

# HME DX Series



HME DX100



HME DX121



HME DX300ES



HME DX210

**Highly Functional and Versatile**  
For Reliable Mobile Communications



**Clear-Com**  
AN HME COMPANY

### About Clear-Com®

Clear-Com, an HME company, is a global provider in professional voice communications systems since 1968. We develop and market proven intercom technologies such as Analog & Digital Partyline, Digital Matrix, Wireless and Intercom-over-IP systems for critical communication applications in broadcast, performance venues, military, government and enterprise markets. Recognized for our legacy of intercom innovations, production teams around the world have come to depend on Clear-Com for clear, reliable and scalable communications solutions.

### About HM Electronics, Inc. (HME)

HM Electronics, Inc. is a diverse group of companies providing solutions that enhance productivity and customer service in markets including restaurants, sports and professional audio. Founded in 1971, we sell, service and support products in 89 countries worldwide, via company-owned offices in the U.S., Canada, Europe, and China, and an extensive network of HME-authorized distributors, dealers and service agents. Every day quick service restaurants take over 24 million orders using HME systems. With the recent acquisition of Clear-Com, HME is the world's leading provider of professional intercom systems.

HME is the proud recipient of the Technology & Engineering Emmy Award for the **Development of Wireless Intercom.**

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## PRODUCT FAMILY OVERVIEW

All HME DX Series wireless intercom systems feature Spectrum-Friendly™ technology for interference-free operation in the increasingly crowded 2.4GHz frequency band. This technology enables broadcast and theatrical production crews to avoid emerging frequency conflicts by designating the 2.4GHz operating frequency range: low- (2.4019- 2.4399GHz), high- (2.4434-2.4814GHz), or full-band.

While generally not a problem when separated, multiple applications and multiple users of the same applications in close proximity can create additional risk for trouble-free operation. The Spectrum-Friendly technology further ensures that HME products do not add interference to the spectrum for other essential wireless services in the vicinity, such as DMX-controlled lighting.

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## Simple and Compact

The HME DX100 system delivers crystal-clear, two-way communications in a compact, portable base station for up to 15 simultaneous wireless users. Hands-free mode allows maximum flexibility and a secure channel ensures that private conversations stay private.



The portable, compact design makes the DX100 system ideal for mobile field applications.

**Up to 15 COMMUNICATOR®s** can be assigned to each base station, four of which can be used in hands-free, full duplex mode.

**Digital Frequency-Hopping Spread Spectrum (FHSS)** with encryption secures communication to prevent eavesdropping.

**Triple diversity — space, time and frequency diversity** provide redundant communication that offers the most dependable system available.

**Remotely “unlatch” COMMUNICATOR transmitters** to help you stop a COMMUNICATOR that has been unintentionally left transmitting — from the convenience of your base station. This is very helpful if a remote user removes his COMMUNICATOR and forgets to turn it off.

**Flexible, battery-powered operation** lets you power your base four different ways:

- Six 1.5V “AA” batteries
- Optional rechargeable BAT850 battery
- 12 VDC automotive adapter
- 100-240 VAC power adapter (provided)

**Power outage backup feature** enables uninterrupted communication in the event of power loss.

### Typical Configurations\*

#### DX100 System

(Order: CZ11433)

- MB100 Base Station
- 4 BP200 Beltpacks
- 4 BP200 Beltpack Pouches
- 4 HS15 Headsets
- 8 BAT41 Rechargeable Batteries (4 Spare Batteries Included)
- AC40A Battery Charger
- 12VDC 60W Power Supply (100/240VAC Universal) (x2)
- 115VAC Power Cord (x2)

#### DX100 System

(Order: CZ11396)

- MB100 Base Station
- 4 WH200 All-in-One Wireless Headsets
- 8 BAT41 Rechargeable Batteries (4 Spare Batteries Included)
- AC40A Battery Charger
- 12VDC 60W Power Supply (100/240VAC Universal) (x2)
- 115VAC Power Cord (x2)

\* Any combination of 15 COMMUNICATOR®s can be used to make up your system.



## Powerful and Versatile

The HME DX121 is a highly versatile and portable system with interfacing capability to four-wire/matrix intercoms and radio-based communication systems.



**2.4GHz Digital Frequency-Hopping, Spread Spectrum (FHSS)** encryption technology ensures confidential communication. Approved for worldwide use.

**Assignable relay closure** provides advanced functionality when used with matrix intercoms or radio based communication systems.

**Built-in one-port battery charger** charges a remote beltpack or all-in-one headset battery in under three hours.

Compatible COMMUNICATOR® models for HME DX100 and HME DX121 (Details on pages 10-11.)

### Typical Configurations\*

#### DX121 System-With Headset (Order: CZ11462)

- BS121 Base Station
- BP200 Beltpack
- Beltpack Pouch
- HS15 Single Muff Headset
- 2 BAT41 Rechargeable Batteries
- DX121 HS-XLR4F Interface Cable
- 12VDC 60W Power Supply (100/240VAC Universal)
- 115VAC Power Cord

#### DX121 System-No Headset (Order: CZ11465)

- BS121 Base Station
- BP200 Beltpack
- Beltpack Pouch
- BAT41 Rechargeable Batteries
- DX121 HS-XLR4F Interface Cable
- 12VDC 60W Power Supply (100/240VAC Universal)
- 115VAC Power Cord

\* Any combination of 4 COMMUNICATOR®s can be used to make up your system.



WH200 All-in-One  
Wireless Headset



BP200 Beltpack



WS200 Wireless Speaker

### Optimum Performance and Highly Intuitive

The HME DX210 offers the perfect blend in performance, expanded connections with wired intercoms and ease of use for reliable intercommunications. Operating in the 2.4GHz band, the DX210 delivers exceptional sound clarity and enables interference-free communications for highly demanding productions.



An advanced 2.4GHz, digital communications system ideal for theatre, remote and studio broadcast productions, live performances, arena and stadium events.

**Up to 15 COMMUNICATOR®s** can be assigned to each base station. In the two-channel mode, any three COMMUNICATORs can be speaking simultaneously and in the selectable single-channel mode, any four COMMUNICATORs can be speaking simultaneously.

**Expandable system** enables up to four synchronized co-located base stations to be used together for a total of 60 COMMUNICATORs with up to 16 in hands-free, full-duplex mode.

**Wired Intercom Input/Output** interfaces make DX210 compatible with existing two-wire partyline or four-wire matrix systems provided by Clear-Com or RTS.

**Wireless ISO Talk-around** allows all wireless users on the same base station to talk with each other, isolated from either two- or four-wire intercom channel. ISO function can be restricted to specific users.

**Digital Auto “Nulling” (Front Panel Access)** provides the deepest hybrid balancing in the industry and is flat across the entire speech bandwidth. The DX210 is equipped with an auto “nulling circuit” to easily null two-wire connections and eliminate echo automatically.

The DX210 supports two separate two-wire/four-wire channels, assignable AUX IN for program input plus AUX OUT that can be used to direct wireless ISO to Stage Announce (SA).

**Triple diversity — space, time and frequency — operation for extreme multi-path situation** provides redundant communication that offers the most dependable system available. The strongest signal is selected from two different antennas, transmitted and received at two different times, on two different frequencies.

# HME DX210 SYSTEM

**Spectrum Friendly™** technology allows users to select the 2.4 GHz operating frequency range – low band, high band or full band – in order to avoid frequency conflicts.

**The vertical and horizontal diversity** antenna system is specially designed to prevent dropouts and provides the strongest audio signal possible.

**Digital 64 bits of encryption for secure communications and Frequency Hopping Spread Spectrum (FHSS) technology** prevents unauthorized personnel from hearing or interrupting your communication.

**Remotely “unlatch” COMMUNICATORS** from transmitting at the base to stop a rogue COMMUNICATOR that’s been left transmitting without having to locate the beltpack.

**Relay (GPIO) actuation with ISO function** from either base station or any one of the appropriately configured COMMUNICATORS.

**Selective headset connector** allows the base station operator direct access to the IC channel, AUX IN/OUT, as well as COMMUNICATORS.

**XLR-3F/1/4" Phone Combo Jack AUX IN connector** allows quick change of audio source connections. Level Adjustable Balanced AUX input Jack expects either ¼" TRS or 3-PIN XLR.

**Backward compatible with previous HME DX200 COMMUNICATORS**, (BP200) beltpacks are automatically assigned to channel 1 audio and work seamlessly with the DX210.

**Two-wire loop-through connectors** allow for connection to multiple external audio devices.

**Feedback protection for un-terminated two-wire channels** automatically eliminates feedback when connecting DX210 base station to two-wire systems.

## Typical Configurations\*

### HME DX210 System (Order: CZ11513)

- BS210 Base Station and 2 Antennas
- 4 BP210 Beltpacks
- 4 Beltpack Pouches
- 5 HS15 Single Muff Headsets
- 8 BAT41 Rechargeable Batteries
- AC40A Battery Charger
- 115/230VAC Power Supply (x2)
- 115/VAC Power Cord (x2)

### HME DX210 System (Order: CZ11514)

- BS210 Base Station and 2 Antennas
- 4 WH210 Wireless Headsets
- 1 HS15 Single Muff Headset
- 8 BAT41 Rechargeable Batteries
- AC40A Battery Charger
- 115/230VAC Power Supply (x2)
- 115/VAC Power Cord (x2)

\* Any combination of 15 COMMUNICATOR®s can be used to make up your system.

Compatible COMMUNICATOR® models for HME DX210  
(Details on pages 10-11.)



BP210 Beltpack



WS200 Wireless Speaker



WH210 All-in-One  
Wireless Headset



### Comprehensive and High Capacity

The flexible HME DX300ES offers a two-channel mobile intercom system that is easy to set up and use, as well as expandable to accommodate larger production crews. Flexible power options, compact size, light weight, and triple diversity design make the DX300ES the ideal solution for live events and broadcasting needs where portability, capability and user capacity are critical.



Spectrum Friendly™ technology allows users to select the 2.4 GHz operating frequency range – low band, high band or full band – in order to avoid frequency conflicts.

**Fast, easy setup for strategic relocation** – Highly portable and very quick to set up and operate.

**Secure, 64-bit encryption and digital Frequency-Hopping Spread Spectrum (FHSS)** prevent interruption from other systems.

**Mix and match** traditional headsets and beltpacks with wireless all-in-one COMMUNICATOR®s. Both units are very lightweight and comfortable to wear.

**Expandable, hands-free operation supports five production crew members in two-way conversation** – two connected to the MB300ES base station and three

using wireless COMMUNICATORs. The system easily expands to 20 users by adding up to three additional MB300ES base stations. Multi-channel capability permits production crew members to talk together on one channel or to split up on two separate channels. Convenient all call button allows transmit on both channels.

**COMMUNICATORs can be used even while their lithium-ion batteries are charging.** When the low battery message is heard, simply replacing the battery in the COMMUNICATOR with a fully charged battery keeps you up-and-running for up to 20 more hours. Batteries charge in less than three hours in the DX300ES four-port battery charger.





# HME DX300ES SYSTEM

**Triple diversity – space, time and frequency diversity** – provides redundant communication that offers the most dependable system available. The triple diversity design transmits the audio signal twice, at different times and frequencies, and selects the strongest signal from two different antennas for uninterrupted communication.

**Flexible power options** enable the MB300ES Base Station to operate on 100-240 VAC, 12-14 VDC, 1.5V “AA” batteries or an optional rechargeable BAT850 battery.

**Portable size and weight** – Designed to travel where needed, the MB300ES Base Station weighs less than three pounds with battery, and measures only 8" x 8" x 3.5"

**Auxiliary Input and Output** ten-pin terminal strip connector for easy connection to four-wire intercom systems. External interface required to connect into two-wire systems.

**Dedicated channel relays** – Each channel has a dedicated relay. Wireless users can activate either one or both simultaneously.



## Typical Configurations\*

### DX300ES System (Order: CZ11468)

- MB300ES Base Station
- 3 BP300 Beltpacks
- 3 BP300 Beltpack Pouches
- 5 HS15 Headsets
- 4 BAT41 Rechargeable Batteries (1 Spare Battery Included)
- AC40A Battery Charger
- 12VDC 60W Power Supply (100/240VAC Universal) (x2)
- 115VAC Power Cord(x2)
- 2 AA Battery Sleds

### DX300ES System (Order: CZ11469)

- MB300ES Base Station
- 2 HS15 Headsets
- 3 WH300 All-in-One Wireless Headsets
- 4 BAT41 Rechargeable Batteries (1 Spare Battery Included)
- AC40A Battery Charger
- 12VDC 60W Power Supply (100/240VAC Universal) (x2)
- 115VAC Power Cord(x2)
- 2 AA Battery Sleds

\* Any combination of 15 COMMUNICATOR®s can be used to make up your system.

Compatible COMMUNICATOR®s models for HME DX300ES (Details on pages 10-11.)



BP300 Beltpack

WH300 All-in-One Wireless Headset

## Super-compact and Durable

The DX Series Wireless Intercom Systems are supported by three types of COMMUNICATOR<sup>®</sup>s: Beltpacks, All-in-One Wireless Headsets and the WS200 Wireless Speaker Station. The COMMUNICATOR<sup>®</sup>s can be mixed and matched for use with most DX Series systems.

For use with the HME DX100, HME DX121, and HME DX210



HME DX Series beltpacks and wireless headsets are the lightest, easiest-to-use and most durable COMMUNICATOR<sup>®</sup>s in the industry.

For use with the HME DX210



## HME DX BELTPACKS AND WIRELESS HEADSETS

**Internal antennas** are housed inside the COMMUNICATOR<sup>®</sup>s for extra durability.

**Rechargeable lithium-ion batteries** provide up to 20 hours of COMMUNICATOR<sup>®</sup> operation with each charge. Batteries charge in less than three hours in the four-port battery charger.

**Voice prompts** inform users of status changes through the headset, such as “change battery” or “out of range.”

**Electronic mic gain and sidetone** adjustments allow for easy, tool-free settings. Sidetone adjustment is not available on the WH200 or WH300.

**Selectable momentary or latching button mode** allows better management of system resources.

### FEATURE HIGHLIGHTS

- Two Intercom Buttons (IC1/IC2) with ISO
- Beltpack mic gain and side tone control
- Selectable PTT or latching button modes
- ISO restrict mode
- COMMUNICATOR “listen only” mode
- Wireless headset “blackout” mode (WH200 & WH210 only)
- Internal antennas
- Lithium-ion rechargeable batteries with up to 20 hours of operation
- Ability to monitor/talk on both channels simultaneously
- User voice prompts

For use with the HME DX300ES



# WIRELESS COMMUNICATOR<sup>®</sup>S

## WS200 WIRELESS SPEAKER STATION

A portable, flexible solution for situations where your production crew cannot wear a headset and for times when a temporary or remote location is used.



### FEATURE HIGHLIGHTS

- Call signaling
- Built-in microphone
- High speaker intelligibility
- Headset jack
- Mic gain and sidetone adjustments
- External speaker connector
- Operates on AC power, 12 VDC or “AA” batteries.

## CL200 CALL LIGHT ACTUATOR

Now enjoy “call signaling” on any DX210 system using the CL200 in two ways: initiated from your intercom system or directly from the CL200’s “CALL” button. After plugging directly into the two-wire connector of any BS210 Base Station, you can activate the high intensity “CALL” light on the WS200 Wireless Speaker Station.

Using the CL200 Call Light Actuator, detect a “CALL” signal from any standard two-wire intercom to a DX210 wireless system. All wireless system COMMUNICATOR<sup>®</sup>s will be sent an audible signal that also triggers the “CALL” light on the WS200 Wireless Speaker Station. The CL200 can also be used to initiate an audible “CALL” signal to any connected standard two-wire intercom system.

- Detects a “CALL” signal from a two-wire intercom
- Sends an audible “CALL” signal to a two-wire intercom
- Actuates an audible “CALL” signal to all wireless COMMUNICATORs
- Triggers the “CALL” light on the WS200 Wireless Speaker Station
- Provides local “CALL” light confirmation at the DX210 Base Station

### CL200/WS200 APPLICATION DIAGRAM



### COMMUNICATOR COMPATIBILITY CHART

MODELS	BP200	BP210	BP300	WH200	WH210	WH300	WS200
DX100	X	X		X	X		X
DX121	X	X		X			X
DX210	X	X		X	X		X
DX300ES			X			X	



# ACCESSORIES



## HS15 Headset

Ultra comfortable, single-muff, over-the-ear, lightweight headset. Electret noise-canceling microphone mounted on a flexible boom which rotates for left or right side use. (Order: CZ11450)

Compatible with **100 121 210 300ES**



## HS15D Headset

Ultra comfortable, dual-muff, over-the-ear, lightweight headset. Electret noise-canceling microphone mounted on a flexible boom which rotates for left or right side use. (Order: CZ11451)

Compatible with **100 121 210 300ES**



## HS16 Headset

Super lightweight, single-muff headset with noise-canceling electret microphone is worn on either ear. Flexible microphone boom ensures optimal sound clarity. Adjustable stainless steel headband provides stable, comfortable fit while ensuring secure positioning of microphone boom. (Order: CZ11452)

Compatible with **100 121 210 300ES**



## HS4-3 Earpiece & Lapel Mic

This earpiece and multidirectional electret lapel microphone combo is perfect for more discreet applications where clear, reliable communication is critical, but needs to be less conspicuous. (Order: CZ11453)

Compatible with **100 121 210 300ES**



## Foam Ear Pads

Used on the HS16 Headset. (Order: 306G103)

Used on HS15 and HS15D headsets. (Order: 202G153)

Compatible with **100 121 210 300ES**



## MD-XLR Headset Adapter

These adapters enable headsets with dynamic mics and XLR connectors to interface with all the DX Series headset jacks. An active built-in circuit provides impedance matching and DC isolation. XLR adapters interface with 4P male, 4P female or 5P male headset connectors. (Order: 4P male: G27245-1, 4P female: G27256-1, 5P male: G27267-1)

Compatible with **100 121 210 300ES**



## Headset Extension Cable

Six foot headset extension cable for all mini-DIN DX Series headset connectors. (Order: 115G394)

Compatible with **100 121 200 210 300ES**



## Headset Interface Adapter

The HSI6000 allows a standard 2.5mm cell phone headset to be connected to the DX Series beltpacks. (Order: CZ11453)

Compatible with **100 121 210 300ES**



## CL200 Call Light Actuator

Used with BS210 Base Station to trigger the call light of a WS200 Wireless Speaker Station. (Order: CZ11455)

Compatible with **210**



## SP10 Base Station Monitor Speaker

Compact eight Ohm speaker that is easily connected to a BS210 Base Station or WS200 Wireless Speaker Station. (Order: G27942-1)

Compatible with **210**



## Base Antenna

4.7" reverse TNC base station antenna. 50 Ohm omnidirectional half-wave dipole. (Order: 101G048)

Compatible with **100 121 210 300ES**

# ACCESSORIES



## Antenna Extension Cables

These 6-foot or 30-foot cables enhance the RF signal of DX bases installed in demanding applications. The 6-foot and 30-foot cables are ideal when antennas must be mounted remotely from the equipment rack. (Order: 6ft: G27009-1, 30ft: G26671-1)

Compatible with **100 121 210 300ES**



## Antenna Splitter

The two-way antenna splitter/combiner allows flexible spot coverage. (Order: 647G006)

Compatible with **100 121 210 300ES**



## Rack Mount Kit 1-RU Panel

Permits the base station antennas to be mounted on the front of the rack panel instead of the back of the base station. (Order: G28066-1)

Compatible with **200 210**



## BAT850 Rechargeable Battery

A more cost-effective alternative than using six 1.5V "AA" batteries, the 7.2V 2300 mAh Ni-MH battery provides hours of reliable, uninterrupted operation for MB Series Base Stations and WS200 Wireless Speaker Stations. (Order: G27021-1)

Compatible with **100 300ES**



## AC850A Battery Charger

This four-port unit charges BAT850 Ni-MH Battery for MB Series Base Stations and WS200 Wireless Speaker Stations. Charger comes with a 100/240 VAC power supply. (Order: CZ11484)

Compatible with **100 300ES**



## AC40A Battery Charger

Up to four BAT41 Batteries for BP210/300 Beltpacks and WH200/300 All-in-One Wireless Headsets can be charged simultaneously in less than three hours. Charger comes with a 100/240 VAC power supply. (Order: CZ11378)

Compatible with **100 121 210 300ES**



## BAT41 Rechargeable Battery

Lithium-ion battery provides 20 hours of push-to-talk operation when used with DX Series beltpacks or All-in-One headsets. (Order: 104034)

Compatible with **100 121 210 300ES**



## 12VDC Power Supply

115/230 VAC universal power supply and cord for all DX Series Base Stations, AC40A Battery Charger and WS200 Wireless Speaker Station. (Order: CZ11421)

Compatible with **100 121 210 300ES**



## MB300ES Interconnect Cable

Seven foot cable with RJ45 connectors for linking up to four MB300ES Base Stations. (Order: 115G372)

Compatible with **300ES**



## Travel Case

Travel case for DX300 Systems includes foam insert cutouts. (Order: 176G018)

Compatible with **300ES**



## Beltpack Pouch

Santoprene™ rubber protective pouch with internal clip for BP210 and BP300 Beltpacks. (Order: 107G065)

Compatible with **100 121 210 300ES**

# TECHNICAL SPECIFICATIONS

SYSTEM SPECIFICATIONS				
	DX100	DX121	DX210	DX300ES
<b>RF Frequency Range</b>	All Band 2400-2483.5MHz Low Band 2401.9-2439.9MHz High Band 2443.4-2481.4MHz	All Band 2400-2483.5MHz Low Band 2401.9-2439.9MHz High Band 2443.4-2481.4MHz	All Band 2400-2483.5MHz Low Band 2401.9-2439.9MHz High Band 2443.4-2481.4MHz	All Band 2400-2483.5MHz Low Band 2401.9-2439.9MHz High Band 2443.4-2481.4MHz
<b>Frequency Response</b>	200Hz-3.5kHz	200Hz-3.5kHz	200Hz-3.5kHz	200Hz-3.5kHz
<b>Distortion</b>	<2%	<2%	<2%	<2%
<b>RF Sensitivity</b>	<-90dBm with 10-3 BER	<-90dBm with 10-3 BER	<-90dBm with 10-3 BER	<-90dBm with 10-3 BER
<b>Temperature Range</b>	-4 to 131°F (-20 to 55°C) Typ.	-4 to 131°F (-20 to 55°C) Typ.	-32 to 122°F (0 to 50°C) Typ.	-4 to 131°F (-20 to 55°C) Typ.
<b>Transmit/Receive Type</b>	Frequency-Hopping Spread Spectrum (FHSS)	Frequency-Hopping Spread Spectrum (FHSS)	Frequency-Hopping Spread Spectrum (FHSS)	Frequency-Hopping Spread Spectrum (FHSS)
<b>Modulation Type</b>	Gaussian Filtered FSK, TDMA	Gaussian Filtered FSK, TDMA	Gaussian Filtered FSK, TDMA	Gaussian Filtered FSK, TDMA
<b>Encryption</b>	64-bit	64-bit	64-bit	64-bit

COMMUNICATOR SPECIFICATIONS			
	BP200/BP210/BP300	WH200/WH210/WH300	WS200
<b>Transmit Power</b>	100mW Burst	100mW Burst	100mW Burst
<b>Antenna</b>	Internal, Dual-Diversity	Internal	Internal, Dual-Diversity
<b>Mic Input</b>	Electret	N/A	Electret
<b>Headset Connector</b>	Mini-DIN	N/A	Mini-DIN
<b>Headset Output</b>	160mW into 32Ω Capable of Driving 16 to 32Ω	160mW into 32Ω	160mW into 32Ω Capable of Driving 16 to 32Ω
<b>Size</b>	3.4" x 2.6" x 1.5" (8.64cm x 6.60cm x 3.81cm)	N/A	10.2" x 6.45" x 3.33" (25.91cm x 16.38cm x 8.46cm)
<b>Weight</b>	7.4oz (0.21kg) with Battery and Pouch	5.7oz (0.16kg) with Battery	2.56lb (1.16kg) with Battery
<b>Power Requirements</b>	One 3.6V Lithium-Ion Rechargeable	One 3.6V Lithium-Ion Rechargeable	100-240VAC, 50-60Hz, 12-14VDC or Six "AA" Cells (Ni-MH Optional)
<b>Battery Life</b>	Hands-Free: Up to 14Hrs PTT: Up to 20Hrs	Hands-Free: Up to 14Hrs PTT: Up to 20Hrs	Headset Only: Up to 16Hrs Internal Speaker Only: Up to 8Hrs
<b>FCC Acceptance</b>	Part 15 (No License Required)	Part 15 (No License Required)	Part 15 (No License Required)



# TECHNICAL SPECIFICATIONS

BASE STATION SPECIFICATIONS				
	MB100	BS121	BS210	MB300ES
<b>Transmit Power</b>	100mW Burst	100mW Burst	100mW Burst	100mW Burst
<b>TX &amp; RX Antenna Dipole</b>	½-Wave, Dual-Diversity Dipole	½-Wave, Dual-Diversity Dipole	½ -Wave, Dual-Diversity Dipole	½ -Wave, Dual-Diversity Dipole
<b>4-Wire I/O</b>	N/A	Terminal Strip Connector, 600Ω Balanced, Level Adjustable	RJ-45, 600Ω Balanced, Level Adjustable, Simultaneous Operation with 2-Wire (x2)	Terminal Strip Connector, 600Ω Balanced, Level Adjustable
<b>2-Wire I/O</b>	N/A	N/A	XLR-3F & 3M, Externally-Switchable RTS or Clear-Com Mode, 200Ω, Level Adjustable, Null Adjustable	N/A
<b>Headset I/O</b>	DIN	200Ω Balanced, Level Adjustable	DIN	DIN
<b>Relay I/O</b>	N/A	5-Pin Terminal Strip Connector, NC, COM, NO, I.C.SEL, GND	Add 5-Pin Terminal Strip Connector, NC, COM, NO, No Connection, GND	8-Pin Terminal Strip Connector, NC, COM, NO, GND (x2) (ES only)
<b>Auxiliary Input</b>	N/A	N/A	XLR-3F/1/4" (6.35mm) Combo Jack, 600Ω Balanced, Level Adjustable	Terminal Strip Connector, 24KΩ Balanced, Level Adjustable
<b>Auxiliary Output</b>	N/A	N/A	XLR-3M, 600Ω Balanced, Level Adjustable	Terminal Strip Connector, 600Ω Balanced, Level Adjustable
<b>Mic Input</b>	Electret	N/A	Electret	Electret (x2)
<b>Headset Connector</b>	N/A	N/A	4-pin Mini-DIN	Mini-DIN (x2)
<b>Headset Output</b>	N/A	N/A	250mW into 32Ω	200mW into 32Ω
<b>Size</b>	10.2" x 6.45" x 3.33" (25.91cm x 16.38cm x 8.46cm)	1.62" x 5.50" x 7.88" (4.1cm x 14cm x 20cm)	19" x 1.72" x 11.6" (1-RU) (48.26cm x 4.37cm x 28.10cm)	8" x 8" x 3.5" (20.32cm x 20.32cm x 8.89cm)
<b>Weight</b>	2.42lb (1.1kg)	1.2lb (0.59kg) with Battery	9.0lbs (4.1kg)	2.8lb. (1.3kg)
<b>Power Requirements</b>	100-240VAC, 50-60Hz or 12-14VDC or Six "AA" Cells (Ni-MH Optional)	100-240VAC, 50-60Hz or 12-14VDC	100-240VAC, 50-60Hz or 12-14VDC	100-240VAC, 50-60Hz or 12-14VDC or Six "AA" Cells (Ni-MH Optional)
<b>Battery Life</b>	Up to 10 Hrs	N/A	N/A	Up to 6 Hrs (with Lithium "AA")
<b>FCC Acceptance</b>	Part 15 (No License Required)	Part 15 (No License Required)	Part 15 (No License Required)	Part 15 (No License Required)

## RoHS Compliance

Clear-Com fully supports the efforts of the European Union to control the use and disposal of hazardous materials and has implemented a comprehensive program which ensures that all our products are compliant with the RoHS legislation.



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