



# CLR Series two-way radio

#### Small. Versatile. Powerful.

Clear communication is critical for all teams. Whether you are supervising a production line, monitoring the school playground, serving customers in a store, or managing an office, you need to be able to connect instantly and share information with your team. The CLR Series is your essential communication tool built to last all day, every day.

The CLR Series is small, lightweight and easy to use. This radio with its push-to-talk (PTT) operation is ready for communication in an instant. Reduce missed messages with louder and clearer audio from the built-in speaker or compatible headsets for precise communication between users. All this performance is protected by a rugged radio housing and long lasting battery.

The CLR Series is ready to provide all day performance and is customisable to your work environment with licensed and unlicensed radio models and a range of radio accessories including chargers, carry options and earpieces.





## Features to keep you connected



#### Stylish, Compact and Durable Design

A sleek design, small enough to fit in the palm of your hand. IP52 and Military Standard 810H rated to survive dust, water, vibration, shock and temperature extremes.



#### Oversized PTT Button

Easily located for instant use without the need to look at the radio.



#### **Up to 18 hour Battery Life**

Power through a full shift with up to 18 hours of battery life from a full charge.



### Audio, Carry, and Charging Accessories

Compliment your workstyle with a variety of accessories designed for the CLR Series.



#### **Escalate Call**

Initiate an important call or alert users on another channel to immediately communicate a message in high-risk situations, keeping your teams and assets safer when an incident occurs.



#### **Voice Guided Navigation**

Help your staff to easily learn the system with voice guided menus. The CLR allows you to use pre-defined voice prompts for your channels or add custom voice prompts to help your staff identify the channel they should be using.



#### 16 Channels & 219 Privacy Codes<sup>1</sup>

Multiple channels give you the flexibility to keep different teams on separate channels and keep your staff focused on their roles. Privacy codes can be added to protect communications from neighbouring groups.

#### **Additional Features**

- · VOX hands free
- 6 call tones
- Mute
- 15 volume levels
- Scan/monitor
- Antimicrobial coating<sup>2</sup>
- Customer programming software (CPS)
- 0.5W Loudspeaker
- 8-Colour LED for channel, mode, and battery indication





#### **General Specifications**

<u> </u>			
	CLR446		
Frequency Band	PMR446 <sup>1</sup> 446.0-446.2 MHz		
Range <sup>3</sup> Unit to Unit: With Repeater (for reference):	$14,000  \text{m}^2  (150,000  \text{ft}^2)  /  10  \text{floors}$ -		
Channel Capacity	164		
Repeater Capability	No		
Channel Bandwidth	12.5 kHz		
PL Codes (Privacy Codes)	39 std + 6 custom		
DPL Codes (Privacy Codes)	84 std + 84 inverted + 6 custom		
Average Battery Life @ 5/5/90 with Standard Li-lon Battery BT90 1800 mAh <sup>5</sup>	18 hours		
Radio Dimensions (H x W x D):	107 x 51 x 23 mm		
Weight: Radio w/Standard Li-Ion Battery BT90	126g		

#### **Transmitter**

		CLR446
RF Output	High: Low:	0.5 Watts
Frequency Stability		+/- 1.5kHz
Spurs & Harmonics	@ < 1GHz: @ > 1GHz:	< - 42 dBm < - 36 dBm
FM Hum & Noise	@ 12.5 kHz without companding: @ 20/25 kHz:	- 40 dB -
Modulation Limiting	@ 12.5 kHz: @ 20 kHz: @ 25 kHz:	± 2.5 kHz - -
Adjacent Channel Power	@ 12.5 kHz: @ 20/25 kHz:	60 dBc
Radiated Spurious Emissions (<1 GHz)		< - 36 dBm
Radiated Spurious Emissions (>1 GHz)		< - 30 dBm
Audio Distortion		< 2%

#### Receiver

		CLR446
Sensitivity (20 dB SINAD)		-118 dBm (0.282 uV)
Adjacent Channel Selectivity	@ 12.5 kHz: @ 20/25 kHz:	> 60 dB -
Intermodulation Rejection		> 63 dB
Spurious Response Rejection		>70 dB
Audio Distortion		< 5%
CSQ Hum & Noise	@ 12.5kHz: @ 20/25 kHz:	- 50 dB -
PL Hum & Noise	@ 12.5kHz: @ 20/25 kHz:	- 50 dB
Radiated Spurious Emissions (< 1GHz)		< - 63 dBm
Radiated Spurious Emissions (> 1GHz)		< - 53 dBm
Audio Output @ <5% Distortion		500 mW @ 8 ohms

#### **Environmental Specs**

Operating Temperature	- 30°C to + 60°C <sup>6</sup> (Radio)	
Shock & Vibration	Polycarbonate Housing Passes EIA 603	
Humidity	Satisfied EIA 603	
Dust & Water Intrusion	IP52	

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#### **Military Standards**

MIL-STD 810 C	MIL-STD 810 D	MIL-STD 810 E	MIL-STD 810 F	MIL-STD 810 G	MIL-STD 810 H
500.1 / Procedure I	500.2 / Procedure II	500.3 / Procedure II	500.4 / Procedure II	500.6 / Procedure II	500.6/ Procedure II
501.1 / Procedure I, II	501.2 / Procedure I/A1, II/A1	501.3 / Procedure I/A1, II/A1	501.4 / Procedure I/HOT, II/HOT	501.6 / Procedure I/A1, II/A1	501.7/ Procedure I/A1, II/A1
502.1 / Procedure I	502.2 / Procedure I/C3, II/C1	502.3 / Procedure I/ C3, II/C1	502.4 / Procedure I/C3, II/C1	502.6 / Procedure I/ C3, II/C1	502.7 / Procedure I/C3, II/C1
503.1 / Procedure I	503.2 / Procedure I/A1C3	503.3 / Procedure I/A1C3	503.4 / Procedure I	503.6 / Procedure I/C	503.7 / Procedure I/C
505.1 / Procedure II	505.2 / Procedure I	505.3 / Procedure I	505.4 / Procedure I	505.6 / Procedure I/A1	505.7 / Procedure I/A1
514.2 / Procedure VIII/F,XI	514.3 / Procedure I/10, II/3	514.4 / Procedure I/10, II/3	514.5 / Procedure I/24, II/5	514.7 / Procedure I/24, II/5	514.8 / Procedure I/24, II/5
516.2 / Procedure II	516.3 / Procedure IV	516.4 / Procedure IV	516.5 / Procedure IV	516.7 / Procedure IV	516.8 / Procedure IV
	500.1 / Procedure I  501.1 / Procedure I, II  502.1 / Procedure I  503.1 / Procedure I  505.1 / Procedure II  514.2 / Procedure VIII/F,XI	500.1 / Procedure   1   500.2 / Procedure   1   501.2 / Procedure   1   501.2 / Procedure   1   1   501.2 / Procedure   1   7   7   7   7   7   7   7   7   7	500.1 / Procedure I         500.2 / Procedure II         500.3 / Procedure II           501.1 / Procedure I, II         501.2 / Procedure I/A1, II/A1         501.3 / Procedure I/A1, II/A1           502.1 / Procedure I         502.2 / Procedure I/C3, II/C1         502.3 / Procedure I/C3, II/C1           503.1 / Procedure I         503.2 / Procedure I/A1C3         503.3 / Procedure I/A1C3           505.1 / Procedure II         505.2 / Procedure I/A1C3         505.3 / Procedure I/A1C3           514.2 / Procedure VIII/F,XI         514.3 / Procedure I/A1C3         514.4 / Procedure I/A1C3	500.1 / Procedure I         500.2 / Procedure II         500.3 / Procedure II         500.4 / Procedure II           501.1 / Procedure I, II         501.2 / Procedure I/A1, II/A1         501.3 / Procedure I/A1, II/A1         501.4 / Procedure I/HOT, II/HOT           502.1 / Procedure I         502.2 / Procedure I/C3, II/C1         502.3 / Procedure I/C3, II/C1         502.4 / Procedure I/C3, II/C1           503.1 / Procedure I         503.2 / Procedure I/A1C3         503.3 / Procedure I/A1C3         503.4 / Procedure I/A1C3           505.1 / Procedure II         505.2 / Procedure I         505.3 / Procedure I/A1C3         505.4 / Procedure I/A1C3           514.2 / Procedure VIII/F,XI         514.3 / Procedure I/A1C3         514.4 / Procedure I/A1C3         514.5 / Procedure I/A1C3	500.1 / Procedure I         500.2 / Procedure II         500.3 / Procedure II         500.4 / Procedure II         500.6 / Procedure II           501.1 / Procedure I, II         501.2 / Procedure I/A1, II/A1         501.3 / Procedure I/HOT, II/HOT         501.6 / Procedure I/HOT, II/HOT         501.6 / Procedure I/HOT, II/HOT           502.1 / Procedure I         502.2 / Procedure I/C3, II/C1         502.3 / Procedure I/C3, II/C1         502.4 / Procedure I/C3, II/C1         502.6 / Procedure I/C3, II/C1           503.1 / Procedure I         503.2 / Procedure I/A1C3         503.3 / Procedure I/A1C3         503.4 / Procedure I         503.6 / Procedure I/C           505.1 / Procedure II         505.2 / Procedure I         505.3 / Procedure I         505.4 / Procedure I         505.6 / Procedure I/A1           514.2 / Procedure VIII/F,XI         514.3 / Procedure I/10, II/3         514.4 / Procedure I/A1         514.5 / Procedure I/A1

<sup>&</sup>lt;sup>1</sup>Restricted to 8 unlicensed channels in Russia by law. Please refer to user guide. Only 446.0–446.1 MHz analogue frequencies are available by default. 446.1–446.2 MHz analogue frequencies should only be used in countries where these frequencies are allowed by government authorities.





0191 228 0466



info@apexradio.com



www.apexradio.co.uk



11 Keel Row, The Watermark, Gateshead, NE11 9SZ

#### For more information, please visit motorolasolutions.com/CLR

Motorola Solutions Ltd. Nova South, 160 Victoria Street, London, SW1E 5LB, United Kingdom.

Availability is subject to individual country law and regulations. All specifications shown are typical unless otherwise stated and are subject to change without notice.

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<sup>&</sup>lt;sup>2</sup>The antimicrobial properties do not protect users or others against bacteria, viruses, germs, or other disease organisms. Always clean this product thoroughly before and after each use. Does not apply to accessories. <sup>3</sup>Range achieved will vary dependant on terrain and local conditions.

<sup>&</sup>lt;sup>4</sup>8 channels are available by default, expandable to 16.

 $<sup>^{5}</sup>$ Average battery life at 5/5/90 duty cycle, transmitter in high power. Actual battery runtime observed may vary.

<sup>&</sup>lt;sup>6</sup>Radio only, battery operating temperature -10°C to +60°C.