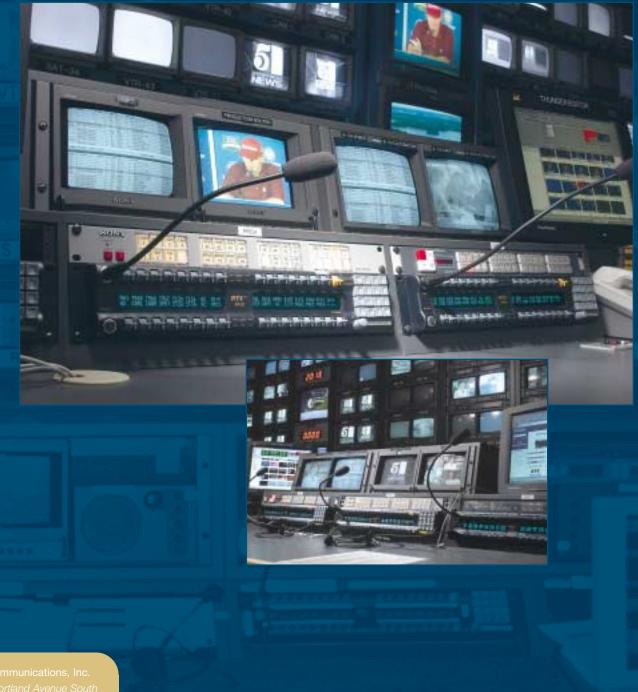
RTSTM Digital Matrix Intercom Systems

MATRICES, USER STATIONS, AND ACCESSORIES



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Digital Matrix Intercom Systems

MATRICES, USER STATIONS, AND ACCESSORIES

RTS

Digital Matrix Intercom Systems

The RTS line of Digital Matrix Intercoms is the most extensive, reliable SYSTEM of professional intercoms in the world. PERIOD.

YOUR NEEDS ... YOUR CHOICE ... RTS INTERCOMS

Whether you want 4, 6 or 8 character alphanumerics (or ALL OF THEM ON A SINGLE SYSTEM), the RTS ADAM and ZEUS Matrix Intercom Systems are the answer.

Whether you have 8 users or THOUSANDS, there is a matrix size, and price for your needs.

Whether your operations are all in one location, or spread across the globe, RTS has a connectivity solution for your needs. RTS was FIRST with Intelligent Trunking, allowing 30+ independent intercom systems to function as a unified communications system for ALL users.

Whether your communication systems need to connect via LAN, WAN, ISDN, VPN, VOIP, twisted pair, fiber, or any other medium, RTS is there for you.

Not JUST a TECHNICAL solution.

You work in the real world, you need REAL WORLD SOLUTIONS.

Reliable, Proven Products. RTS Matrix Intercoms are in daily use throughout the world in Television Networks, Nuclear Power Plants, NASA, Military Facilities, Air Traffic Control, and Theater.

Unmatched Support – RTS has Systems Engineers, worldwide, to provide design and installation assistance, on site training and upgrades, and operational assistance.

The LOWEST Total Cost of Ownership in the industry. RTS alone has a demonstrated COMMITMENT to preserving your investment. RTS Matrix equipment from the early 80's is still in use today, upgraded and compatible with the "Latest and Greatest" ADAM systems. "Obsolescence" is NOT in our vocabulary. Keypanels and accessories are compatible across the entire line of ADAM, ADAM-CS, ZEUS and ZEUS II Matrices.



RTS Digital Matrix Intercom Systems - Interconnecting the world.

Worldwide Connectivity



RTS[®]

Digital Matrix Intercom Systems



The RTS family of Digital Intercom matrices is the most extensive, most widely used, and most "obsolescence proof" line of intercoms in the world today. From the "top of the line" ADAM matrix, available in sizes from 8 to 1,000+ users, to the original ZEUS 24 port matrix, RTS matrices are the standards for reliable, mission critical communications in broadcast, military, industrial and entertainment applications.

- Individual cross-point level controls
- Non-volatile memory for all system setup and assignment information
- Real-time, on-line configuration and monitoring
- RTS UPL User Programmable Language for custom system configurations via pull down menus
- 8 GPI inputs and outputs standard, may be increased up to 255
- Sizes from 8 to 1,000+ users
- Multi-level IFB, ISO, Party-Lines, Groups, and GPI all STANDARD
- Dual Purpose Ports support BOTH keypanels and 4W signals
- Integrated support for RTS Intelligent Trunking of 31 matrices (ADAM, ADAM-CS and ZEUS II)





(Advanced Digital Audio Matrix)

The largest and most expandable in the RTS Matrix family, ADAM provides up to 136 ports in a single 7 RU frame, and can be expanded to 1,000 ports in a single matrix. ADAM comes standard with redundant power supplies and redundant controllers, and features automatic changeover in the event of failure. ADAM is available with a wide variety of cabling options, including RJ-11, DB-9, jackfields, and many others.

ADAMCS

Just like its "big brother" ADAM, ADAM-CS comes standard with redundant power supplies and controllers. Providing up to 64 ports in just 5 RU of space, ADAM-CS provides a costeffective solution, where space is critical, and reliability and performance CANNOT be compromised.

📀 ZEUS

Packed with all the performance and features as ADAM, ZEUS offers a very cost-effective 24 ports in just 2 RU of space. Single circuit board construction provides the ultimate in rugged reliability. Front panel status LEDS for each port provide quick and easy confirmation of system operation. Enhanced audio design delivers in excess of 85 dB dynamic range, allowing ZEUS to be used in many audio routing and mixing applications.

🕗 ZEUS II

RTS ZEUS II provides all the features and performance of the original ZEUS DSP intercom along with full support for RTS Intelligent Trunking. ZEUS II also comes equipped with dual redundant power supplies with independent AC inputs for fail-safe operation.

RTS[®] <u>KP3</u>2 <u>DSP</u> Keypanel Series



1 Shown with optional MCP-90 microphone

The RTS KP32 FAMILY of user stations offers an unbeatable match of features, options, and performance.

Now available in 4, 6, and 8 character models, RTS is the only intercom manufacturer to give YOU the choice of any or ALL of these standards.

Features contemporary styling and extensive programmability for unprecedented function and performance. Each of the models is 2 RU high by less than 4 inches deep behind the rack.

The KP32 family of DSP keypanels provide all the functionality of the KP-96 and KP-12 series, and add significant features such as DSP processing for mixing and audio control.

Depending on the model selected, the keypanel may provide from 16 to 32 keys, with 4, 6, or 8 character alphanumeric displays on bright fluorescent or high contrast LCD backlit displays. All displays are dimmable, providing excellent visibility, whether in darkened control room, or broad daylight.

- Extremely bright displays with adjustable brilliance
- Choice of 4, 6, or 8 character alphanumeric models
- Keys individually programmable for latch/non-latch operation, Talk/Listen, or ANY supported function
- Binaural audio with DSP control, allows assignment of intercom and external monitor audio in any combination to each ear
- Integral numeric keypad for programming and telephone dialing access
- Upgradeable; continuing enhancements can be downloaded into keypanel from Telex website
- Optional RC/GPI connector kit provides 2 external audio inputs, relay and opto-isolated GPI, and ancillary audio connections
- Intuitive cross-point level adjustments using master volume control and individual listen keys
- All models available in Black or RTS Grey, with 4 or 5 pin headset connectors
- Optional built-in coaxial cable adapter perfect for remote use





The original 4 character alphanumeric panel with fluorescent display. Provides 30 individually assignable keys, along with numeric keypad and call waiting and programming windows.

KP32/16

All the functionality of the KP-32 with 14 individually assignable keys for simplified, lower cost option where 32 keys are not required.

💿 KP632/24

The power and flexibility of the original KP-32 with enhanced contrast LCD display supporting 22 individually assignable keys with 6 character alphanumerics for increased naming options.

KP832/20

The power and flexibility of the original KP-32 with enhanced contrast LCD display supporting 18 individually assignable keys with 8 character alphanumerics for the ultimate in naming options.

EKP32

EXP32 Expansion K

Expansion Keypanel for increasing the number of directly accessible keys at a given location. Model EKP-32 shown, available in 4, 6, or 8 character versions for KP-32, KP-632 and KP-832 keypanels.

LCP32/16

Level control panel providing direct "knob access" to individual crosspoint level controls for operator convenience. Model LCP-32/16 shown, available in 4, 6, or 8 character versions for KP-32, KP-632 and KP-832 keypanels and expansion panels.

C KP32/RC

Rear panel connector option for KP-32, KP-632 and KP-832 models. Provides 2 auxiliary audio inputs, microphone pre-amp out, external speaker, opto-isolator and relay GPIs, and external headset connector. Can be supplied factory installed or field installed by the user.



RTS[™]

KP12 **Modular** Keypanel Series



The RTS KP-12 Modular series of keypanels represents the ultimate in compact, fully programmable user stations. Based on a common set of internal modules (modules also available separately for custom designs) the KP-12 series have a common set of very powerful features, which make them attractive in mobile applications and in other situations where space is at a premium. Available in lever key versions and push button versions, the basic KP-12 provides a menu driven, fully programmable 12 key user station in a single rack unit of space. Expansion panels and level control panels round out the offerings in the rack mount form factor. Desktop and Tektronix[®] WFM 1/2 x 3 RU form factor units are also available.

- Extremely long-life, high visibility green alphanumeric LEDS
- Fully programmable via pull down menus selected via front panel shaft encoder
- Lever key versions provide individual Talk/Listen functions on each key
- Push button versions provide individually assignable talk, listen or T/L function on each button
- All keys assignable for all functions (point to point, IFB, ISO, PL, SL, relay, GPI)
- Removable, optional gooseneck microphone
- Universal power supply for 100 240 VAC, 50/60 Hz operation
- Optional rear connector and GPI options available for rack mount panels
- Wide range of keypanels and expansion panels for specific applications





Desktop keypanel. Perfect for use on desks, console shelves, and remote locations available in 8 and 12 key versions, in both push button and lever key style. All units are fully programmable using pull down menus and shaft encoder. These units use optional MCP-90 series gooseneck microphones. Rear connector panel and GPI panel are NOT available for these models.

🙆 KP12LK

1 RU keypanel with 12 keys plus call waiting window with display. Perfect for installations where space is an issue. Only 5.5" deep (less connectors), allowing easy console mounting. Available with optional MCP-90 series gooseneck microphones. Available in both lever key and push button versions. Available rear panel options include GPI and rear connector panel.

EKP20LK

Expansion panels for KP-12 series of rack mount keypanels. Adds 20 keys to intercom station; up to 2 panels can be added per station, giving a total of 32 keys in 2 RU, or 52 keys in 3 RU. Available in push button and lever key versions.



🕗 LCP

Level Control Panels for KP-12 series of rack mount keypanels and EKP series of expansion panels. Available with 12 or 20 level controls in a single RU. Provide individual cross-point level adjustments, with corresponding level displayed on keypanel LEDS.

KP8T

8 position keypanel in Tektronix® WFM form factor (1/2 RU wide by 3 RU high). Includes mounting bezel and universal 100 - 240 VAC 50/60 Hz power supply. Same general specifications as the DKP series of panels. Perfect for Director, TD, and video consoles. (Shown with optional MCP-90 microphone)





The extremely compact modular circuit boards used in the KP-12 line of products are available in kits including the circuit boards, interconnect wiring, switches, etc. for those applications where a custom enclosure or mounting is required. Please contact Telex for further technical information.



The KPM-CK and KPM-IO are rear panel option kits for the KP-12 series of rack mount keypanels. The KPM-CK option provides connections for external mic in, auxiliary line input, microphone pre-amp out, secondary headset connector, and external speaker jack. The KPM-IO option provides 4 opto-isolated logic inputs, 2 open collector outputs, and 2 relay outputs. Status and control of GPI signals can be programmed and controlled from KP-12 or ADAM and ZEUS EDIT programs. These options are NOT available with KP-8T or DKP series of panels.

RTS[®] Value Keypanel Series



The RTS Value Keypanel Series are ideal where simplicity of operation and cost are of primary importance. The keypanels share a common set of features across the entire family. The alphanumeric call waiting window is used for scrollable access to all ports, PLs, ISOs, IFBs, etc. and to check and make key assignments. Keys may be assigned to any intercom function including talk, listen, talk/listen, relay, PL, ISO, IFB, and SL. All models use the optional RTS MCP-90 series gooseneck microphones. These keypanels are ideal for use with the RTS ZEUS and ZEUS II intercom matrices, but (like all RTS Matrix keypanels) are compatible with all RTS matrices past and present, including the CS-9500, CS-9600, CS-9700, ADAIM, and ADAM-CS.

Features

- Full scroll list access to all assignable communications
- Individual Talk/Listen function on each key
- RTS Digi-action for latch /non-latch operation
- High Brightness Alphanumeric LED for call waiting, scroll and key assignments
- Wide variety of form factors for ease of installation
- Full control of keys through ADAM-EDIT for latch disable, restrict, listen mode and other functions
- Supports both headset and speaker/mic operation
- MOST AFFORDABLE HIGH PERFORMANCE line of keypanels



MKP12

The top of the Value Series Line, the MKP-12 provides 12 fully programmable Talk/Listen keys, internal 4 watt speaker for clear communications, and universal power supply for operation from 100 – 240 VAC.

MKP4

The MKP-4 is the "baby brother" of the MKP-12, providing 4 fully programmable Talk/Listen keys and headset operation, the MKP-4 keypanel is perfect for installation tight on space or budget. In the RTS 1/2 rack format, the MKP-4 can be mounted along side any of the wide variety of RTS intercom accessories.

MCS325

Modular speaker for use with the MKP-4 keypanel. Available mounting options include the MCP-1 and MCP-4 for side by side or stacked mounting.

🕘 BKP4

The BKP-4 is ideal for desktop use or in any application where portability is important. The unit includes built-in speaker and is housed in an extremely rugged aluminum enclosure. Power is provided by a built-in universal power supply for operation from 100 – 240 VAC.

S WKP4

The WKP-4 is designed for wall mounted applications. Perfect for use in commercial sound and industrial settings, the WKP-4 is compatible with the Telex U series flush mount box. Flush mounting into consoles, custom enclosures and walls is a snap. The least expensive of the value series keypanels, the WKP-4 requires 15 – 24 VDC at 1 Amp.

5 TKP4

The TKP-4 is ideal for installation in broadcast facilities, owing to its 1/2 x 3 RU form factor, compatible with Tektronix® and other WFM/Vectorscope products. Provided with a pressure fit front bezel and universal 100 – 240 VAC power supply, the unit is perfect for TD consoles, equipment racks, camera control positions, anywhere an empty "slot" is available in a WFM rack assembly.

UBox (not shown)

The U-Box is used for wall mounting 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.

RTS[™]

KP96 **Classic** Keypanel Series

The keypanel line that started it all and brought Matrix Intercoms to the market. Still the most widely used keypanel in the world, and is still supported and available from RTS.



() KP96-7

16 key user station with separate talk and listen keys. The KP96-7 includes programming keypad for assigning keys, and dialing access to telephone lines using TIF-2000 telephone interface. The KP-96-7 has been updated to include built-in individual cross-point level control. Compatible with LCP100A level control panel, KP96/RC connector panel and EKP series of expansion panels.

KP98-7

16 key keypanel, available in Black or RTS Grey. Includes programming keypad, alphanumeric LEDs for individual keys, lighted EAO talk and listen keys. 4 character call waiting window. Compatible with KP-96-RC, LCP-100A level control panel and with EKP-98-0 expansion panels. Uses optional removable gooseneck microphone MCP-90.

ECP100A

Level control panel for use with KP-9x and EKP-9x series panels and expansion panels. 16 individual volume controls in 1 RU.

LKP957

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Listen only keypanel provides audio monitoring for any combination of sources, including party-lines, IFBs, program sources and intercom channels. The panel operates in "MANY" mode to permit simultaneous monitoring of multiple sources, (with priority single source ISO), or in "ONE" mode where one source at a time can be selected.



Expansion keypanels for use with KP96-7 and KP98-7. Up to 3 expansion panels can be added to a primary panel, providing up to 64 independent talk and listen keys. Available models include:

EKP98-0 (shown) 16 illuminated EAO keys

EKP96-8 2 RU, matches KP96-7 key layout

EKP96-4 2 RU with LEDS and designator strip instead of alphanumeric LEDS

Other models available on special order.



) **KP**96/RC

Rear connector option required for use of expansion panels, also provides external mic in, external line in, mic preamp out, headset, and provisions of external speaker connection.

Options/Other Models

Keypanels and accessories are available in Black or RTS Grey, and with 4 or 5 pin headset connectors. Green LEDs are standard. Other models and options are available on special order, including models with red LEDS, 6 pin headset connectors, and designation strips in lieu of alphanumeric displays. Additional models of expansion panels are also available. Please contact your RTS Sales Representative for price and availability.

RTS[™] TM2000 Trunk Master

What is "RTS Intelligent Trunking"? It's no less than your own private version of the long distance telephone system, allowing users of 2 or more (up to 31) separate matrices to instantaneously, seamlessly communicate with one another with all the same presets, scroll lists, and tallies available on local matrices. Whether the systems are located in adjacent studios or continents away from one another, Intelligent Trunking brings all your communications together.



The RTS TM-2000 is the second generation of Intelligent Trunking controllers from Telex. Since 1994, RTS Intelligent Trunking has been the worldwide standard, providing the most advanced control of multiple communications systems, allowing them to operate as a single unified system. The TM-2000 Trunk Master is unmatched in providing configuration, control and management of trunks, whether over copper, fiber, data networks, or RF paths.

Compatible "all the way back" to RTS/McCurdy 9000 series matrices, the TM-2000 works with ADAM, ADAM-CS and ZEUS II matrices from RTS.

The included Trunk Edit software provides the system administrator the EASY ability to assign trunk priorities, restrict access to individual trunks, and in conjunction with ADAM-EDIT software on the matrices to individually by user restrict access to remote matrices.

RTS Trunk Supervisor software is available, which provides a detailed graphical representation of trunk utilization in an intuitive map format reminiscent of the giant map walls used by long distance carriers to map long distance traffic and network status. The Trunk Supervisor can be configured to generate specific alarms, email messages, or pager messages to alert key operators when signal paths need attention.

- Available in redundant configurations with automatic changeover and alarms
- Compatible with all RTS matrix families (including ZEUS II model of ZEUS)
- Supports ANY methodology of audio and data Trunking including:
 - LAN, WAN, VPN
 - ISDN, ATM
 - Fiber Optics, Twisted Pair, Coax
 - Terrestrial and Satellite RF Paths
- Configuration Software runs under all versions of Windows[®] 95 and newer
- Matrix cascading to automatically find multi-hop paths when direct paths are unavailable

RTS Matrix Accessories

A full line of products to complete your communications SYSTEM, including interfaces to party-line intercoms, coaxial cable, telephone lines, and relays. Accessories also include control panels for IFB levels and assignments, panels for adjusting system audio levels, microphones and 4 wire beltpacks.



MCP90 Series

Gooseneck Microphone designed and manufactured by

Electro-Voice, and compatible with RTS Matrix and TW Intercom products, the MCP-90 series of microphones provide superior vocal response. Shown in lengths of 8", 12", and 18"; 3" stub also available.

TIF2000

Single channel **Intelligent Telephone Interface** allows incoming and outgoing telephone calls from ADAM and ZEUS matrices. Provides full programmable routing of telephone communications, password protection, and the highest quality digital hybrid for exceptional audio nulling and quality.

Two channel **Coax Cable** Interface for matrix-keypanel interconnect. Works with the KP-32 series of panels using the optional plug in card; can also be used in matching pairs with other keypanels. Adapts the RTS standard 3 pair interconnect to a single 75 ohm coax.

SSA424

The SSA-424 Digital Hybrid provides 2 independent channels of 2 wire (TW) to 4 wire hybrid in a 1/2 rack wide by 1 RU package. The TW interface is suitable for balanced and unbalanced systems, allowing RTS Matrix systems to interface to virtually ANY party-line intercom system in use today. Easy to read front panel level meters make matching audio levels simple, and the RTS advanced DSP hybrid eliminates all need for manual nulling, even under varying loads. A call signal option is available, which encodes and decodes TW call signals that can be used to interface matrix GPI circuits.

6 SSA324

The SSA-324 Analog Hybrid provides 2 independent channels of 2 wire (TW) to 4 wire hybrids in a 1/2 rack wide by 1 RU package. The TW interface is suitable for balanced and unbalanced systems, allowing RTS party line systems to interface to virtually ANY party-line intercom system in use today. Features system to system level, duck and null adjusts with front panel headset connector for use during setup. Option card allows translation of call lights and two-way radio interfacing.





LCP102

The LCP-102 is a Multi-Function Panel for matrix systems. It can be switched via front panel control to any one of three functions. In "TRIMS" mode, it can be used to adjust any input or output audio levels for the matrix. In "PAP" mode, you can select any input source for an IFB and adjust the level of the source for each of the IFBs. In the "CDP" mode, you can make assignments to party-lines and adjust listen levels for any party-line member. In all modes, the bright LED displays provide full details on the action being performed. Selection and adjustment are made using shaft encoders.

🕗 BP300FW

4 Wire Beltpack matrix compatible version of the venerable RTS BP-300 beltpack. Headset user station without need for separate hybrid. Takes external power either via XLR connector for audio and power or separate connector.

IFB828

IFB Level Controller provides power, matrix interface and easy audio level control for 8 channels of IFB. Compatible with RTS IFB-325, IFB-4020 and IFB-4030 beltpacks.

PAP32

Program Assign Panel provides quick direct access to change program sources assigned to IFBs. Panel can access all sources and destinations, and display any 16 at one time. EKP panels can be used to increase sources and destinations.

UIO256

General Purpose Interface provides 16 GPI inputs and outputs that can be programmed from ADAM-EDIT or ZEUS-EDIT to control virtually any intercom function, or to activate any external function based on a wide range of programmable parameters. Inputs are opto-isolated logic levels, outputs are DPDT relays. Up to 16 UIO-256 units can be connected to a single matrix, providing over 250 logic inputs and outputs. Front panel LEDS indicate real-time status of all inputs and outputs.

MCP1

Mounting Bracket for 2 main (modular style) components. Comes with 1/4" to 1/4" link cable.

Mounting Bracket for 1 main (modular style) component.

Mounting Bracket for 2 main (modular style) tandem components. Comes with 1/4" to 1/4" link cable.

RadioCom[™] Wireless Intercoms



Telex offers the widest variety of Professional Wireless Intercoms in the industry. From entry level fixed frequency VHF units to the state-of-theart BTR-800 UHF frequency agile system, Telex has a wireless intercom product for any need.

In conjunction with RTS Matrix products, Telex wireless intercoms can provide the ultimate in assignable flexibility where being tethered by a cable is not desirable.

Telex offers a full range of antennas, battery chargers, splitter combiners and other accessories. See the full line RadioCom catalog for more information.

- Full Duplex hands free operation
- Compatible with RTS TW and Matrix Hardwire Intercoms
- Wide Band Low Noise Analog Circuitry (except BTR-600 Encrypted Intercom)
- Uses readily available Alkaline or NiMH AA batteries
- Rugged Metal Beltpacks
 (Hi impact Polycarbonate on TR-300)
- Support for "stacking" multiple systems for additional beltpacks
- Half Duplex Option for sharing single channel between multiple beltpacks (perfect for users that primarily listen)
- Telex Staff Engineers provide full frequency coordination services





Top of the line, the BTR-800 base station/TR-800 beltpack system provides Clearscan[™] UHF frequency agile operation. The base station supports 4 independent beltpacks, each with 2 channels of intercom, Stage Announce (SA), and Wireless Talk Around (WTA).

BTR700 TR700

The 700 series offers the same performance and frequency agility of the 800 series in a simplified single channel model. TR-700 beltpacks do not have SA or WTA features, but also work with the BTR-800 for individual users that need only single channel access.



Fixed frequency VHF intercom system. The BTR-300 base supports 4 independent beltpacks. The most economical PROFESSIONAL broadcast wireless intercom in the world. High impact polycarbonate beltpacks have been proven nearly indestructible in over ten years of field use.

BTR500 TR500

Fixed frequency UHF operation with 2 intercom channels to choose from in a "one to one" base-beltpack configuration makes the 500 series perfect for systems where very few users need to be wireless. With the "one to one" configuration, the 500 is also perfect for reconfigurable wireless systems, using a matrix port per base, allowing each beltpack to be individually addressed.



Digitally encrypted, the 600 series offers the same "one to one" configuration as the 500 series, while providing a secure communications path. Used by the coaches of the NFL for SECURE game day communications, the 600 series has been proven absolutely reliable and rugged over many seasons of use. **TELEX**. Headsets and Earsets

Telex offers a wide variety of headsets and earsets to meet any intercom or talent monitoring need. All headsets are available in 4 pin or 5 pin configuration, and all styles are available in single or dual muff. A separate catalog of headsets, earsets and accessories is available. The most popular configurations are shown below.



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RTS[™]

Typical **System** Layout

