

Mag One X10d portable radio

Built for the fast-paced
world of business

The Mag One X10d is a versatile and high-performing device for your business workforce. Whether managing a retail store, coordinating events or overseeing campus activity, the X10d connects your team with static-free, reliable communication – in a world where every second counts.



→ Take control

A radio this versatile should be able to keep up. With 23 hours of talk time, your radio should last an entire shift and then some. But just in case, the USB-C port also lets you charge your radio with an ordinary USB charger.

→ Listen up

With its 3-watt maximum audio power output, the X10d is the loudest radio in the Mag One family. Noise cancellation means clear audio, even in a noisy environment.

→ Stay safe

With features like a dedicated emergency button, Lone Worker and remote monitoring, the X10d helps protect you and your staff.



Ready to work

A connected workforce makes for smooth operations; with improved range performance, your team enjoys clear communication across a wide expanse. And at IP55, the X10d can handle the wear-and-tear of a high-energy workday.

Product Features

GENERAL

Analog and digital

DMR standards compliant¹

64 channels

USB-C (charging and programming)

3 programmable buttons

Voice announcements

Custom channel announcements

Voice recording¹ (8 hours)

Dual priority scan

Nuisance channel delete

Voice operation transmission (VOX)

IP55 dust and water ingress protection

Rugged to MIL-STD 810

AUDIO

Enhanced audio power

Noise cancellation

SAFETY

Emergency alert¹

Lone worker¹

Remote monitor

Radio disable / enable

SYSTEM

Dual-capacity direct mode¹

ANALOG FEATURES

Analog scrambling

¹ Digital feature



Specifications

GENERAL SPECIFICATIONS

FREQUENCY	400 - 470 MHz	136 - 174 MHz
Typical RF output		
High power	4 W	5 W
Medium power		2.5 W
Low Power		1 W
Channel capacity		64 channels
Channel spacing		12.5 / 25.0 kHz
Dimension ¹ (H x W x D) with battery		122 x 54 x 30 mm
Weight with battery, antenna, belt clip		300 g
Battery life ² (analog / digital)		16 hours / 23 hours
Power supply (Nominal)		7.2 V

TRANSMITTER SPECIFICATIONS

4FSK digital modulation	12.5 kHz Data: 7K60F1D and 7K60FXD 12.5 kHz Voice: 7K60F1E and 7K60FXE Combination: 7K60F1W
Digital protocol	ETSI TS 102 361-1, -2, -3
Conducted / radiated spurious emissions (TIA603E)	< -36 dBm for < 1 GHz ; < -30 dBm for > 1 GHz
Adjacent channel power	> 60 dB @ 12.5 kHz / >70 dB @ 25 kHz
Frequency stability	± 1.5 ppm
Modulation limiting	± 2.5 kHz @ 12.5 kHz / ± 5.0 kHz @ 25 kHz

RECEIVER SPECIFICATIONS

Analog sensitivity (12dB SINAD)	0.18 µV (typical)
Digital sensitivity (5% BER)	0.18 µV (typical)
Conducted / radiated spurious emissions (TIA603E)	< -57 dBm for < 1 GHz ; < -47 dBm for > 1 GHz
Intermodulation (TIA603E)	> 65 dB
Adjacent channel selectivity (TIA603A)-1T	> 60 dB @ 12.5 kHz / > 70 dB @ 25 kHz
Spurious Rejection (TIA603D)	> 70 dB
Frequency stability	± 1.5 ppm

AUDIO SPECIFICATIONS

Digital vocoder type	AMBE+2
Audio output power (Rated / Max)	1 W / 3 W
Audio distortion at rated power	3% (typical)
Hum and noise	-40 dB @ 12.5 kHz / -45 dB @ 25 kHz

ENVIRONMENTAL SPECIFICATIONS

Operating temperature ³	-30 °C to 60 °C
Storage temperature	-40 °C to 85 °C
Temperature shock	Per MIL-STD 810C, D, E, F, G, H
Humidity	Per MIL-STD 810C, D, E, F, G, H
Electrostatic discharge	IEC 61000-4-2 Level 4
Dust and water intrusion	IEC60529 IP55
Salt fog	Per MIL-STD 810C, D, E, F, G, H

¹ Dimensions at grip area.

² Typical battery life, 5/5/90 profile at maximum transmitter power. Actual observed runtimes may vary.

³ Temperature listed are for radio specification. Li-Ion battery discharge: -20°C to +60°C.



MILITARY STANDARDS (MIL-STD 810)												
MIL-STD 810C			MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G		MIL-STD 810H	
	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE
Low pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.6	II	500.6	II
High temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/HOT, II/HOT	501.5	I/A1, II/A2	501.7	I/A1, II/A1
Low temperature	502.1	I	502.2	I, II	502.3	I, II	502.4	I, II	502.5	I, II	502.7	I, II
Temperature shock	503.1	I	503.2	A1/C3	503.3	A1/C3	503.4	I	503.5	I/C	503.7	I/C
Solar radiation	505.1	II	505.2	I/A1	505.3	I/A1	505.4	I/A1	505.5	I/A1	505.7	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III	506.6	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	—	507.5	II/Aggravated	507.6	II/Aggravated
Salt fog	509.1	I	509.2	I	509.3	I	509.4	—	509.5	—	509.7	—
Blowing dust and sand	510.1	I/-	510.2	I, II	510.3	I, II	510.4	I, II	510.6	I, II	510.7	I, II
Vibration	514.2	VIII/F, W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24, II/5	514.6	I/24, II/5	514.8	I/24, II/5
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.7	I, IV	516.8	I, IV
Contamination by fluids									504.2	II	504.3	2.2.6 b

To learn more, visit: motorolasolutions.com/x10d



Motorola Solutions Singapore Pte. Ltd., 80 Pasir Panjang Road #18-81, Mapletree Business City, Singapore 117372

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2024 Motorola Solutions, Inc. All rights reserved. 09-2024 [LD04]