RCA
Communications Systems

BRM1250 Mobile / Base Station - *Power, Reliability & Versatility*

Built with high quality materials for extra durability, the powerful yet simple-to-use BRM1250 radio comes with a large 8 character LED display allowing you to easily identify the transmitting caller ID. The radio is built to the latest industry standards and requirements and it is completely FCC 2013 compliant. Advanced features like Private calling (ISOLine), Group Calling (GroupCall) and emergency call features are available with the built-in MDC signaling or the advanced RDC2400 signaling. With power output options of 45 Watts UHF / 50 Watts VHF or 140 Watts UHF / VHF, you will have the immediate and reliable communication you need to keep your team working efficiently.

The Voice Compander Audio Enhancement and powerful 5 Watt Internal / 13 Watt External speakers ensure loud and clear sound, even in noisy environments. You can organize your 128 channels into groups and use the scanning function to monitor them all so you never miss a call! The versatility of the BRM1250 radio helps keep productivity and efficiency at a high level, no matter how fast your business grows!

General Specifications		
Frequency Range UHF / VHF:		400-470 MHz UHF / 136-174 MHz VHF
Power Output In Watts:		45 UHF / 50 VHF; optional 140 UHF or VHF
Channel Capacity		128
Zone Capacity		16
Channel Spacing		25/20/12.5KHz
Operating Voltage		13.6V DC ±15%
Current Drain	Standby	0.5A
	Receive	<2.0A
	Transmit	12A (50W/45W) /< 5A (5W)
Frequency Stability		±2.5ppm
Operating Temperature		-30°C~+60°C
Antenna Impedance		50Ω
Dimensions (HxWxD)		48mm × 154mm x 161mm
Weight		1228g

digital CODED SQUELCH

2013 NARROW BAND COMPLIANT

3 YEAR Platinum WARRANTY PROTECTION PROGRAM

Sonic Audio+ **sound+** Enhanced Audio Clarity

SECURENCRYPT ™

ISOLine Private Calling

Group Call

MDC1200 COMPATIBLE

RCA BRM1250 Features

- **High-output Power -** BRM1250 offers you higher out-put power 50W(VHF)/45W(UHF) and 140 Watts option. Ensuring you long-distance communication requirement.

- **DTMF Encoder-decoder -** The DTMF function conclude DTMF ANI, flexible dialing. Customized, user friendly number storage can be used for your most often called numbers. BRM1250 can also the function of DTMF decoder (optional).

- **Robust Audio -** BRM1250 has unique voice cavity design on configuration. Besides, voice compander audio enhancement and a powerful 13W external speaker will provide superb clear, crisp sound, even in noisy environments.

- **Over-heating Protection -** In case of long time transmission at high power, the BRM1250 will automatically switch to low output power to avoid radio over-heating.
- **Built-in Scrambler -** Maintaining private and secure communications is increasingly important, with potentially sensitive information flowing back and forth. The scrambler feature provides enhanced security for your important and private communication.
- **RDC2400TM and MDC1200 signaling -** The RDC2400TM signaling is exclusive to RCA, and contributes to the system to achieve features including ANI (Automatic Number Identification), Individual Call, Group Call, Broadcast, Kill, Short Message and Data Transmission.

  The MDC1200 Signaling is compatible with MDC1200, and allows functions including PTT ID Encode, Emergency Encode, Radio Check Decode, Kill & Revive, Individual Call, Group Call and Broadcast.
- **Automatic Number Identification (ANI) -** After RDC2400 or MDC1200 signaling is received, the radio will display the ID or alias of the other party. The radio firmware supports a selective call list containing up to 128.
- **Built-in modem -** The built-in 1200/2400bps MSK modulator offers data transmission capability.*
- **Emergency alarm -** The emergency button allows for a transmission of a signal indicating an emergency situation.
- **Kill and revive -** The kill function permits an authorized radio to remote disable another lost radio. This function can ensure you higher security and is perfect for the radio rental business. A killed radio will return to operational use when the revive code is received.
- **Public Address (PA) -** The public address feature feeds microphone audio through a powerful PA amplifier to the external speaker, offering robust, out of vehicle, audio clarity.
- **Large 15-Segment LCD Display -** Users may toggle the display to channels or zones, auto dial numbers or other functional settings. The keypad and display illuminates to provide visibility for night time operation.
- **128 Channels and Dynamic Regrouping -** The 128 channel and zoning capability of the BRM1250 offers flexibility in organizing work groups. Each channel and zone can be assigned a user friendly name for easy identification. Dynamic regrouping offers flexibility in a changing work group environment.
- **Lone Worker -** The lone worker feature provides added security and safety for individuals who work remotely from their team. Since this function is enabled, the radio will emit an alert tone after the preset time elapses, then the user must press any key, otherwise the emergency procedure will be activated.
- **Ignition Sense, Timed Power Off -** When this function is enabled, you have to connect the ignition wire to the rear panel of the radio so that you can turn on/off the radio by igniting/stalling the car. The radio can only be turned on by igniting the car and will be turned off automatically within the preset time after the car stalls.
- **Versatile Scan -** The BRM1250 scan allows for single or multiple zone scanning. Scanning features include add / delete scan channels, nuisance channel delete and user selectable priority channel.
- **Wired Cloning / MSK Wireless Cloning -** Allows users to quickly and easily duplicate one radio's parameters into another radio.
- **UST (User Selectable Tone) -** The user can select CTCSS/CDCSS codes via the programmed function key.

Transmitter Specifications	
RF Power Output	45W /50W
Modulation	16KΦF3E/11KΦF3E
Spurious and Harmonics	< -23dBm
FM Noise	>45dB (25/20KHz) >40dB (12.5KHz)
Audio Distortion	≤3%

Receiver Specifications	
Sensitivity	0.28 µV
Selectivity	75/65dB
Intermodulation	70
Spurious Response Rejection	70
S/N (wide/medium/narrow)	>45dB (25/20KHz) >40dB (12.5KHz)
Internal Audio Power Output (Rated)	5W (less than 5% distortion) 3W (less than 3% distortion)
External Audio Power Output (Rated)	13W (less than 5% distortion) 12W (less than 3% distortion)

All Specifications are tested according to TIA/EIA-603, and subject to change without notice due to continuous development.

Applicable Military Standards 810C/D/E/F

Applicable MIL-STD	810C		810D		810E		810F	
	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	1,2	500.3	1,2	500.4	1
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2	501.4	1,2
Low Temperature	502.1	1	502.2	1,2	502.3	1,2	502.4	1,2
Temp. Shock	503.1	1	503.2	1	503.3	1	503.4	1
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1,2
Rain	506.1	2	506.2	2	506.3	1,2	506.4	1,2
Humidity	507.1	2	507.2	2,3	507.3	2,3	507.4	1
Salt Fog	509.1	1	509.2	1	509.3	1	509.4	1
Dust	510.1	1	510.2	1	510.3	1	510.4	1
Vibration	514.2	8,10	514.3	1	514.4	1	514.5	1
Shock	516.2	1,2,5	516.3	1,4	516.4	1,4	516.5	1,4

Optional Accessories:

MM1250 - Palm Microphone (Replacement)

MM1250K -Keypad Microphone

EXSPK1250 - External Speaker

DMM1250 - Desktop Mobile Microphone

Optional Accessories:

ANTB4503 - Base Station Antenna UHF 3db Gain, NMO Style	ANTB1443 - Base Station Antenna VHF 3db Gain, NMO Style
ANT4503 - Base Station Fiberglass Antenna UHF 3db Gain	ANT1523 - Base Station Fiberglass Antenna VHF 3db Gain