RTS

NOMAD Wireless Intercom - TR-1000

▶ IP-65 Rating for Outdoor Use

▶ Up to 16 full-duplex channels with call features

▶ Glitch-free and Redundant Audio & Control

▶ Full-duplex embedded microphone and front speaker with AEC for hands-free communication

▶ Bring your own headset - Multiple XLR pin-outs and 3.5mm headset jack

The RTS Nomad Wireless Intercom System is an integrated digital wireless communications system consisting of beltpacks and access points communicating over encrypted DECT (Digital Enhanced Cordless Telecommunications) wireless technology. Communication between the access points and the Matrix uses OMNEO technology, the Dante-based platform for high-quality audio over IP. DECT is a license-free, globally accepted standard for wireless communication.

The TR-1000 provides access to user select full duplex audio channels (or a mix of audio channels) with call features and flexible programming via the beltpack and RTS Intercom software. Beltpacks are able to "roam" between remote transceiver (access point) locations with seamless communication.

The solid design of the RTS Nomad Wireless Intercom System is matched by the strength and flexibility of the communication system it supports. Integrating effortlessly with digital wired and legacy analog systems, Nomad redefines team coordination by wirelessly providing 16 channels of encrypted glitch-free audio and control to intercom users wherever they may roam.

Technical specifications

General

	TR-1000 Beltpack
Audio	BV32 wideband audio
Bandwidth (over DECT)	20 Hz - 7.5 kHz
Backlit display	Color, 240 x 240 pixel, TFT
Removable battery pack	Li-Ion pack, 3.7 VDC, 6840 mAh
Typical battery life	18 hours
Wireless encryption	AES256

Environmental

	TR-1000 Beltpack
Operating temperature (°F)	14 °F - 104 F
Operating temperature (°C)	-10 C - 40 C
Storage temperature (°F)	-4 °F – 140 °F
Storage temperature (°C)	-20 °C – 70 °C
Dimensions (H x W x D) (in)	5.63 in x 3.90 in x 2.17 in
Dimensions (H x W x D) (mm)	143 mm x 99 mm x 55 mm
Weight (lb)	1.23 lb

	TR-1000 Beltpack
Weight (kg)	0.56 kg
Ingress protection (IP)	IP-65

Controls

	TR-1000 Beltpack
Level controls	Two rotary encoders
Talk/Listen control	4 top panel talk buttons (listen function programmable)
Full-Duplex audio paths	Up to 16
Number of assignment pages	4
Call waiting control	Reply and Clear functionality
Main menu sub-menus	Beltpack, Audio, Favorites, Setup, Pre-sets, Status

Connections

		TR-1000 Beltpack
Headset connectivity		XLR-5F, XLR-4F, XLR-4M (User replaceable)
		3.5mm
XLR		
	Microphone	Dynamic or Electret (auto-detect)
	Headset impedance	150 Ω nominal (32 Ω - 600 Ω)
3.5mm		
	Microphone	Electret only
	Headset impedance	32 Ω - 600 Ω
	Aux in	1 Vrms (nominal), 20 Hz - 20 kHz (+0/-1 dB)
	Aux out	1 Vrms (nominal), DECT: 20 Hz - 7.5 kHz
USB-C		
	In-beltpack charging jack	Yes
	Firmware update jack	Yes
Lanyard		Integrated lanyard clip connection points

Internal Microphone

	TR-1000 Beltpack
Type	Embedded
Typical input	80 dBSPL
Max. input	100 dBSPL
Bandwidth	20 Hz - 20 kHz (+0/-3 dB)
	20 Hz - 5 kHz (+0/-1 dB)

Internal Speaker

	TR-1000 Beltpack
Nominal output	84 dBSPL (1 kHz @ ½ meter)
Max. output	94 dBSPL (1 kHz @ ½ meter)
Frequency range	350 Hz - 6 kHz (+0/-3 dB)

DECT Communications

	TR-1000 Beltpack
RF frequency range (MHz)	1,920 MHz - 1,930 MHz (US, Canada)
	1,880 MHz - 1,900 MHz (EU = Europe, Asia, Australia)
	1,894 MHz - 1,906 MHz (Japan)
	1,910 MHz - 1,930 MHz (Mexico, South America)
Communication protocol	DECT
Frequency selection	Automatic via DCS (Dynamic Channel Selection)
Modulation	DBPSK
Antennas DECT	Dual, internal inverted F antennas
Delay-spread and multi-path RF protection	Next generation DECT channel compensation
Maximum peak RF output power (mW)	100 mW (20 dBm) (US, Canada, Malaysia)
	250 mW (24 dBm) (Europe, Mexico, South America, Japan)
Average power (US, Canada, Malaysia)	4 mW
Average power (Europe, Mexico, South America, Japan)	10 mW

Bluetooth Low Energy Communications

	TR-1000 Beltpack
BLE 5.3 frequency range	2400 - 2483.5 MHz
Communication protocol	BLE 5.3
Modulation	GFSK
Antenna	Internal ¼-wave
Maximum output power	1 mW

Ordering information

TR-1000 US 4F Belt pack US/Can, 4F
IP-65 wireless beltpack providing up to 16 full-duplex
audio channels with call features. Requires AP-1000.
Order number **TR-1000 US 4F | F.01U.425.679**

TR-1000 US 4M Belt pack US/Can, 4M
IP-65 wireless beltpack providing up to 16 full-duplex
audio channels with call features. Requires AP-1000.
Order number **TR-1000 US 4M | F.01U.425.621**

TR-1000 US 5F Belt pack US/Can, 5F
IP-65 wireless beltpack providing up to 16 full-duplex
audio channels with call features. Requires AP-1000.
Order number **TR-1000 US 5F | F.01U.425.680**

Accessories

BP-1000 TR-1000 spare battery
State-of-art Li-Ion, prismatic, rechargeable
battery Order number **BP-1000 | F.01U.425.739**

TR-1000-XLR4F XLR cartridge 4-pin female XLR4F
XLR Cartridge 4 Pin Female
Order number **TR-1000-XLR4F | F.01U.425.711**

TR-1000-XLR4M XLR cartridge 4-pin male XLR4M
XLR Cartridge 4 Pin Male
Order number **TR-1000-XLR4M | F.01U.425.710**

TR-1000-XLR5F XLR cartridge 5-pin female XLR5F
XLR Cartridge 5 Pin Female
Order number **TR-1000-XLR5F | F.01U.425.712**