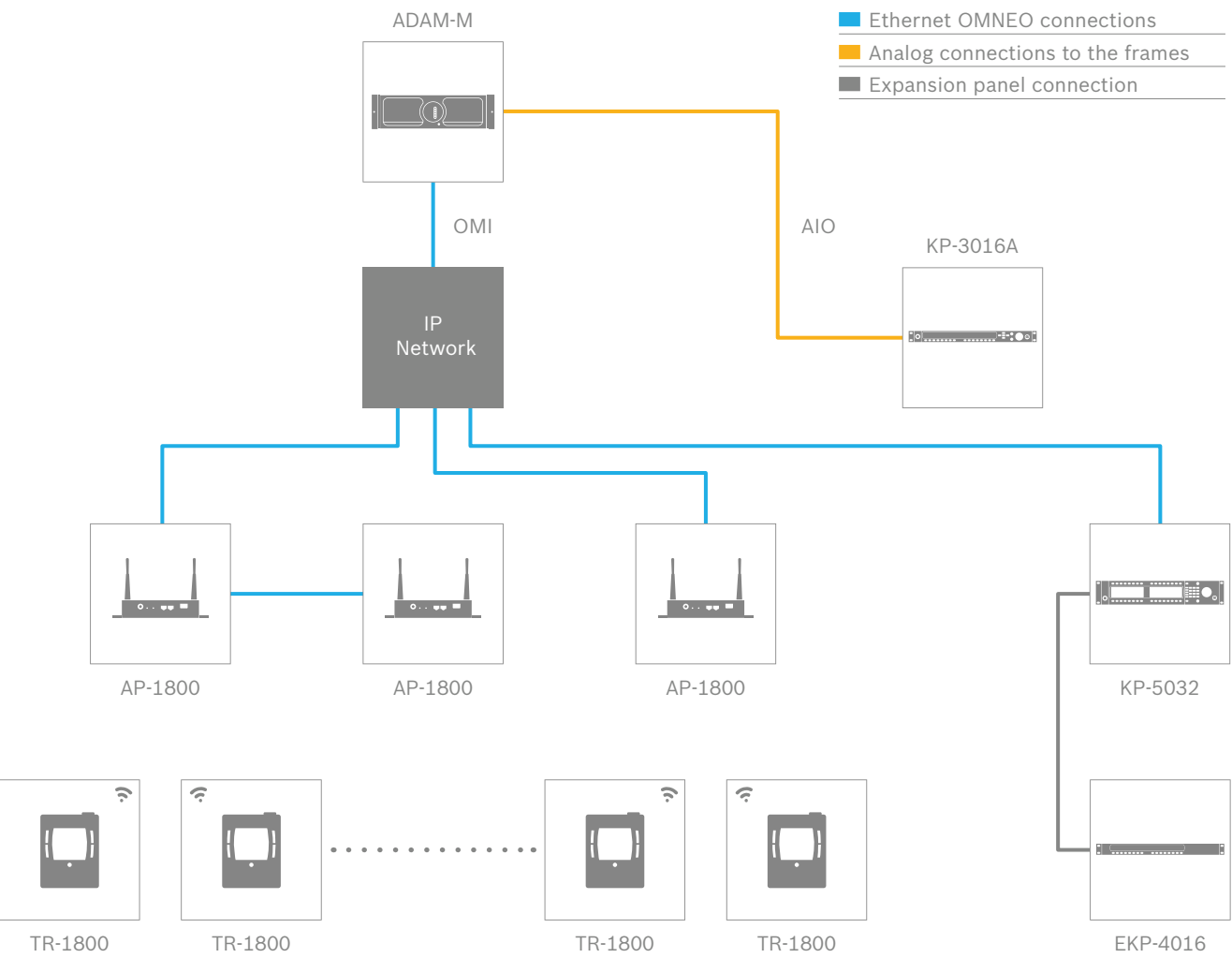# EXPANDING
THE SYSTEM.

ROAMEO's cellular structure can cover a wide area with superior audio and seamless roaming between the individual cells. Each cell requires an AP-1800 access point and covers a specified area and number of beltpacks, depending on the audio codec used. Each AP-1800 has a built-in IP switch that adds multiple streams together in the same cable and will configure itself automatically.

Users can easily expand the coverage area by adding further access points, while additional wireless beltpacks can be directly addressed as part of a wired RTS matrix intercom system. Depending on the audio codec used, users can select between a higher emphasis on voice quality (G.722 full bandwidth) or a more efficient use of the radio spectrum with a higher number of beltpacks (G.726 narrow-band).

The ROAMEO system is an environmentally friendly system without any dangerous emissions at low radiation. It is compliant with the US environmental regulation N33.6.

ROAMEO
CELLULAR DECT-BASED
WIRELESS INTERCOM SYSTEM

Technical Specifications

Overall	TR-1800 (EU)	TR-1800 (NA)	AP-1800 (EU)	AP-1800 (NA)
Function	Beltpack (BP)		Access Point (AP)	
RF Frequency Range MHz	1880 – 1900	1920-1930	1880 – 1900	1920 – 1930
RF Standard	DECT			
RF range, typical	50 – 75 m indoor, 150 – 200 m outdoor			
Voice Codecs	G.722 (wideband) / G.726 (narrowband)			
Voice latency (ms)	Approx 40 ms BP to BP; 30 ms BP to matrix and matrix to BP			
Product Dimensions mm (W x H x D)	102 x 124 x (42 w/o clip, 59 w. clip)		195 x 138 x 39	
Product Weight kg	0.349 w. clip & batt.		0.442 w. antennas	
Shipping Dimensions mm (W x H x D)	244 x 99 x 144		287 x 99 x 194	
Shipping Weight	0.68 kg (1.50 lbs)		0.86 kg (1.90 lbs)	
IP-rating	IP-52		Indoor only	
Frequency Response	300 – 7000 Hz (G.722), 300 – 3500 Hz (G.726)			

Beltpack TR-1800	
Roaming	Full, automatic
Max BPs / AP	5 (G.722), 10 (G.726)
Max BPs / system	40
Headset	5-pin female XLR
Battery time	17 hours
Keys for talk/listen	4x2 + reply & clear
User interface	Icons plus text
Languages	10
Menu keys	4
Screen	320x240 pixel color LCD
Call Waiting Window	monochrome
Antenna arrangement	Dual, internal

Access Point AP-1800	
Audio, AP to matrix	OMNEO
Max APs / system	10 (EU) / 5 (NA)
Typical power, W	6,5
Antenna type	Detachable, adjustable
Characteristics	3dBi gain, omni-directional
Mounting	Surface or pole (w clamp)
Voltage	12 V DC, external

ADAM-M

OMI   AIO   KP-3016A

IP Network

■ Ethernet OMNEO connections
■ Analog connections to the frames
■ Expansion panel connection

AP-1800   AP-1800   AP-1800   KP-5032

TR-1800   TR-1800   TR-1800   TR-1800   EKP-4016

For further information, you can reach us at **info@rtsintercoms.com**
Please visit the RTS website at: **www.rtsintercoms.com**

RTS

USER-FRIENDLY, SEAMLESS COMMUNICATION IN LARGE AREAS.

RTS is one of the market leaders in live production intercoms and its products stand for failure-free, professional intercom systems considered by many as industry standard. The new ROAMEO wireless intercom system from RTS is a professional, easy-to-use and future-proof solution based on the license-free DECT (Digital Enhanced Cordless Telecommunications) standard with a protected frequency band. ROAMEO provides high-quality audio and a large number of simultaneous users across wide areas over a seamlessly integrated digital wireless beltpack and associated access points.
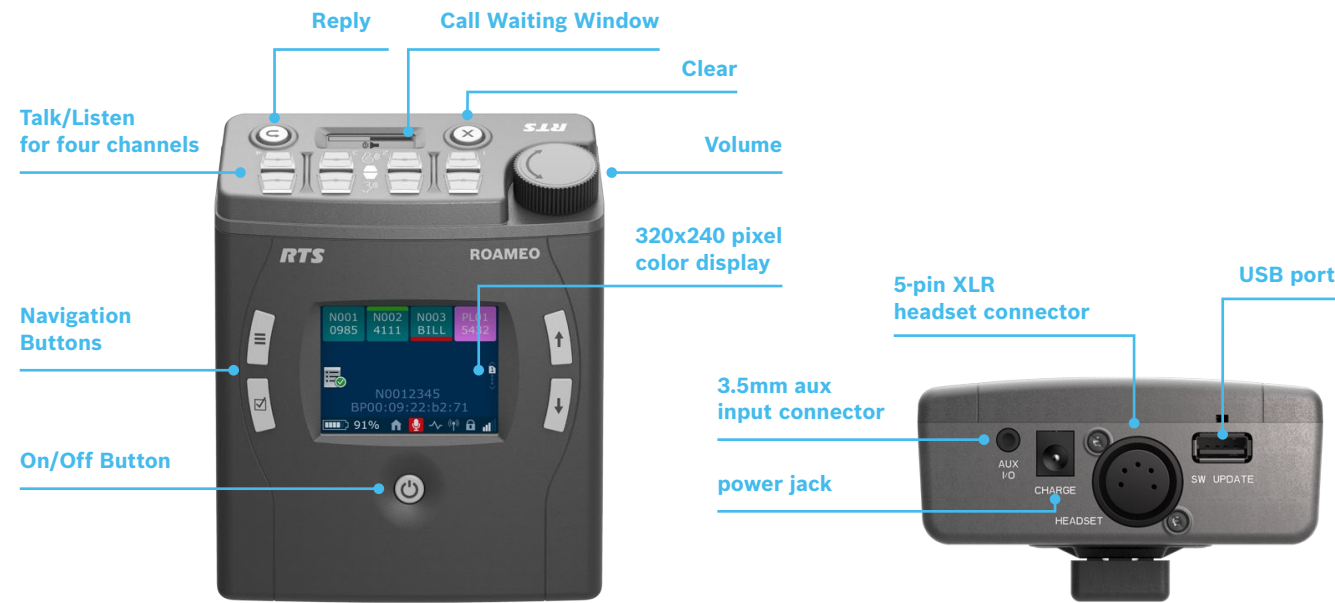
Featuring a modern, rugged design, ROAMEO is suitable for a wide range of professional intercom applications where wireless communication is critical, including broadcast production studios, theater and sports productions, houses of worship, commercial buildings and outside broadcast (OB) trucks.

ROAMEO can solve a series of communication challenges by operating like a wireless keypanel in the field which is easy to use and easy to expand. Additionally, wireless beltpacks can be directly addressed as part of a wired RTS matrix intercom system.

The system consists of the TR-1800 beltpack, the AP-1800 access point and accessories including charger, holster and pole-mount kit.

THE TR-1800 BELTPACK

Reply
Call Waiting Window
Clear
Talk/Listen for four channels
Volume
320x240 pixel color display
5-pin XLR headset connector
USB port
Navigation Buttons
3.5mm aux input connector
On/Off Button
power jack

USER-FRIENDLY, INTUITIVE OPERATION.

ROAMEO provides a superior user experience – the system can be easily configured in a multi-language set-up via scroll lists on the TR-1800 beltpacks or using the control software AZedit, which allows users to configure the complete intercom system on one screen. Thanks to its large color LED-display and intuitive icon-based menu structure, the TR-1800 beltpack is very easy to set up and operate. The four talk/listen buttons are shaped differently and provide users with a tactile feedback; the operation of the device is thus possible without the need to look at it. With its lightweight, durable housing, the beltpack features the smallest enclosure in its class and is protected against dust and light rain. Sophisticated circuits guarantee optimized sound performance using state-of-the-art echo cancellation algorithms. Both the beltpack and access point firmware are easy to update without disassembly. The software of the TR-1800 beltpack can be upgraded easily using an USB Flash Drive.

Home

Settings

Level Adjust

Alerts

Assignments

Advanced Settings

Languages

THE AP-1800 ACCESS POINT

COMPATIBLE AND RELIABLE.

Operating like a wireless keypanel, ROAMEO can be fully integrated into all existing digital RTS matrices. The system allows users to address either individuals or specified groups. Connection to a digital matrix is easily established via a single Ethernet cable; the access points can be daisy-chained. The AP-1800 access point is protected by a durable aluminum enclosure and designed for a minimum of spatial requirements on vertical or horizontal wall surfaces.

The AP-1800 access points convert the DECT signals into Dante-compatible OMNEO IP-technology, thereby providing the highest interoperability, flexibility, reliability and resilience – a truly future-proof solution which also provides connectivity to a wide range of third-party products. OMNEO enables a secure setup at a competitively low system cost due to the use of standard IT components, simplified installation and lower maintenance costs.

DECT

DECT (Digital Enhanced Cordless Telecommunications) is a digital wireless radio technology for voice data applications that originated in Europe. It is a worldwide established standard used primarily in home and small office systems, but also available in many private branch exchange (PBX) systems for medium and large businesses using multiple base stations for coverage. This sophisticated technology features high voice quality and supports seamless handover when switching cells. The frequency band that is reserved for voice transmissions, is called Unlicensed Personal Communications Services. These channels are reserved exclusively for voice communication applications, which is why DECT is future-proof and operates clearly even in common congested domestic radio traffic situations, and is immune to interference.