

Tempest®900 Wireless

CM-922 2-Channel Wireless BaseStation



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Description

The Tempest **CM-922** is a 2-channel 900 MHz Frequency Hopping Spread Spectrum (FHSS) digital wireless intercom system. The CM-922 BaseStation provides connection to two separate hard-wired intercom channels: two 3-pin XLR and one 4-wire port per channel. The 2-wire (TW) interface is compatible with Clear-Com®, RTS®, Telex® and most other TW intercom systems, 4-wire intercoms and other devices.

The CM-922 front panel offers easy access to the hardware intercom settings and levels. Each wireless BeltStation can simultaneously monitor and/or talk on both of the hard-wired channels. Each BeltStation user may simultaneously talk/listen on A and B or toggle between A and B in "Single Listen" mode. The CM-922 BaseStation is also compatible with common hard-wired system features, such as Call and Remote Mic Kill.

Versatility

The CM-922 BaseStation offers a Stage Announce (SA) output with a relay closure. This is ideal for use with Public Address Systems (PA), city-wide IFB transmitters or virtually any application that can be triggered with a General Purpose Input/Output (GPIO).

RF Performance

The CM-922 BaseStation comes standard with a single whip antenna (RP-TNC RF connector) and an RJ-45 connector for the (optional) remote transceiver. The remote transceiver allows the antenna functionality to be located up to 1500 ft (450 m) away from the BaseStation over CAT-5/6 cable with no loss of RF signal. The CAT-5/6 cable also supplies power to the remote transceiver. An additional RJ-45 enables remote monitoring and control of the entire wireless system over a Local Area Network (LAN) with the aid of the Tempest T-Desk software.

Expandability

Utilizing the Tempest system's TDMA technology and proprietary Accu-Sync™ BaseStation coordination, up to 5 CM-922 BaseStations and 25 full-duplex wireless BeltStations (in Normal Mode) can be operated in close proximity to each other within the 900 MHz band while maintaining excellent system performance. By switching to Shared Mode, an unlimited number of BeltStations can be connected to one BaseStation.

Features:

- 2-channel digital wireless BaseStation
- 900 MHz, license free operation
- Frequency Hopping Spread Spectrum technology
- Large LCD front panel screen showing current status of each BeltStation
- Simple configuration of 2- and 4-wire audio settings, including Input/Output levels
- Compatible with Clear-Com®, RTS®, AudioCom®
- T-Desk software enables remote monitoring via LAN interface
- Optional Remote Transceiver extends antenna coverage up to 1500 ft (450 m) from BaseStation
- Flexible Power Options: Universal voltage power supply (85-264 VAC) or 11-32 DC voltage
- Lost Packet Concealment prevents "clicks" and "pops" when a data packet is lost
- Only available in US and Canada

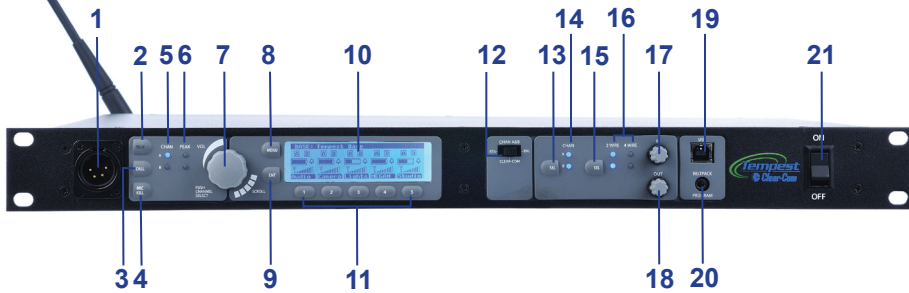


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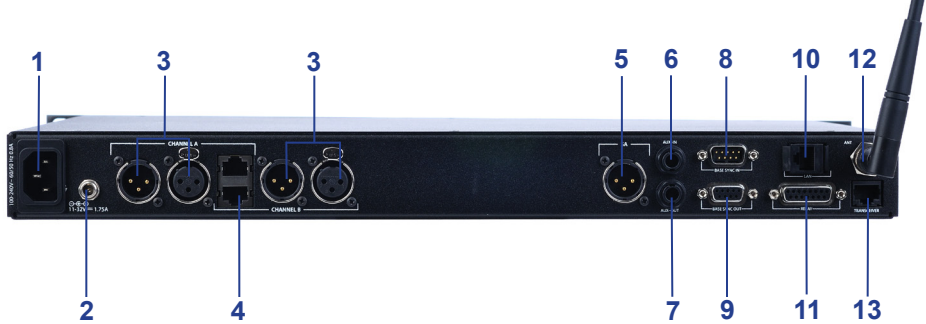
Front Panel



Front Panel Legend:

- 1) Local Headset Connector
- 2) Talk Button
- 3) Call Button
- 4) Mic Kill Button
- 5) Local Headset Channel LEDs A/B
- 6) Peak LEDs
- 7) Volume Control
- 8) Menu Button
- 9) Enter Button
- 10) LCD
- 11) Buttons 1-5
- 12) 2-Wire Intercom Type Slide Switches
- 13) Wired Intercom Channel Select Button
- 14) Channel LEDs
- 15) 2-Wire/4-Wire Select Button
- 16) 2-Wire/4-Wire LEDs
- 17) IN Level Control
- 18) OUT Level Control
- 19) USB Connector
- 20) Beltstation Program Connector
- 21) Power ON/OFF Switch

Back Panel



Back Panel Legend:

- 1) AC Power Input Connector
- 2) DC Power Input Connector
- 3) Intercom Channel A/B Connectors
- 4) RJ-45 4-Wire Intercom A/B Connectors
- 5) Stage Announce Connector
- 6) Aux IN Connector
- 7) Aux OUT Connector
- 8) Base Sync IN Connector
- 9) Base Sync OUT Connector
- 10) Local Area Network RJ-45 Connector
- 11) Relay Connector
- 12) Antenna Connector
- 13) Remote Transceiver RJ-45 Connector

Technical Specifications:

System Specifications

| | |
|---------------------------|--|
| RF Frequency: | 902 to 928 MHz |
| RF Scheme: | FHSS with TDMA |
| Effective Radiated Power: | 250mW using 2dBi antenna |
| Receiver Sensitivity: | -100 dBm for 10 ⁻⁵ BER |
| Radio Certification: | FCC Part 15, Canadian RSS-210, license free |
| Transmission Range: | Up to 1,000ft (305m); 500 - 900ft (150 - 275m) typical |
| Audio Dynamic Range: | >94dB |
| Audio Frequency Response: | 300Hz - 3.8KHz with proprietary audio voice shaping |
| System Latency: | Less than 50ms direct |

BaseStation Specifications

| | |
|---|--------------------|
| Intercom Audio Channels: | 2 |
| Full-duplex BeltStations per BaseStation: | 5 (in Normal Mode) |
| Half-duplex, Shared BeltStations per BaseStation: | Unlimited |

| | |
|--|--|
| Number of Antenna Ports per BaseStation: | 1 |
| Antenna Connector Type: | RP-TNC |
| Number of Synchronized BaseStations: | 5 |
| BaseStation/BeltStation Pairing: | Mini-jack/cable |
| Programming Port: | USB |
| Stage Announce and GPO Closures: | 6 relays via DB15 |
| 2-wire Intercom Interface: | 2 channels via XLR-3F with XLR-3M loop |
| 2-wire Compatibility: | Clear-Com, RTS and balanced compatible |
| 4-wire/Matrix Connection: | 2 ports via RJ-45 |
| Aux Input: | 1/4" 3-conductor jack accepts -4 to +8dB, balanced, transformer isolated |
| Aux Output: | 1/4" 3-conductor jack nominal -4 to +8dB, balanced, transformer isolated |
| Stage Announce Output: | XLR-3M, nominal -4 to +8dB, balanced, transformer isolated |
| Front Panel Headset: | 4-pin male XLR |
| MicrophoneType: | Dynamic or Electret, Auto-Selected |

| | |
|--------------------------|--|
| Front panel LCD Display: | 240 x 64 resolution 32 level grayscale |
| Power Input - AC: | 85-264 VAC at 50-60 Hertz, 15 Watts |
| Power Input - DC: | 11-32 VDC, 12 Watts |

Environmental

-4° – 122° F (-20° – 50° C)

Dimensions

19 in W x 1.76 in H x 12 in D (483 mm x 44 mm x 190 mm)

Weight

10.5 oz (4.75kg)

Notice About Specifications

While Clear-Com makes every attempt to maintain the accuracy of the information contained in its product manuals, that information is subject to change without notice. Performance specifications included in this manual are design-center specifications and are included for customer guidance and to facilitate system installation. Actual operating performance may vary.

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