Linking People Together

FSII-BP24

Key Features and Benefits

Beltpack

- Functions with FreeSpeak BASE-II, FreeSpeak Edge Base, Arcadia Central Station and Eclipse HX via E-IPA cards
- 1.9, 2.4 and 5.0 GHz beltpacks operate on a single system
- Supports up to 200 beltpacks on a single system (see Capacity Chart for details)
- Encoder Volume Swap between A&C and B&D
- Volume Swap allows for independent level control on channels A, B, C, and D listens.
- "Listen Again" message replay
- Simple 2-channel partyline operation to 5-channel intercom on the same beltpack
- Over-the-air beltpack registration

Connectivity

- 2.4 GHz radio frequency
- Typical range 300ft (90m), outdoor range 800ft (240m)
- Robust radio link works in high multipath or reflective environments

Mechanical

- IP53 rating for wet and dusty conditions
- 18+ hour battery life or USB port for continuous operation

FreeSpeak II® is a high performance wireless solution operating in the 1.9 and 2.4 GHz frequency bands designed for extensive communication in large-scale operations.

Description

The FSII-BP24 is a rugged, water-resistant beltpack that operates in the ISM license-free 2.4 GHz frequency range. Featuring the "Clear-Com Sound", the FSII-BP24 has high audio bandwidth for superior intelligibility and listening comfort.

Operation

The FSII-BP24 can connect to the FreeSpeak II Base Station, FreeSpeak Edge Base Station, Arcadia Central Station or to the Eclipse® HX matrices using the E-IPA-HX interface card. FSII-BP24 users can roam seamlessly between FSII-TCVR-24 transceivers over wide areas. The "Listen Again" feature allows users to replay earlier commands, eliminating the need to repeat communication or disturb productions. Volume Swap allows for independent level control on channels A, B, C, and D listens.

Increase System Size

The FSII-BP24 can be used interchangeably with any other FreeSpeak II or FreeSpeak Edge beltpack on the same system. Depending on what system you connect to, you can increase the quantities of beltpack users that operate on a single system (see Capacity Chart for details).

Durability

The FSII-BP24 is IP53 rated for wet weather or dusty conditions making it ideal for outdoor productions. For better grip and protection, the beltpack has a rubberized over-mold to protect it from the most rugged environments.

Battery

Using the BAT60 Li-Ion battery, the FSII-BP19 has 18+ hours of battery life. Using an alternative set of 3 AA cells, the battery life is 6-9 hours. The beltpacks also include an USB charging port for recharging or for continuous powered transmissions.

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Capacity Chart

	Max Beltpacks	Max TCVRs	Max BPs per TCVR
FreeSpeak II Base II 5Up	5	2 (E1) 10 (via 2 FSII-SPL)	4 (E1)
FreeSpeak II Base II	25	2 (E1) 10 (via 2 FSII-SPL)	4 (E1)
FreeSpeak Edge Base	16	2 (E1) 10 (via 2 FSII-SPL)	4 (E1)
Arcadia Central Station	64	2 (E1) 10 (via 2 FSII-SPL)	4 (E1)
Eclipse HX (via E-IPA Cards)	192 Delta 200 Median/Omega	30 Delta (via 6 FSII-SPL) 40 Median (via 8 FSII-SPL) 50 Omega (via 10 FSII-SPL)	4 (E1)

*Note: Each E-IPA Card supports up to 50 beltpacks with 10 E1 Transceivers using 2 Splitters

Technical Specifications

Audio
Audio Bandwidth: 200Hz-7.5kHz
No. of Full-Duplex Audio Paths: Up to 5 with individual level control (2 dedicated rotaries, 3 with menu), 2 controls and a main volume
Mode of Operation: Full duplex on all routes
Level/Talk Controls: 4 pushbuttons, a reply button and 2 rotary controls
Enter/Answer-Back Button: 1

Radio
Frequency Spectrum: 2.400-2.483MHz for EU and US cellular auto roaming technology
Modulation: GFSK, TDMA frame 10ms full and long slot
Output power: (EU) 18-22dBm, (US) 18-20dBm
Range: Typical indoor range 300ft (90m), outdoor range 800ft (240m)
Battery: Li-Ion or 3 AA alkaline cells
Battery Charging: Drop-in charger (AC60) or local USB
Battery Life: 18+ hours with Li-Ion; 9 hours with 3 x Alkaline AA cells

Connectors
Headset Connector: 4-pin male, Clear-Com standard, options for 5-pin female and 7-pin male with PTT
Headset Voltage: Maximum of ~+8dBu as set by firmware

Microphone Type: Electret and Dynamic, selectable in beltpack menu
Microphone Voltage: Electret Mic:-45dBu (additional 2.5V DC bias voltage positive on Pin 2 and negative on Pin 1 via a 1k resistor).
Headset Limiter: Selectable from beltpack menu
Max Distance (Beltpack To Transceiver, Indoor):
~300-500ft (90-150m)

Max Distance (Beltpack To Transceiver, Outdoor):
~800-1500ft (240-450m)

Environmental
IP53 water and dust resistance
Operating: 32°-125°F (0°-50°C)
Storage: 32°-150°F (0°-70°C)
Humidity: Between 20% and 90%, Non-Condensing

Dimensions
Tapered design at largest points
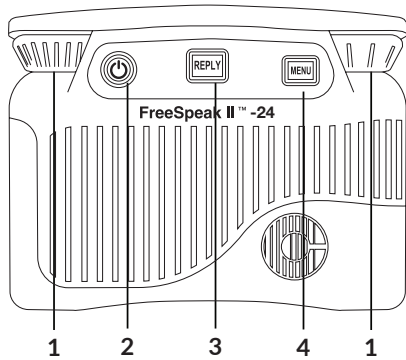3.9 x 5.1 x 1.8in (HxWxD)
(99 x 129.5 x 45.7mm)
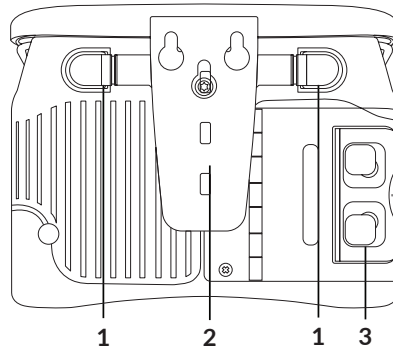
Weight
9.0oz (0.25kg) including batteries

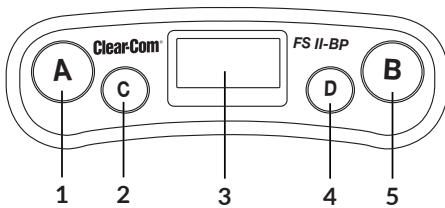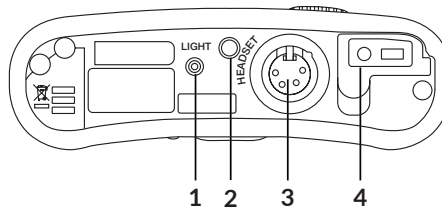Front

Back

Legend

Front
1. Volume control
2. Power button
3. Reply button
4. Menu buton

Back
1. Shoulder strap hook
2. Belt clip
3. Battery door

Top

Bottom

Top
1. Channel A
2. Channel C
3. LCD
4. Channel D
5. Channel B

Bottom
1. Flashlight
2. Flashlight switch
3. Headset connector
4. USB and Audio Jack connectors

Order Codes

Approved for use in USA & Canada:
FSII-BP24-X4-US
FSII-BP24-X5-US
FSII-BP24-X7-US

Approved for use in EU:
FSII-BP24-X4-EU
FSII-BP24-X5-EU
FSII-BP24-X7-EU

www.clearcom.com/
freespeakii-knowledge-center/

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

WARNING: Cancer and Reproductive Harm - **www.P65Warnings.CA.Gov**

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