

# **RTS** Intercom Systems

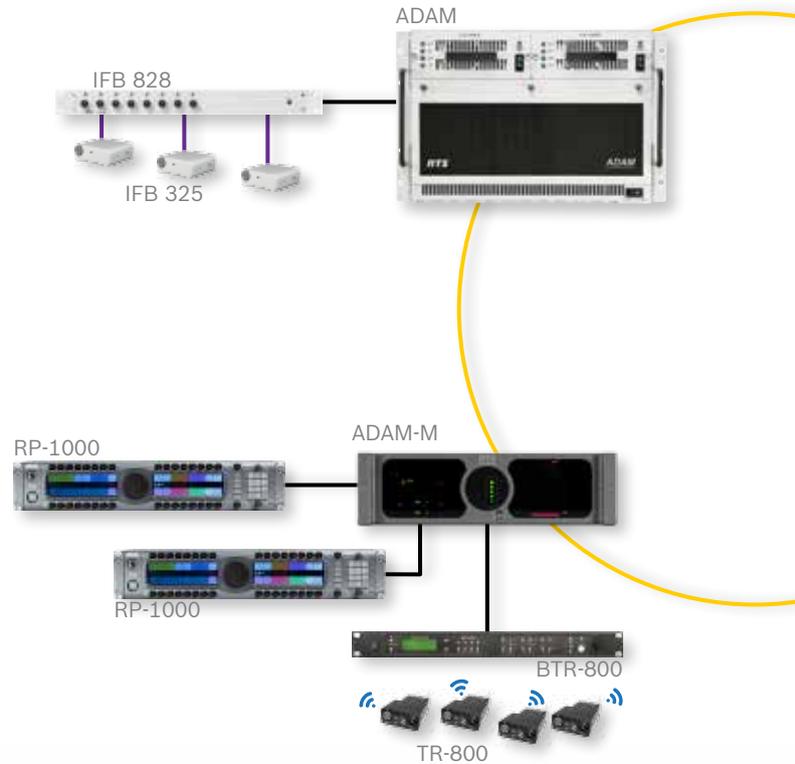
Innovating the Future of Global Communications



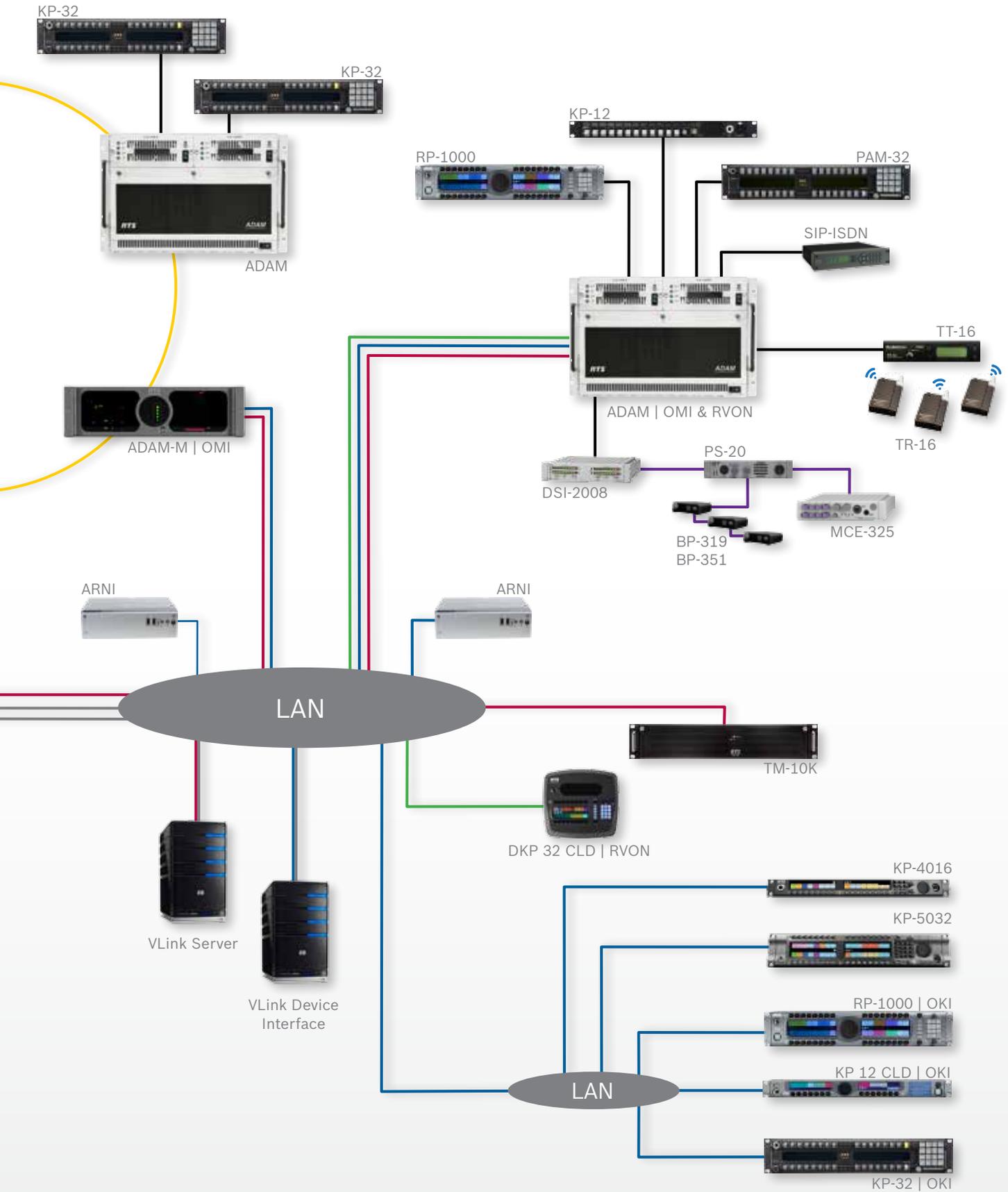
## 2 | Table of Contents

Worldwide Connectivity .....	3
Digital Matrix .....	4–25
Intercom Matrices .....	4
RTS+OMNEO .....	6
Trunkmaster Series.....	9
Tri-Bus Multi-Frame Topology .....	9
Interface Cards.....	10
RVON VoIP Devices & Breakout Panels ..	11
RTS VLink .....	12
Software .....	13
Color Display Keypanel Series.....	14–17
KP-32 Keypanel Series.....	18
KP-12 Keypanel Series.....	20
Value Keypanel Series .....	22
System Peripherals.....	24
Partyline .....	26–33
Power Supply.....	26
Master Station .....	27
User Stations .....	28
Beltpacks.....	30
IFB System Peripherals .....	31
Accessories.....	32
AudioCom .....	33
Product Specifications .....	34
Intercom Headsets .....	36

RTS is an industry leader in the design and manufacture of intercom solutions. From the Advanced Digital Audio Matrix (ADAM) systems used to coordinate major network broadcasts of the world's largest events to small-format systems used for in-house productions, RTS is dedicated to innovating the future of global communications.



- Trunking data for the TM-10K
- Ethernet OMNEO connections
- Analog connections to the frames
- Ethernet RVON connections
- TW audio
- Tri-Bus fiber ring
- Ethernet data



The RTS family of digital intercom matrices is the most extensive, widely used line of intercoms in the world. From the top-of-the-line ADAM matrix, available in sizes from 16 to more than 880 users, to the Zeus III LE 16-port matrix, RTS matrices are the standard for reliable, mission-critical communications in broadcast, military, industrial and entertainment applications.



#### Intercom matrices at a glance:

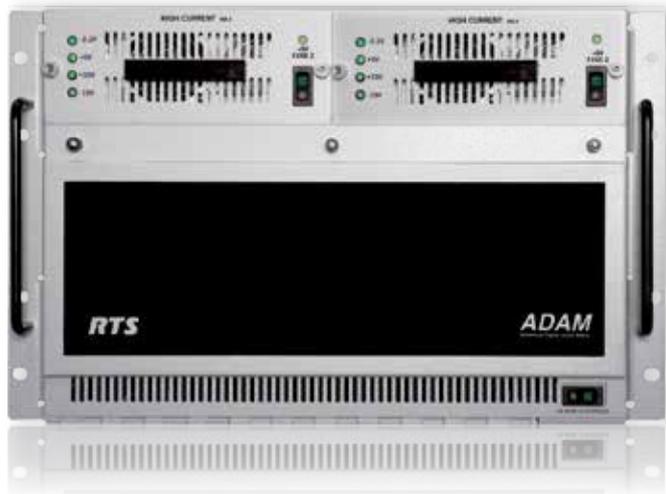
Attribute	ADAM	ADAM-M	Cronus	Zeus III	Zeus III LE+
Port Capacity: Single Frame	272 <sup>1</sup>	128 <sup>1</sup>	32	32	16
Rack Units	7	3	2	1	1
Redundant Power Supplies	Yes	Yes	Yes	Yes	Yes
Redundant Controllers	Yes	Yes	No	No	No
Bus Expansion	Yes	Yes	Yes, 4x Cronus, linking license required	No	No
Link Method	Single Mode Fiber or Multi Mode Fiber	Single Mode Fiber or Multi Mode Fiber	Coax/Fiber between Cronus Frames	N/A	N/A
Cable Length	TBX fiber single mode 40 km Multi mode 550 m	TBX fiber single mode 40 km Multi mode 550 m	Coax: 90 m Fiber : 15 km Single mode	N/A	N/A
Audio Bits	24	24	24	24	24
VOX on Input	Yes	Yes	Yes	Yes	Yes
OMNEO Audio	Yes	Yes	No	No	No
Trunking Support	Yes	Yes	Yes	Yes	Yes
Intuitive User Interface	Yes	Yes	Yes	Yes	Yes
Matrix PC Connection	Ethernet, Serial	Ethernet, Serial	Ethernet, Serial, USB	Ethernet, Serial, USB	Ethernet, Serial, USB
Non-Destructive Download	Yes	Yes	Yes	Yes	Yes
Integrated Partyline Interface	No	No	No	Yes (2)	Yes (2)
Remote Configuration	Yes	Yes	Yes	Yes	Yes
Relays	External GPIO-16	External GPIO-16	4	2	2

<sup>1</sup> More with 64-Channel MAD1 and OMNEO card(s)

## ADAM

### Advanced Digital Audio Matrix

Using a Time Division Multiplex (TDM) technique, ADAM grows linearly as users are added; the system comes standard with newly redesigned, redundant high-current power supplies. The Ethernet master controller, MCI-E, allows for automatic changeover in the event of failure. With the added convenience of Ethernet connectivity between the ADAM intercom and a PC running AZedit matrix control software, it can support 32 simultaneous AZedit sessions via Ethernet and three sessions via serial.



## ADAM-M

### 3RU Advanced Digital Audio Matrix

The 3RU matrix frame supports eight interface cards, in addition to redundant master controller cards. In keeping with the RTS principle of backward compatible, forward thinking, the ADAM-M is fully compatible with all current ADAM cards, including the MADI-16 Plus and OMNEO 16 interface. Users now have the option of configuring a very compact frame with RVON, MADI, OMNEO and analog with full redundancy.



## Cronus

### DSP Matrix Intercom

RTS Cronus intercom is a modular, 32-port digital matrix intercom in 2RU that can hold up to four AIO analog or RVON-C VoIP cards with eight ports each. Based on advanced DSP architecture, Cronus intercom has the ability to link up to four units into a single 128-port matrix. The Cronus can be preconfigured for fiber with a connection up to 9.3 mi (15 km) or coax for a connection up to 300' (91.4 m). When connected as a single matrix, individual Cronus intercom controls remain autonomous and independent at each matrix for the highest reliability. Cronus is available with an analog card or the RVON-C VoIP card.



## Zeus III

### Digital Intercom Matrix

Zeus III is the next generation of compact intercom system units, giving compact systems more options for their intercom configurations. Zeus III has 32 channels in/out and two additional configurable partyline interface channels. Its compact size is perfect for environments with limited space. With integrated Ethernet, Zeus III can be configured from virtually anywhere on the network using AZedit software. Alternatively, Zeus III can be directly connected to AZedit via a USB connector on the front panel. The system has 32 standard RJ45 connectors, making it easier to connect the intercom system with audio lines and keypanels by keeping the RTS wiring scheme.



## Zeus III LE and Zeus III LE+

### Digital Intercom Matrix

Zeus III LE is the further refinement of compact intercom system units, giving compact systems more options for their intercom configurations. Zeus III LE has 16 channels in/out and two additional configurable partyline interface channels. Its compact size is perfect for environments with limited space. With integrated Ethernet, Zeus III LE can be configured from virtually anywhere on the network using AZedit software. Alternatively, Zeus III LE can be directly connected to AZedit via a USB connector on the front panel. The system has 16 standard RJ45 connectors, making it easier to connect the intercom system with audio lines and keypanels by keeping the RTS wiring scheme. The Zeus III LE+ contains all of the same features as the Zeus III LE with the ability to provide the user with redundant AC power supplies for an added level of reliability.



...with pure IP connectivity, ultra-low latency and full HD audio

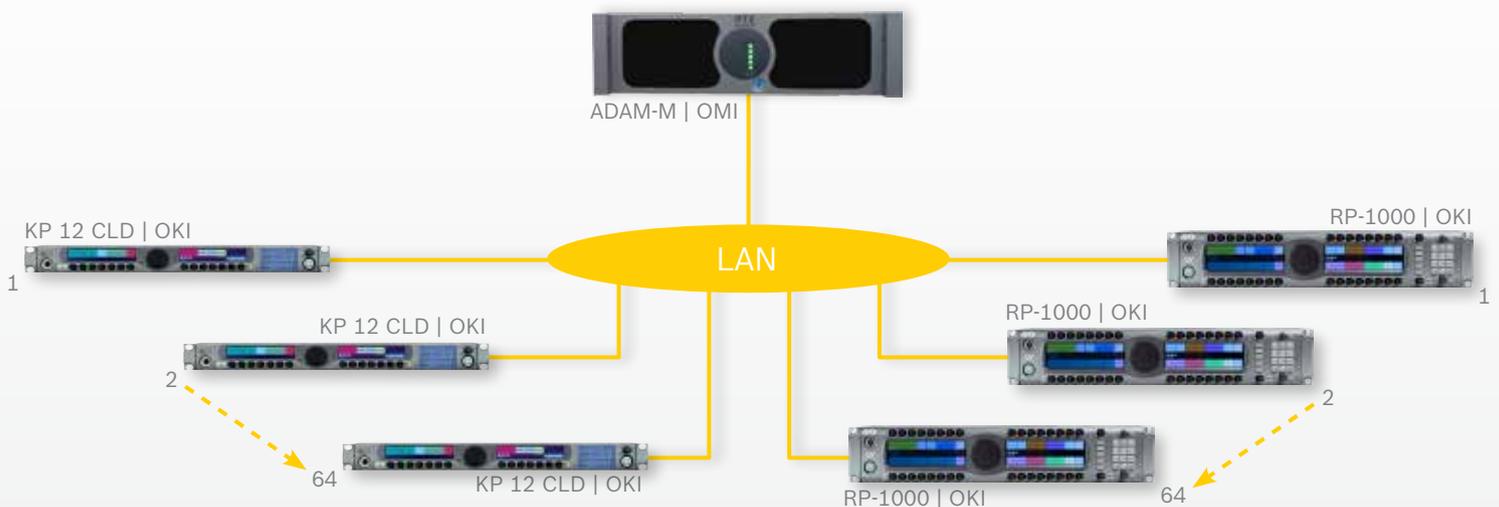
OMNEO is a media networking architecture for professional applications. Using standard IP Ethernets, media products that integrate OMNEO can be assembled into networks of 2 to 10,000 cooperating devices that exchange studio-quality synchronized multichannel audio and share common control systems.

OMNEO's media transport technology is Audinate's Dante, a high-performance, standards-based, routable IP media transport system. OMNEO's system control technology is Open Control Architecture, or OCA. OCA is an open public standard for the control and monitoring of professional media networks.

The new RTS ADAM OMNEO interface cards transform the ADAM intercom system into a flexible, IP-based, AVB-compatible intercom network. OMNEO media networking architecture **goes beyond** traditional AVB solutions by incorporating both industry standard OCA control and IP audio. OMNEO will interoperate with AVB and Dante devices, ensuring future interconnectivity with a growing number of devices. ADAM OMNEO products open the door to deploy ADAM intercom systems over any standard IP-based network. Most importantly, with OMNEO users are not "locked in" to other vendors' proprietary backbone infrastructure. This makes RTS the leading IP open network solution for professional production intercoms.

With RTS+OMNEO, such essential tasks as deploying intercom user stations, linking via trunking and interfacing to third party devices has now become easier and more flexible. The addition of ADAM OMNEO cards to any compatible ADAM system means even existing installations can be networked over standard IP hardware with high quality, ultra-low-latency audio.

The product range consists of the ADAM OMNEO card for the ADAM and ADAM-M intercom frames and a user station interface card for select RTS keypanel models. Both these cards fully update the connectivity of these RTS intercom products to be fully IP compatible.



## OMI

### ADAM Matrix Card

This card fits into the standard slots of the RTS ADAM or ADAM-M frames and provides a gateway to the world of OMNEO IP-compatible networking. The card consists of the traditional ADAM front and back card components and enhances ADAM systems with the following features:

- The OMI card is available in configurations up to 64 bidirectional ports upgradable in increments of 16 ports on a single card.
- In addition to the standard RJ45 Ethernet connection, fiber connectivity is also supported with the addition of optional single mode or multimode modules.
- A fully configured single compact ADAM-M frame can support up to 256 OMNEO ports, providing a highly compact single frame solution for many system installs.
- The ADAM frame supports an astounding 512 OMNEO ports, making it ideal for larger systems without the need for frame-to-frame linking.



## OKI

### Keypanel Interface Card

This card fits into select RTS user stations and provides native OMNEO IP connectivity for RJ45 Ethernet connections into the OMNEO network with optional single or multimode fiber modules. The card provides a two-port switch onboard as a pass-thru connection to allow daisy chaining of keypanels if required. It plugs into the existing header in the keypanel and comes with all parts needed to complete the upgrade. The OKI card is available for the RTS KP-32, RP-1000 or KP 12 CLD keypanel.



### Specification Table

	ADAM OMI Card	OKI Keypanel Interface Card
Supporting Products	ADAM, ADAM-M	KP-32, KP 32 CLD, RP-1000, KP 12 CLD
Connections		(2) RJ45 Ethernet Connections (1) LC Type SFP Fiber Connector
Audio I/O Levels	N/A. See note below*	Input/Output (maximum level): +20 dBu Input/Output (nominal level): +8 dBu
Frequency Response (Input)		within $\pm 1$ dB from 20 Hz – 20 kHz
THD+N at 1 kHz	better than 0.01% @ 8 dB	–
Network Delay		<20 ms typical
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	KP 12 CLD/KP 32 CLD/RP-1000: -40°F to 158°F (-40°C to 70°C) KP-32: -40°F to 140°F (-40°C to 60°C)
Operating Temperature	32°F to 122°F (0°C to 50°C)	KP 12 CLD/KP 32 CLD/RP-1000: 5°F to 122°F (-15°C to 50°C) KP-32: 14°F to 105.8°F (-10°C to 41°C)
Power Consumption	14.9 W @ 5 V (Front and Back combined)	KP 12 CLD/KP 32 CLD/RP-1000 without Fiber: 5 watts KP 12 CLD/KP 32 CLD/RP-1000 with Fiber: 5.75 watts KP-32 without Fiber: 5.5 watts KP-32 with Fiber: 6.25 watts
Weight	Front Card: 0.65 lb (0.29 kg) Back Card: 0.30 lb (0.14 kg)	4.15 oz (card only)
Card Dimensions (W x D x H)	Front Card: 0.8" x 12.7" x 6.8" (21.04 cm x 322.40 cm x 173.11 cm) Back Card: 0.8" x 6.8" x 6.8" (20.0 cm x 172.56 cm x 172.26 cm)	4.5" x 3.0" x 1.1" (29.03 cm x 19.35 cm x 7.10 cm)

\*OMI card is a digital board with build-in audio mixer for 64 inputs. The audio I/O levels are specific to analog sources such as AIO-16 or keypanel.

## OEI-2

OMNEO External Interface – 2



Offering the latest in state of the art technology, the OEI-2 enables connectivity between analog audio sources or legacy RTS keypanels and an OMNEO network. OMNEO sets the standard for the future of audio communications by offering high quality IP compatible audio, ultra low latency, and supports DHCP and Bonjour protocols. OEI-2 supports all RTS analog keypanels.

- Provides an interface between legacy RTS keypanels and the OMI OMNEO interface cards for ADAM and ADAM-M units.
- Provides less than 20ms of audio latency in typical network installations.
- Provides a frequency response of 20Hz to 20KHz to the keypanel
- Supports DHCP and device discovery for easy set up and network management.
- Supports a fiber connection to the keypanel (multi-mode or single-mode optional).
- Supports CAT-5/5e and CAT-6 with dual Ethernet connectors for device looping.
- Supports compatibility with third-party Dante products.

## ARNI

Audio Routed Network Interface



ARNI significantly extends the reach of an OMNEO-based RTS intercom network to function seamlessly across subnets. ARNI enhances the flexibility of system deployments by providing network services and network-wide synchronization for OMNEO traffic. ARNI may also be configured for fully redundant operation to ensure network reliability and stability. ARNI allows the creation of media networks that are able to support up to 10,000 devices across 40 subnets.

Two models are available: the ARNI-S and the ARNI-E. Depending on the size and configuration of the network, multiple ARNI devices can be deployed to achieve the desired network layout and functionality.

- ARNI-S supports up to 450 devices in a single subnet.
- ARNI-E supports up to 10,000 devices across multiple subnets.
- ARNI-E also supports synchronization across subnets.

## TM-10K

High Capacity Trunkmaster



The RTS TM-10K trunkmaster is a super high capacity intelligent linking system to provide virtually limitless expansion to any RTS intercom network. The TM-10K seamlessly links up to 255 intercom systems, allowing users to communicate with one another instantaneously with all the same presets, scroll lists and tallies available on local matrices. Over 10,000 users can be interconnected into one network. Whether the systems are located in adjacent studios or on different continents, intelligent trunking unifies your unique communication needs.

The TM-10K can be linked using OMNEO, RVON or analog audio connections providing the ultimate in flexibility and reliability. Using multiple TM-10K units, the system is fail safe, providing redundant linking connections and control of which can be separated over long distances for superior reliability and flexibility.

- Dual redundant power supplies provide fail safe operation.
- Support for dual network interface connections for enhanced reliability.
- Solid-state hard drive for superior operational speed and reliability.
- Capacity to link up to 255 intercom systems and over 10,000 users.
- Full support for all RTS digital matrix frames.
- Fail safe operation when using multiple trunkmasters.
- Redundant trunkmasters can be geographically separated.

## Tri-Bus Multi-Frame Topology

The RTS systems Tri-Bus technology provides the end user with a wide variety of system expansion options. The Tri-Bus expander supports both a dual fiber ring or a robust mesh architecture for added redundancy. Whether your communication needs call for a distributed topology or centralized design, the Tri-Bus expansion card can meet the challenge.



RTS interface cards are the core of the modular digital matrix intercom concept. An array of features and connectivity options allow users to customize their ADAM matrix to integrate seamlessly into a cohesive communication network. Each new generation provides expanded possibilities for existing ADAM frames, solidifying its investment value for years to come. With features such as hot swap and user allocated ports, the ADAM subassemblies ensure that users can scale their intercom systems to fit their growing needs with peace of mind.

## MCII-E

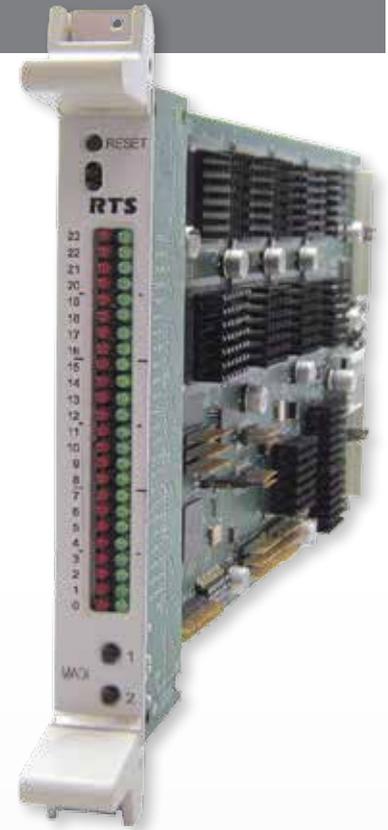
### Ethernet Master Controller Card Kit for ADAM

The Ethernet connectivity of the MCII-E enables multiple AZedit sessions and remote peripherals, such as the GPIO-16 (page 22). Adding Ethernet connectivity between the ADAM intercom and a PC running AZedit matrix control software, the new controller can support up to 35 simultaneous AZedit sessions. Using a pair of MCII-E controller cards provides full redundancy with seamless automatic changeover upon failure. The MCII-E also supports SNMP, the IETF standard protocol for monitoring network-attached devices.

## MADI-16 Plus

### Multichannel Audio Digital Interface Card

The MADI-16 Plus card expands the ADAM system configuration capabilities by utilizing MADI (Multichannel Audio Digital Interface) technology to connect any AES-10 compliant devices over coaxial or fiber connections at sampling rates of 44.1 kHz and 48 kHz. Unlike the RVON devices, the MADI-16 Plus has a point-to-point configuration, which provides for little or no delay in the transmission of audio across lines.



### Interface Card Comparison

Card	Frames	Functionality	Backcard Connectors
AIO-16	ADAM Series	16-Port Analog I/O	Provides 16 ports of audio in and out via MDR and 50-pin SCSI, plus individual data drivers
Cronus-AIO	Cronus	8-Port Analog I/O	Provides 8 ports of audio in and out via RJ-12 or MDR
MADI-16 Plus	ADAM Series	16-64 Port MADI	Connects any AES-10 compliant devices over coaxial or fiber connections
MCII-E	ADAM Series	Ethernet Master Controller	Connects to AZedit matrix control software via Ethernet
OMI	ADAM Series	16-64 Port IP Audio	Provides 2 RJ45 and one fiber optic connection
RVON-16	ADAM Series	16-Port VoIP	Connects ADAM to panels and/or audio tielines over standard IP networks
RVON-C	Cronus	8-Port VoIP	Connects Cronus to panels and/or audio tielines over standard IP networks
TBX-Tribus	ADAM Series	Triple-Bus Expander	One card Links up to four ADAM frames together

## RVON VoIP Devices

The RTS Voice Over Network (RVON) series allows the full integration of our intercom system into your existing data network. It also allows you to create an independent network for your RVON equipment. Our devices are fully IP-compliant with current VoIP standards. All RVON series devices can be monitored via SNMP. The RVON product family supports ancillary data control for use with RTS intelligent trunking. These products enable trunking over IP for local to worldwide connectivity.

VoIP Interface	Device	Functionality
RVON-1	KP-32	Single Channel VoIP Interface
RVON-2	RP-1000 KP 12 CLD DKP 16 CLD	2-Channel VoIP Interface for CLD Keypanel Series
RVON-16	ADAM Series	16-Port VoIP Card Kit
RVON-C	Cronus	8-Port VoIP Card Kit
RVON-I/O	Analog Devices	8-Port VoIP Analog Interface
VKP	PC Client	Virtual Keypanel

## Breakout Panels

Breakout panels provide a convenient way of expanding the port capacity of ADAM intercom systems. There are eight breakout panels for use with the AIO cards: XCP-32-DB9, XCP-16-DB9-T, XCP-48-RJ45, XCP-48-TELCO, XCP-40-DB9, XCP-40-RJ11, XCP-955 and XCP-24.



### Breakout Panel Comparison

Panel	Frame	Back Card	Connectors
XCP-955	ADAM/ADAM-M	Telco	(25x) RJ-12
XCP-954-48	ADAM/ADAM-M	Telco	(48x) DB-9
XCP-32-DB9	ADAM/ADAM-M & Cronus	MDR	(32x) DB-9
XCP-16-DB9-T	ADAM/ADAM-M & Cronus	MDR	(16x) DB-9
XCP-48-RJ45	ADAM/ADAM-M & Cronus	MDR	(48x) RJ-45
XCP-48-Telco	ADAM/ADAM-M & Cronus	MDR/Telco	(6x) Telco
XCP-40-DB9	ADAM/ADAM-M	SCSI	(40x) DB-9
XCP-40-RJ11	ADAM/ADAM-M	SCSI	(40x) RJ-12
XCP-24	ADAM/ADAM-M	SCSI	(3x) Telco
XCP-ADAM-MC	ADAM/ADAM-M	SCSI	(10x) DB-9, (1x) DB25

RTS VLink is a new, fully interconnected software application that enables remote users to interface with RTS matrix intercoms, allowing an unprecedented degree of control and flexibility from anywhere in the world. The RTS VLink system provides intelligent trunking links into an RTS intercom matrix to provide full support for RTS intercom alphas and matrix access for standard communications workflows. RTS VLink represents the only fully interconnected, DHCP-compliant virtual communications solution on the market today for a major hardware-based intercom communications system.

## RTS VLink Features

- **Anywhere, Anytime Access** – The perfect solution for users that need secure, intelligent access to their RTS matrix from any location.
- **Flexible Configuration** – Scale the system to any number of ports (initial system of eight ports with two-port expansions available). Purchase only the capacity you need.
- **Full Integration into RTS Matrix Intercom Systems** – Allows full mapping of all intercom alphas.
- **Fully DHCP Compliant** – Operates over open Internet connections. Secure access can be employed with a standard VPN connection.
- **SIP Support** – Full SIP support, to and from the matrix.
- **Flexible Connectivity** – Provides a variety of connection methods, including MADI, analog or Firewire connections.
- **True Mobility** – Access an RTS matrix via the Internet, using a WiFi/3G/4G connection.



Access Your RTS Intercom Matrix  
Anywhere, Anytime

RTS software provides complete control over your intercom system from any standard Windows computer. Configure keypanel settings, assign user rights and even link matrices together that are thousands of miles away.

The RTS VoIP Virtual Keypanel (VKP) is a Windows-based application that allows any user to have a fully functioning RTS digital matrix intercom user station on their PC.

## AZedit

### RTS Matrix Control Software

Intercom system configuration has never been easier with the advent of AZedit matrix control software. AZedit is a Windows-based, full-featured configuration software, providing online and offline configuration capabilities. It gives you the ability to manage multiple intercom systems, assign and reassign users to different ports, as well as dynamically add intercom hardware to your system setup without jumper changes, rewiring or taking the system offline. AZedit has the capability to load pre-set configuration files, which means saved configurations can be uploaded to the live application at anytime without interruption. AZedit can be used as a monitor tool to observe the status of features, such as gain and crosspoint settings, keypanel keys activated and other aspects of the system. AZedit can run in multiple sessions using the MCII-E ADAM master controller to allow for remote system configuration. AZedit is updated regularly to provide users with the latest features and innovations available.



## RestrictEdit

### Access Management Software

RestrictEdit is a tool to create restriction files for use with AZedit software. Restriction files allow administrators to manage user access to resources and features. AZedit includes support for user restrictions by reading a text file (the restrictions file) and parsing out the set of resources and features available to each user.



## IPedit

### Configuration Software for RVON & OMNEO Devices

IPedit is a Windows-based GUI application for configuring and displaying RVON and OMNEO devices connected to your matrix system. IPedit is to IP products as AZedit is to ADAM, Cronus and Zeus. An enhanced version of IPedit is available, which can configure multiple network devices simultaneously.



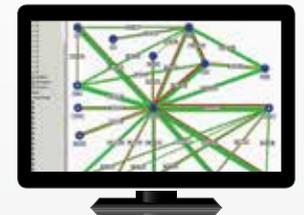
## Trunk Edit Software

TES is a GUI for programming TM-2000 or MTM-2000 trunking devices. TES allows the user to set up all necessary parameters required for trunking multiple intercom systems. Each intercom system can be configured to work together as a virtual-integrated, single intercom system while still maintaining each individual system's autonomy.



## Trunk Supervisor Software

TSS is a trunking system management application. The program allows for real-time monitoring of trunk line status information. When used in combination with the RT-2M test set, it allows for fully automated testing of a trunked system. If a trunk line is found to be out of specification, the trunk line can be pulled out of service until the issue is resolved. The program also has the capability of remote notification of user defined alarm events.



**KP-5032**

32-Position HD Color Display Keypanel



The KP-Series keypanels delivers superior high-quality digital audio using the Bosch-branded OMNEO technology with Dante by Audinate audio over IP via either copper or fiber. The KP-Series keypanels delivers top-notch audio, free of noise, delay, and other artifacts present in older technology. This family of keypanels includes a rich set of connectors as standard, including GPIO and RC. As with other RTS products, emphasis has been placed on backward compatibility with previous generations of matrices including analog technology.

The KP-Series keypanels utilizes the latest generation of wide angle TFT displays providing superior clarity, resolution, and longer display life, delivering high-quality readability under a variety of lighting conditions.

## KP-Series Features

- **OMNEO Open Media Networking Standard** – The new KP-Series is future-proof and so is your communication. The unparalleled flexibility features automatic hardware recognition plus the open source technology of OMNEO, so you get full backward compatibility and easy scalability.
- **Full IP Connectivity and TCP-IP Layer 2 & 3 Compatibility** – Out with the old and in with the more intuitive. The new design and an enhanced user interface enable easier understanding and improved operation. The software provides simple and intuitive navigation of menus, with the most commonly used features easily accessible.
- **Advanced Signal Processing and AD/DA** – Get high-quality audio transmission every time. The new keypanel family features two echo cancellation modes, plus quick AD/DA conversion – ensuring ultra-low latency and reducing noise, echo, delay and other malfunctions found in older technologies.
- **User-Friendly, High-Res Color Display** – Get high quality, inside and out. The new KP-Series keypanels feature a unified design, including color, contrast, resolution and viewing angle for complete communication harmony. Plus, multiple controls through ergonomically-designed levers.
- **Backward compatibility** – All KP-Series keypanels are compatible with older technologies such as analog audio in USOC and 568-B connector formats.
- **Standardized connectors** – All previous hardware connector options (RC, GPI, and ancillary items) are now standard.
- **Enhanced navigation menus** – Optimized for ease of use.
- **Front panel headset connector** – Field-swappable, making it simple to change the default 5-pin XLR (6-pin compatible) headset connector with a 4-pin XLR headset connector, as needed.

## KP-4016

16-Position HD Color Display Keypanel



## EKP-4016

16-Position HD Color Display Expansion Panel



### KP-Series Accessories

Accessory	Panel	Functionality	Features
PSU MK	KP-5032 OEI-2/KP-4016	Mounting bracket	Mounting bracket for secure mounting of the external OEI-2/KP-4016, KP-5032 power supply.
PSU KP	RP-5032 KP-4016 EKP-4016	Power supply	spare power supply for RP-5032, KP-4016 and EKP-4016
Hdst Conn 4F	KP-5032 KP-4016	Headset connector	XLR A4F headset connector inlay for KP-5032 and KP-4016 keypad.
Hdst Conn 6F	KP-5032 KP-4016	Headset connector	XLR A6F headset connector inlay for KP-5032 and KP-4016 keypad.
Hdst Conn 5M	KP-5032 KP-4016	Headset connector	XLR A5M headset connector inlay for KP-5032 and KP-4016 keypad.
Hdst Conn 4M	KP-5032 KP-4016	Headset connector	XLR A4M headset connector inlay for KP-5032 and KP-4016 keypad.
LCP 16 CLD	RP-1000 KP 32 CLD KP-5032 KP-4016	Level Control Panel	Provides direct knob access to the volume levels of AUX, sidetone, speaker, headset and other functions of the RP-1000/KP 32 CLD

## RP-1000 Series

32-Position Color Display Keypanel



The Color Series represents the latest generation of RTS keypanels. The panels sport advanced features that take flexibility and ease-of-use to the next level. The Color Series feature a revolutionary customizable GUI in integrated full-color TFT displays. The Color Series advanced functionality is wrapped in a sleek, ergonomic design with a contoured bezel that fits flush within a rackmount configuration and looks great on the desktop.

The new RP-1000 features a stunning high-contrast HD TFT display with high-efficiency LED backlighting and enhanced language support for system alphas.

## Color Series Features

- **Full-Color TFT Display** – The TFT color display hosts a rich and intuitive GUI that allows each type of function to be assigned a unique color.
- **Modern, Modular Design** – The rackmount Color Series keypanel's flush front panel is ergonomically designed to fit easily into any control room or truck application. The back panels are optimized for future expansion.
- **Multi-Directional Keys** – Multi-directional keys are used for talk, listen and emulation of traditional level control function.
- **Enhanced Features** – The Color Series keypanels support industry leading features, such as up to six auxiliary inputs, three relays, independent digital gain control for microphone sources and configurable audio routing.
- **DSP** – Acoustic Echo Cancellation, Equalization, Mixing, Filtering and Metering.
- **User-Programmable Buttons** – User-programmable buttons provide custom shortcuts to menu functions.
- **Key Sequence Options** – Color Series keypanel can be ordered with the new Color key sequences and button screening, or the classic key sequences and button screening configured for the backlit numeric keypad.
- **Future Expansion** – Designed to allow for an expansion panel and optional connections to the matrix through current and future standard transmission formats.

## RP-1932

Color Display Expansion Panel



## DKP 16 CLD

Color Display Desktop Keypanel



## KP 12 CLD

12-Position Color Display Keypanel



### Color Series Accessories

Accessory	Panel	Functionality	Features
DKP 16 CLD RC	DKP 16 CLD	Rear Connector Kit	5 AUXs, 3 relays, 4 opto Inputs, headset, 2 OC outputs, foot SW, mic in/out, speaker
KP 12 CLD RC	KP 12 CLD	Rear Connector Panel	3 AUXs, 3 relays, 4 opto inputs, headset, 2 OC outputs, foot SW, mic in/out, LCP, EXP, frame, VoIP
RP-1000 RC	RP-1000 KP 32 CLD	Rear Connector Kit	6 AUXs, 3 relays, 4 opto inputs, headset, foot SW, speaker, 2 OC outputs, mic in/out
LCP 16 CLD	RP-1000 KP 32 CLD	Level Control Panel	Provides direct knob access to the volume levels of AUX, sidetone, speaker, headset and other functions of the RP-1000/KP 32 CLD
OKI	RP-1000 KP 32 CLD KP 12 CLD KP-32	OMNEO Interface	Two channels of audio in and out, Ethernet and fiber compatible
RVON-2	RP-1000 KP 32 CLD DKP 16 CLD KP 12 CLD	VoIP Interface	Two channels of audio in and out, Ethernet compatible

## KP-32

32-Position, 4-Character Keypanel



The RTS KP-32 family of keypanels offers an unbeatable match of features, options and performance. The RTS KP-32 keypanel fits in a standard 19" rack and is 2RU high. It has 32 lever keys: 30 keys are for intercom talk/listen assignment, one for call waiting response, and one for headset/microphone/program selection and volume setup. KP-32 combines all of the programmable features of the KP-12 keypanel. The KP-32 features DSP and binaural headset operation with left/right assignment of audio signals. It also has large, super-bright, long-life fluorescent displays with adjustable brightness control, making it suitable for all types of ambient lighting. The KP-32 RC audio board with GPI option is available for KP-32 series keypanels.

### KP-32 Series Accessories

Accessory	Panel	Functionality	Features
KP-32 RC	KP-32	Rear Connector Kit	2 line-level audio inputs, unswitched balanced microphone preamplifier output, headset, speaker output, foot switch input, GPIO, 4 opto-isolated inputs, 2 open-collector outputs, 2 SPDT relay outputs
LCP-32/16	KP-32 Series	16-Position Control Panel	Provides direct knob access to individual listen level controls for operator convenience.
OKI	RP-1000 KP 12 CLD KP-32	OMNEO Interface	Two channels of audio in and out, Ethernet and fiber compatible
RVON-1	KP-32	VoIP Interface	One channel of audio in and out, Ethernet compatible

## KP-32/16

16-Position, 4-Character Keypanel



## EKP-32

32-Position, 4-Character Expansion Panel



Which keypanel series is right for you?

Feature	Color Series	KP-32	KP-12	Value
Display	Full-Color TFT	Monochrome LCD	Monochrome LCD	Monochrome Call Waiting Window
Alpha Characters	4, 6 or 8 Locally Configurable	4	4	4
Character Sets Supported	English, Kanji, Katakana, Cyrillic, Simplified Chinese	English, Katakana, Cyrillic	English, Katakana, Cyrillic	English
Mounting	Rackmount, Desktop	Rackmount	Rackmount, Desktop	Rackmount, Desktop, Tektronix WFM, Wallmount
Key Type	Lever Key	Lever Key	Lever Key or Pushbutton	Lever Key
Color	Black/Grey Duotone	Black	Black	Black or Grey
Keypanel Cable Length	Total 5,000 ft per port, unlimited with RVON VoIP/OMNEO.			
Local XPT Level Control	Yes, Integrated into Key	Yes	Yes	
Pages on Panel	8	8	8	4

## KP-12

12-Position Keypanel



The 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 has a common set of very powerful features, which makes each model attractive in mobile applications and in other situations where space is limited. Available in lever-key and pushbutton versions, the basic KP-12 provides a menu-driven, fully programmable, 12-key user station in 1RU of space. Expansion panels and level control panels round out the offerings in the rackmount form factor. Desktop and Tektronix WFM 3RU form factor units are also available.

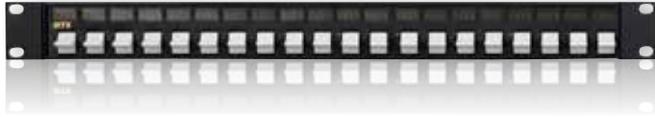
- Extremely long-life, high-visibility, green alphanumeric LEDs.
- Fully programmable menus selected via front-panel shaft encoder.
- Lever-key versions provide individual talk/listen functions on each key.
- Pushbutton versions provide individually assignable talk, listen or talk/listen function on each button.
- All keys assignable for all functions (point to point, IFB, ISO, PL, SL, relay, GPI).
- Removable, optional MCP-90 series gooseneck microphone.
- Universal power supply for 100–240 VAC, 50/60 Hz operations.
- Optional rear connector and GPI options available for rackmount panels.
- Wide range of keypanels and expansion panels for specific applications.

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.



## EKP-20

20-Position Expansion Panel



## LCP-20

20-Position Level Control Panel



## LCP-12

12-Position Level Control Panel

## DKP-12

12-Position Desktop Keypanel

## DKP-8

8-Position Desktop Keypanel



### KP-12 Series Accessories

Accessory	Panel	Functionality	Features
KPM-CK	KP-12	Rear Connector Kit	Mic in/out, EXT line in, headset, speaker
KPM-I/O	KP-12	GPI Option Kit	4 optos, 2 OCs, 2 relays

## MKP-12

12-Position Rackmount Keypanel



The RTS value keypanel series is ideal where simplicity of operation and cost are paramount. 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 Zeus series intercom matrices, but (like all RTS digital matrix intercom keypanels) are compatible with all RTS matrices, past and present. The RTS value keypanel series provides a scribble strip for key identification.

## Kaplin Medical Education Services Uses RTS to Link Their Exam Rooms

Kaplin Medical Educational Services of Newark, NJ uses an RTS Zeus-based system to communicate between 12 examination rooms, two wireless proctors and a 3-position control/monitor center. A team of licensed physicians located in the control room monitor and evaluate student physicians in the exam rooms on various medical practices and procedures via small, ceiling-mounted video cameras and an intercom station. If assistance is required, the student contacts the control room via a wallmounted WKP-4 station. Based on the situation, the licensed physician, using an MKP-12 station, either talks the student through the problem or contacts a roving proctor. The roving proctor, using an RKP-4 wireless 4-channel backpack, talks with the control room, the exam room and/or a second roving proctor to resolve the problem.

### MKP-4

4-Position Rackmount/Desktop Keypanel



### BKP-4

4-Position Desktop Keypanel



### WKP-1

1-Position Wall Keypanel



### WKP-4

4-Position Wall Keypanel



#### Keypanel Comparison

Feature	MKP-12	MKP-4	BKP-4	WKP-4	WKP-1
Keys	12	4	4	4	1
Mounting	Rackmount or Desktop	Rackmount (with MCP mounting kit) or Desktop	Desktop	Wallmount	Wallmount
Call Waiting Window	4 Characters	4 Characters	4 Characters	4 Characters	N/A
Cost Effective	Yes	Yes	Yes	Yes	Yes
Headset Jack	XLR-4F	XLR-4F	XLR-4F	XLR-4F	N/A
Mic Jack	¼" TRS	¼" TRS	¼" TRS	¼" TRS	Integrated Mic
Speaker	Integrated	Optional MCS-325	Integrated	Integrated	Integrated

## GPIO-16

### General Purpose Interface

The GPIO-16 interface provides 16 opto-isolated inputs and 16 relay outputs. It connects to the matrix via serial or Ethernet for remote operations.



## MDA-100

### Mixing & Distribution Amplifier

The MDA-100 contains an 8 x 1-summing amplifier (mixer) and a 1 x 8 distribution amplifier.



## DSI-2008

### Digital System Interface

The DSI-2008 interfaces two 2-wire intercom lines to two 4-wire lines, and also interfaces balanced and unbalanced 2-wire lines. Digital hybrids eliminate all nulling and ducking adjustments. It puts an end to concerns about echo and feedback when interfacing 2-wire lines.



## SSA-324

### System-to-System Adapter

The SSA-324 interfaces two 2-wire intercom lines to two 4-wire lines, and also interfaces balanced and unbalanced 2-wire lines. The SSA-324 is ideal for steady load applications.



## TIF-2000A

### Single-Line Telephone Interface

The TIF-2000A provides bidirectional communication between the intercom matrix and a standard analog telephone line.



## TIF-4000

### 12 Line Telephone Interface

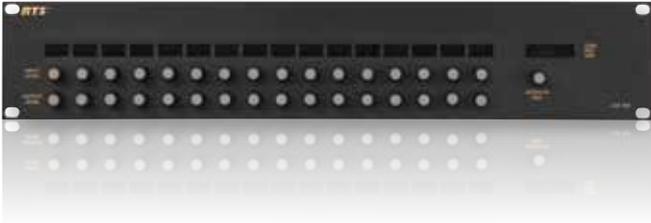
The TIF-4000 provides bidirectional communication between the intercom matrix and an analog telephone line.



## LCP-102

### Level Control Panel

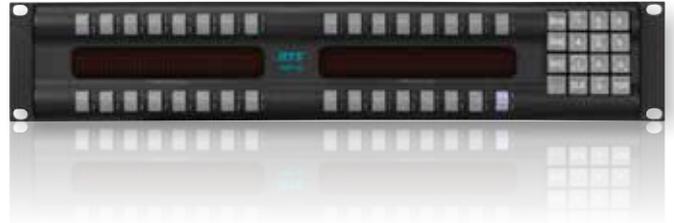
The LCP-102 functions as an analog trim panel, used to either adjust input/output gains, partyline assignments or program assignments for IFBs.



## PAP-32

### Program Assignment Panel

The PAP-32 enables routing of program sources to IFB destinations.



## PAM-32

### Program Assignment Monitor

The PAM-32 has 30 keys for monitoring inputs, one key for scrolling alpha assignments and one for headset/speaker selection.



## PAM-16

### Production Audio Monitor

The PAM-16 has 16 keys for monitoring audio inputs.



## SIP-ISDN

### SIP Telephone Interface

The SIP-ISDN has support for the SIP protocol and incorporates an ISDN basic rate interface (1x S0/2 Lines) and a LAN interface.



Power supplies are the heart of partyline intercom systems. They supply operating voltage to belt packs and many user stations. Unique, short-circuit reset circuitry design and unparalleled mechanical engineering ensures reliable, trouble-free operation for years to come. With all of the things you have to worry about, power supplies should not be one of them.

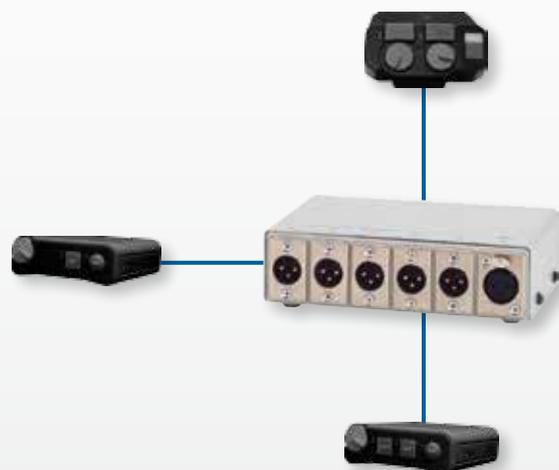


## PS-20

### Power Supply

The PS-20 is the latest power supply. The PS-20 features 2- and 4-channel operation, RTS monitoring, 2-channel program input, audio linking and 3-mode operation: RTS 2-channel, RTS 4-channel and Clear-Com mode. It also has double the power output per channel of previous RTS power supplies, which will substantially increase the number of user stations and belt packs that can be connected.

The PS-20 features two channels of communication where both channels are “wet,” meaning there is power on each channel (RTS 2-channel mode). In RTS 4-channel mode, the audio signals and DC exist on the same wire. The PS-20 can also be switched into Clear-Com mode. The PS-20 has a 3-pin XLR (male) connector on the front of the system, where a RTS user station can connect and monitor activity on either or both channels. A single PS-20 power supply has 1.8 amps per channel, which means the user can power up more stations. If additional user stations or belt packs are needed, two PS-20s can be joined together to double the power capability. A pair of standard stereo plug connectors are available on the back of the power supply to connect two PS-20s through audio linking as well. The 3-pin XLR female program input connector can be used to send audio to both CH 1 and/or CH 2.



RTS two-wire intercom master stations have been the industry standard for professional partyline communication systems for more than 25 years. With their flexible configurations, ease of use and legendary reliability, they are the elite core communications control tools.

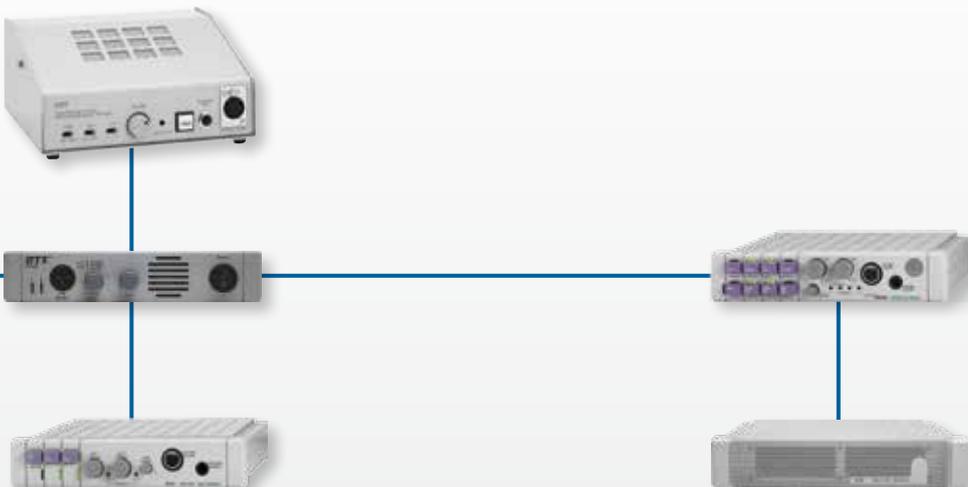
RTS two-wire intercom master stations are installed in major broadcast and industrial application venues worldwide.



## MCE-325

### 2- or 4-Channel User-Programmable Master Station

The MCE-325 is a 4-channel, programmable intercom station. It may be used as a headset station or, with the addition of the MCS-325 modular speaker, as a speaker station. It may be mounted in a console or equipment rack via optional mounting kits. The MCE-325 can be used with either 2-wire or 4-wire intercom lines, or a combination of both. The MCE-325 can be interfaced to a variety of external devices, including external program sources, 2-way radios, paging systems and satellite circuits. The MCE-325 can be ordered for 4- or 5-pin operation.



RTS two-wire intercom user stations employ a unique modular design that enables a few station types to be configured into a multitude of communications solutions. Rugged and dependable RTS two-wire intercom user stations form the widest variety of stationary communications stations in the industry. RTS two-wire intercom user stations are the perfect choice for a wide range of applications regardless of what physical profile is required. RTS is the only two-wire protocol that allows two communication channels to be connected on a single standard microphone cable.

## MRT-327

### User Station

The model MRT-327 is a 2-channel intercom station for use in RTS two-wire intercom systems. It may be used as a headset station or as a speaker station (with an optional MCS-325 modular speaker listed on page 30). The MRT-327 may be installed in optional console or rackmount configurations. The MRT-327 can be ordered for 4- or 5-pin operation.



## RM-325

### User Station

The RM-325 is a 2-channel binaural headset station. Features stereo (split-feed) operation, microphone limiter circuit, two powerful headphone amps and simplified operational controls, including individual volume adjusts. Packaged in ½-rack by 1RU metal housing for added durability.



## SPK-300L

### Portable Desktop Speaker User Station

The SPK-300L is a desktop station with built-in speaker. It can be used as a “public” listen box via built-in speaker or privately through the headset connection. Features a channel-select switch, call light, speaker on/off switch and dual-purpose portable desktop volume control. Packaged in a rugged, all-metal housing perfect for table-top operation.



## CM-300L

### Console-Mount User Station

Two-channel select, console-mount user station. Features a microphone limiter circuit, separate dynamic and carbon microphone inputs, and a silent channel select switch. Solid metal front and open back for console mounting.



## WM-300L

### Wallmount User Station

Two-channel select, wallmount headset station. Features channel select switch, call light and headset volume control. Fits in standard two-gang outlet box.



## WMS-300L

### Dual-Channel Wallmount User Station with Speaker

Two-channel select, wallmount speaker user station. Features channel select switch, call light and a speaker on/off switch. Fits in standard four-gang outlet box.



### Which user station is right for you?

Feature	MRT-327	RM-325	SPK-300L	CM-300L	WM-300L	WMS-300L
Keys	Pushbutton	Pushbutton	Toggle Switch	Toggle Switch	Toggle Switch	Toggle Switch
Mounting	Rackmount or Desktop	Rackmount or Desktop	Desktop	Console-Mount	Wallmount	Wallmount
Speaker	MCS-325	N/A	Internal	N/A	N/A	Internal
Call Light	Yes	Yes	Yes	Yes	Yes	Yes
<b>Power Consumption</b>						
Quiescent	45 mA ±10%	60 mA ±10%	10–40 mA	23 mA ±10%	10–40 mA ±10%	10–40 mA
Operating 25Ω Phones	75 mA ±10%	100 mA ±10%	50 mA	37 mA ±10%	50 mA	50 mA
Operating 25Ω Phones + Call Light	90 mA ±10%	125 mA ±10%	70 mA	60 mA ±10%	75 mA	70 mA
Operating 8Ω Speaker	240 mA ±10%	300 mA ±10%	100 mA			100 mA
Operating 8Ω Speaker + Call Light	300 mA ±10%	360 mA ±10%				

Using the latest in space-age materials, RTS two-wire intercom beltpacks are mechanically engineered to be rugged and dependable. Unique audio circuitry is perfect for either high- or low-noise environments while maintaining maximum voice intelligibility.

## BP-319

### Single-Channel Portable Metal Beltpack

The BP-319 is a portable beltpack for use with RTS two-wire intercom systems. The BP-319 is a microprocessor controlled one-channel intercom beltpack. The BP-319 has connections for headset/earset microphones (dynamic or electret). The beltpack has an autosensing function that automatically detects the headset mic and powers it if the mic is electret. The BP-319 consumes 45 to 70 mA of power.



## BP-351

### Dual-Channel Portable Metal Beltpack

The BP-351 is a portable beltpack for use with RTS two-wire intercom systems. The BP-351 is a microprocessor controlled 2-channel select intercom beltpack. The BP-351 has connections for headset/earset microphones (dynamic or electret). The beltpack has an autosensing function that automatically detects the headset mic and powers it if the mic is electret. The BP-351 consumes 45 to 70 mA of power.



## BP-325

### Dual-Channel Binaural Programmable Beltpack

The BP-325 is a portable beltpack for use with RTS two-wire intercom systems. The BP-325 is a binaural (stereo), programmable 2-channel beltpack with program-input capability. For use with a dynamic microphone only. The BP-325 consumes 65 to 85 mA of power.



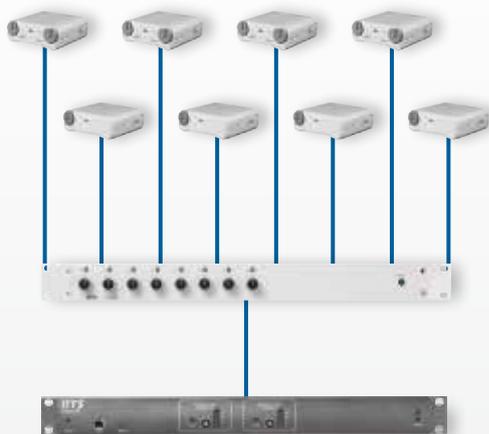
Interrupt Fold Back (IFB) is a broadcast term used to describe the process of cueing on-air talent. RTS IFB equipment is designed with a modular approach that meets the needs of not only large television networks, but can also be configured for any one-way communication needs. With multiple program audio sources and individual or simultaneous interrupts, the RTS series of IFB and ISO products is perfect for any talent-cueing need.

The 4010 is a central IFB electronics station. It contains all necessary control functions and electronics, including line power, to provide an active link between the 4001, 4002 and 4003 control stations and the 4030 and IFB-325 user stations.

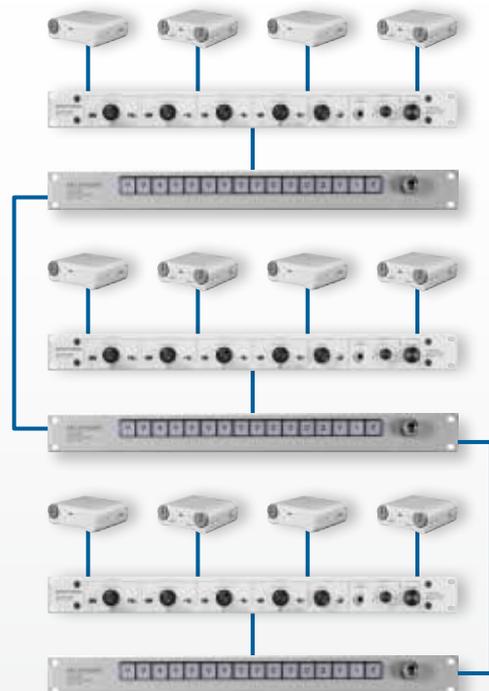
The IFB-828 interfaces up to eight 4030 or IFB-325 beltpacks to any RTS digital matrix intercom system and provides power to the beltpacks. The IFB-828 may also be used as a simple program interface to feed two separate program sources to each of eight 4030 beltpacks (16 program sources to eight beltpacks total).

The 4030 and IFB-325 are listen-only beltpacks with two and one channels, respectively. The 4030 contains electronics to provide a stereo audio signal to the user. The IFB-325 provides a mono (either interrupt/non-interrupt selected via 4010) audio signal to the user. The 4030 and IFB-325 feature volume controls in extruded aluminum cases. For earset options see page 34.

The 4001 and 4003 are IFB control stations with four and 12 channels, respectively, thus the control stations separate talent feeds per channel plus one Stage Announce send. The control stations feature two distinct audio sends per IFB channel for interrupt/non-interrupt or multiple program feeds. Each unit has illuminated switches, supports four priority levels and a gooseneck mic connector. An optional rack kit is also available. Requires one 4010 central IFB. 4001 is not displayed.



Digital Matrix IFB System



Partyline IFB System

RTS offers a full line of products to complete your communications system, including interfaces to partyline intercoms, cables, 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.

RTS two-wire intercom source assignment panel accessories are a key element in large, high-end RTS two-wire intercom partyline systems. With the ability to turn a standard 2-bus communications system into a 12 or more bus configuration, source assignment panels are vital to system expansion. Increasing the number of usable communication busses allows the system to be tailored to individual user needs.

## SAP-1626

2RU Source Assignment Panel

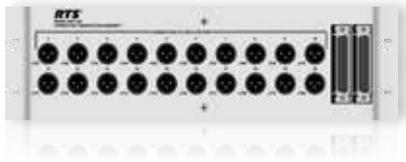
It assigns any one of 12 intercom channels and/or three program audio channels to 26 separate 2-channel user stations via convenient thumb-wheel switches. I/O provided via two 50-pin connectors. Normally used in conjunction with a BOP-220.



## BOP-220

3RU Breakout Panel, I/O Connector Transition Assembly

It provides a convenient interface between a SAP-1626 (25 pair 50-pin) and up to 20 user stations or strings of stations (3-pin XLR male).



## LMS-325\*

(Active) Line-Monitor Speaker Station

Part of RTS's unique modular packaging system. Features a full-range, 5 W speaker and power amp, dual-channel inputs from 2-wire or separate program inputs, and volume control. Packaged in 1/2 rack by 1RU metal housing for added durability and magnetically shielded for use near video monitors.

\* LMS-325 available in select countries



## MCP-90

Electret Gooseneck Microphone

### MCP-90-0

0" Gooseneck Microphone

### MCP-90-8

8" Gooseneck Microphone

### MCP-90-12

12" Gooseneck Microphone

### MCP-90-18

18" Gooseneck Microphone



## SAP-612

Source Assignment Panel

It transforms a basic 2-bus intercom system into a 6-bus system via convenient slide switches. Provides six input channels and 12 2-channel 2-wire user station strings. I/O provided via two 1/4", three 3-pin XLR female and twelve 3-pin XLR male connectors. Contains XLR jacks for RTS power supply.



## MCS-325

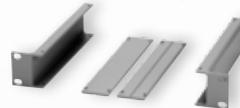
Passive Modular Speaker

It can be combined with MCE-325 and MRT-327 to provide speaker station operation. Packaged in 1/2 rack by 1RU metal housing for added durability.



## MCP-1

Mounting Bracket for Two Main Components



## MCP-2

Single Rackmount Kit



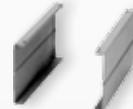
## MCP-3

Mounting Kit for One Main Component



## MCP-4

Tandem Mount Kit for Two Main Components



## CIA-1000

Call Light Indicator Assembly



\* CIA-1000 available in select countries

## TW-5W

1 x 5 Dual-Channel 3-Pin XLR-Type Passive Splitter

## TW-7W

One XLR-3F into Seven XLR-3M Out

## 4022

1 x 2 25 pair, 50-pin passive splitter

## 4025A

1 x 4 50-pin passive splitter



## MS-2002 Dual-Channel Master Station

### MS-4002\* Four-Channel Master Station

The master stations provide unique balanced audio design that allows users to utilize the longest 2-wire partyline cable runs in the industry. The master stations offer users the ultimate in performance and flexibility. Operators can utilize headset or speaker/mic operation and have full access to all intercom channels—both individually and as “all talk”. The master station users can also utilize innovative features such as the “remote mic kill” function to silence any open mic on the intercom channel so that extraneous noise can be eliminated, backlit lettered buttons for darkened environments and the ability to operate in an unbalanced mode to be completely Clear-Com compatible.

\* MS-4002 available in select countries



## BP-1002

### Single-Channel Beltpack

Portable 1-channel beltpack headset station for mobile users. High-quality audio system with mic limiter circuit. Rugged, low-profile metal case with sturdy beltclip. 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. 3-pin male and female XLR loop-through connectors for partyline connection. 4-pin male XLR headset connector. Powered from partyline. Clear-Com compatible.



## BP-2002

### Dual-Channel Beltpack

Portable 2-channel beltpack headset station for mobile users. Identical to BP-1002 with the following differences: Includes partyline select switch with partyline one and two indicator lights. 6-pin male and female XLR loop-through connectors for 2-channel connection. Powered from partyline. Clear-Com compatible.



## SS1002

### Single-Channel Speaker Station

The single-channel can be used as speaker station and/or headset station. Features include headset operation for noise reduction and privacy; dual-purpose level control, which adjusts both the speaker volume and the headset listen volume; “remote mic kill” receive enabled so an open mic can be silenced from any user or master station; and backlit buttons for darkened environments. Clear-Com compatible.



## PS4001

### Four-Channel Power Supply

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 standalone power supply to provide power to four independent partyline channels. Rack mountable in a variety of modular configurations with one of several optional rack mount kits. Clear-Com compatible.



## 19" Rackmount Products

Product	Height	Depth	Weight	Color
<b>4010</b>	1RU	15" (38.1 cm)	10.74 lb (4.87 kg)	Grey
<b>4012</b>	3RU	5.06" (12.86 cm)	3.72 lb (1.69 kg)	Silver
<b>ADAM</b>	7RU	21" (53.34 cm)	48 lb (21.77 kg)	Grey
<b>ADAM-M</b>	3RU	21" (53.34 cm)	22.05 lb (10.00 kg)	Duotone
<b>ARNI</b>	2.75"	8" (20.32 cm)	6.52 lb (2.96 kg)	Grey
<b>BOP-220</b>	3RU	5" (12.7 cm)	2.43 lb (1.1 kg)	Silver
<b>Cronus</b>	2RU	13.25" (33.66 cm)	14.15 lb (6.41 kg)	Grey
<b>CSI-200</b>	1RU	8.25" (20.96 cm)	2.2 lb (1 kg)	Grey
<b>DSI-2008</b>	1RU	8.25" (20.96 cm)	2.9 lb (1.32 kg)	Grey
<b>EKP-20</b>	1RU	7.13" (18.1 cm)	4.6 lb (2.09 kg)	Black or Grey
<b>EKP-32</b>	2RU	5" (12.7 cm)	5.6 lb (2.54 kg)	Black or Grey
<b>EKP-4016</b>	1RU	3.25" (9.85 cm)	2.95 lb (1.34 kg)	Duotone
<b>GPIO-16</b>	1RU	7" (17.78 cm)	5.48 lb (2.49 kg)	Grey
<b>ICP-2000</b>	1RU	0.75" (1.91 cm)	0.89 lb (0.4 kg)	Black
<b>IFB-828</b>	1RU	7" (17.78 cm)	8.84 lb (4.01 kg)	Grey
<b>KP 12 CLD</b>	1RU	4.28" (10.87 cm)	3.76 lb (1.71 kg)	Duotone
<b>KP-12</b>	1RU	5.5" (14 cm)	5.1 lb (2.31 kg)	Black
<b>KP-32</b>	2RU	5" (12.7 cm)	6.4 lb (2.9 kg)	Black
<b>KP-32/16</b>	2RU	5" (12.7 cm)	5.9 lb (2.68 kg)	Black or Grey
<b>KP-5032</b>	2RU	3.25" (9.85 cm)	4.89 lb (2.22 kg)	Duotone
<b>KP-4016</b>	1RU	3.25" (9.85 cm)	3.5 lb (1.58 kg)	Duotone
<b>LCP-102</b>	2RU	7.13" (18.1 cm)	8.28 lb (3.76 kg)	Black or Grey
<b>LCP-12, 20</b>	1RU	6.63" (16.83 cm)	3 lb (1.36 kg)	Black or Grey
<b>LCP-32/16</b>	1RU	1.75" (4.45 cm)	3 lb (1.36 kg)	Black or Grey
<b>LMS-325</b>	1RU	8" (20.32 cm)	2.76 lb (1.25 kg)	Grey
<b>MCE-325</b>	1RU	8" (20.32 cm)	4.5 lb (2.04 kg)	Grey
<b>MCS-325</b>	1RU	8.25" (21 cm)	2.52 lb (1.14 kg)	Grey
<b>MDA-100</b>	1RU	8.5" (21.59 cm)	7.38 lb (3.35 kg)	Grey
<b>MKP-12</b>	1RU	8" (20.3 cm)	4.96 lb (2.25 kg)	Black or Grey
<b>MKP-4</b>	1RU	8.25" (21 cm)	2.82 lb (1.28 kg)	Grey
<b>MRT-327</b>	1RU	9" (22.86 cm)	2.75 lb (1.25 kg)	Grey
<b>PAM-16</b>	1RU	5" (12.7 cm)	4.5 lb (2.04 kg)	Black
<b>PAM-32</b>	2RU	3.5" (9 cm)	3.86 lb (1.75 kg)	Black or Grey
<b>PAP-32</b>	2RU	4.5" (11.43 cm)	5.58 lb (2.53 kg)	Black or Grey

Product	Height	Depth	Weight	Color
PS-20	1RU	8.56" (21.75 cm)	5 lb (2.27 kg)	Grey
RKP-4B	1RU	9" (22.86 cm)	3.5 lb (1.59 kg)	Black
RM-325	1RU	8" (20.32 cm)	2.75 lb (1.25 kg)	Grey
RP-1000	2RU	3.25" (8.25 cm)	6.3 lb (2.86 kg)	Duotone
RP-1932	2RU	3.25" (8.26 cm)	6.3 lb (2.86 kg)	Duotone
RVON-I/O	1RU	8" (20.32 cm)	3.7 lb (1.67 kg)	Grey
SAP-1626	2RU	9.8" (24.89 cm)	10 lb (4.54 kg)	Grey
SAP-612	1RU	8" (20.32 cm)	4.52 lb (2.05 kg)	Grey
SIP-ISDN	1RU	8.5" (21.59 cm)	3 lb (1.36 kg)	Duotone
SSA-324	1RU	8.25" (20.96 cm)	2.7 lb (1.22 kg)	Grey
SWP-2000	1RU	5.75" (14.61 cm)	4.6 lb (2.09 kg)	Black
TIF-2000A	1RU	8.25" (20.96 cm)	2.25 lb (1.13 kg)	Grey
TIF-4000	4RU	13" (33.02 cm)	28.45 lb (12.9 kg)	Grey
TM-10K	2RU	12" (30.48 cm)	26.78 lb (12.15 kg)	Black
Zeus III	1RU	15" (38.1 cm)	7 lb (3.18 kg)	Duotone
Zeus III LE/LE+	1RU	15" (38.1 cm)	7 lb (3.18 kg)	Duotone

#### Non-Rackmount Products

Product	Form Factor	Height	Width	Depth	Weight	Color
4030	Beltpack	1.5" (3.8 cm)	3.75" (9.53 cm)	1.8" (4.57 cm)	0.67 lb (0.3 kg)	Grey
BKP-4	Desktop	5.06" (12.86 cm)	9.25" (23.5 cm)	8" (20.32 cm)	3.2 lb (1.45 kg)	Grey
BP-319	Beltpack	5" (12.7 cm)	3.5" (8.89 cm)	1.8" (4.57 cm)	0.75 lb (0.34 kg)	Black or Grey
BP-325	Beltpack	5" (12.7 cm)	3.75" (9.53 cm)	2.05" (5.21 cm)	0.5 lb (0.23 kg)	Black or Grey
BP-351	Beltpack	5" (12.7 cm)	3.5" (8.89 cm)	1.8" (4.57 cm)	0.75 lb (0.34 kg)	Black or Grey
CIA-1000 Front	Rackmount or Desktop	1RU	8.19" (20.8 cm)	5.56" (14.13 cm)	0.94 lb (0.43 kg)	Grey
CIA-1000 Top	Desktop	2" (5.08 cm)	8.19" (20.8 cm)	5.25" (13.34 cm)	0.94 lb (0.43 kg)	Grey
CM-300L	Console Mount	2.75" (6.99 cm)	6.25" (15.88 cm)	6.4" (16.26 cm)	1.2 lb (0.54 kg)	Grey
DKP 16 CLD	Desktop	3.2" (8.13 cm)	10.1" (25.65 cm)	9.2" (23.37 cm)	3.78 lb (1.71 kg)	Duotone
DKP-8, 12	Desktop	3.75" (9.53 cm)	9" (22.86 cm)	7.25" (18.42 cm)	4.58 lb (2.08 kg)	Grey
IFB-325	Beltpack	1.5" (3.8 cm)	3.75" (9.53 cm)	1" (2.54 cm)	1 lb (0.45 kg)	Grey
KP-8T	Tektronix WFM	5.2" (13.21 cm)	8.38" (21.29 cm)	9" (22.86 cm)	10.9 lb (4.94 kg)	Grey
RKP-4	Beltpack	5.35" (13.59 cm)	3.75" (9.53 cm)	2.02" (5.13 cm)	1.2 lb (0.55 kg)	Black
SPK-300L	Desktop	4" (10.16 cm)	8" (20.32 cm)	8" (20.32 cm)	3.5 lb (1.59 kg)	Grey
WKP-1	Wallmount	4.5" (11.43 cm)	4.5" (11.43 cm)	2.75" (7 cm)	0.79 lb (0.36 kg)	Grey
WKP-4	Wallmount	6.5" (16.51 cm)	9" (22.9 cm)	2.5" (6.35 cm)	1.32 lb (0.6 kg)	Grey
WM-300L	Wallmount	4.5" (11.43 cm)	4.5" (11.43 cm)	1.81" (4.6 cm)	0.56 lb (0.25 kg)	Grey
WMS-300L	Wallmount	4.5" (11.43 cm)	8" (20.32 cm)	1.75" (4.45 cm)	1 lb (0.45 kg)	Grey

RTS offers a wide variety of headset styles to choose from, including lightweight and full-cushion headsets in either single or dual-sided versions. We also have hearing protection headsets that offer noise reduction of up to 24 dB and earset selections that can accommodate all applications.

Most headsets feature our latest flexible boom arms and are terminated with an A4M connector for compatibility with RTS intercom systems. Most headsets are also available with an A5M connector or unterminated.

#### The right headset for the right application

Feature	PH-88, -44	MH-300, -302	PH-1, -2	HR-1, -2
Single Sided	PH-88	MH-300	PH-1	HR-1
Dual Sided	PH-44	MH-302, -402	PH-2	HR-2
Weight W/O cord	2.5 oz, 3 oz	8 oz, 10 oz, 10 oz	11 oz, 13 oz	11 oz, 15 oz
Noise Reduction Dual-Sided Models Only		MH-402: 12 dB		21 dB
Mic Type	Flexible Dynamic Noise-Cancelling	Flexible Dynamic Noise-Cancelling	Flexible Dynamic Noise-Cancelling	Flexible Dynamic Noise-Cancelling
Mic Sensitivity	-65 dBV/Pa @ 1 cm			
Mic Frequency Range	200 Hz – 10 kHz	200 Hz – 10 kHz	200 Hz – 6 kHz	150 Hz – 8 kHz
Mic Impedance	200 Ω	200 Ω	150 Ω	200 Ω
Speaker Sensitivity	109 dB SPL @ 1 kHz, 1 mW	100 dB SPL @ 1 kHz, 1 mW	95 dB SPL @ 1 kHz, 1 mW	95 dB SPL @ 1 kHz, 1 mW
Speaker Frequency Range	100 Hz – 7 kHz	100 Hz – 10 kHz	100 Hz – 10 kHz	100 Hz – 10 kHz
Speaker Impedance	300 Ω, 150 Ω	150 Ω	300 Ω, 150 Ω	300 Ω, 150 Ω

## RTS Announcer Earsets

The popular RTS earsets are precisely designed for inconspicuous listening while on camera. Used by nearly all major television networks and stations, we have surpassed industry standards. The extremely efficient miniature driver element requires only nominal operating power and enables the announcer to hear program cues while working with a live microphone. The units are also suitable for many other applications, such as live-theater script prompting.



PH-88



PH-44



## PH-88 & PH-44

### Lightweight Headsets

The PH-88 and PH-44 are super lightweight headsets for the ultimate in daylong comfort. They offer a dynamic noise-cancelling gooseneck microphone with a semi-rigid, fully adjustable boom for precise positioning. The high-quality wide band dynamic earphones are covered in supple leather-style material for superior fit, isolation and frequency response.

PH-1



PH-2



## PH-1 & PH-2

### Full-Cushion, Medium Weight Headsets

The PH-1 and PH-2 series of medium-weight intercom headsets is considered the industry-standard by many users in all applications. With a weight of only 11 oz and 13 oz respectively, these headsets offer the ultimate in daylong comfort.

MH-300



MH-402



## MH-300 & MH-302

### Premium Lightweight Headsets

RTS MH single- and dual-sided headsets combine a unique, multifunctional modular design with low-profile, lightweight construction. Two models are available. MH-300 single-sided headset and MH-302 dual-sided headset.

HR-1



HR-2



## HR-1 & HR-2

### Medium Weight Headsets

The HR-1 and HR-2 are medium-weight passive noise reduction headsets with dynamic noise-canceling microphones. The headsets have a noise reduction rating of 21 dB; suitable for use in a moderately noisy environment. The ergonomic moleskin-covered headband design distributes pressure evenly with no pressure points, ensuring hours of comfortable wear. This headset folds into a compact form for ease of storage.



For information on any of the products featured in this catalog, you can reach us at [info@rtsintercoms.com](mailto:info@rtsintercoms.com)

Please visit the RTS website at: [www.rtsintercoms.com](http://www.rtsintercoms.com)

## **EUROPE, MIDDLE-EAST & AFRICA**

### **EUROPE**

Bosch Sicherheitssysteme GmbH (EVI Audio GmbH)  
Sachsenring 60 | D-94315 Straubing | Germany  
Phone: +49 9421 706-0 | Fax: +49 9421 706-265

### **MIDDLE-EAST & AFRICA**

Robert Bosch Middle East FZE  
Dubai Airport Free Zone | West Wing | 6B office 535  
Box 54307 | Dubai | UAE  
Phone: +971 4 2123308 | Fax: +971 4 212 3388

### **EMEA TECH. SUPPORT**

Bosch Security Systems Ltd.  
P.O. Box 750 | Broadwater Park | Denham UB9 5HJ | United Kingdom  
Phone: +44 (0) 189587 8055  
E-mail: [support.emea@rtsintercoms.com](mailto:support.emea@rtsintercoms.com)