

# CP-242 4-Channel BeltStation



CP-242 4-Channel  
2.4GHz BeltStation



The CP-242 is a 4-channel wireless BeltStation operating in the 2.4GHz frequency range making it the ideal wireless intercom system for indoors, outdoors and touring applications.

## DESCRIPTION

The CP-242 is a 4-channel wireless BeltStation that operates in conjunction with the CM-244 Tempest2400 BaseStation. There are 3 modes of operation for a BeltStation - Normal, Split and Shared. By switching to Shared or Split Mode, an unlimited number of BeltStations can be registered to each BaseStation using shared resources. Each BeltStation user may simultaneously Talk/Listen on A or B and C or D or toggle between A and B or C and D in "Single Listen" mode. Volume is set by rotating the CH A/B or CH C/D rotary control.

There are two Talk buttons on each BeltStation, one for each channel. The Talk button enables the microphone signal for the assigned intercom channels. Each Talk button has individual LED indicators.

The Talk button can be latching or momentary. The Call button sends a 2-wire compatible call signal to any wireless BeltStation and any hardwired intercom device on the intercom channel.

BeltStations are provided with a rechargeable Li-Polymer battery capable of 9+ hours of operation or can be powered by (3) Standard AA Alkaline batteries. Each BeltStation has its own back-lit display and menu functions which allow settings to be changed at the BeltStation locally.

## AUDIO

Each full-duplex BeltStation establishes a unique audio path (point-to-point) with the associated CM-244 BaseStation delivering an individualized mix minus signal to other BeltStations in the system. Therefore, each BeltStation can monitor a unique mix of intercom channels and other audio sources.

## DURABILITY

The CP-242 BeltStations are made of a weather-resistant ABS co-polymer blend with a high performance polyurethane over-mold.

## TEMPEST2400 SEAMLESS ROAMING

Tempest2400 Seamless Roaming is the ability for one or more Tempest2400 BeltStations to move freely from one BaseStation to another without any intervention from the end user. This allows the implementation of a Tempest2400 wireless intercom system which can cover large areas with multiple zones or areas in a facility that would not be adequately supported by a single antenna installation.

A BeltStation can roam between as many as 16 different BaseStations (coverage areas or zones). In addition, all Tempest operational modes (Normal, Shared and Split) are supported for seamless roaming operation.

## KEY FEATURES AND BENEFITS

- 4-channel, full-duplex BeltStation
- 2.4GHz, license free operation
- Dual Talk/Listen operation
- Backlit LCD screen shows battery life, RF signal strength and more
- Stage Announce output with relay closure
- Lithium-Polymer rechargeable battery (or 3 Alkaline AA batteries)
- Weather resistant enclosure

## Roaming Features

- Seamless roaming of BeltStation between BaseStations
- Supports Normal, Shared and Split Modes
- Scalable architecture allows for seamless linked roaming zones
- Seamless handoffs between roaming zones – automatic

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## BeltStation Legend

1. Volume Channels A/B and C/D
2. STAGE Button
3. ENTER Button
4. CALL Button
5. LCD
6. MENU Button
7. Belt Clip
8. Power ON/OFF Button
9. Battery Compartment
10. Headset Connector
11. BeltStation Pairing Connector
12. USB Mini B Connector
13. Rubberized Access Cover
14. Channel A/B and C/D Talk Buttons

## TECHNICAL SPECIFICATIONS

### System Specifications

RF Frequency:	2400 to 2480 GHz
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 and ETS 300.328 rules, 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

### BeltStation Specifications

Intercom Audio Channels:	4
Headset Connector:	4-pin male XLR
Microphone Type:	Dynamic or Electret, Auto-Selected
Antenna Internal:	+2 dBi patch
Charger Input:	100-240V, 0.3A, 50-60Hz
Charger Output:	5V, 1.25A
Battery Charging:	via mini USB connector using supplied charger
Battery Life, Rechargeable Lithium-Polymer:	Up to 9+ hours
Charge Time, Rechargeable Lithium-Polymer:	2 3/4 hours in BeltStation; 2 1/2 hours in charger (from empty)
Optional Power:	3 Standard AA alkaline cells
Battery Life, Alkaline:	Approximately 4 hours

### Environmental

-4° – 122° F (-20° – 50° C)

### Dimensions

4.0 in W x 6.1 in H x 1.75 in D  
(102 mm x 156 mm x 44.5 mm)

### Weight

14.3 oz (0.41 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.