

PRO5150™
Portable Radio



Motorola's PRO5150 portable radio is the solution for professionals who require a rugged and reliable radio to help them stay in contact. This practical radio can easily help you to increase productivity by keeping you communicating, yet streamlines your radio use—allowing you to concentrate on the job at hand.

Companding Technology

With X-Pand™ voice compression technology, audio quality is clear and crisp even in noisy surroundings.

Tone Tagging

Eight different ringing tones identify an individual or group.

Emergency Siren/Alert

A dedicated button on the top of the radio can be programmed to make a piercing sound when pushed in case of an emergency. For more critical emergencies, the dispatch center can be alerted instead.

Switchable RF Power Level

Each channel can be programmed with a high or low power setting depending on your coverage needs. Any of the side buttons on the radio can be programmed to temporarily switch between high and low power levels.

12.5/25 kHz Switchable Channel Spacing

Each channel can be programmed with either 12.5 kHz or 25 kHz channel spacing, providing flexibility to comply with changing government regulations.

Escalert

The sound of the alert tone gradually increases when a selective call or Call Alert™ is not answered.

Internal Voice Operated Transmission (VOX)

With the use of an appropriate headset, you can speak and listen to a radio conversation without having to use your hands.

PRO5150™ PORTABLE RADIO

GENERAL	LOWBAND	VHF/UHF
Dimensions HxWxD With standard high capacity NiMH battery; Without belt clip	5.40 in. x 2.26 in. x 1.50 in. 137 mm x 57.5 mm x 37.5 mm	
Weight (grams/ounces)	420/15	
Power Supply	Rechargeable battery 7.5 Volts	
Average Battery Life @ 5/5/90 Duty Cycle*	11 hrs @ low power/8 hrs @ high power	
Model Numbers	LAH25BEC LAH25CEC	VHF/LAH25KDC UHF/LAH25RDC UHF/LAH25SDC
Frequency Range	29.7 - 42.0 MHz 35.0 - 50.0 MHz	VHF/ 136-174 MHz UHF/ 403-470 MHz UHF/ 450-527 MHz
Channel Spacing	20 kHz	12.5/20/25 kHz
Frequency Stability (-30°C to 60°C, 25°C Ref.)	± 10 ppm	±5 ppm @ 25 kHz ±2.5 ppm @ 12.5 kHz

*5% receive, 5% transmit, 90% standby

TRANSMITTER	LOWBAND	VHF/UHF
RF Power Output	1-6 W	VHF/ 1-5 W UHF/ 1-4 W
Modulation Limiting	±4 kHz @ 20 kHz	±2.5 kHz @ 12.5 kHz ±4.0 kHz @ 20 kHz ±5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB	
Conducted/Radiated Emissions	66 dBw	
Audio Response (0.3-3 kHz)	+1 to -3 dB	
Audio Distortion	3% typical	

RECEIVER	LOWBAND	VHF/UHF
Sensitivity (12 dB SINAD) EIA	0.25 µV typical	
Sensitivity (20 dB SINAD) ETS	0.50 µV	
Intermodulation per EIA	70 dB	
Adjacent Channel Selectivity	70 dB	60 dB @ 12.5 kHz 70 dB @ 25 kHz
Spurious Rejection	70 dB	
Rated Audio	0.5 W	
Audio Distortion @ Rated Audio	3% typical	
Hum and Noise	-45 dB @ 12.5 kHz/-50 dB @ 25 kHz	
Audio Response (0.3-3 kHz)	+1 to -3 dB	
Conducted Spurious Emission Per FCC Part 15	-57 dBm < 1 GHz / -47 dBm > 1 GHz	

MILITARY STANDARDS Applicable ML-STD	810C		810D		810E	
	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	1, 2	500.3	1, 2
High Temperature	501.1	1, 2	501.2	1, 2	501.3	1, 2
Low Temperature	502.1	1	502.2	1, 2	502.3	1, 2
Temperature Shock	503.1	1	503.2	1	503.3	1
Solar Radiation	505.1	1	505.2	1	505.3	1
Rain	506.1	1, 2	506.2	1, 2	506.3	1, 2
Humidity	507.1	2	507.2	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, 4	516.4	1, 4

Specifications subject to change without notice. All electrical specifications and methods refer to EIA/TIA 603 standards.

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LAE-PRO5150 REV. 7/02

Portable Radio Features

- ▶ 4 or 16 Channels
- ▶ PTT-ID (encode only)
- ▶ Battery Gauge (LED/TONE)
- ▶ Repeater/Unit-to-Unit Operation
- ▶ Monitor
- ▶ Tight/Normal Squelch
- ▶ Busy Channel Lockout
- ▶ Time-Out Timer
- ▶ Nuisance Channel Delete
- ▶ CSQ / PL / DPL / inv-DPL
- ▶ Option Board Port
- ▶ Emergency Siren

In addition, the 16 channel model offers this enhancements:

- ▶ Emergency Alert (encode only)
- ▶ Call Alert™ (decode only)
- ▶ Voice Selective Call (decode only)
- ▶ Selective Radio Inhibit (decode only)
- ▶ Quik-Call II Signaling (decode only)
- ▶ Single Priority Scan

Quality/Reliability

 Motorola Accelerated Life Test

 Military Standards MIL-SPECS 810 C, D, E

Contact your Motorola Representative today for more information.

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