

BIZTALK TWO-WAY RADIO



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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 Small Business, Hospitality, Construction, Warehousing, Maintenance, and other Business uses.

FEATURES

- 16 Channels
- 56 Frequencies
- 142 Privacy Codes (38 CTCSS / 104 DCS)
- Monitor Function
- Scan Function
- Voice Prompted Battery Alert & Channel Selection
- External Speaker/Microphone Jack
- PC Programmable



FCC NOTICE

The radios 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-lonizing 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, and (2) this radio must accept any interference that may cause undesired operation.

To maintain compliance with FCC's RF exposure guidelines, for bodyworn 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.



ISED NOTICE

IMPORTANT: This device complies with Industry Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT: Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.

IMPORTANT: Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

IMPORTANT: Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée quivalente (p.i.r.e.) ne dépassepas l'intensité nécessaire à l'établissement d'une communication satisfaisante.



IMPORTANT: This radio transmitter (3690A-BR200) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

· Quarter-Wave Helically Wound Antenna- 50 Ohm, 2dBi

IMPORTANT: Le présent émetteur radio (3690A-BR200) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur

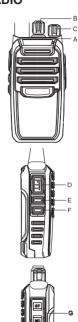
· Quarter-Wave Helically Wound Antenna- 50 Ohm, 2dBi

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GETTING TO KNOW YOUR RADIO

CONTROLS

- A. LED INDICATOR: The LED is
 Green when receiving signals and
 Red when transmitting.
- B. CHANNEL SELECTOR: Rotate to select channels 1-16.
- C. POWER/VOLUME KNOB: 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.
- D. PTT (Push to Talk): Press and hold to transmit voice communication.
- **E. Monitor Button:** Press to enter the Monitor mode.
- F. Scan Button: Press to enter the Scan mode.
- G. External Speaker/Mic Jack





INSTALLING THE BATTERY

Your radio operates with a Lithium-Ion battery. The belt clip should be removed (see below) to make the installation and removal of the battery easier.

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:

Press the release latch and slide the pack 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 provided in the gift box.

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



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 antenna mount.



INSTALLING EXTERNAL ACCESSORIES

Pulling the rubber cover to the side exposing the speaker/mic jacks, insert the accessory plugs into the speaker/mic jack.



CHARGING THE BATTERY PACK

Your radio is equipped for using a rechargeable Lithium-Ion battery pack which can be recharged by inserting the radio or battery into the desktop charger (as described below). Midland recommends charging the battery pack when the charge battery alert comes on and removing the radio from the charger when the charging is finished.

To charge using the Desktop Charger:

- Plug the AC adaptor into a 120V AC wall outlet. The charger's LED turns green when power is present.
- Making sure the battery contacts and charge terminals are clean and in good condition, slide the battery or radio with installed battery into the charger.

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 The charger LED will turn red and begin charging the unit. Charging time depends on the charge of the battery. After charging is complete the LED will turn Green

In order to ensure that the battery pack is fully charged, it is recommended that the battery pack be charged with the radio turned off.



- 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
- For long term storage of the radio, turn the radio OFF and remove the batteries from the radio.

OPERATING YOUR RADIO

PROGRAMMING SOFTWARE

Your Midland BR200 radio comes with 16 preprogrammed channels. The BR200 also comes with programming software to personalize your business radio. To download the software please go to: midlandusa.com

Note: If there is not a frequency programmed into a channel, you will hear a loud continueos tone indicating that there is nothing programmed for that channel.

POWER ON/OFF AND VOLUME

Rotate the **POWER/VOLUME** knob clockwise to turn the radio on and increase the volume level. Rotate the control counter-clockwise to reduce the volume level and to turn the radio off. During Power On, the radio will beep once and indicate the last channel selected.

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ABOUT RANGE

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

| Industrial | Multi-Level |
|--|-----------------------------|
| Inside Steel/ Concrete Industrial Building | Inside Multi-Level Building |
| Up To 250,000 sg. 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.
- Be sure to use fresh or fully charged batteries a low battery will cause low power conditions.

TRANSMITTING AND RECEIVING A CALL

- For maximum clarity, hold the radio at least 1 inch (2.5cm) from your mouth
- Press and hold the PTT button and speak in a normal voice into the microphone. The RX/TX LED will glow RED while transmitting.
- To receive a call, release the PTT button. The RX/TX LED will glow GREEN when your radio is receiving a transmission.

MONITOR

Pressing the **Monitor** button will let you hear noise so you can adjust the volume level of the radio when not receiving a signal. This should be used to check activity on your current channel before transmitting.

CHANNEL SELECTION

Rotate the Channel Selector knob to select one of the 16 channels.

SCAN FUNCTION

- 1. To begin scanning, press and hold the Scan Button for 3 seconds.
 - Your radio will beep twice alerting you that the radio has entered scan mode
- When in Scan Mode, the radio will rapidly scan through all programmed channels and will pause on any active channel.



- While Scan Function is active the Green LED will flash to indicate that the radio is scanning.
- After stopping on an active channel, Scanning will resume once there has been 4 seconds of no activity on the channel.
- 4. To reply to a received transmission when the Scan Mode is enabled, press and hold the PTT button (on radio or headset accessory) while the radio is paused on the active channel, the radio will then transmit on the active channel's frequency.
 - The radio will remain on the active channel for 4 seconds after the PTT button is released.
- To transmit on the frequency selected by the Channel Knob while Scan Mode is enabled, the user will verify that the radio is not receiving a transmission, then press PTT button (on radio or headset accessory).
 - Once the PTT button is released the radio will go back into scanning after 4 seconds of inactivity.
- To exit Scan Mode, the user will Long Press (≥ 3 seconds) the Scan Button.
 - The radio will emit a single beep, alerting the user that the radio has exited Scan Mode

PRIVACY CODES

CTCSS (Continuous Tone Coded Squelch System) and DCS (Digitally Coded Squelch) are systems that allow several users to share the same channel without disturbing each other. With CTCSS or DCS enabled, the channel is muted to all incoming signals unless they carry the correct CTCSS or DCS tone. When a transmission with the correct 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 correct tone will not be heard.

Your BR200 Series radio has 142 Privacy Codes, which are available on any channel. The selected Privacy Code may be different for each channel.

Privacy Codes can only be set using the programming software. This software can be downloaded from the **midlandusa.com** website.

Note: If you select a *CTCSS* Privacy Code, any pre-selected *DCS* Privacy Code will be cancelled and vice-versa.

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TROUBLESHOOTING GUIDE

| PROBLEM | SOLUTION |
|----------------------------|--|
| No Power | Check battery installation and/or replace battery pack. Check Power/Volume control knob. |
| Cannot Receive Messages | Confirm the radios have the same channel and privacy code settings. Make sure that you are within range of the other transceivers. Buildings and other structures may interfere with your communication. |
| Charger Not Functioning | Contacts on the bottom of the radio may require cleaning. Ensure the outlet where the charger is plugged in is functioning properly. Check that the hattery pack is installed properly. |

If you have a problem which you believe requires service, please call first and speak with a service technician at 816-241-8500. Many problems can be remedied over the phone without returning the unit for service.

USE AND CARE

- 1. Use a soft damp cloth to clean the radio
- 2. Do not use alcohol or cleaning solutions to clean the radio.
- 3. Do not immerse the radio in water.
- 4. 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.



SPECIFICATIONS

Channels 16 Channels + 142 Privacy Codes
Operating Frequency UHF 461.0375 ~ 469.5625MHz
Power Source 3.7Vdc Li-ion Battery Pack

DEFAULT FREQUENCIES CHART

| CH. No | CH. Freq (MHz) | Code | CH. No | CH. Freq (MHz) | Code |
|--------|----------------|------|--------|----------------|------|
| 1 | 464.5500 | 1 | 9 | 464.5500 | 29 |
| 2 | 467.9250 | 1 | 10 | 467.9250 | 29 |
| 3 | 467.8500 | 1 | 11 | 467.8500 | 29 |
| 4 | 467.8750 | 1 | 12 | 467.8750 | 29 |
| 5 | 464.5500 | 6 | 13 | 464.5500 | - |
| 6 | 467.9250 | 6 | 14 | 467.9250 | - |
| 7 | 467.8500 | 6 | 15 | 467.8500 | - |
| 8 | 467.8750 | 6 | 16 | 467.8750 | - |

AVAILABLE FREQUENCIES CHART

| Code | Freq (MHz) |
|------|------------|------|------------|------|------------|------|------------|
| 1 | 464.5000 | 15 | 461.1875 | 29 | 462.9125 | 43 | 466.2625 |
| 2 | 464.5500 | 16 | 461.2125 | 30 | 464.4875 | 44 | 466.2875 |
| 3 | 467.7625 | 17 | 461.2375 | 31 | 464.5125 | 45 | 466.3125 |
| 4 | 467.8125 | 18 | 461.2625 | 32 | 464.5375 | 46 | 466.3375 |
| 5 | 467.8500 | 19 | 461.2875 | 33 | 464.5625 | 47 | 466.3625 |
| 6 | 467.8750 | 20 | 461.3125 | 34 | 466.0375 | 48 | 467.7875 |
| 7 | 467.9000 | 21 | 461.3375 | 35 | 466.0625 | 49 | 467.8375 |
| 8 | 467.9250 | 22 | 461.3625 | 36 | 466.0875 | 50 | 467.8625 |
| 9 | 461.0375 | 23 | 462.7625 | 37 | 466.1125 | 51 | 467.8875 |
| 10 | 461.0625 | 24 | 462.7875 | 38 | 466.1375 | 52 | 467.9125 |
| 11 | 461.0875 | 25 | 462.8125 | 39 | 466.1625 | 53 | 469.4875 |
| 12 | 461.1125 | 26 | 462.8375 | 40 | 466.1875 | 54 | 469.5125 |
| 13 | 461.1375 | 27 | 462.8625 | 41 | 466.2125 | 55 | 469.5375 |
| 14 | 461.1625 | 28 | 462.8875 | 42 | 466.2375 | 56 | 469.5625 |

CTCSS PRIVACY CODES CHART

| Code | Freq (Hz) |
|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|
| 1 | 67.0 | 9 | 91.5 | 17 | 118.8 | 25 | 156.7 | 33 | 210.7 |
| 2 | 71.9 | 10 | 94.8 | 18 | 123.0 | 26 | 162.2 | 34 | 218.1 |
| 3 | 74.4 | 11 | 97.4 | 19 | 127.3 | 27 | 167.9 | 35 | 225.7 |
| 4 | 77.0 | 12 | 100.0 | 20 | 131.8 | 28 | 173.8 | 36 | 233.6 |
| 5 | 79.7 | 13 | 103.5 | 21 | 136.5 | 29 | 179.9 | 37 | 241.8 |
| 6 | 82.5 | 14 | 107.2 | 22 | 141.3 | 30 | 186.2 | 38 | 250.3 |
| 7 | 85.4 | 15 | 110.9 | 23 | 146.2 | 31 | 192.8 | | |
| 8 | 88.5 | 16 | 114.8 | 24 | 151.4 | 32 | 203.5 | | |

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DCS PRIVACY CODE CHART

| No. | CODE | No. | CODE | No. | CODE | No. | CODE |
|-----|------|-----|------|-----|------|-----|------|
| 1 | 23 | 27 | 165 | 53 | 413 | 79 | 731 |
| 2 | 25 | 28 | 172 | 54 | 423 | 80 | 732 |
| 3 | 26 | 29 | 174 | 55 | 431 | 81 | 734 |
| 4 | 31 | 30 | 205 | 56 | 432 | 82 | 743 |
| 5 | 32 | 31 | 223 | 57 | 445 | 83 | 754 |
| 6 | 43 | 32 | 226 | 58 | 464 | 84 | 36 |
| 7 | 47 | 33 | 243 | 59 | 465 | 85 | 53 |
| 8 | 51 | 34 | 244 | 60 | 466 | 86 | 122 |
| 9 | 54 | 35 | 245 | 61 | 503 | 87 | 145 |
| 10 | 65 | 36 | 251 | 62 | 506 | 88 | 212 |
| 11 | 71 | 37 | 261 | 63 | 516 | 89 | 225 |
| 12 | 72 | 38 | 263 | 64 | 532 | 90 | 246 |
| 13 | 73 | 39 | 265 | 65 | 546 | 91 | 252 |
| 14 | 74 | 40 | 271 | 66 | 565 | 92 | 255 |
| 15 | 114 | 41 | 306 | 67 | 606 | 93 | 266 |
| 16 | 115 | 42 | 311 | 68 | 612 | 94 | 274 |
| 17 | 116 | 43 | 315 | 69 | 624 | 95 | 325 |
| 18 | 125 | 44 | 331 | 70 | 627 | 96 | 332 |
| 19 | 131 | 45 | 343 | 71 | 631 | 97 | 356 |
| 20 | 132 | 46 | 346 | 72 | 632 | 98 | 446 |
| 21 | 134 | 47 | 351 | 73 | 654 | 99 | 452 |
| 22 | 143 | 48 | 364 | 74 | 662 | 100 | 454 |
| 23 | 152 | 49 | 365 | 75 | 664 | 101 | 455 |
| 24 | 155 | 50 | 371 | 76 | 703 | 102 | 462 |
| 25 | 156 | 51 | 411 | 77 | 712 | 103 | 523 |
| 26 | 162 | 52 | 412 | 78 | 723 | 104 | 526 |



LIMITED WARRANTY (United States and Canada)

Subject to the exclusions set forth below, Midland Radio Corporation will repair or replace, at its option without charge, any Midland UHF transceiver which fails due to a defect in material or workmanship within One Year following the initial consumer purchase.

This warranty does not apply to water damage, battery leak, abuse or misuse of unauthorized accessories, unauthorized service or modification or altered products. Accessories have a 90 day warranty from date of purchase, including any antennas or chargers that are included with the unit

ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED AS SET FORTH HEREIN AND TO THE DURATION OF THE LIMITED WARRANTY, OTHERWISE THE REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. IN NO EVENT SHALL MIDLAND BE LIABLE, WHETHER IN CONTRACT OR TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE, GROSS NEGLIGENCE, BODILY INJURY, PROPERTY DAMAGE AND DEATH) FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT OR ACCESSORY, OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE ABILITY OR INABILITY TO USE THE PRODUCTS OR ACCESSORIES TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY JAW.

For Product Purchased in the USA:

Performance of any obligation under this warranty may be obtained by returning the warranted product, prepaid freight, along with proof of purchase to:

Midland Radio Corporation Warranty Service Department 5900 Parretta Drive Kansas City, MO 64120

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

NOTE: The above warranty applies only to merchandise purchased in the United States of America or any of the territories or possessions thereof, or from a U.S. Military exchange.

For Product Purchased in Canada:

Performance of any obligation under this warranty may be obtained by returning the warranted product, along with proof of purchase, to your place of purchase in Canada.

This warranty gives you specified legal rights. Additional warranty rights may be provided by law in some areas within Canada.

ACCESSORIES

Accessories can be purchased at midlandusa.com

R₄1



1 Programming cable for BR200 radio

\$9.99

R_A9



D-Ring headset

BA2



Over the ear headset

\$29.99

BRB200



1 Replacement battery for BR200 radio

\$29.99

R_A3



Concealed headset

\$39.99

BGC200



1 Multi unit charger for BR200 radio

\$99.99

BA4



Speaker mic

\$39.99



5900 Parretta Drive Kansas City, MO 64120 Call 816.241.8500

We'd love to hear from you! Let us know what you think of your new Midland product at







or by visiting us at midlandusa.com

Note: Features & Specifications are subject to change without notice. MIDLAND is not responsible for unintentional errors or omissions on its packaging.