



Linking
People
Together



BS410 Base Station

Key Features and Benefits

- Two-Channels
- 2.4 GHz frequency range
- 7KHz wide band audio
- 2-wire and 4-wire bridging on the same system
- 2-wire auto-nulling
- Lost packet concealment
- Supports up to 15 beltpacks and/or wireless headsets

The DX410 is a two-channel digital wireless solution operating in the 2.4GHz frequency band with 7KHz wideband audio delivering an overall better experience in performance, range and sound.

Description

The BS410 is the base station for the DX410 wireless system, used with wireless BP410 beltpacks. A single DX410 base station supports up to 15 registered BP410 beltpacks and/or WH410 all-in-one wireless headsets. Two-wire auto-nulling enables fast and accurate integration with Clear-Com and RTS wired partyline systems.

Operation

The BS410 is a 1RU 2-channel base station with local headset, 2- and 4-wire audio connections, auxiliary in out, and assignable relays. 2-wire connections can be set to RTS or Clear-Com and have auto-nulling. The built in 2.4GHz transceiver transmits RF via two dipole antennas with reverse TNC connectors.

Audio Bridging

The BS410 allows the option for combining 2-wire and 4-wire audio together on A or B channels. When daisy-chaining multiple bases together, users are able to bridge a 4-wire, allowing the use of 4-wire out to send the audio to a mixer, matrix or other audio source.

Clear Audio

The DX410 system features 7KHz wideband audio. The high quality audio expands audio range and increases intelligibility in high RF environments so even soft whispers can be heard clearly.

2-Wire Auto-Nulling

Auto-nulling provides echo cancellation on unbalanced 2-wire intercom systems for fast and accurate integration with RTS and Clear-Com wired partyline systems.

Technical Specifications

Audio

Channels: 2 audio channels
Capacity: Up to 15 BP410 and/or WH410 per base station
Full-Duplex: Yes. Single-channel = 4 in simultaneous full-duplex. Dual-channel = 3 in simultaneous full-duplex.
Radio Frequency Range: 2400 – 2483.5 MHz
Audio Frequency: 200 Hz – 7KHz
4-wire I/O: RJ45, 600 Ohms balanced, level adjustable, simultaneous operation with 2-wire
2-wire I/O: XLR-3M, XLR-3F, externally-switchable RTS or Clear-Com, 200 Ohms, level adjustable, null adjustable to 50dB attenuation, typical
Aux Input: XLR-3F with ¼" (6.35mm) combo jack, 600 Ohms balanced, level adjustable
Aux Output: XLR-3M, 600 Ohms balanced, level adjustable
Headset Connector: 4-pin mini-DIN, Electret microphone
Headset Output: 200mW into 32 Ohms
Antenna Type: External ½-wave dipole (R-TNC connector), RX/TX horizontal/vertical diversity
System Distortion: <2%
Communication Security: 64-bit encryption, dual-slot diversity

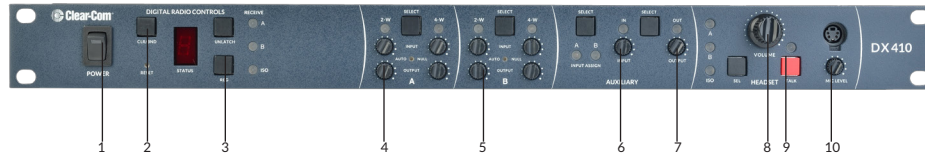
Transmitter

Type: Frequency Hopping, Spread Spectrum (FHSS)
Transmit Power: 100mW burst
Modulation Type: Gaussian filtered FSK, TDMA
Frequency Stability: 13 ppm
Harmonics/Spurious: Exceeds FCC and ETSI specifications over temperature

Rear Panel



Front Panel



Order Codes

Part Number and Description

CZ-BS410: World-wide base station
CZ-MB410-EU- ETSI complainant base station for EU countries requiring CE mark

Receiver

Type: Frequency Hopping, Spread Spectrum (FHSS)
RF Sensitivity: <-90dBm w 10-3 BER
Frequency Stability: 13 ppm
Distortion: <2%

Power Requirements:

100 – 240 VAC, 50 – 60 Hz or 12 – 14 VDC

Environmental:

Temperature: +32°F - +122°F (0°C - +50°C)

Dimensions

1.75 x 19.0 x 17.13 in
 (44 x 483 x 435 mm) (HxWxD)

Weight

9 lbs (4.1 kg)

Legend

Rear Panel

1. ANT (R-TNC)
2. PRIMARY/SECONDARY Select Switch
3. (A) 4-W RJ-45 Connector
4. (A) 2-W XLR-3M Connector
5. (A) 2-W XLR-3F Connector
6. CLEAR-COM/RTS Select Switch
7. (B) 2-W XLR-3F Connector
8. (B) 2-W XLR-3M Connector
9. (B) 4-W RJ-45 Connector
10. SINGLE/DUAL Channel Select Switch
11. AUX IN Connector
12. AUX OUT Connector
13. Relay Connector
14. DC Power Connector
15. ANT (R-TNC)
16. Chassis Grounding Screw

Front Panel

1. POWER switch
2. CLR/BND button
3. REG (registration) button
4. (A) 2-W input level adjust
5. (B) 4-W output level adjust
6. AUX INPUT level adjust
7. AUX OUTPUT level adjust
8. HEADSET VOLUME knob
9. HEADSET TALK On/Off button
10. HEADSET MIC LEVEL adjust

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.