



MOTOROLA
intelligence everywhere™

PR400™ | PM400™

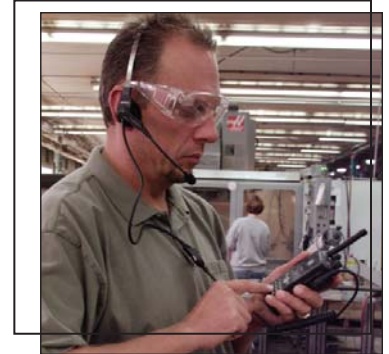
Portable and Mobile Series
Two-Way Radios and Accessories



The Motorola Difference

Motorola has developed two-way radios with a number of key factors in mind to provide you with great quality and enhanced value. These key factors represent the essential elements you depend on and expect in your communication – and Motorola brings them all together for you!

- **Value** to ensure you get the most for your communication dollars
- **Reliability** so you can depend on your radio, even in harsh environments
- **Ease of Use** for simple operation and customization
- **Audio Quality** to get your message through loud and clear
- **Size and Weight** to provide convenient installation or easy portability
- **Battery Life** to give you the power you need to communicate – as long as you need
- **Programmable** to customize features of each radio for each user
- **Range** that lets you reach coworkers across the street or across town



Motorola – A Name You Know and Trust

For 75 years, Motorola has been a leader in creating state-of-the-art wireless communication for people like you. The PR400 portable and PM400 mobile two-way radios continue to uphold that standard of excellence that Motorola is known for. Each radio is backed by a limited two-year* warranty on parts and labor. So when you select the PR400 or PM400, you will experience the same exceptional quality you have come to expect from Motorola products.

The PR400 and PM400 two-way radios are ideal for many businesses and industries including:

- Agriculture
- Hospitality
- Light Construction
- Light Industrial
- Manufacturing
- Public Administration
- Delivery Services
- Security
- Taxi and Limousine Services
- Transportation/Fleet
- Utilities

Superb Performance, More Channels ... Still Affordable

The PR400 portable and PM400 mobile two-way radios are easy to use. The time-tested durability of Motorola's two-way radios represents an exceptional value when you consider the life span of the radios and minimal downtime for replacement parts and repairs.

The PR400 and PM400 are ideal for small businesses and companies that need reliable communication that delivers every time, while also providing an affordable communication solution with the features you need and Motorola's renowned quality.

*Radio accessories are covered by Motorola's one-year accessories warranty.

Why Are the PR400 and PM400 Right for You?

- More channels provide you with options, flexibility and control over your communication.
- Motorola dealers can help program your favorite features so each portable and mobile radio can be customized to best suit the needs of the individual radio user.
- Upgrading is easy because the PR400 and PM400 radios share compatible accessories with some of Motorola's most popular two-way radios.
- All of the PR and PM Series radios come standard with an option board port for future expandability and added flexibility.
- The PR400 is available in three models that vary by display, channels and features so there is a perfect model for every level of manager and employee.
- The PR400 and PM400 have a high-quality speaker that provides noticeably clear, crisp audio with minimum distortion at maximum power.
- The PM400 offers the most features and channels of any Motorola mobile in our Commercial Series and can be mounted in just about any vehicle. It also serves as an ideal desktop base station in the office or on the factory floor.
- Motorola Original® replacement parts are on hand and easily available so radio repairs can be turned around quickly.

PR400 and PM400 Radio Accessories Customize Your Radio for Your Specific Needs

Choose from many Motorola Original Accessories or Motorola Certified Accessories to expand the capabilities of your radio and create a truly customized communication solution for your business. Motorola accessories are system-tested with Motorola radios to ensure optimum performance. Ask us how we can help customize your two-way radios with just the right accessories for your communication needs.

In addition to the accessories below, Motorola offers a variety of antenna options, such as the UHF Heliflex Stubby Antenna (NAE6522) shown throughout this brochure and VHF Stubby Antenna (HAD9742/HAD9743). Contact us for complete accessory availability.

PR400 RADIO ACCESSORIES

- **Antenna Accessories**
For transmission and reception range, choose from a variety of antennas
- **Batteries**
Different battery chemistries to best suit your needs
- **Carry Accessories**
Keep the radio secure and take it with you wherever you need to go
- **Chargers**
Keep your Motorola batteries fully powered and ready when you need them
- **Headsets**
For hands-free operation so you can do the work you need to do
- **Surveillance Accessories/Earpieces**
Enhance privacy and discrete communication
- **Ear Microphone Accessories**
Ideal for hands-free communication
- **Remote Speaker Microphones**
Talk or listen without removing the radio from your belt or case

PM400 RADIO ACCESSORIES

- **Microphone Accessories – microphones and speakers**
Make it easy to hear and be heard
- **Hands-Free Accessories**
Help improve operating efficiency so that drivers stay focused and keep their hands on the wheel
- **Desktop Base Station Accessories – power supplies and stands**
Set up an efficient, centralized base station or dispatch center
- **Mounting Accessories**
Customize the mobile's mounting for any vehicle configuration
- **Antenna Accessories**
For transmission and reception range, choose from a variety of antennas
- **Mobile Data Accessories**
Allow your communication system to grow, with Global Positioning Systems, Automatic Vehicle Locator, Mobile Display Status Terminals and more
- **Public Address Accessories**
Convert your mobile unit into a public address system for broadcast communication
- **Alarm Accessories**
Provide a warning or an alert

PR400 Portable with No Display or Keypad



16 Channels

Antenna

Choice of antenna options for your specific needs

Large Rotary Channel Selector

Fixed rotary knob changes channels quickly and easily

Rotary On/Off/Volume Control

Tri-Color LED Indicator

Indicates radio status and battery levels

Accessory Connector with Dust Cover

Convenient access for audio accessories

Microphone/Speaker

Larger, with improved components for enhanced audio

3" Belt Clip

Attaches radio firmly to belt

Rugged, Die-Cast Chassis

With polycarbonate housing for greater protection

Two Programmable Option Buttons (S1, S2)

Support up to 4 favorite features

Large, Textured Push-to-Talk Button

Easy to find and use, even when wearing gloves

Battery Latch Lock

Secures battery in case the radio is dropped

PR400 Features

- 16 Channels
- UHF and VHF Frequencies
- Up to 4 Programmable Features
- Busy Channel Lockout
- Transmit Time-Out Timer
- Voice-Operated Transmit (requires voice-activated microphone)
- TPL Standard and Non-Standard Reverse Burst (for better compatibility with fleets)
- Privacy Codes (42 standard TPL codes, 84 standard DPL codes and non-standard codes)
- System Scan and Auto Scan
- Single and Dual Priority Scan (frequently scans higher-priority channels)
- Revert Scan (radio moves automatically to last landed scan channel when exiting scan mode)
- Scan Talkback (respond to transmission while scanning)
- Option Board Expandability
- Quik-Call II™ Selective Call/Call Alert Decode
 - Selective Call: Calls a specific group or individual
 - Call Alert: Notifies a specific group or individual user with an alert tone and lighted LED
- MDC1200 Signaling
 - PTT ID Encode: Sends unique four-digit ID (Caller ID) information when transmitting on the current MDC system
 - Selective Radio Inhibit Decode: Dispatcher can remotely disable radio to prevent transmission from reaching stolen or inactive radios
 - Radio Check Decode: Dispatcher can determine remotely if radio is powered on without disturbing user
- DTMF Signaling
 - PTT ID Encode: Sends unique one to eight-digit ID (Caller ID) information when transmitting on the current DTMF system, which can be displayed on radios equipped with DTMF decoding capabilities
- 2-Year Standard Warranty

Note: All standard features listed here also are included on the Full Display and Limited Keypad model.

PR400 Programmable Features

(You can choose up to 4)

- **High/Low Power**
Adjusts transmit power to accommodate user environment
- **Tight/Loose Squelch**
Tight squelch helps minimize interference from undesired strong signals; loose squelch helps weak signals to be heard
- **Repeater/Talkaround**
Unit-to-unit communication, bypassing the repeater
- **VOX On/Off**
Enables/disables voice-operated transmit functionality for the current channel (Can also program VOX headset sidetone)
- **Option Board On/Off**
Enables/disables option board functionality for the current personality
- **Battery Indicator**
Displays battery charge level via LED
- **Volume Set**
Sets preferred volume level for radio speaker
- **Nuisance Channel Delete**
Temporarily deletes a specific channel from your scan mode if you no longer want to hear activity on that channel
- **Monitor**
Monitors the selected channel for any activity
- **Sticky Permanent Monitor**
Allows continuous channel monitoring
- **2 Memory Channels**
Direct access to up to 2 memory channels
- **Escalert™**
Increases volume of unanswered alarm alert

PR400 Portable Standard Package

- Radio
- 1600 mAh Slim Lithium-ion Battery
- 90-Minute Rapid Charger
- 3" Spring Belt Clip
- Antenna (VHF Heliflex or UHF Whip)*
- User Guide
- Safety Manual
- 2-Year Radio Warranty

*Motorola offers a variety of antenna options, such as the UHF Heliflex Stubby Antenna (NAE6522) shown throughout this brochure and VHF Stubby Antenna (HAD9742/HAD9743).

Excellence in Design

Great care was taken in the design process of the PR400 and PM400 to not only help ensure ruggedness and reliability, but ease of use and functionality.

What's in a test? Motorola's radios must survive multiple drops from a height of five feet onto a hard surface to surpass our durability standards. And Motorola's Accelerated Life Test dishes out the equivalent of five years of abuse over a period of just three to five weeks. Our comprehensive testing is intended to design and develop a tough, high-quality radio that serves you for the long term.



PR400 Portable with Full Display and Limited Keypad



32 Channels

Large Rotary Channel Selector

Continuous rotary knob changes channels quickly and easily

Backlit 8-Character Alphanumeric Display with User-Friendly Icons

Display indicates radio status and battery levels and allows for viewing of channel names and Caller IDs, so users know who's contacting them on the radio

Menu Scroll Buttons

Allow user to change channels and access menu features

Four Programmable Option Buttons (S1, S2, P1, P2)

2 side and 2 front buttons support up to 8 favorite features

PR400 Additional Features

The Full Display/Limited Keypad model has all of the same regular and programmable features as the Non Display model plus the following:

- 32 Channels
- Up to 8 Programmable Features
- Supports Up to 16 Scan Lists of Up to 16 Channels Per List
- User Editable Standard TPL/DPL Codes
- User Editable Scan List
- Lights On/Off
Keypad and display backlights
- Tones On/Off
- Call Tone Tagging
Tag a special tone for a particular call
- Quik Call II™ Signaling
 - Selective Call Encode: Calls a specific group or individual
 - Call Alert Encode: Notifies a specific group or individual user with an alert tone and lighted LED
- DTMF Signaling
 - Selective Call/Call Alert Encode

PR400 Additional Programmable Features

(You can choose up to 8)

• Phone Mode

Provides access to telephone interconnect through a repeater

• Menu Mode Enter/Exit

Access to radio menu and to select a menu option

• Radio Call

Allows a user to initiate Quik-Call II™ and/or DTMF Call Alert or Selective Call Encode from a call list

• Scan List Edit

Allows user to add/remove channels from current scan list

PR400 Portable with Full Display and Full Keypad

PR400 Additional Features

The Full Display/Full Keypad model has all of the same regular and programmable features as the Non Display and Limited Keypad models plus the following:

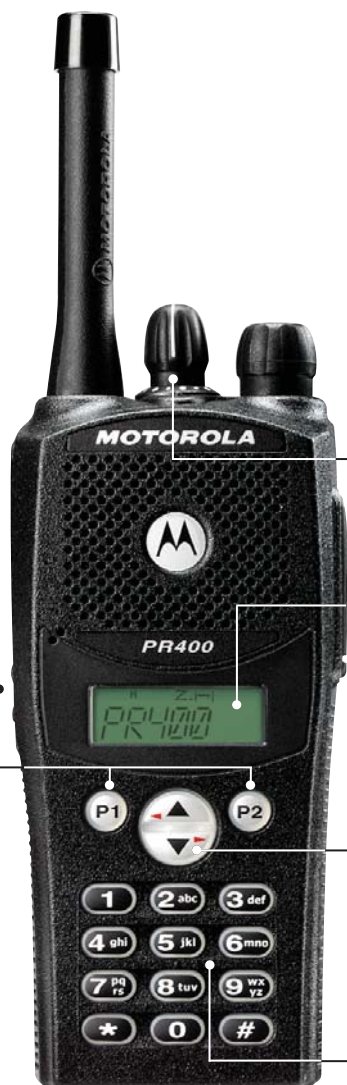
- 64 Channels
- User Editable Standard and Non-Standard TPL/DPL Codes
- Keypad Tones On/Off
- Manual Access Repeater:
Send DTMF tones to repeater
- User Editable Phone List
- Speed Dial for Radio Call Encode

PR400 Additional Programmable Features

(You can choose up to 8)

- **Speed Dial**
- **Keypad Lock/Unlock**
Allows user to lock/unlock keypad access to prevent unauthorized phone use

Four Programmable Option Buttons (S1, S2, P1, P2)
2 side and 2 front buttons support up to 8 favorite features



64 Channels

Large Rotary Channel Selector
Continuous rotary knob changes channels quickly and easily

Backlit 8-Character Alphanumeric Display with User-Friendly Icons

Display indicates radio status and battery levels and allows for viewing of channel names and Caller IDs, so users know who's contacting them on the radio

Menu Scroll Buttons
Allows user to change channels and access menu features

Full DTMF Keypad

Batteries and Chargers

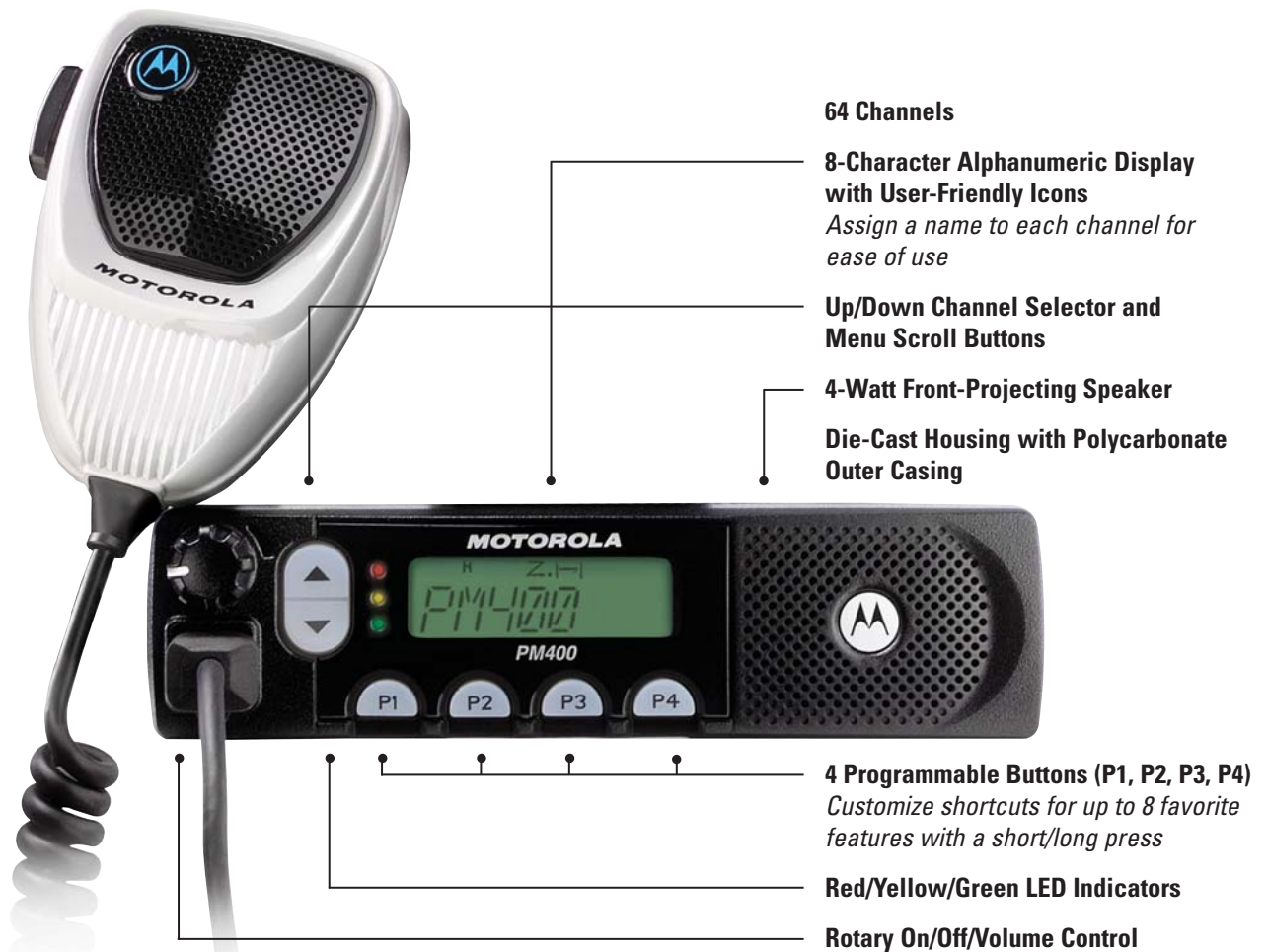
All PR400 radios come standard with a lightweight 1600 mAh Slim Lithium-ion battery. It's easy to carry, does not suffer from memory effect and can be charged in 90 minutes with Motorola's new rapid charger included in the standard package. There's also a new FM-certified "intrinsically safe" NiMH 1300 mAh battery option.

Whether you select our nickel-cadmium, nickel-metal hydride or lithium-ion battery, remember to only charge it with a Motorola Original® battery charger.

Because you need to hear and be heard

The PR400 and PM400 use Motorola's X-Pand™ technology to compress the speaker's voice at transmission and expand it at the receiving end while simultaneously reducing extraneous noise. X-Pand improves the signal-to-noise ratio to improve audio quality, particularly at 12.5 kHz channel spacing.

PM400 Mobile



PM400 Features

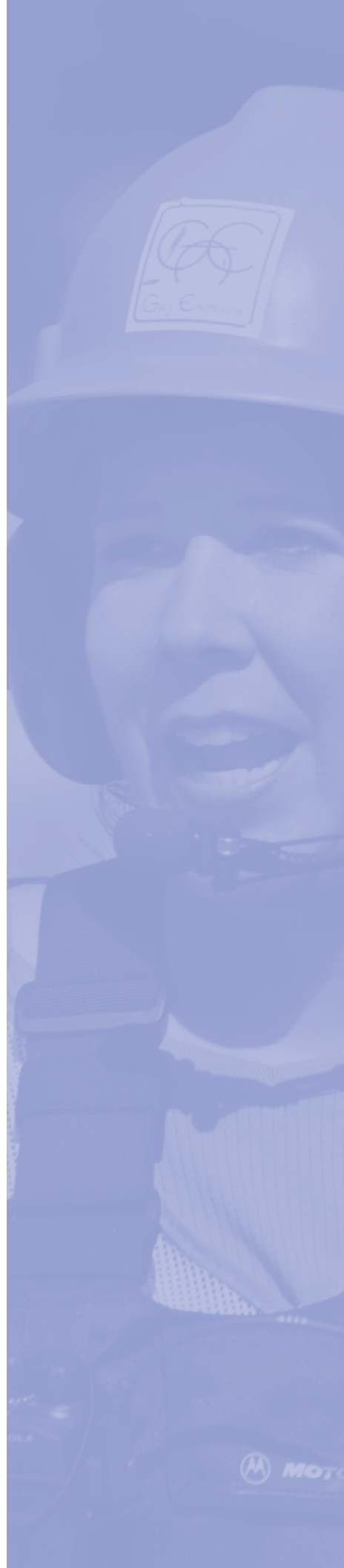
- 64 Channels
- Up to 8 Programmable Features
- VHF and UHF Frequencies
- Transmit Time-Out Timer
- Busy Channel Lockout
- Voice-Operated Transmit (requires voice-activated microphone)
- Private-Line/Digital Private-Line Code Editing
- TPL Standard and Non-Standard Reverse Burst (for better compatibility with fleets)
- Privacy Codes (42 standard TPL codes, 84 standard DPL codes and non-standard codes)
- System Scan and Auto Scan
- Supports Up to 16 Scan Lists of Up to 16 Channels Each
- Single and Dual Priority Scan (frequently scans higher-priority channels)
- Revert Scan (radio moves automatically to last landed scan channel when exiting scan mode)
- Scan Talkback (respond to transmission while scanning)
- Adjustable Backlight Intensity
- Quik-Call II™ Signaling Encode/Decode
 - Selective Call: Calls a specific group or individual
 - Call Alert: Notifies a specific group or individual user with an alert tone and lighted LED
- MDC1200 Signaling
 - PTT ID Encode/Decode: Sends unique four-digit (Caller ID) information when transmitting on the current MDC system
 - Selective Radio Inhibit Decode: Dispatcher can remotely disable radio to prevent transmission from reaching stolen or inactive radios
 - Radio Check Decode: Dispatcher can determine remotely if radio is powered on without disturbing user
 - Emergency Encode: Causes an MDC Emergency Signal to be transmitted on the current MDC system
- DTMF Signaling
 - PTT ID Encode: Sends unique one to eight-digit (Caller ID) information when transmitting on the current DTMF system, which can be displayed on radios equipped with DTMF decoding capabilities
 - Selective Call/Call Alert Encode
- Call Tone Tagging (special tone for a particular call)
- 2-Year Standard Warranty

PM400 Programmable Features (You can choose up to 8)

- **2-Channel Home Revert**
Returns to 1 or 2 favorite channels
- **Volume Set**
Sets preferred volume level for radio speaker
- **Silent Monitor/Open Squelch**
Silent monitor causes radio to remain silent when there is no channel activity; open squelch monitor causes "white noise" to be heard when there is no channel activity
- **Sticky Permanent Monitor**
Allows continuous channel monitoring
- **High/Low Power**
Adjusts transmit power to accommodate user environment
- **Repeater Talkaround**
Unit-to-unit communication, bypassing the repeater
- **Local/Distance**
Local mode reduces interference from nearby radios; distance mode helps improve range
- **Tight/Loose Squelch**
Tight squelch helps minimize interference from undesired strong signals; loose squelch helps weak signals to be heard
- **Nuisance Channel Delete**
Temporarily deletes a specific channel from your scan mode if you no longer want to hear activity on that channel
- **Scan On/Off**
Enables/disables scan mode of operation
- **VOX On/Off**
Enables/disables voice-operated transmit function for the current channel
- **Escalart**
Increases volume of unanswered alarm alert
- **Menu Mode**
Access to radio menu and to select a menu option
- **Option Board On/Off**
Enables/disables option board functionality for the current personality
- **Phone Mode**
Provides access to telephone interconnect through a repeater
- **Speed Dial**
Initiates a phone call to a preprogrammed recipient with the press of a DTMF key (requires a DTMF keypad microphone)
- **Radio Call**
Allows user to initiate Quik-Call II™ and/or DTMF Call Alert or Selective Call Encode from a call list
- **Scan List Edit**
Allows user to add/remove channels from current scan list
- **External Alarm**
Activates a warning or alert by triggering flashing headlights, a siren or a horn (requires an external alarm accessory and an accessory connector pin to be programmed for external alarm through CPS)

Standard PM400 Product Package

- Radio with Rear-Mounted Connectors for Power, 16-Pin Accessory and Mini-U Antenna
- Low-Profile Mounting Bracket
- Heavy-Duty Microphone with Hang-Up Clip
- Standard Power Cable
- User Guide
- Safety Booklet
- 2-Year Standard Warranty



PR400 Portable Two-Way Radio Specifications*

General Specifications		
	VHF	UHF
Frequency	146-174MHz	403-440MHz, 438-470MHz, 465-495MHz
Channel Capacity	16, 32 or 64	16, 32 or 64
Power Supply	7.5 Volts +/- 20%	7.5 Volts +/- 20%
FCC Description	ABZ99FT3045	ABZ99FT4057, ABZ99FT4056, ABZ99FT4058

No Display or Keypad		
	DIMENSIONS H w/o knobs x W @spkr x D @ spkr w/o belt clip	WEIGHT (w/ radio, battery, and belt clip, w/o antenna)
1100 mAh NiCd	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	430 g (15.17 oz)
1300 mAh NiMH Intrinsically Safe (FM)	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	449 g (15.83 oz)
1400 mAh NiMH	130mm H x 62mm W x 43mm D (5.12" H x 2.4" W x 1.69" D)	446 g (15.73 oz)
1600 mAh Slim Li-ion	130mm H x 62mm W x 42mm D (5.12" H x 2.4" W x 1.65" D)	377 g (13.30 oz)
1800 mAh Li-ion	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	376 g (13.26 oz)

Full Display and Limited Keypad		
	DIMENSIONS H w/o knobs x W @spkr x D @ spkr	WEIGHT (w/ radio, battery, and belt clip, w/o antenna)
1100 mAh NiCd	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	451 g (15.91 oz)
1300 mAh NiMH Intrinsically Safe (FM)	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	469 g (16.54 oz)
1400 mAh NiMH	130mm H x 62mm W x 43mm D (5.12" H x 2.4" W x 1.69" D)	467 g (16.47 oz)
1600 mAh Slim Li-ion	130mm H x 62mm W x 42mm D (5.12" H x 2.4" W x 1.65" D)	397 g (14.0 oz)
1800 mAh Li-ion	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	396 g (13.97 oz)

Full Display and Full Keypad		
	DIMENSIONS H w/o knobs x W @spkr x D @ spkr	WEIGHT (w/ radio, battery, and belt clip, w/o antenna)
1100 mAh NiCd	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	451 g (15.91 oz)
1300 mAh NiMH Intrinsically Safe (FM)	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	469 g (16.54 oz)
1400 mAh NiMH	130mm H x 62mm W x 43mm D (5.12" H x 2.4" W x 1.69" D)	467 g (16.47 oz)
1600 mAh Slim Li-ion	130mm H x 62mm W x 42mm D (5.12" H x 2.4" W x 1.65" D)	397 g (14.0 oz)
1800 mAh Li-ion	130mm H x 62mm W x 45mm D (5.12" H x 2.4" W x 1.75" D)	396 g (13.97 oz)

Average Battery Life			
BATTERY	CAPACITY (mAh)	HI-PWR 5W Talk Time (hrs)	LO-PWR 1W Talk Time (hrs)
1100 mAh NiCd	1100	8	10
1300 mAh NiMH Intrinsically Safe (FM)	1300	9	11
1400 mAh NiMH	1400	10	13
1600 mAh Slim Li-ion	1600	12	17
1800 mAh Li-ion	1800	14	19

PR400 Portable Two-Way Radio Specifications*

Receiver Specifications				
	VHF 12.5kHz	VHF 20/25/30kHz	UHF 12.5kHz	UHF 20/25/30kHz
Frequency	146-174MHz		403-440MHz, 438-470MHz, 465-495MHz	
Sensitivity 12dB SINAD	0.25µV (typical)		0.25µV (typical)	
Adjacent Channel Selectivity	-65 dB	-70 dB	-65 dB	-70 dB
Intermodulation	-70 dB		-70 dB	
Frequency Stability (-30 C to +60 C)	0.00025%		0.00025%	
Spur Rejection	-75 dB		-75 dB	
Image and 1/2 I-F Rejection	-70 dB		-70 dB	
Audio Output @ <5% Distortion	500 mW		500 mW	

Transmitter Specifications				
	VHF	VHF	UHF	UHF
RF Output	Low	High	Low	High
	1W	5W	1W	4W
Frequency	146-174MHz		403-440MHz, 438-470MHz, 465-495MHz	
Channel Spacing	12.5/20/25kHz		12.5/20/25kHz	
Frequency Stability (-30 C to +60 C)	0.00025%		0.00025%	
Spurs/Harmonics	-36 dBm < 1GHz		-36 dBm < 1GHz	
	-30 dBm > 1GHz		-30 dBm > 1GHz	
Audio Response (from 6 dB/oct. Preemphasis, 300 to 3000Hz)	+1, -3 dB		+1, -3 dB	
Audio Distortion @ 1000 Hz, 60% Rated	< 3%		< 3%	
FM Noise	-40 dB (12.5kHz)		-40 dB (12.5kHz)	
	-45 dB (25kHz)		-45 dB (25kHz)	
FCC Modulation				
20/25/30 kHz	16K0F3E		16K0F3E	
12.5 kHz	11K0F3E		11K0F3E	

Portable Military Standards 810 C, D, E & F

Applicable MIL-STD	810C		810D		810E		810F	
	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2	500.4	1
High Temp	501.1	1, 2	501.2	1, 2	501.3	1, 2	501.4	1, 2
Low Temp	502.1	1	502.2	1, 2	502.3	1, 2	501.4	1, 2
Temp Shock	503.1	1	503.2	1	503.3	1	503.4	1
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1
Rain	506.1	1, 2	506.2	1, 2	506.3	1, 2	506.4	1
Humidity	507.1	2	507.2	2, 3	507.3	2, 3	507.4	3
Salt Fog	509.1	1	509.2	1	509.3	1	509.4	1
Dust	510.1	1	510.2	1	510.3	1	510.4	1
Vibration	514.2	8, 10	514.3	1	514.4	1	514.5	1
Shock	516.3	1, 2, 5	516.3	1, 4	516.4	1, 4	516.5	1

PR400 Environmental Specifications

Operating Temperature	- 30 C to + 60 C
Storage Temperature	- 40 C to + 85 C
ESD	IEC 801-2 KV
Water and Dust Intrusion	IP 54

*All specifications subject to change without notice.

PM400 Mobile Two-Way Radio Specifications*

General Specifications				
	VHF		UHF	
Channel Capacity	64		64	
Technical RF Output	Low	High	Low	High
	1-25W	25-45W	1-25W	25-40W
Frequency	146-174MHz		438-470MHz, 465-495MHz	
Dimensions (H * W * L)	1.73" x 6.67" x 4.64" (44mm x 169mm x 118mm)		1.73" x 6.67" x 4.64" (44mm x 169mm x 118mm)	
Weight (radio only)	2.25 lbs (1.02 Kg)		2.25 lbs (1.02 Kg)	
Current Drain: Standby	0.3A		0.3A	
Rx@ rated, external 8 ohm speaker	1.5A		1.5A	
Transmit	7A (25W)	9.5A (45W)	8A (25W)	9A (40W)
FCC Description	AZ492FT3805 (25W) ABZ99FT3046 (45W)		AZ492FT4856 (25W) ABZ99FT4048 (40W), AZ99FT4049 (40W)	
Receiver				
	VHF		UHF	
Frequencies	146-174MHz		438-470MHz, 465-495MHz	
Channel Spacing	12.5/20/25kHz		12.5/20/25kHz	
Frequency Stability (-30 C + 60 C, +25 C)	+/-2.5ppm		+/-2.5ppm	
Sensitivity (12db Sinad)	0.35µV (12.5kHz) 0.3µV (25kHz) typical		0.35µV (12.5kHz) 0.3µV (25kHz) typical	
Intermodulation	65dB (12.5kHz)	75dB (25kHz)	60dB (12.5kHz)	70dB (25kHz)
Adjacent Channel Selectivity	65dB (12.5kHz)	75dB (25kHz)	60dB (12.5kHz)	70dB (25kHz)
Spurious Rejection	75dB		70dB	
Rated Audio (extended audio with 4 ohm speaker)	4W internal 13W external		4W internal 13W external	
Audio Distortion @ Rated Audio	3% typical		3% typical	
Hum and Noise	-40 dB (12.5kHz) -45 dB (25kHz)		-35 dB (12.5kHz) -40 dB (25kHz)	
Audio Response	+1, -3 dB		+1, -3 dB	
Conducted Spurious Emission	-57 dBm < 1GHz -47 dBm > 1GHz		-57 dBm < 1GHz -47 dBm > 1GHz	
Transmitter				
	VHF		UHF	
Frequencies	146-174MHz		438-470MHz, 465-495MHz	
Channel Spacing	12.5/20/25kHz		12.5/20/25kHz	
Frequency Stability (-30 C + 60 C, +25 C)	+/-2.5ppm		+/-2.5ppm	
Modulation Limiting	+/-2.5kHz (12.5kHz) +/-4kHz (20kHz) +/-5kHz (25kHz)		+/-2.5kHz (12.5kHz) +/-4kHz (20kHz) +/-5kHz (25kHz)	
FM Hum and Noise	-40 dB (12.5kHz) -45 dB (25kHz)		-35 dB (12.5kHz) -40 dB (25kHz)	
Conducted/Radiated Power	-36 dBm < 1GHz -30 dBm > 1GHz		-36 dBm < 1GHz -30 dBm > 1GHz	
Adjacent Channel Power	-60 dB (12.5kHz) -70 dB (25kHz)		-60 dB (12.5kHz) -70 dB (25kHz)	
Audio Response	+1, -3 dB		+1, -3 dB	
Audio Distortion	3% typical		3% typical	
FM Modulation	11K0F3 (12.5kHz) 16K0F3E (25kHz)		11K0F3 (12.5kHz) 16K0F3E (25kHz)	

*All specifications subject to change without notice.

PM400 Mobile Military Standards

Applicable MIL - STD	810C		810D		810E	
	Methods	Procedures	Methods	Procedures	Methods	Procedures
Temperature Shock	503.1	I	503.2	I	503.3	I
Solar Radiation	505.1	I	505.2	I	505.3	I
Salt Fog	509.1	I (48 Hours)	509.2	I (48 Hours)	509.3	I (48 Hours)
Vibration	–	–	514.3	I. Cat. 1	514.4	I. Cat. 1
Shock	516.2	I, III	516.3	I, V	516.4	I, V

Accelerated Life Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.

PM400 Environmental Specifications

Operating Temperature	- 30 C to + 60 C
Storage Temperature	- 40 C to + 85 C
Thermal Shock	- 40 C to + 80 C
Humidity	95%RH @8Hr
Water and Dust Intrusion	IP 54
Packing Test	Impact test

Exceptional Durability

There's a reason why Motorola two-way radios are built to last. Motorola's rugged and reliable radios, including the PR and PM Series radios, undergo rigorous testing in the design process. We use U.S. Military Standards and Motorola's Accelerated Life Test, so you can be assured Motorola radios will hold up under demanding conditions. These tests are designed to simulate very harsh environments, including:

Rain* – steady rainfall and wind for 30 minutes on every surface. Ideal for agriculture, light construction, utility and public administration personnel who work outdoors in any type of weather.

Salt Fog – 48 hours of exposure to an atomized salt solution. Hospitality staff, utility workers and public administration personnel working near oceans or around winter salt applications will appreciate our radios' resistance to salt corrosion.

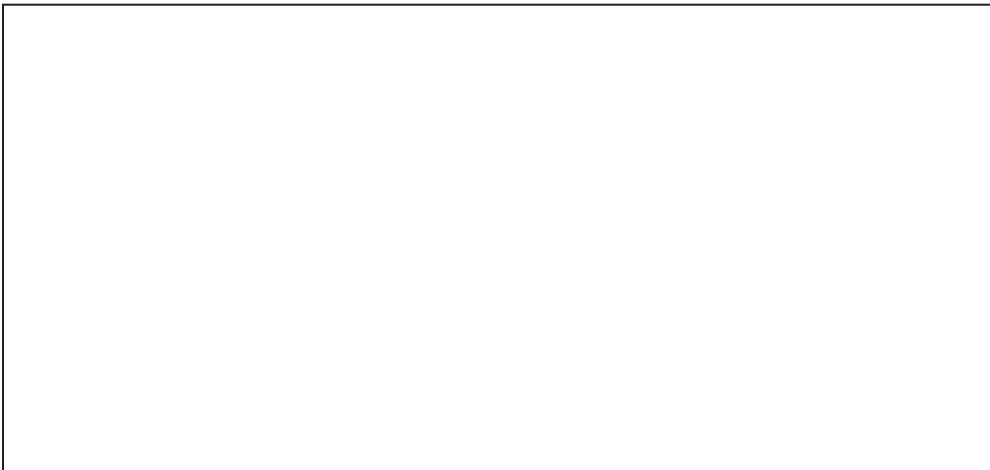
Dust* – 6 hours of blowing dust on all surfaces. Ideal for agriculture, light construction, utility and public administration workers who are exposed to a variety of dusty environments.

Vibration – up to 9 hours of exposure to vibration that simulates the rigors that portables and mobiles could undergo while being transported. Because portables are carried by the radio user, it's important they hold up to extensive vibration tests, and mobiles must withstand the rigors of the road. Light construction and industrial workers, agriculture, utility and public administration staff expect a radio to withstand any vibrations.

Shock – 18 shocks with a minimum G force of 40 Gs each make these portables and mobiles ideal for light construction and light industrial, agriculture, public administration, utilities and anyone who has dropped a radio at some time.

*PR400 only

For more information:



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MD-EUPR400/PM400



Motorola's Commercial, Government and Industrial Solutions Sector (CGISS) is a recipient of the prestigious 2002 Malcolm Baldrige National Quality Award, in recognition of its commitment to performance excellence and quality achievement.