

470-698 MHz UHF WIRELESS INTERCOM SYSTEM

HME PRO850™



More Capabilities and Controls
For Critical Communication Demands

PRODUCT FEATURES

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 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.

USER-FRIENDLY DISPLAYS AND MENUS



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.

BASE STATION FEATURES

- **Frequency agility** enables you to operate the PRO850 within the 470-698 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. The upper band is limited to 12 MHz and 480 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 PC850 software lets you configure the entire PRO850 System and manage configuration files from the convenience of your PC via the RS-232 serial port.





- **Expandable system** allows you to configure the PRO850 to meet your communication needs. A standard PRO850 System comes with four beltpacks and a base station. By linking several base stations to provide additional receivers, up to 12 users can communicate with each other in full-duplex operation.
- **Automated beltpack output power control** helps optimize the system operating power. The base station automatically configures beltpack settings and calibrates the power level for each beltpack, depending on its distance from the base. This eliminates base receiver overload and extends the beltpack 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 beltpack 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” beltpacks from transmitting** at the base to stop a rogue beltpack that’s been left transmitting without having to locate the beltpack.

BELTPACK FEATURES

- **Beltpack 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 partyline selection, paging, ISO, alert and call functions.
- **Individual volume controls** allow beltpack 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 beltpack.
- **Channel lockout** enables multiple beltpack users to share the same operating frequency and automatically disable a beltpack’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 beltpack batteries are low.
- **Versatile headset connector** allows use of standard 4-pin male connector or field-install of a 4-pin or 5-pin female XLR connector. The beltpack 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 beltpack headset and controlled by the beltpack 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.

TECHNICAL SPECIFICATIONS

BASE STATION SPECIFICATIONS

GENERAL

Frequency Range:	470-608MHz, 614-698MHz in Dual TX/RX Bands
Frequency Response:	50Hz to 10kHz
Power Requirements:	100-240VAC, 50-60Hz or 12-14VDC
Size:	19" 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, 600W Balanced, Level Adjustable, Simultaneous Operation with 2-Wire
2-Wire I/O:	XLR-3F, Externally-Switchable RTS® or Clear-Com® Mode, 200W, Level Adjustable, Null Adjustable
Auxiliary Input:	XLR-3F/¼" Phone Combo Jack, 600W Balanced, Level Adjustable
Aux & Page Output:	XLR-3M, 600W Balanced, Level Adjustable
Page & Alert Relay:	2 Four-Pin Phoenix, 2A @ 30VDC Max
Beltpack Interface:	RJ10, RS-232
PC Interface:	DB9, RS-232, 38400 baud
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 - 160mW per Side, Mono - 250mW
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®/Clear-Com® Mode Switch

TRANSMITTER

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

RECEIVER

Type:	720 Synthesized (480 for Upper Band), 25kHz 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:	10ppm
Distortion:	<1% at Maximum Deviation

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BELTPACK SPECIFICATIONS

GENERAL

Frequency Range:	470-608MHz, 614-698MHz in Dual TX/RX Bands
Antenna Type:	Flexible ¼-Wave, Field-Replaceable
Frequency Response:	50 Hz to 10 kHz
Battery Requirements:	6 "AA" Alkaline Cells (Optional Ni-MH)
Battery Life:	PTE: 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:	16oz (0.45 kg) with Batteries
Base Interface:	RJ10, RS-232
Auxiliary Input:	Connector: 1/8" Miniature Phone Jack Impedance: 8kΩ, Input Level: 100mV Overrides Optional 2nd Receiver if Installed.
Headset Connector:	XLR-4M (Optional Field-Installable XLR-4 or 5F)
Mic Input:	Auto-Detect, Low Impedance Dynamic or Electret
Headset Output:	200mW @ 1% THD into 50W
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 (480 for Upper Band), 25kHz Channel Steps
Transmit Power:	100, 50, 10 or 1mW, 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:	50kHz
Frequency Stability:	10ppm
Harmonics/Spurious:	Exceeds FCC Specifications

RECEIVER

Type:	720 Synthesized, 25kHz 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:	10ppm
Distortion:	<1% at Maximum Deviation

OPTIONS / ACCESSORIES

AC850A:	4 Port Battery Charger
BAT850:	Ni-MH Rechargeable Battery
RMK850:	Rackmount Antenna Adapter, 1-RU
RAK850:	Remote Antenna Kit
HS15-4F:	Single Muff Noise Cancelling Headset
HS15D-4F:	Dual Muff Noise Cancelling Headset