



# CP110™ UHF/VHF

## Portable Two-Way Radios—Display Models

### Performance You Can Count On.

The Motorola CP110 provides your business with a competitive communications edge, enhancing employee efficiency and overall profitability. Affordable and easy to use, the CP110 helps keep your operations on schedule, maximize job-shift productivity, enhance security and increase overall customer satisfaction. Compatible with other radios operating on the same frequency and code, the versatile CP110 also has a full complement of accessories for customizing the radio to suit your needs.



CP110 UHF



CP110 VHF

#### Exceptional Audio Quality

2000 mW audio output, speaker magnetic field reduction, wind-noise reduction and improved RF specifications deliver superior audio quality that is 30% louder than Motorola CP100 radios.

#### Rugged and Water Resistant

Meets Military 810 C,D,E and F and IP54/55 specifications for shock, rain, humidity, salt fog, vibration, sand/dust, temperature shock, high and low temperature.

#### Customer Programming Software (CPS)\*

Allows users to perform programming functions and direct entry of frequencies. CPS provides access to features such as Reverse Burst to eliminate unwanted noise, Radio Reporting to manage cloning and radio profiles, Manager Lock, Power Select, PL/DPL Defeat and two additional Time-Out Timers.

#### Tri-Color LED Interface

Convenient interface allows users to identify different radio features and radio status.

#### Power and Coverage\*\*

2 Watt UHF—Coverage of up to 250,000 sq. ft., 20 floors.  
2 Watt VHF—Coverage of up to 220,000 sq. ft., 13 floors.

#### Flexible and Durable Battery Life Solutions

CP110 battery packs are designed and manufactured to ensure durability of the radio. Radios ship standard with a high capacity Lilon battery. Other accessories for purchase: ultra high capacity Lilon and an alkaline battery kit.

#### Easy Cloning

Quickly copy settings with the Radio-to-Radio Cloning Cable or Multi-Unit Charger. (Both accessories sold separately.)

#### Convenient Charging

Drop-in charger keeps radios charged, ready—and centrally located.

#### Advanced Voice Activation (VOX)

Enables convenient hands-free operation when used with optional accessories.

#### General Features:

- Accessory Mic Gain
- Backlight
- Battery Save
- 16 Channels
- USB CPS Interface
- 2- and 3-Year Extended Warranty Options
- Manager Lock
- Low Battery Alert
- Power Select—1/2 Watts
- Power-up Tone
- Radio Mic Gain
- Rapid Drop-in Charger
- Removable Antenna
- Scan and Scan List
- Scramble
- Time-Out Timer

\* Windows® XP, Windows 2000 compatible, separate USB cable required.

\*\* Coverage will vary based on terrain, conditions and the radio model used.

## General Specifications

	CP110 UHF	CP110 VHF
Frequency Range	UHF (450 to 470 MHz)	VHF (150.8 to 174 MHz)
Audio Output	2000 mW	
Channel Capacity	16 Channels	
Channel Bandwidth	12.5/25 kHz	
Dimensions (H" x W" x D") w/High Capacity Lilon Battery w/Ultra High Capacity Lilon Battery	4.5 x 2.2 x 1.8 inches (115.6 x 57.6 x 45.1 mm) 4.5 x 2.2 x 1.8 inches (115.6 x 57.6 x 45.1 mm)	
Weight w/High Capacity Lilon Battery w/Ultra High Capacity Lilon Battery	10.3 oz (293g) 10.3 oz (293g)	
Average Battery Life @ 5/5/90 (with Battery Save On): w/High Capacity 2200 mAh Lilon Battery w/Ultra High 2400 mAh Lilon Battery w/Optional Alkaline Battery Accessory	Up to 24 Hours Up to 26 Hours Up to 26 Hours	
Power Supply Voltage	7.2 Volts DC (Lilon Battery Pack or Alkaline )	
FCC Designation	AZ489FT4880	AZ489FT3819
IC Designation	109U-89FT4880	

## Transmitter

RF Output High Low	2 Watts 1 Watt
Frequency Stability	< 2.5 ppm
Spurs & Harmonics	< -45 dBc
FM Hum & Noise	-40 dB @ 12.5 kHz -45 dB @ 25.0 kHz
Modulation Limiting	±2.5 kHz @ 12.5 kHz ±5.0 kHz @ 25.0 kHz
Adjacent Channel Power	60 dBc
Radiated Spurious Emissions @ 12.5 kHz	< -20 dBm
Radiated Spurious Emissions @ 25 kHz	< -13 dBm
Audio Frequency Response (0.3 - 3.0 kHz)	+1 to -3 dB
Audio Distortion	< 2%

## Receiver

Sensitivity (12 dB SINAD)	-122 dBm (0.18 µV)
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 65 dB @ 25.0 kHz
Intermodulation Rejection	60 dB
Spurious Response Rejection (blocking 1 MHz)	80 dB
Audio Distortion	< 5%
CSQ Hum & Noise @ 12.5 kHz	-50 dB
PL Hum & Noise @ 12.5 kHz	-50 dB
DPL Hum & Noise @ 12.5 kHz	-45 dB
Radiated Spurious Emissions (< 1 GHz)	< -54 dBm
Radiated Spurious Emissions (> 1 GHz)	< -52 dBm
Audio Output @ < 5% Distortion	1.5 W @ 8 ohms

## Military Specifications

Standard	MIL 810 C Methods/Procedures	MIL 810 D Methods/Procedures	MIL 810 E Methods/Procedures	MIL 810 F Methods/Procedures
Low Pressure	500.1 / Procedure 1	500.2 / Procedure 2	500.3 / Procedure 2	500.4 / Procedure 1
High Temperature	501.1 / Procedure 1,2	501.2 / Procedure 1,2	501.3 / Procedure 1,2	501.4 / Procedure 1,2
Low Temperature	502.1 / Procedure 1	502.2 / Procedure 1,2	502.3 / Procedure 1,2	501.4 / Procedure 1,2
Temperature Shock	503.1 / Procedure 1	503.2 / Procedure 1	503.3 / Procedure 1	503.4 / Procedure 1
Solar Radiation	505.1 / Procedure 1	505.2 / Procedure 1	505.3 / Procedure 1	505.4 / Procedure 1
Rain	506.1 / Procedure 1,2	506.2 / Procedure 1,2	506.3 / Procedure 1,2	506.4 / Procedure 1
Humidity	507.1 / Procedure 2	507.2 / Procedure 2,3	507.3 / Procedure 2,3	507.4 / Procedure 3
Salt Fog	509.1 / Procedure 1	509.2 / Procedure 1	509.3 / Procedure 1	509.4 / Procedure 1
Dust	510.1 / Procedure 1	510.2 / Procedure 1	510.3 / Procedure 1	510.4 / Procedure 1
Vibration	514.2 / Procedure 8,10	514.3 / Procedure 1	514.4 / Procedure 1	514.5 / Procedure 1
Shock	516.2 / Procedure 1,2,5	516.3 / Procedure 1,4	516.4 / Procedure 1,4	516.5 / Procedure 1

## Environmental Specifications

Operating Temperature	-30°C to +60°C (Radio)
Sealing	IP55
Shock & Vibration	Polycarbonate Housing passes EIA 603
Dust & Humidity	Satisfied EIA 603

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.