

# CM-944 4-Channel BaseStation



CM-944 4-Channel 900MHz BaseStation

The CM-944 is a 4-channel BaseStation operating in the 900MHz frequency range ensuring comprehensive coverage and wide reach while offering high resistance to multi-path interference.

## DESCRIPTION

The Tempest CM-944 is a 4-channel Frequency Hopping Spread Spectrum (FHSS) digital wireless intercom system operating in the 902 to 928MHz band. The front panel LCD display provides real time status including battery monitoring of active BeltStations and easy access to the hardwire intercom settings and levels. Each BaseStation is capable of Call and Remote Mic Kill.

## VERSATILITY

The CM-944 BaseStation connections include a 2-wire interface with M/F 3-pin XLR loop thru and one 4-wire RJ45 port per channel. The 2-wire interface is compatible with Clear-Com®, RTS®, and Telex® intercom systems, and includes an auto-null circuit.

## EXPANDABILITY

Utilizing the Tempest system's TDMA technology and proprietary Accu-Sync synchronization, up to 5 CM-944 BaseStations and 25 full-duplex wireless BeltStations (in Normal Mode), either 2-channel or 4-channel BeltStations, can be used simultaneously. By switching to Shared or Split Mode, an unlimited number of BeltStations can be registered to each BaseStation using shared resources.

## RF PERFORMANCE

The CM-944 BaseStation is supplied with a single whip antenna (RP-TNC RF connector). On the rear is a RJ45 connector for a (optional) remote transceiver. The remote transceiver can be located up to 1500ft (450m) away from the BaseStation over CAT-5/6 cable with no loss of RF signal.

## ACCU-SYNC

Accu-Sync provides a common timing signal between connected BaseStations. This signal ensures that transmission cycles for all Accu-Synced BaseStations occur simultaneously. This synchronized transmission eliminates the negative RF effect, called de-sensing, minimizing potential RF interference between BaseStations.

## iSELECT™ ROAMING

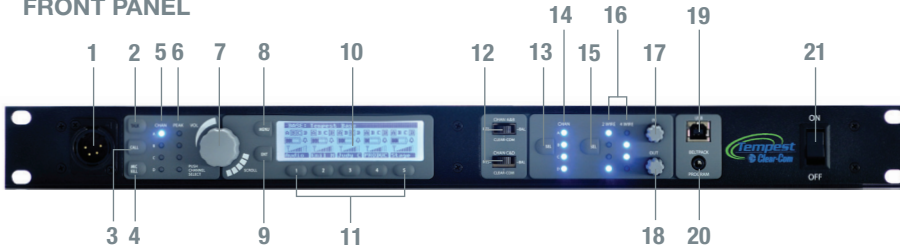
The CM-944 BaseStations handle work zone transitions with iSelect™ on-command roaming technology. Accessing iSelect through the CM-944 BaseStation LCD user interface allows a user to easily change their association with another BaseStation location in just a few seconds.

## KEY FEATURES AND BENEFITS

- 4-channel digital wireless BaseStation
- 900MHz, license free operation
- Lost Packet Concealment prevents "clicks" and "pops" when a data packet is lost
- Accu-Sync synchronization
- Connect an unlimited number of BeltStations per BaseStation
- Connects both 2-channel and 4-channel BeltStations
- T-Desk software enables remote monitoring via LAN interface
- Optional Remote Transceiver extends antenna coverage up to 1500ft (450m) from BaseStation

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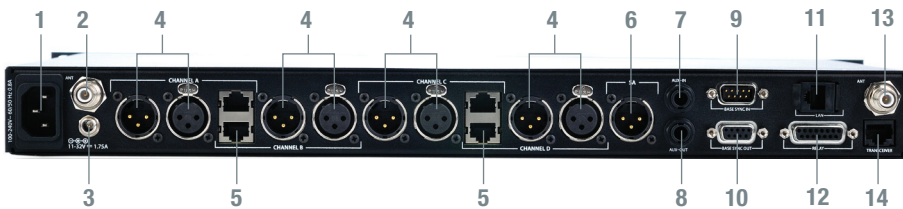
## FRONT PANEL



### Front Panel Legend

1. Local Headset Connector
2. Talk Button
3. Call Button
4. Mic Kill Button
5. Local Headset Channel LEDs A-D
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. Antenna Connector
3. DC Power Input Connector
4. Intercom Channel A/B/C/D Connectors
5. RJ-45 4-Wire Intercom A/B/C/D Connectors
6. Stage Announce Connector
7. Aux IN Connector
8. Aux OUT Connector
9. Base Sync IN Connector
10. Base Sync OUT Connector
11. Local Area Network RJ-45 Connector
12. Relay Connector
13. Antenna Connector
14. 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 <sup>-5</sup> 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:	4
Full-duplex BeltStations per BaseStation:	5 (in Normal Mode) Half-duplex, Shared
BeltStations per BaseStation:	Unlimited
Number of Antenna Ports per BaseStations:	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:	4 channels via XLR-3F with XLR-3M loop
2-wire Compatibility:	Clear-Com, RTS and balanced compatible
4-wire/Matrix Connection:	4 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
Microphone Type:	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

### 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 lbs (4.75 kg)

### 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.