

Encore™ Party-line Communication Systems



Raising Performance to New Levels

Clear, reliable, and proven party-line communication solutions



Based upon Clear-Com's market proven communication technology, Clear-Com Encore™ delivers improved audio performance and offers a more streamlined, contemporary and user-intuitive design.

All components are constructed and proven to withstand rugged usage in fast-paced, demanding and high intensity applications. Even under the most challenging conditions, the noise attenuating headsets and noise-cancelling microphones, combined with anti-sidetone circuitry, minimize acoustic noise and feedback to provide superior sound quality.

Clear-Com Encore is highly compatible with other Clear-Com or third-party components. This level of flexibility enables users to assemble the right system for their unique needs and can easily scale to support the growing production environment.

Clear-Com party-line intercom systems are widely used in live performance theaters, concert halls and sport stadiums. They are also found in small to mid-sized TV/broadcast studios, smaller broadcast production trucks, industrial settings, houses of worship and in simulation applications.

Clear-Com Encore™ Product Family Overview

Clear-Com® delivers the most comprehensive set of party-line intercom systems in the world. From main stations to remote stations, wall-mounted speaker stations to multi-channel belt packs, robust interfaces, headsets, announcer console and more.

2-Channel Main/Remote Stations



MS-702



RM-702



CS-702

4-Channel Main/Remote Stations



MS-704



RM-704



SB-704

Programmable Source Assignment Panel



RCS-2700 + RCU-67

Wall Mount Speaker Stations



KB-702



KB-701



KB-702GM



HB-704



V-BOX shown with KB-702



HB-702

Belt packs



RS-601



RS-602



RS-603

Headsets



CC-95



CC-260



CC-40



CC-60



CC-25



CC-27



CC-26



Handsets



PT-7



HS-6

Power Supplies



PS-704



PS-702

Program Interrupt (IFB)



PIC-4704



TR-50



AX-704



MA-704

Que-COM



Que-COM

Interfaces



TW-47



TW-12C



IF4W4



AC-701



TWC-704

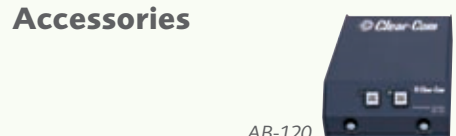


TWC-701



EF-701M

Accessories



AB-120



FL-7



SP-3



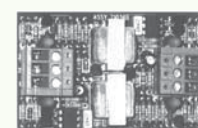
GM-9/GM-18



WP-2



WP-6



MT-1



YC-36



YC-66

Main/Remote Stations

MS-702 Rack-Mount Main Station



Compact, feature-laden, single rack-space intercom main station supports up to 40 RS-601 beltpacks, 10 speaker stations or 12 headset stations on two channels. Other features include: Channel A-B linking; program input with individual channel level controls; Remote Mic Kill switch, and external relay circuit.

RM-702 Remote Station



Single rack-space, two-channel station is powered by the intercom line. Operator can talk and/or listen on either or both channels. Accepts line-level audio program input, with both channels programmable for interrupt. Microphone limiting and speaker "dipping" circuit for greater output before feedback.

CS-702 Portable Main Station



The CS-702 is a portable main station with a power supply and a versatile intercom monitoring system. It supports up to 40 beltpacks or 10 speaker stations on 2 channels. CS-702 accepts mic or line-level audio program input, assignable to either or both channels, with interrupt switch to override program.

MS-704 Rack-Mount Main Station



Four intercom channels with programmable front-panel buttons. High-capacity, fail-safe power supply supports up to 40 RS-601 beltpacks or 10 speaker stations or 12 headset stations; 3 IFB channels, announce button/relay, channel-linking button and Remote Mic Kill switch.

RM-704 Remote Station



Remote station provides four independent intercom channels, with programmable front-panel buttons for versatility. Separate volume controls for each channel and four separate audio program inputs. Three IFB channels for talent cuing and announce button/relay for paging. Powered by the intercom line.

SB-704 Switchboard Main Station



SB-704 includes all of the features of the MS-704, with a 4 x 10 assignment matrix in place of the internal speaker (external speaker required). The station features a ten-position slide switch matrix that allows assignment of any of the ten intercom lines to any of the four intercom channels, to an isolated separate party-line, or to an off position.

PS-702 2-Channel Power Supply



The PS-702 can deliver 1.2 amps at 30 volts DC to two channels. This is sufficient to power up to 40 beltpacks, 10 speaker stations, or 12 headset stations even under the most demanding conditions. Either channel is capable of supplying up to 1.2 amps. The full current capacity may be divided between the two channels.

PS-704 4-Channel Power Supply



The PS-704 is a four-channel, single rack-space intercom power supply that features Clear-Com's "fail-safe" design for maximum reliability. The power supply delivers 1.2 amps at 30 volts, supplying power for one to four channels of intercom. It will support up to 40 beltpacks, 10 speaker stations or 12 headset stations.

RCS-2700 + RCU-67 Programmable Source Assignment Panel



RCS-2700 + RCU-67 is ideal for medium to large installations where channel assignments to remote stations frequently change. 8 master channel "sources" can be assigned to any 24 remote station "destinations", and additional RCS-2700 units can be connected for up to 15 sources and 72 destinations. It can store 14 presets.

AMS-1027 Amplified Monitor Speaker



A self-contained, bi-amplified, monitor speaker that occupies only a single rack-space. It features magnetically shielded speakers; exceptional audio quality; baffled speaker system reaching output levels of 96 dB SPL; and extended bass response. Separate volume and balance; user configurable to A/B volume controls for each channel.

AB-120 Announcer Console



The On-Air Announcer Console is the ultimate broadcast-quality tool for announcers and commentators, the AB-120 integrates all of the inputs, outputs, and controls necessary at the announce position, including intercom "Talkback," IFB receiver, and a silent "Mute" button that provides noise-free cough and "mic on/off" switching. Extremely flexible, the console is easily configured for practically any combination of audio sources, microphones, headsets, or intercom systems, ensuring quality audio and powerful communications.

Wall Mount Stations

Speaker Stations

KB-701 Single Channel Station



The KB-701 remote speaker station connects to a single channel of party-line intercom and operates in half-duplex mode. It features both an integral speaker and a flushmount electret microphone with mic limiter and a push-to-talk button.

KB-702 2-Channel Station



The KB-702 remote speaker station permits the user to select between two channels of party-line communications, with the ability to talk and/or listen on the selected channel. The user can listen via the integral speaker, or may use a headset or telephone-style handset - and can talk via a headset mic, a telephone handset, or a push-to-talk microphone.

V-Box Portable Enclosure For KB Stations



V-BOX shown with KB-702

V-Box permits either angled or vertical portable/ desktop mounting of the KB-702, KB-702 GM, and KB-701 speaker stations. Both male and female 3-pin XLR connectors on side panel. Rugged metal and wood construction for an attractive, durable enclosure.

KB-702 GM provides the same features as KB-702, plus gooseneck microphone (GM-9/GM-18 or GN-250/ GN-450) connector options, with adjustable VOX feature and mic/headset switch.

Headset Stations

HB-702 2-Channel



HB-702 is a selectable two-channel wall or console-mounted headset station. Microprocessor-controlled logic and switching, with momentary/latching talk button. Visual call signaling. Optional 4-wire and TW daughter boards.

HB-704 4-Channel



HB-704 provides the same features as HB-702, but can access four intercom channels. Optional TW daughter board.

Program Interrupt (IFB)

The Clear-Com IFB system sends one of two program audio signals to individual Talent Receivers via standard, two-conductor shielded mic cables. This system allows Talent coordinators to interrupt the program and cue talent. Tally lights indicate IFB channels in use.

PIC-4704 Program Interrupt Controller



Each IFB Controller handles up to four Talent Receivers. For use with MA-704 and AX-704 IFB Control Panels or intercom stations. This unit contains the circuitry for selecting one of two program sources, sending the program to the IFB channels, and interrupting it via the Talent Control Station. Variable audio program dip-level. Monaural or stereo/ split-feed outputs. Improved and intuitive user interface. Requires a 6-pin XLR cable for connection to MA-704/AX-704 control panels.

AX-704/MA-704 IFB control panel



AX-704



MA-704

These console-mount or rack-mount units control "program interrupt" (IFB) to the talent. The MA-704 includes a gooseneck microphone connector, illuminated "All Talent", and 4 individual talent push buttons. The AX-704 permits expansion in multiples of 4. Both accept the "hot mic out" from a Clear-Com station.

TR-50 Talent Receiver



An amplified single-channel talent beltpack with volume control. It connects to the Program Interrupt controller with standard microphone cable. Mini earphone jack output. Includes talent earset.

PK-7 Lightweight power supply



The PK-7 power supply will support up to 30 Que-Com headset stations. It is line and load regulated and short-circuit protected.

Que-Com



Que-Com is a high-performance, economical party-line communications system. This system features a wide frequency response and high audio output. Rugged, all-metal diecast beltpack with belt clip. The intercom provides an individual volume control and mic on/off switch for each station with a permanently attached, rugged, noise-isolating headset. Interconnects with standard mic cable. Que-Com is compatible with all Clear-Com systems. Available with single-ear headset (SMQ-1) and double-ear Headsets (DMQ-2). The PK-7 is a suitable power supply option.

Interfaces

TW-47 2-way radio/walkie-talkie interface



Compatible with both Clear-Com and RTS®, TW-47 connects virtually any set of walkie-talkies to anyone on the wired party-line intercom; simply use one walkie-talkie as a base-station. The base-station radio is keyed from the intercom call signal. Extensive RF and EMI isolation prevents interference from entering the intercom system. Separate transmit and receive level controls are provided, along with audio level and transmitter keying indicators. The stand-alone interface is powered by the intercom line.

EF-701M Interface



The EF-701M interface converts a single channel of standard or TW party-line intercom to four-wire audio, while also converting call signals to RS-422 data (and back). The resulting four-wire audio plus RS-422 data can then be sent to a Clear-Com Matrix port, fiber-optic converter (modem) or connected to another EF-701M over twisted-pair cable such as CAT-5E.

TWC-701/TWC-704



The TWC-701 2-channel cable adapter combines two intercom channels on to a single 3-pin XLR cable. All two-wire (TW) belt-pack models require this adapter to support a two channel connection to a multi-channel Clear-Com system. The TWC-704 provides four TWC circuits in 1RU. Each TWC-701 and TWC-704 module can drive up to fifteen RS-603 series belt-packs.

TW-12C System Interface



TW-12C connects one intercom system to another. Optoisolation eliminates hums and buzzes. Compensates for level and impedance differences between systems. Allows Clear-Com-to-Clear-Com, Clear-Com-to-RTS, and RTS-to-RTS system configurations. Powered by the connected intercom system. Translates "call" signals in both directions.

IF4W4 4-wire interface



Four channel interface connects Clear-Com to TV cameras, two-way radios, satellite links, and other communications devices through either their headset jacks or 4-wire circuits. IF4W4 has selective party-line capability. Features individual transmit, receive, and null controls, as well as transmit level indicators. Switchable mic or line-level output for compatibility. The built-in test jack and test tone provide quick nulling.

AC-701 Telephone and 2-wire interface



Transformer-isolated unit connects a Clear-Com system to any other 2-, 3-, or 4-wire system or to telephone lines. Ideal for connecting telephone lines to Clear-Com. Built-in test tones and balancing controls for fast, easy setup. Individual transmit and receive gain controls.

Beltpacks

RS-601



Single channel with 3-pin female and male XLR, 4-pin male XLR headset connector, 2.5mm AUX headset connector and an RS-232 data connector.

RS-602



Dual channel with 6-pin female and male XLR, 4-pin male XLR headset connector, 2.5 mm AUX headset connector and an RS-232 data connector.

RS-622



Similar to the RS-602 with split-ear operation via 6-pin male XLR headset connector. Line connection through 6-pin female XLR.

RS-603 (TW)



Dual channel with 3-pin female and male XLR, 4-pin male XLR headset connector, 2.5 mm AUX headset connector and an RS-232 data connector.

RS-603R (TW)



Similar to RS-603 but with 4-pin female XLR headset connector.



RS-623



Similar to RS-603 with split-ear operation via 6-pin male XLR headset connector. Requires a TWC-701 or TWC-704 (sold separately) for two-channel operation.

RS-623R (TW)



Similar to RS-603 with split-ear operation via 5-pin female XLR headset connector. Mono compatible.

V-PACK Programming Software

Clear-Com V-PACK software offers the user the ability to create, store and transfer various set-up options between the beltpack and a PC. Once connected, all the onboard set-up options plus additional ones are available to select and write into a beltpack's memory.

Headsets and Handsets

CC-95



Durable, professional headset with smooth, full-range audio response and great comfort. Flexible boom arm features a specially designed, noise-cancelling mic; rotate for left- or right-side use. Custom foam-filled ear cushion provides acoustic isolation in moderate-noise level environments. 5.5-foot (1.67 meter) cord with 4-pin female XLR connector.

CC-95R

Same as above with 4-pin male for RTS systems.

Note: All headsets above can have their microphones wire balanced for broadcast use.

CC-40 and CC-60



Single- or double-ear general-purpose intercom headsets. 200/400 Ohms, with excellent noise attenuation. Straight 5.5-foot cord (1.67 meter) with 4-pin female XLR connector.

PT-7 Hand-held mic



Rugged, push-to-talk, hand-held microphone with mounting clip. 5-foot coil cord with 4-pin female XLR connector.

CC-260



Double-ear, noise-attenuating headset with same features as CC-95. Separate wires for each earphone allow stereo or "split ear" use.

CC-260-6

Same as CC-260 except with 6-pin connector.

Use with binaural RS-622 Beltpack.

CC-25, CC-26 and CC-27



The CC-25 electret is only available with mini plug for 600 Series beltpacks.

The CC-26 is a single-ear, 300-Ohm ultra-lightweight (1.3 oz) headset with dynamic, noise-cancelling mic element on a flexible boom. Straight 5.5-foot cord (1.67 meter) with 4-pin female XLR connector.

The CC-27 is a single-ear wrap around rear-worn headset with microphone. 4-pin XLR female. 200-Ohm Dynamic noise cancellation microphone with 150Hz to 10KHz frequency response.

HS-6 Telephone-style handset



Telephone-style handset with wall/console mount hanger, push-to-talk switch. 6-foot coil cord with 4-pin female XLR connector.

Accessories

FL-7 Call Signal Flasher



New LED design with dimmer. Provides both a visual and audible indication of a call signal on the intercom channel. Front-panel mode switch selects flasher, ring or both.

GN-250/GN-450 Gooseneck Mics



GN-250--25 cm/10" Plug-in gooseneck microphone
GN-450--45 cm/18" Plug-in gooseneck microphone

WP-2 Intercom Outlet Wall Plate



Selectable two-channel wall plate connects to single-channel belt packs such as the RS-601. 3-pin male XLR connector with two-position channel-selector switch, allowing user to talk on either of two intercom channels.

SP-3 Line Splitter



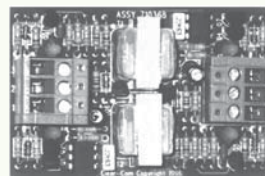
A one-female-input to three-male-output cable assembly for intercom line splitting.

GM-9/GM-18 Gooseneck Mics



The GM-9 (9" length) and GM-18 (18" length) gooseneck microphones feature a gold-plated, threaded, and locking 3-conductor quarter-inch phone plug connector. A fitted windscreen is included. The uni-directional electret condenser mic element has a side and rear rejection of greater than 6 dB between 100 Hz and 10 kHz.

MT-1 Isolator Circuit Card



Electrically isolates the ground, power, and signaling lines when connecting between two party-line intercom systems. Use one card per channel.

WP-6 Intercom Outlet Wall Plate



Wall plate for use with two-channel belt packs such as the RS-602 and RS-622. 6-pin male XLR connector connects user with two intercom channels.

YC-36 "Y" Adapter



Plugs into the 6-pin male XLR intercom connector on a RS-602 or RS-622 belt pack. The other end provides two 3-pin female XLR connectors, for separate line connection to channels A and B.

YC-66 6-Pin Line Splitter

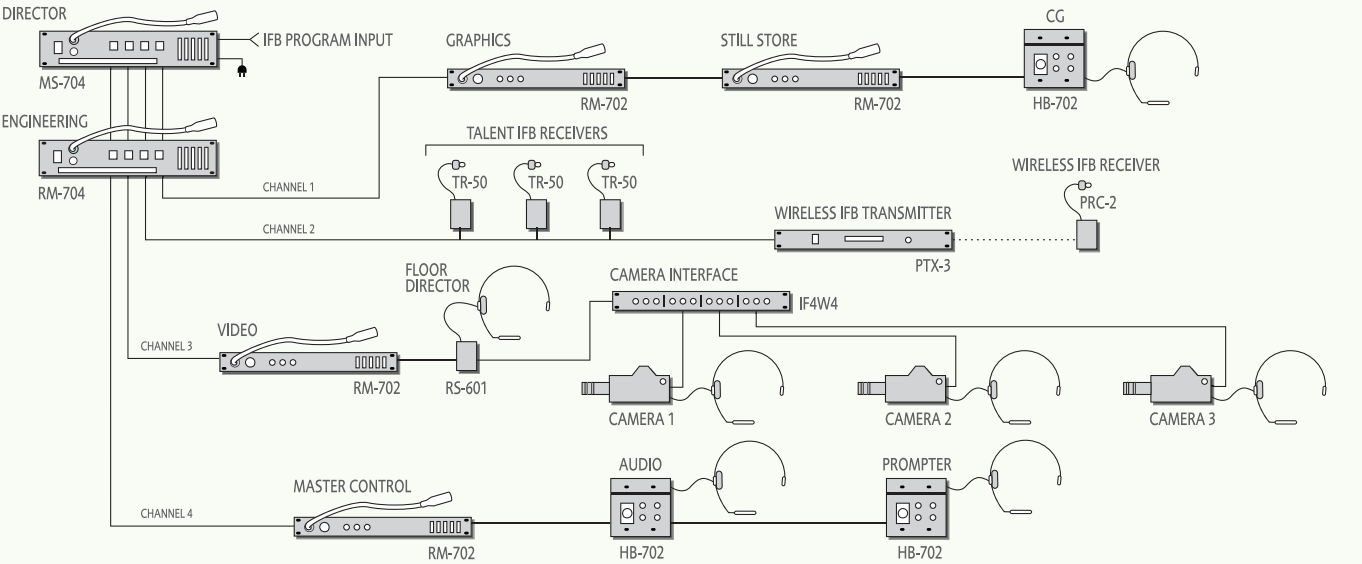


One 6-pin male XLR connector splits into two 6-pin female connectors.

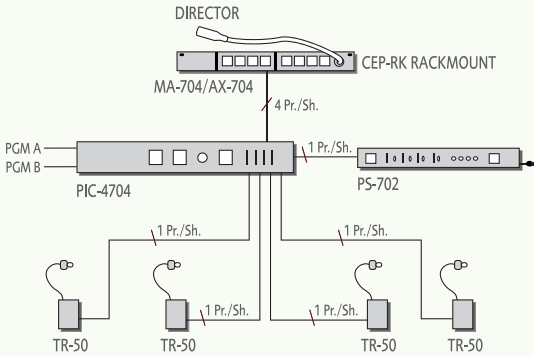
System Diagrams

TV Broadcast Station

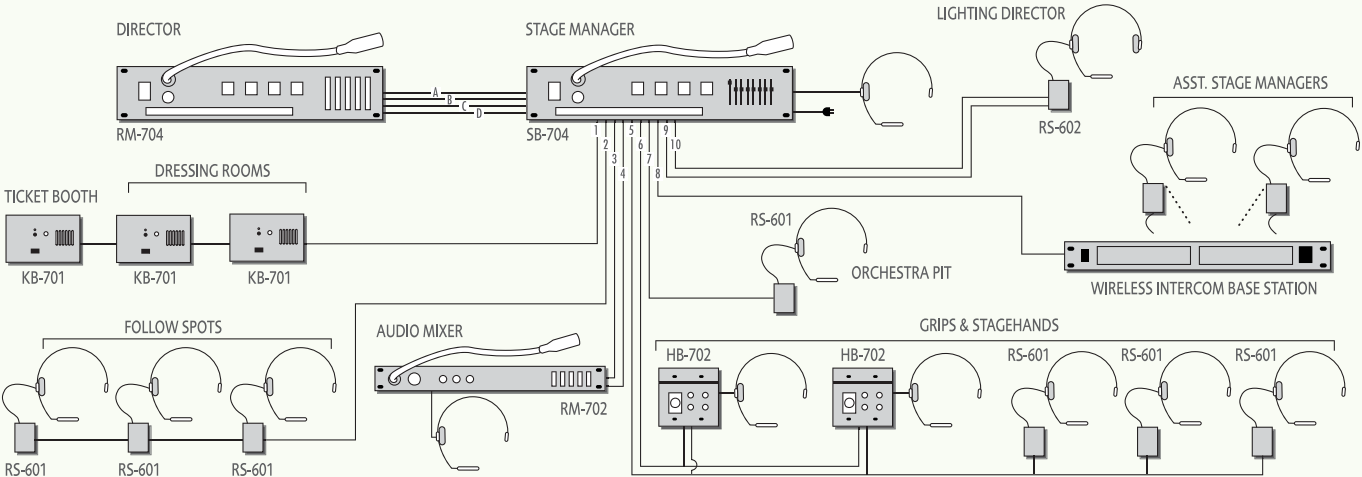
4-Channel TV News System



Stand-Alone System, 1 Location, 4 Talent

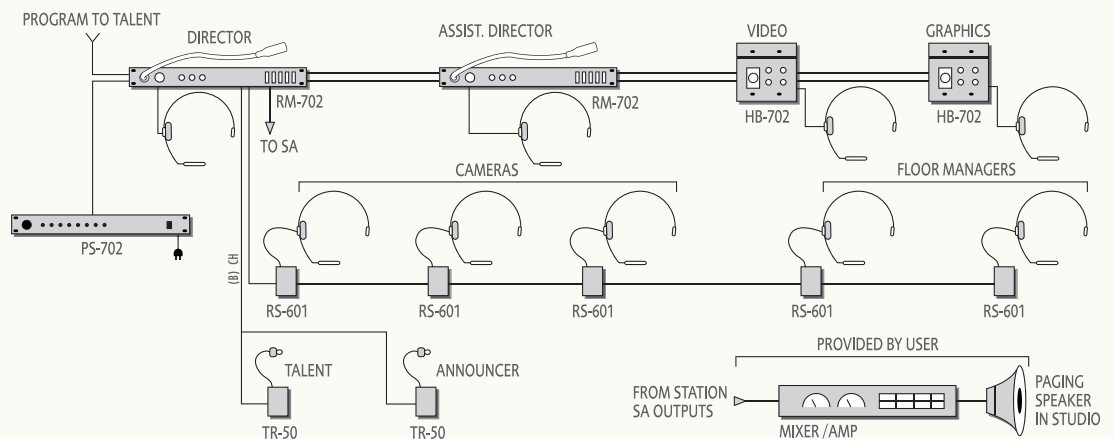


4-Channel System Using SwitchBoard Main Station



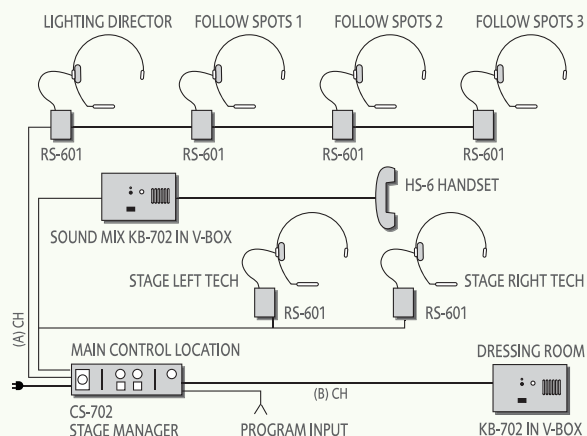
System Diagrams

Cable/School Television Studio

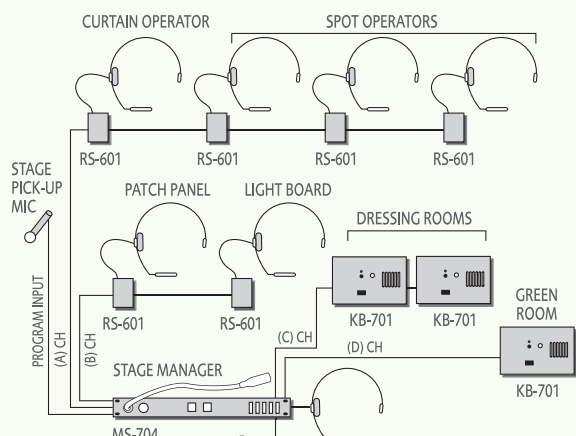


Stage Production

Typical Portable System

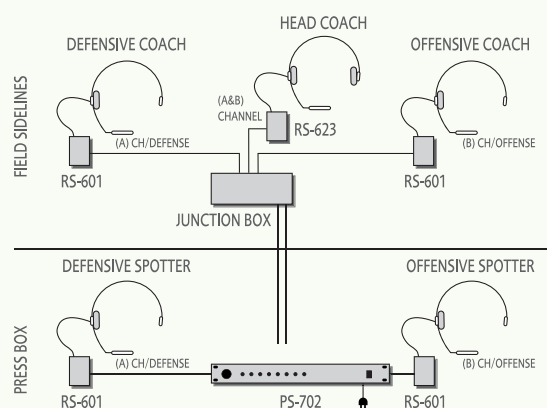


Theater



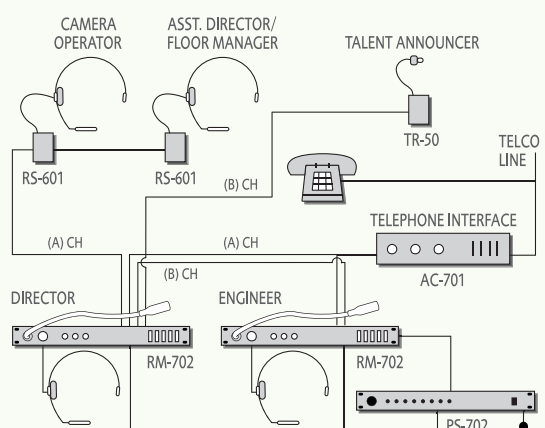
Sports Production

Coach to Spotter System-Portable



OB Truck

ENG/EFP Truck



The Complete Clear-Com Product Offering

Eclipse Digital Matrix Intercom Systems

Clear-Com Eclipse digital matrix technology is a highly reliable, flexible and scalable foundation for user-to-user and group based multi-connections. The Eclipse product family provides a broad range of powerful matrix frames, user panels and interfaces to support basic to complex intercom requirements, including connectors to Clear-Com party-line (using the CCI-22).

Eclipse PiCo is a highly functional and compact 36-port matrix frame for small to medium size venues or studios. The Easi-PiCo is a fixed configuration version of a standard Eclipse PiCo with 16 ports.

Facilities that have expanded communication needs or with limited rack space may consider the midsize **Eclipse Median** that combines a 112-port frame with built-in interface slots. The largest matrix is the **Eclipse Omega**, providing a 240-port matrix frame for large facilities with a high quantity of users located in either one or multiple sites.

Furthermore, Clear-Com offers the entry-level **Easi-PiCo** solution, a preconfigured matrix package which comes with a scaled-down 16-port Eclipse PiCo frame, interfaces and a choice of beltpacks and panel options.



Eclipse Omega



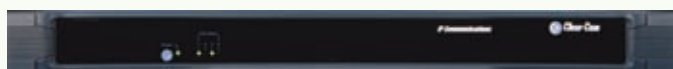
Eclipse Median



Eclipse PiCo



Eclipse Easi-PiCo Package



VoICE 2.0



SOFT-Voice Screenshot

Concert Screenshot

IP Communications

Clear-Com offers the most advanced solutions to link matrix-to-matrix and matrix-to-panels over large distances.

Concert provides PC to PC intercom with an option to communicate directly with Eclipse users. The **VoICE 2.0** IP interface takes advantage of Internet Protocol and leverages the growing availability of VPN and the Internet to lower operating costs for wide area linked matrices. **SOFT-Voice**, a virtual panel application on your PC, connects back to VoICE 2.0 to provide IP based remote panel connections to the home matrix.

Wireless Intercom Solutions

Clear-Com carries the broadest range of wireless intercom selections on the market to address the ever-increasing needs for wireless mobile communication in large production venues. All Clear-Com wireless offerings are full-duplex, enabling belt-pack users to talk and listen simultaneously.



CellCom®/FreeSpeak®

Each belt-pack provides users with the flexibility of one-to-one or group communication. Available as standalone systems or linked with traditional wired intercom systems such as party-line or matrix systems, these solutions allow operators to "cut the cord", offering unrestricted mobility and unparalleled ease of communication.

Clear-Com includes the following wireless offerings:

CellCom®/FreeSpeak® – License-free digital transmission wireless intercom that provides roaming wireless belt-pack connections seamlessly in a large coverage area. CellCom®, trademarked in the US, operates in 1.921- 1.928 GHz range; FreeSpeak®, for all non-US markets, operates in 1.881- 1.916 GHz range.

WBS

WBS-670 (single-channel) or WBS-680 (two-channel) analogue wireless intercom systems operates in frequency bands between 518-740 MHz, ideal for crowded venues with potential frequency or environmental challenges.



WBS-670 and WBS-680



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