



BIZTALK® BUSINESS BAND TWO-WAY RADIO



BR200S

midlandusa.com

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INTRODUCTION

For over half a century, Midland Radio has been providing radio communication with superior quality, reliability, and strong value. With these core values in mind, the Midland BR200 provides a communication solution for manufacturing, retail, hospitality, construction, warehousing, maintenance, and other business uses.

FEATURES

- 2 Watts Transmit Power
- 16 Channels
- 142 Privacy Codes
- 99 Frequency Channel Bank
- Monitor
- Scan
- Battery Save Mode
- Time Out Timer
- Bilingual Voice Announcements (English and Spanish)
- 10 Level Squelch Settings
- Low Battery Alert
- Accessory (Headset) Jack
- PC Programming
- Desktop Charger

FCC NOTICE

The radio operates on UHF frequencies which require an FCC (Federal Communications Commission) license. You must be licensed prior to operating on these frequencies. Serious penalties could result from unlicensed use of these frequencies, in violation of FCC rules, as stipulated in the Communications Act's Sections 501 and 502 (amended).

You will be issued a call sign by the FCC which should be used for station identification when operating the radio on these channels. You should also cooperate by engaging in permissible transmissions only, avoiding channel interference with other users, and being prudent with the length of your transmission time.

To obtain a license or ask questions about the license application, contact the FCC at 1-888-CALL FCC or go to the FCC's website: <http://www.fcc.gov> and request form 601.

EXPOSURE TO RADIO FREQUENCY ENERGY

Your Midland radio is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy:

- United States Federal Communications Commission, Code of Federal Regulations: 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI)/Institute of Electrical & Electronics Engineers (IEEE) C95.1-1992
- Institute of Electrical and Electronics Engineers (IEEE) C95.1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

To control your exposure and ensure compliance with the general population or uncontrolled environment exposure limits, transmit no more than 50% of the time. The radio generates measurable RF energy exposure only when transmitting.

BODY WORN OPERATION

If you wear the radio on your body when transmitting, always use Midland supplied or approved belt clip, holster, case, or body harness for this product. Use of any accessories not supplied or approved by Midland may exceed FCC/ Health Canada RF exposure guidelines. If you do not use accessories supplied or approved by Midland, **ensure the radio and its antenna are at least 1 inch (2.5cm) from your body when transmitting.**

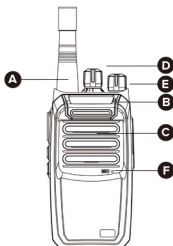
IMPORTANT: Changes or modifications to this unit not expressly approved by MIDLAND RADIO CORP could void your right to operate this unit. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the COMMUNICATOR to exceed those limitations. Any adjustment to your radio must be made by qualified technicians.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device does not cause harmful interference

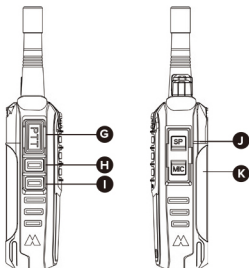
To maintain compliance with FCC's RF exposure guidelines for body-worn operation, this radio has been tested and meets the FCC RF exposure guidelines when used with Midland Radio Corp. accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

GETTING TO KNOW YOUR RADIO-QUICK START CONTROLS

- A. Antenna
Install the antenna per instructions below before operating the radio.
- B. LED Indicator
The LED is green when receiving signals.
Red when transmitting.
- C. Speaker.
- D. Channel Selection
Rotate to the desired channel setting.
- E. Power/Volume
Turn clockwise to turn the power on and increase the volume level.
Turn counter-clockwise to decrease the volume level and turn the power off.

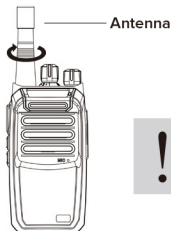


- F. Microphone
- G. PTT (Push To Talk)
Press and hold to transmit voice communication.
- H. Monitor On/Off
- I. Scan On/Off
- J. Accessory Speaker/Mic Jack
- K. Rechargeable Battery Pack



INSTALLING THE ANTENNA

Align the antenna with the threaded connector located on the top of the radio. Holding the antenna at the base, rotate the antenna clockwise until secure.



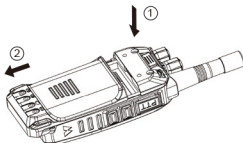
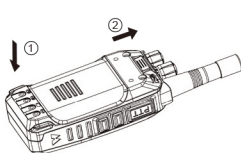
- Be careful not to over tighten to avoid damaging the antenna mount.
- Do not operate the radio without the antenna installed as it may cause damage to the radio.

INSTALLING THE BATTERY

Your radio operates with a Lithium-Ion battery. Care should be taken when installing or removing the battery as not to short circuit the battery contacts causing damage to the battery pack.

To install the battery:

With the back of the radio facing you, install the battery by sliding the pack along the back of the radio until the latch on the radio locks.



To remove the battery:

Release the battery latch and slide the battery down and away from the radio.

INSTALLING THE BELT CLIP

With the back of the radio facing you, align the BELT CLIP with the screw holes on the radio. Attach the BELT CLIP with the Phillips-Head screws that came with the belt clip.

! Be careful not to over tighten screws to avoid damaging radio chassis.



INSTALLING EXTERNAL ACCESSORIES

Pull the accessory jack cover to the side exposing the speaker/mic jacks. Insert the accessory plug into the speaker/mic jack, making sure it is securely in place and has made a good connection.



CHARGING THE BATTERY PACK

Your radio is equipped with a Lithium-Ion battery pack which can be recharged by inserting the radio or battery into the desktop charger (as described below). You should charge the battery pack when the Charge Battery Alert comes on, and remove the radio from the charger when the charging is finished.

To charge using the Desktop Charger:

1. Plug the DC barrel plug on the adaptor cord into the connector on the back of the charging base.
2. Plug the AC adaptor into a 120V AC wall outlet, making sure the AC outlet has power.
 - The charger's LEDs turns green when power is present.
3. Make sure the battery contacts and charge terminals are clean and in good condition.

4. Slide the radio with installed battery, or a spare battery without radio, into the charger being careful to align the slots on the battery with the tabs inside the charger base.
5. The charger LED's will turn red and begin charging the battery.
6. Charging time depends on the charge level of the battery.
7. After charging is complete the LED will turn green.
8. Remove the radio from the charger.

To charge using the BGC200 Multi-Unit Charger Accessory:

The (optional) Multi-Unit Charger (MUC) allows the drop-in charging of 6 radios and 6 batteries from a single AC outlet.

1. Plug the barrel plug on the adaptor cord into the connector on the back of the charging base.
2. Plug the AC adaptor into a 120V AC wall outlet. Make sure the AC outlet has power.
3. The charger's LEDs turns green when power is present.
4. Make sure the battery contacts and charge terminals are clean and in good condition.
5. Slide the radio with installed battery, or a spare battery without radio, into the charger being careful to align the slots on the battery with the tabs inside the charger opening.
6. The charger LEDs will turn red and begin charging the unit.
7. Charging time depends on the charge level of the battery.
8. After charging is complete, the LED will turn green.

It is recommended that the battery pack be charged with the radio turned off to ensure it fully charges.



- Only use the Midland Lithium-Ion battery pack.
- Do not attempt to charge any battery packs other than the one indicated in the manual. This may cause leakage and damage to the radio or charger and void your warranty.
- For long term storage of the radio, turn the radio OFF and remove the batteries from the radio.
- Do not discard old batteries in the trash. Use the call2recycle program as outlined on the back of this manual.

USE AND CARE

- Use only a soft, damp cloth to clean the radio.
- Do not use alcohol or cleaning solutions to clean the radio.
- Do not immerse the radio in water.
- Dry the radio with a dry lint-free cloth should it get wet.
- Turn off the radio and remove the batteries during long-term storage.

ABOUT RANGE

Your BR200 is designed to give you maximum range under optimum conditions.

Industrial	Multi-Level
Inside Steel-Concrete Building	Inside a Multi-level Building
Up to 250,000 sq. ft.	Up to 20 floors

Optimum conditions are:

- Open warehouse floor plan or area.
- Open rural areas without obstructions.
- Flat areas where you can see the other person to ensure you get maximum range.
- You are using fully charged batteries - a low battery will cause low power conditions.
- Your radio is set to use its highest transmit power level.

OPERATING YOUR RADIO

POWER ON/OFF AND VOLUME

1. Rotate the POWER/VOLUME knob clockwise to turn the radio on and increase the volume level.
2. Rotate the control counter-clockwise to reduce the volume level and to turn the radio off.

CHANNEL SELECTION

1. Rotate the channel section knob to the desired setting.
2. The radio will announce the channel numbers as you rotate the knob.

! Make sure you are using the same channel/frequencies as others in your communications group or you will not be able to hear or talk to them.

TRANSMITTING AND RECEIVING A CALL

For maximum clarity, hold the radio at least 1 inch (2.5 cm) from your mouth.

1. Press and hold the **PTT** button and speak in a normal voice into the microphone. The RX/TX LED will glow red while transmitting.
2. To receive a call, release the **PTT** button. The RX/TX LED will glow green when your radio is receiving a transmission.

CHANNEL SCAN

Press the bottom side key for 3 seconds to turn scanning on or off.

The radio will rapidly scan through all available channels stopping briefly on a channel in use to hear the conversation. You may join the conversation by pressing your PTT button and using the radio normally. The radio will return to scan mode after 3 seconds of inactivity.

MONITOR

Press the top side key to turn Monitor on or off.

Monitor is used to check for channel traffic before you transmit.

RADIO CONFIGURATION

Your BR200 radio comes configured with 16 commonly used authorized frequencies. You can custom configure your radio by selecting any of the 99 authorized frequencies listed in the "Available Frequencies Chart" listed in this manual. A PC software application to configure your radio is available at www.midlandusa.com.

The BA1 programing cable is required to configure your radio. It is listed in the back of this manual and available at www.midlandusa.com.

PRIVACY CODES

CTCSS (Continuous Tone Coded Squelch) and DCS (Digitally Coded Squelch) allow several users to share the same channel frequency without disturbing each other. With CTCSS or DCS enabled, the channel is muted to all incoming signals unless they carry the same CTCSS or DCS tone. When a transmission with the same tone is received, the channel un-mutes and the voice audio can be heard. When the transmission ends the channel becomes muted again. Transmissions that do not have the same tone will not be heard.

Your BR200 radio has 142 privacy codes, which can be used on any channel. The selected privacy code may be different for each channel, but must be the same for a channel on all radios you wish to talk to. Programming a new privacy code overwrites any previous code programmed.

Privacy codes can be set using the FREE programming software that can be downloaded from www.midlandusa.com.

! You will not be able to hear or talk to other radios that do not match your frequency and Privacy Code by channel and frequency.

TROUBLESHOOTING GUIDE

Problem	Solution
No Power	1. Make sure the battery is fully charged and correctly installed. 2. Check the On/Off Volume Control to make sure the radio is turned on.
Can't Receive Messages	1. Confirm the radios are set to the same channel frequency and privacy code setting. 2. Make sure you are within range of the other radio (see About Range). 3. Make sure there are not any major obstructions between you and the other radio (see About Range).
Charger Not Functioning	1. Make sure the contacts on the bottom of the radio are clean, nothing in the way of making connection with the charger contacts. 2. Make sure the charger is plugged in and the outlet has power. 3. Make sure the battery pack is installed properly.

For further assistance, contact the Midland Customer Service Team at (816) 241-8500. Most problems can be remedied over the phone without returning the radio for service.

SPECIFICATIONS

Channels: 16

Privacy Codes: 142

Operating Frequency: UHF Band, 450~470MHz

Power Source: 3.7VDC Li-ion Battery Pack