

P R O 8 5 0

850



PRO850™ Wireless Intercom System



Customer Driven

Go the distance in wireless performance.



System Highlights

- > Frequency agile/Exceptional operating range
- > Wide frequency response with low distortion
- > Simultaneous dual-channel operation
- > Automatic frequency selection
- > PC and PDA interface

User-Friendly Displays & Menus



PDA850 - Allows beltpac status to be checked and configuration set without returning the unit to the base station.



Talk Status - Displays the talk status of all receivers at a glance. If a user is talking, that user's name is clearly shown.



Receiver Controls - Press the "Receiver Quick Menu" button to gain instant access to receiver controls.

Why choose the new *PRO850* Wireless Intercom System from HME? Simply because you can do more with the *PRO850* than any comparable system on the market. With the *PRO850*, you'll get exceptional operating range, cutting-edge features, and the flexibility to configure and expand the entire system to meet your unique intercom needs. Innovative features like PC and PDA interface, automated power control, simultaneous dual-channel interface, Wireless ISO — plus all the standard capabilities — give you more operating power and flexibility to achieve the best performance. Combine all that with a ruggedly-constructed design, the *PRO850* provides the utmost reliability and sound quality. More value. Better performance. Greater reliability. The *PRO850* is the ultimate solution for all your intercom needs.



BASE STATION

More Operating Power

- **Frequency agility** enables you to operate the PRO850 within the 470-740 MHz UHF band. These synthesized frequencies can be selected in 25 kHz increments over each 18 MHz operational band so you can easily choose from 720 different transmit and 720 receive frequencies.
- **User-friendly graphical interface** on the base makes it easy to set up the system and obtain status information using the LCD display and menu keys. Pull-down menus on the LCD provide fast, easy access to all system features. Menus are organized by status, audio-level monitoring, system configuration, and system information. Simple navigation buttons and multi-function rotary knob facilitate the setup and access of desired features.
- **PC interface** using HME's PC850 Software lets you configure the entire PRO850 System and manage configuration files from the convenience of your PC via the RS-232 serial or USB port.
- **Expandable system** allows you to configure the PRO850 to meet your communication needs. A standard PRO850 System comes with four belt-pacs and a base station. By linking several base stations to provide additional receivers, up to 16 users can communicate with each other in full-duplex operation.
- **Automated belt-pac output power control** helps optimize the system operating power. The base station automatically configures belt-pac settings and calibrates the power level for each belt-pac, depending on its distance from the base. This eliminates base receiver overload and extends the belt-pac battery life.
- **Intermodulation-free frequency groups** have been pre-configured to help you easily scan and select the best, interference-free frequency groups when you set up the PRO850. The savvy user can also configure additional frequency groups for a quick recall.
- **Alert relay output** provides a configurable set of contacts that can respond to problem conditions or to belt-pac user requests.
- **Audio digitally mixed and routed under user control** allows any combination of inputs to be mixed and delivered to any output. These settings can be preset and saved to provide different mix configurations for different shows.
- **Remotely "unlatch" belt-pacs from transmitting** at the base to stop a rogue belt-pac that's been left transmitting without having to locate the belt-pac.

BELTPAC

More Flexibility

- **PDA interface** provides a convenient method to configure belt-pac frequencies and functions through a built-in IrDA port using a Palm-OS PDA and PDA850 Tools.
- **Belt-pac controls are configurable** for multiple transmit modes. Separate talk buttons for each channel can be configured for "push-to-talk" or "push-to-enable" operation. Buttons not configured for transmitter control can be configured for party-line selection, paging, ISO, alert and call functions.
- **Individual volume controls** allow belt-pac users to adjust and mute the volume. The MASTER and Auxiliary Volume Controls provide a push-to-mute function so you can temporarily mute a channel while keeping previous volume settings.
- **Dual-channel access** allows users to choose from two hardwired intercom channels. Simultaneous dual-channel access is obtained using the optional 2nd receiver module.
- **Alert and page relay closures** allow you to remotely control external devices from the belt-pac.
- **Channel lockout** enables multiple belt-pac users to share the same operating frequency and automatically disable a belt-pac's ability to transmit if another user is already transmitting on that frequency.
- **Low battery alert** informs the user through the headset and base station that the belt-pac batteries are low.
- **Versatile headset connector** allows use of standard 4-pin male connector or field-install of a 5-pin female XLR connector. The belt-pac auto-detects the microphone type.
- **Detachable antennas** with strong, threaded connectors make storage and shipping easy.
- **Auxiliary audio input** allows a separate audio source, such as an IFB receiver, to be heard through the belt-pac headset and controlled by the belt-pac volume controls.
- **LED blackout mode** enables crew members to work on a darkened stage without tell-tale lights being visible to the audience.
- **Automatic status reporting to base** keeps the technical crew informed of the battery condition and which users are talking.



Base Station Specifications

General

Frequency Range:	470-608 MHz, 614-740 MHz in 18 MHz TX and RX Bands
Frequency Response:	50 Hz to 10 kHz
Power Requirements:	100-240 VAC, 50-60 Hz or 12-14 VDC
Size:	1.9" x 1.72" x 11.75" (1-RU) (48.26cm x 4.37cm x 29.8cm)
Weight:	<11 lbs (<5 kg)
Tx & Rx Antenna:	¼-Wave (Supplied), BNC Connector
4-Wire I/O:	RJ45, 600Ω Balanced, Level Adjustable, Simultaneous Operation with 2-Wire
2-Wire I/O:	XLR-3F, Externally-Switchable RTS® or ClearCom® Mode, 200Ω, Level Adjustable, Null Adjustable
Auxiliary Input:	XLR-3F/¼" Phone Combo Jack, 600Ω Balanced, Level Adjustable
Aux & Page Output:	XLR-3M, 600Ω Balanced, Level Adjustable
Page & Alert Relay:	2 Four-Pin Phoenix, 2A @ 30 VDC Max
Beltpac Interface:	RJ10, RS-232
PC Interface:	DB9, RS-232, 38400 baud
USB Interface:	USB B-Type Receptacle, USB 1.1 Compliant
External Control Interface:	RJ45, RS-422
Headset Connector:	XLR-4M (Optional Field-Installable XLR-5F)
Mic Input:	Auto-Detect, Low Impedance Dynamic or Electret
Headset Output:	Stereo - 160 mW per Side, Mono - 250 mW
Front Panel Controls:	Power Switch with Indicator Menu Navigation Keys Receiver Quick-Menu Keys Rotary Knob for Adjustments Headset Channel Select & PTT
Front Panel Indicators:	Graphic LCD 3 Wired System Status LEDs 4 Receiver Status LEDs Headset Channel Select & Talk LEDs
Rear Panel Controls:	2-Wire Channel Line Null RTS®/ClearCom® Mode Switch

Transmitter

Type:	720 Synthesized, 25 kHz Channel Steps
Transmit Power:	240, 100, 10 or 1 mW Configurable
Modulation Type:	FM
Deviation:	50 kHz
Frequency Stability:	10 ppm
Harmonics/Spurious:	Exceeds FCC Specifications

Receiver

Type:	720 Synthesized, 25 kHz Channel Steps
RF Sensitivity:	<1µV for 20dB SINAD
Squelch Threshold:	Front Panel Adjustable
Image Rejection:	>70dB
Squelch:	Data Channel Coded Plus Carrier Signal Level
Squelch Quieting:	90dB
Frequency Stability:	10 ppm
Distortion:	<1% at Maximum Deviation

All specifications are subject to change without notice.
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Beltpac Specifications

General

Frequency Range:	470-608 MHz, 614-740 MHz in 18 MHz TX and RX Bands
Antenna Type:	Flexible ¼-Wave, Field-Replaceable
Frequency Response:	50 Hz to 10 kHz
Battery Requirements:	6 "AA" Alkaline Cells (Optional NiMH)
Battery Life:	PTT: Up to 9 Hours (Alkaline) PTT: Up to 15 Hours (Alkaline)
Size:	5.75" x 4.38" x 2.31" (14.6cm x 11.13cm x 5.87cm)
Weight:	16 oz (0.45 kg) with Batteries
Base Interface:	RJ10, RS-232
PDA Interface:	IrDA
Auxiliary Input:	Connector: 1/8" Miniature Phone Jack Impedance: 8kΩ, Input Level: 100 mV Overrides Optional 2nd Receiver If Installed.
Headset Connector:	XLR-4M (Optional Field-Installable XLR-5F)
Mic Input:	Auto-Detect, Low Impedance Dynamic or Electret
Headset Output:	200 mW @ 1% THD into 50Ω
Controls:	Main Volume Control with Power Switch and Push-to-Mute, 2nd RCVR/AUX Volume Control with Push-to-Mute, 4 Mode/Function Switches Microphone Gain Adjustment
Indicators:	Power/Low Battery LED Transmit LED & 4 Channel/Status LEDs

Transmitter

Type:	720 Synthesized, 25 kHz Channel Steps
Transmit Power:	100, 50, 10 or 1 mW, Fixed Output/Automatic Control
Transmission Modes:	Push-to-Talk (PTT), Push-to-Talk-Shared (PTS), or Push-to-Enable (PTE). May Be Configured for Momentary or Latch Mode.
Modulation Type:	FM
Deviation:	50 kHz
Frequency Stability:	10 ppm
Harmonics/Spurious:	Exceeds FCC Specifications

Receiver

Type:	720 Synthesized, 25 kHz Channel Steps
RF Sensitivity:	<1µV for 20dB SINAD
Squelch Threshold:	User Configurable
Image Rejection:	>70dB
Squelch:	Adjustable Carrier Signal Level
Squelch Quieting:	80dB
Frequency Stability:	10 ppm
Distortion:	<1% at Maximum Deviation

Options/Accessories

AC850	Four-Port Battery Charger
BAT850	NiMH Rechargeable Battery Pack
Beltpac	2nd Receiver Module
PC850:	PC-Based Application Tools
PDA850:	Palm OS PDA-Based Application Tools

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