4000s.

Selling Features:

Expandable Up to 18 Channels - The EMS-4000 expansion module can easily be incorporated into new or existing AudioCom systems to expand the number of intercom channels up to 18 in convenient four channel increments.

Supports Full User Station Functionality - With the EMS-4000 all of the intercom channels in your system have full access to the advanced features of the AudioCom user stations such as Remote Mic Kill and All Talk functions.

Integrated Power Supply - The EMS-4000 offers unparalleled convenience by incorporating all of the features of an advanced user station and a 2 amp power supply in a 1RU rack mountable package.

TELEX

AudioCom

System Benefits:

- **Balanced Audio Transmission**
  AudioCom is the only intercom system to offer electronically balanced transmission of all signals.

- **All Metal Beltpacks**
  AudioCom beltpacks utilize the most advanced design and construction techniques utilizing only the finest materials.

- **Longer Cable Runs**
  AudioCom unique balanced audio transmission system allows cable runs up to 2000 feet with standard microphone cable.

- **Backlit Buttons**
  AudioCom buttons are clearly labeled and are backlit so the label can be read even in darkened room environments.

- **Less System Noise**
  AudioCom's unique balanced audio design combined with high impedance bridging and low impedance mic inputs create the cleanest audio in the business.

- **Clear-Com Compatible**
  Most AudioCom components can be run in an unbalanced mode that is completely compatible with Clear-Com party-line intercom systems.
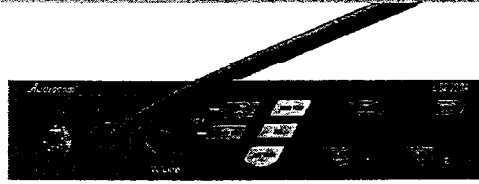
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Audiocom®
Party-line Intercom Systems

innovative solutions for today's communications

US-2000A
User Station

Two channel, full featured user station with unique modular design.

Selling Features:

Superior Audio Quality - The US-2000A, as well as all AudioCom products, incorporates a Balanced Audio design and uses only the highest quality electronic components for the ultimate in clarity and intelligibility.

Modular Design - The US-2000A is a part of the unique AudioCom modular design system that allows smaller systems to be upgraded as the need occurs without having to scrap the existing components.

ES-4000A
Us Station

Four channel expansion module for modular expansion to 18 channels.

Selling Features:

Expandable Up to 18 Channels - The ES-4000A expansion module can easily be incorporated into new or existing AudioCom systems to expand the number of intercom channels a user station can access up to 18 channels.

Supports Full User Station Functionality - With the EMS-4000 all of the intercom channels in your system have full access to the advanced feature of the AudioCom user stations such as Remote Mic Kill and All Talk functions.

PS-2000L
Power Supply

Two channel power supply which provides 2 amps of system power.

Selling Features:

Rugged, Powerful Design - The PS-2000L power supply is designed and built with performance and reliability as the ultimate standard.

Oth. Models Available - Other AudioCom power supplies such as the SPS-2000A and the PS-4000A offer expanded capabilities and features such as a powered speaker (SPS-2000A) and four channel operation (ES-4000A).

TELEX®

AudioCom
System Benefits:

- **Balanced Audio Transmission** - AudioCom is the only intercom system to offer electronically balanced transmission of all signals.

- **All Metal Beltpacks** - AudioCom beltpacks utilize the most advanced design and construction techniques utilizing only the finest materials.

- **Longer Cable Runs** - AudioCom unique balanced audio transmission system allows cable runs up to 2000 feet with standard microphone cable.

- **Backlit Buttons** - AudioCom buttons are clearly labeled and are backlit so the label can be read even in darkened room environments.

- **Less System Noise** - AudioCom's unique balanced audio design combined with high impedance bridging and low impedance mic inputs create the cleanest audio in the business.

- **Clear-Com Compatible** - Most AudioCom components can be run in an unbalanced mode that is completely compatible with Clear-Com party-line intercom systems.

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Party-line Intercom Systems

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BP-1000/2000
Beltpacks

One/two channel all metal beltpacks.

Selling Features:

All Metal Rugged Design - The BP-1000 and BP-2000 beltpacks are designed and manufactured using the highest level of materials and quality workmanship.

Flexible Compatibility - The BP-1000 and BP-2000 beltpacks are internally programmable for various operational modes as well as being capable of working in an unbalanced mode which is completely Clear-Com compatible.
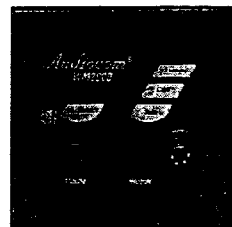
WM-1000/2000
Wall Mount Stations

One/two channel wall mount headset stations.

Selling Features:

Standard 2-Gang Box - The WM-1000 and WM-2000 wall mount headset stations are designed to fit conveniently into a standard 2-gang electrical box so that no special mounting is required.

Simple Operation - The WM-1000 and WM-2000 wall mount headset stations, with their ergonomic design, are easy to use and allow even unexperienced users the ability to be up and running right away.
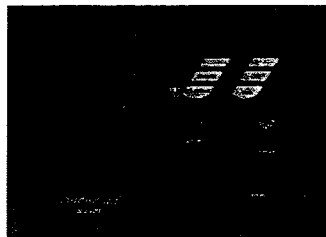
SS-1000/2000
Speaker Stations

One/ two channel speaker stations.

Selling Features:

Multiple Configurations - The SS-1000 and SS-2000 can be easily adapted for different application requirements by using one of three mounting boxes.

Speaker/Mic or Headset Operation - The SS-1000 and SS-2000 stations can be used in either headset mode or in Speaker/Mic mode with optional EGM microphone.

TELEX

AudioCom

System Benefits:

• **Balanced Audio Transmission**
AudioCom is the only intercom system to offer electronically balanced transmission of all signals.

• **All Metal Beltpacks**
AudioCom beltpacks utilize the most advanced design and construction techniques utilizing only the finest materials.

• **Longer Cable Runs**
AudioCom unique balanced audio transmission system allows cable runs up to 2000 feet with standard microphone cable.

• **Backlit Buttons**
AudioCom buttons are clearly labeled and are backlit so the label can be read even in darkened room environments.

• **Less System Noise**
AudioCom's unique balanced audio design combined with high impedance bridging and low impedance mic inputs create the cleanest audio in the business.

• **Clear-Com Compatible**
Most AudioCom components can be run in an unbalanced mode that is completely compatible with Clear-Com partly-line intercom systems.

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Audiocom®
Party-line Intercom Systems

innovative solutions for today's communications

IC-W3
Security Intercom

Ticketbooth security intercom system

Selling Features:

Gooseneck or Headset Operation 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 Setup - Revolutionary new mechanical design concepts incorporated in the IC-W3 make installation easy. Utilize your choice of one 2 ½ inch hole or five smaller mounting holes. Either way, you'll save prec   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, interrupted, garbled audio is not what you want that impression to be. With unique audio shaping circuitry and improved VOX (voice threshold level activation) your customers will hear exactly what you want them to.
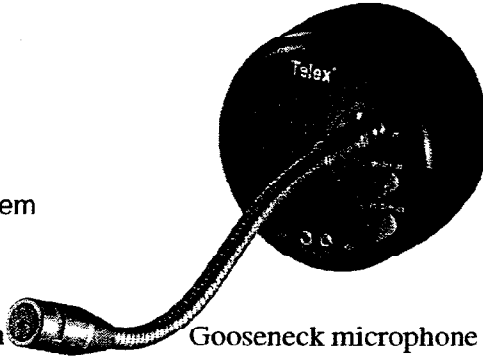
Durability - Super strong high tech polycarbonate fiber resin material makes the IC-W3 virtually indestructible. For years of dependable, maintenance free operation, choose the AudioCom IC-W3.

IC-W4
Security Interface

Two channel power supply which provides 2 amps of system power.

Selling Features:

Connects to Existing Intercom - For live theater and other applications connecting the ticket booth intercom to existing communications systems is esse   ¹ to keep things running smoothly. The IC-W4 gives you that option. With ...e ability to seamlessly interface the IC-W3 to virtually every major intercom system available today, you'll always have access to the information you need.

TELEX®

AudioCom

System Benefits:

- **Balanced Audio Transmission**
  AudioCom is the only intercom system to offer electronically balanced transmission of all signals.

- **All Metal Beltpacks**
  AudioCom beltpacks utilize the most advanced design and construction techniques utilizing only the finest materials.

- **Longer Cable Runs**
  AudioCom unique balanced audio transmission system allows cable runs up to 2000 feet with standard microphone cable.

- **Backlit Buttons**
  AudioCom buttons are clearly labeled and are backlit so the label can be read even in darkened room environments.

- **Less System Noise**
  AudioCom's unique balanced audio design combined with high impedance bridging and low impedance mic inputs create the cleanest audio in the business.

- **Clear-Com Compatible**
  Most AudioCom components can be run in an unbalanced mode that is completely compatible with Clear-Com partly-line intercom systems.

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RadioCom™
Wireless Intercom Systems
wireless that works

Professional
Intercom
Product
Guide

TELEX

RadioCom
BTR-500/600 Benefits

BTR-500
Wireless Intercom

Two channel wireless intercom system with independent level control and interconnectability.

Selling Features:

Two Channel Frequency Agility - The BTR-500 wireless intercom system incorporates proven multiple fixed crystal technology to offer two channel RF frequency agility for transmit and receive.

Two Intercom Channel Auto Switching - The BTR-500 wireless intercom system offers true two intercom channel communications. With auto switching technology, the user can select one of two intercom channels right at the beltpack.

Full Duplex Operation - True full duplex operation in all modes allow BTR-500 users completely natural and error free communications.

Individual Level Controls - The BTR-500 base station has individual level controls for intercom in and out, Aux. in and out, local and beltpack functions for the ultimate in flexibility and source compatibility.
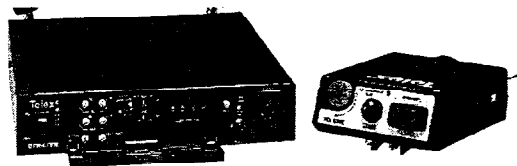
- **Two Channel Operation**
  Unique auto switching technology allows users to access either of two intercom channels right from the beltpack.

- **Cast Magnesium Beltpack**
  Beltpacks made of strong, lightweight cast magnesium ensures comfort and rugged reliability.

- **Frequency Agility**
  Two fixed crystal RF channels for both TX and RX provide the ability to avoid harmful interference even in traveling applications.

- **Dual Function Talk Button**
  Electronic digi-latching button latches on with a momentary touch, but is a momentary action when held for some period.

- **Independent Level Controls**
  Independent level controls are provided for every aspect of the BTR-500/600 system to ensure a perfect communications experience every time.

BTR-600
Wireless Intercom

Two channel digitally encrypted wireless intercom system with all of the features of the BTR-500 system including independent level control.

Selling Features:

Digital Encryption - The BTR-600 offers the ultimate in secure communications with it's unique digital encryption. This proprietary encryption technique offer over 65,000 code combinations that can be changed on the fly by means of 4 cipher code switches on both the base station and beltpack.

All the Features of the BTR-500 - In addition to advanced digital encryption, the BTR-600 wireless intercom system offers all of the features of the BTR-500 listed above.

- **Digital Encryption (600 only)**
  Proprietary digital encryption with over 65,000 unique code combinations ensure the highest level of security for the most critical applications.
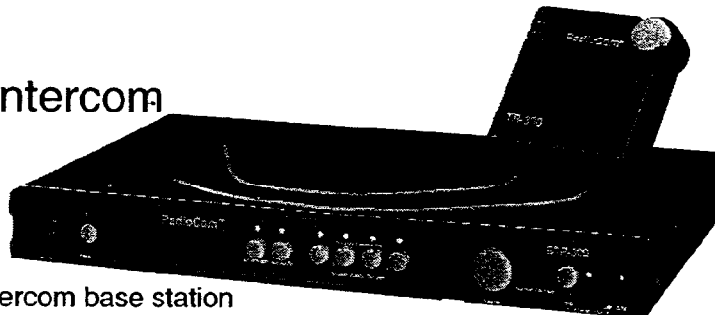
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RadioCom™
Wireless Intercom Systems

wireless that works

BTR-300
Wireless Intercom

VHF wireless intercom base station
supports up to four wireless beltpacks in full duplex communication.

Selling Features:

Cost Effective - The BTR-300 is the most cost effective wireless intercom system available for professional and industrial applications.

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 interference even in hostile RF environments.

Mo₁ ltpacks - 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.

Quality Audio - Unique audio shaping circuitry and superior RF design combine to give the BTR-300 wired intercom quality sound.

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.

TR-300
Wireless Beltpack

Wireless intercom beltpack with small, light weight, rugged polycarbonate resin case.
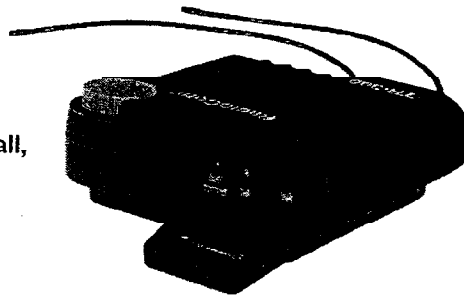
Selling Features:

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 profession reless 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.)

TELEX®

RadioCom

BTR-300 Benefits:

• Full Duplex Operation
Unlike two-way radios the BTR-300 offers full duplex communications for natural, error free communications.

• Small, Rugged Beltpack
The TR-300 beltpack weighs only 13 ounces (with batteries) and is only two inches deep for a compact, yet rugged package.

• Cost effective
The RadioCom BTR-300 wireless intercom system offers more features than the competition at less than half the price.

• Operating Range
Beltpacks can operate at ranges of up to 2000 feet line of sight from each other even in hi RF environments.

• Long Battery life
The TR-300 offers the longest battery life in the business with 24 hours using AAs and 17 hours using NiMH (Nickel Metal Hydride) rechargeables.

• System Compatibility
The BTR-300 is completely compatible with AudioCom, RTS and Clear-Com systems. Simply set a rear panel switch and you are ready to go.

Call Toll Free Today:
800-392-3497

Zeus

Digital Matrix Intercom Systems

innovating the future of communications

Zeus 2400
Digital Audio Matrix
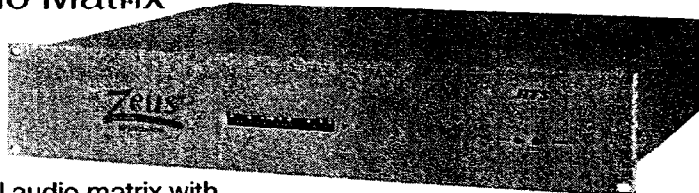
24 port DSP digital audio matrix with
enhanced audio design that delivers in excess of 85dB dynamic range.

Selling Features:

24 Individual Ports - The Zeus 2400 digital audio matrix has 24 individual
ports (one pair for transmit and one pair for receive per port).

Port Flexibility - The Zeus 2400's 24 ports each have dual functionality to
support both keypanels and four-wire signals. Four-wire signals can be
adapted through an SSA-324 to support external TW party-lines.

Individual Cross-point Level Control - The Zeus 2400 digital audio matrix
independent level control for each cross-point and input/output is perfect for
audio routing and mixing applications.

8 GPI Inputs and Outputs - The Zeus 2400 offers GPI (general purpose
interface) that enables the Zeus to trigger outside events such as speaker
closures, alert lights, two way radios or any other device as necessary.

MKP-4
Modular Keypanel
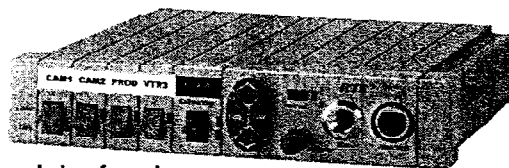
Cost effective digitally controlled modular four key
keypanel with call waiting window and full function menu.

Selling Features:

Modular Design - The MKP-4 is based on the RTS ½ rack modular form
factor and can be rack or console mounted.

Key Assignment Flexibility - Each key on the MKP-4 can be assigned to
any Zeus function including relays and GPIs as well as point-to-point, party-
line, ISO, IFB and other communications and routing functions.

Other Form Factors Available - This value series of 4 key keypanels is also
available in Desktop (BKP-4), Wall Mount (WKP-4) and ½ x 3 RU WFM/
Vectorscope slot for functionality in virtually every physical requirement.

TELEX®

Zeus

Zeus 2400 Benefits:

• **Flexible Configurations**
Zeus can be configured to meet
the unique demands of almost
any communications need using
a relatively small number of
system components.

• **More Than Just Intercom**
Zeus is more than just an
intercom. With 90 dB of dynamic
range and full mixing and routing
capabilities Zeus can handle
virtually any audio need.

• **Cost effective**
Zeus is the most cost effective
digital matrix system on the
market. No other system even
comes close.

• **Interface to the Outside World**
Zeus's Unique User
Programmable Language and
GPI input/outputs facilitate
interfacing with virtually any
device.

• **Control System Compatibility**
Command Line Protocol, a high
level language available through
a rear panel serial port allow
Zeus to function with AMX and
Crestron control devises.

• **Outstanding Audio Quality**
20 - 20 KHz frequency response
with 90 dB typical dynamic r' ;
at less than .01% THD.

Call Toll Free Today:
800-392-3497