



## TECHNICAL DATA SHEET

Model TMR2MS24INCC

### ABOUT

The Tempest MasterBelt is ideal for mobile production and offers all the advanced features, reliability, and robustness of the Tempest2400 rack-mount BaseStation in a compact, portable, and easy-to-deploy package that can be conveniently worn on the hip. The Tempest MasterBelt is designed to act as a Tempest BaseStation. This enables the Tempest Wireless technology to be used in applications where users move together within the same workspace. Because the "Base" is a "Belt"—there is added flexibility for the group to be on-the-go. When ordering, reference Part Number **TMP-MS224** (or **TMP-MS224-EU** for European sales).

### FEATURES & BENEFITS



- Tempest BeltStation that acts as a BaseStation
- Compatible with all Tempest2400 BeltStations
- Ideal for mobile, on-the-go applications where wireless communications are needed
- Tour guides, camera crews, utility crews, and any application where users move together
- 2.4GHz worldwide, license free operation
- Patented FHSS transmission scheme
- 2xTX redundant data transmission
- Supports up to 5 full-duplex wireless BeltStations
- Supports unlimited BeltStations in Shared Mode
- 2 communication channels (conversations)
- True dual talk/listen operation
- Vibrate Call alert as well as in-ear audible tone option
- Lithium-Polymer removable/rechargeable battery
- Durable, weather-resistant enclosure
- RoHS compliant

### TECHNOLOGY

The MasterBelt operates in the 2.4GHz band and uses Frequency-Hopping Spread Spectrum (FHSS) and TDMA technology. Its unique RF platform enables it to coexist with other common wireless sources such as traditional wireless microphones, IFB or in-ear monitor systems, and Wi-Fi networks.

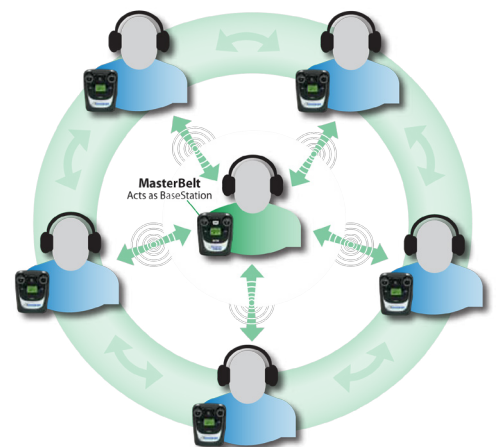
### PERFORMANCE

The Tempest MasterBelt (and BeltStations) are ruggedly designed and constructed with an incredibly strong, lightweight ABS co-polymer blend with a high performance polyurethane over-mold, which makes it comfortable to wear and durable in challenging production environments.

### OPERATION

The MasterBelt supports two intercom channels (A/B) and can support up to five BeltStations operating in full duplex simultaneous communication. The MasterBelt can also operate in Shared or Split modes common to the Tempest Wireless technology. These modes can support an unlimited number of BeltStations operating in a listen and push-to-talk manner.

Each of the five wireless BeltStations per MasterBelt has a unique audio path (i.e., point-to-point), and can simultaneously monitor and/or talk on both wireless intercom channels while in dual listen mode. Alternatively, BeltStations may be placed in single listen mode if the user desires to switch back and forth between the two channels separately.



# SPECIFICATIONS\*

## SYSTEM SPECIFICATIONS

RF Frequency	2400 to 2480 MHz
RF Scheme	FHSS with TDMA
Effective Radiated Power	100mW using 2dBi antenna
Receiver Sensitivity	-93 dBm for 10 <sup>-5</sup> BER
Radio Certification	FCC Part 15.247, ETS 300 328 v1.8.1 rules (apply to model numbers ending in "EU" only**), Canadian RSS-210, license free.
Transmission Range	1,000 ft. (304.8 m) under ideal conditions. 500 ft. to 900 ft. (152.4 m to 274.3 m) typical
Audio Dynamic Range	>94dB
Audio Frequency Response	300Hz–3.8KHz with proprietary audio voice shaping
System Latency	Less than 50ms direct
RoHS Compliant	Yes

## MASTERBELT SPECIFICATIONS

Intercom Audio Channels	2
Simultaneous Listen Paths	True Dual Listen
Headset Connector	4-pin male XLR
Microphone Type	Dynamic or Electret, auto selected
LCD Display	102 × 80 pixels
Antenna	Internal +2 dBi patch
USB BeltStation Power Supply	Input 100–240 V, 0.3 A, 50–60 Hz; Output 5 V, 1.25 A
Battery Life, Rechargeable	Up to 8 hours
Charge Time, Lithium-Polymer Battery	Under 3 hours
Optional Power	3 Standard AA alkaline cells
Battery Life, Alkaline Batteries	Approximately 4 hours
Dimensions (inches)	H 6.1 in. × W 4.0 in. × D 1.75 in. (156 mm × 102 mm × 44.5 mm)
Weight (with Lithium-Polymer Battery)	14.3 oz (1.17 kg)
Operating Environment	-20°C to 50°C (-4°F to 122°F)   10% to 90% humidity



### \*Notice About Specifications

While CoachComm makes every attempt to maintain the accuracy of the information contained in this datasheet, this information is subject to change without notice. Please check our website for the latest system specifications and certifications.

\*\*TMR2MS24INEU models meet the same specifications and comply with ETSI standards (300.328 v1.8.1). Non-EU models are non-compliant with ETSI standards.



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