



MOTOROLA

TWO-WAY RADIOS

P040: The Entry Level Radio

The compact, lightweight design is convenient to use and carry throughout the duration of your working day. The P Series radios meet US Military Standards for use in hostile environments as well as the IP54 specification for driving rain and dust.



Operator Friendly Controls and features include:

- **Signalling:**
The P Series radios support the Motorola Private™ signalling system, allowing you to organise your workforce communications effectively and efficiently, by filtering out unwanted calls.
- **X-Pand™ Audio Enhancement:**
Companding and Low Level expansion help ensure crisper, clearer and stronger audio. This means that you stay in touch with your colleagues, even when working in environments with high levels of background noise.
- **Voice Operated Transmit (VOX):**
VOX enables "hands-free" operation, allowing your staff to concentrate on the task in hand rather than the radio in hand.
- **Adjustable Transmit Power Levels:**
The radio user can choose between a low power setting, to extend battery life, or a high power setting to assist in extending communication range.
- **Programmable Channel Spacing:**
Enables quick and easy migration to another communication system with different channel spacing requirements.
- **Busy Channel Lockout:**
This enforces system discipline by preventing radio users from interrupting each other's communications.
- **FM Approved:**
The P Series radios have been approved by the Factory Mutual Corporation for use in hazardous environments.
- **Option Board Expandability:**
You can expand the capabilities of your P Series radio by adding one of the following option boards:
 - SmarTrunk II for low-cost trunking.
 - Transcript scrambling for over-air message security.
- **Repeater Talkaround:**
If your system utilises a repeater, the Repeater Talkaround feature helps ensure that, in the absence of the repeater, local communications resume at the push of a button.
- **Scanning:**
The P Series radios support scanning to allow activity on different communications channels to be monitored and answered, thus ensuring that critical calls are received.
- **Time Out Timer:**
This important feature helps to prevent a single radio user from monopolising the communication channel by limiting talk time.



As Dedicated As You Are

Professional Radio

Entry Level Professional Specifications

General - VHF, UHF	
*Frequency:	136-174/403-470/450-527
Channel Capacity:	16 channel
Power Supply:	7.5v
Dimensions: With Standard High NiMH Battery: With NiCd Battery:	HxWxD Radio footprint height excluding knobs 137mm x 57.5mm x 37.5mm 137mm x 57.5mm x 40mm
Weight: With Standard NiMH Battery: With NiCd Battery:	429g 454g
Average Battery Life @5/5/90 Cycle: With Standard Capacity NiMH Battery: With NiCd Battery:	Low Power 10 hours 10 hours High Power 8 hours 8 hours
Sealing:	Withstands rain testing per MIL-STD-810-C,D & E and P54
Shock and Vibration:	Protection provided via impact resistant housing exceeding MIL-STD-810-C,D & E and TIA/EIA 603
Dust and Humidity:	Protection provided via environment resistant housing exceeding MIL-STD-810-C,D & E and TIA/EIA 603

Portable Military Standards 810 C, D, & E						
Applicable MIL-STD	810C Methods Procedures		810D Methods Procedures		810E Methods Procedures	
Low Pressure	500.1	1	500.2	2	500.3	2
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2
Low Temperature	502.1	2	502.2	1,2	502.3	1,2
Temp. Shock	503.1	1	503.2	1	503.3	1
Solar Radiation	505.1	1	505.2	1	505.3	1
Rain	506.1	2	506.2	2	506.3	2
Humidity	507.1	2	507.2	2,3	507.3	3
Salt Fog	509.1	1	509.2	1	509.3	1
Dust	510.1	1	510.2	1	510.3	1
Vibration	514.2	8,10	514.3	1	514.4	1
Shock	516.2	1,2,5	516.3	1	516.4	1

Transmitter	
Specification:	VHF/UHF
* Frequency:	136-174/403-470/450-527
Frequency Separation:	Full Bandsplit
Channel Spacing:	12.5/20/25 kHz
Frequency Stability: (-30°C to +60°C, +25°C Ref.)	+/- 0.00025%
Power:	5W: 136-174 4W: 403-470, 450-527
Modulation Limiting:	+/- 2.5 @ 12.5 kHz +/- 4.0 @ 20 kHz +/- 5.0 @ 25 kHz
FM Hum & Noise: Conducted/Radiated Emission:	-40 dB -66 dBw
Modulation FCC Type:	12.5 kHz 11 K0F3E 25 kHz 16K0F3E
Audio Response: (from 6dB/octave pre-emphasis, 300 - 3000Hz)	+1 to -3 dB
Audio Distortion	3%

Receiver	
Specification:	VHF/UHF
*Frequency:	136-174/403-470/450-527
Frequency Stability: (-30°C to +60°C)	0.00025%
Frequency Separation:	Full Bandsplit
Sensitivity (12dB SINAD) (EIA)	25 µV
Intermodulation (EIA)	70 dB
Adjacent Channel Selectivity:	60 dB @ 12.5 kHz 70 dB @ 25 kHz
Spurious Rejection:	70 dB
Rated Audio: Audio Distortion:	500 mW 3%
Hum and Noise: Audio Response (300-3000 Hz)	-45dB @ 12.5 kHz, -50dB @ 25 kHz +1 to -3
Conducted Spurious Emission:	-57dBm<1 GHz/-47dBm>1 GHz/FCC Part 15

*Availability subject to country law and regulations/Specifications subject to change without notice.
All specifications shown are typical. Radios meet applicable regulatory requirements.

The Motorola P Series has been developed to offer a high level of durability and operational reliability. Like all of our products, the P Series has passed the unique Motorola Accelerated Lift Test, which simulates five year's use in the field.

Motorola Original accessories offer you complete communications solutions to both enhance and simplify your radio applications.

For exceptional performance, reliability and quality, Motorola Original accessories and batteries are the only options.

For full details, please refer to the P Series Radio Accessories brochure

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For full details, please refer to the Professional Radio Series Accessories brochure.



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