

### BIZTALK™ BUSINESS BAND TWO-WAY RADIOS



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## INTRODUCTION

Thank you for choosing the BR180 Business Radio from Midland.

We recommend you read this manual thoroughly to insure you get peak performance from your radio. You may also contact our Customer Service Team at (816) 241-8500 (8 AM to 4:30 PM CT, M-F) for assistance.

## FEATURES

- 1-Watt transmit power
- Customize to 1, 2, 3 or 4-Channel Operation
- 99 Frequency selection channel bank
- 142 Privacy codes
- LCD display with backlighting
- NOAA Weather alerts and information
- Li-Ion rechargeable battery
- Up to 14 hours of battery life
- Battery save mode
- Battery gauge with low battery alert
- Keypad tones and Keypad lock
- VOX and Squelch control
- 5 Call alerts and Vibrate alert
- Monitor and Scan
- Time-Out-Timer
- Keypad and PC programming
- Radio to radio cloning

## 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.

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 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.

B. Power/Volume

Turn clockwise to turn the power on and increase the volume level. Turn counterclockwise to decrease the volume level and turn the power off

C. LED Indicator

Solid Green indicates RX  
Solid Red indicates TX

D. LCD Display

See the section below for details

E. Weather/Keypad Lock

Short press to listen to the weather  
Long press to lock the keypad

F. Call/Menu

Quick double press to send a call alert  
Long press to activate menu

G. Microphone

H. Channel or Menu Down

I. Channel or Menu Up

J. TALK (Push-To-Talk)

Press and speak into the microphone to transmit  
Release to receive

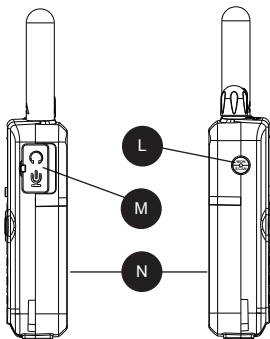
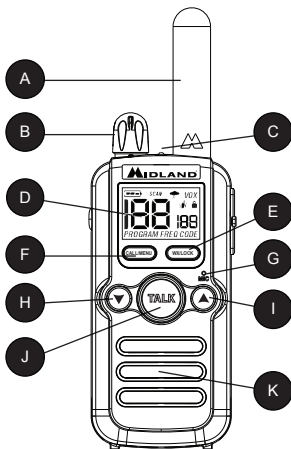
K. Speaker

L. Monitor/Scan

Short press to activate Monitor  
Long press to activate Scan

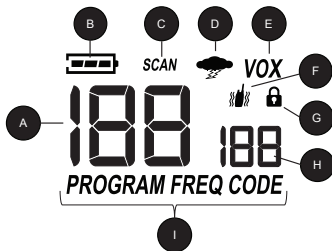
M. Accessory Speaker/Mic Jack

N. Battery Door



## LCD DISPLAY

- A. Channel Number
- B. Battery Gauge
- C. Scan On/Off
- D. Weather On/Off
- E. Vox On/Off
- F. Vibrate On/Off
- G. Keypad lock On/Off
- H. Frequency or Privacy Code Number
- I. Programming information

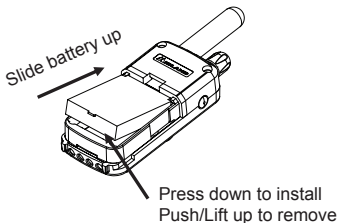
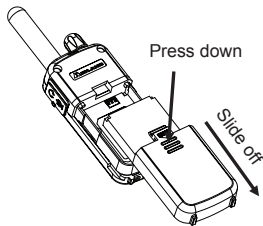


## INSTALLING THE BATTERY

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

### To install the battery:

1. With the back of the radio facing you, remove the battery door by pressing down on the top center of the battery door and sliding it down from the radio.
2. Place the battery inside the battery compartment, making sure the battery contacts are aligned with the radio contacts. Slide up and press down to lock the battery into place.
3. Replace the battery door making sure it snaps into place.



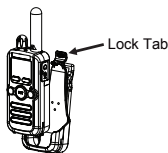
### To remove the battery:

1. Remove the battery door as described above.
2. Slide the battery up to un-lock it and lift it up out of the compartment.

## INSTALLING THE HOLSTER

With the back of the radio facing you, align the bottom of the holster with the bottom of the radio, and push the top of the holster over the top of the radio until the Lock Tab snaps into place.

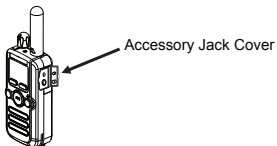
To remove the Holster, push on the Lock Tab until it releases the radio.



## 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.

**Low Battery Alert:** The radio will double beep every 10 seconds and the Battery Icon will flash in the display to let you know you need to charge the battery soon.

To charge using the **Desktop Charger:**

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, making sure the AC outlet has power.
  - The charger's LED's 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 the installed battery, or a spare battery without a radio, into the charger, being careful to align the radio or battery contacts to the charging terminals.
  - The chargers LED's will turn red and begin charging the battery.
  - Charging time will vary based on the battery level, but should not take longer than 5 hours.
5. After charging is complete the LED will turn Green.
6. Remove the radio from the charger when fully charged.

To charge using the BGC180 **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.
  - The charger's LED's will turn 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 the installed battery, or a spare battery without a radio, into the charger, being careful to align the radio or battery contacts to the charging terminals.
  - The charger LED's will turn red and begin charging the unit.
  - Charging time will vary based on the battery level but should not take longer than 5 hours.
5. 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 designed for this radio.
- 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.

## 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 BR180 is designed to give you maximum range under optimum conditions.

| Industrial                     | Multi-Level                   |
|--------------------------------|-------------------------------|
| Inside Steel-Concrete Building | Inside a Multi-level Building |
| Up to 200,000 sq. ft.          | Up to 15 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 knob counterclockwise to reduce the volume level and to turn the radio off.
3. During Power On, and when changing channels, the radio will briefly display the channel and privacy code settings.

### TRANSMITTING AND RECEIVING A CALL

For maximum voice clarity, hold the radio microphone about 1 inch from your mouth.

1. Press and hold the **TALK** button and speak in a normal voice into the Microphone.
  - The RX/TX LED will glow RED while transmitting.
2. The radio will automatically receive a transmission when the **TALK** button is not pressed.
  - The RX/TX LED will glow GREEN when your radio is receiving a transmission.



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

## CHANNEL SELECTION

1. Press the channel up or down selection buttons to the desired channel.
  - a. The radio will display the channel numbers as you scroll up or down the selection.
  - b. The radio will only display the channels that are programmed with a frequency.

## MONITOR

1. Briefly press the **Monitor/Scan** button to turn Monitor on or off.
  - Monitor is used to check for channel traffic before you transmit.

## CHANNEL SCAN

1. Press and hold the **Scan/Monitor** button for 3 seconds to turn Scan on or off.
2. The radio will rapidly scan through all available channels stopping briefly on a channel in use to hear the conversation.
3. You may join the conversation by pressing the **TALK** button and using the radio normally.
4. The radio will return to scan mode after 5 seconds of inactivity.

## KEYPAD LOCK

1. Press and hold the **WX/Lock** button for 3 seconds to lock the keypad.
  - Keypad lock prevents accidental changes to the channel or menu settings.
  - You can send/receive calls, use Call Alert, Listen to Weather, and Scan while the keypad is locked.

## CALL AND VIBRATE ALERT

Your BR180 can send a "Call Tone" or briefly vibrate another radio to alert them you are about to transmit. Before using these features, turn ON CALL ALERT by using either the Keypad or PC Programming (see pg. 15) and use the MENU function as described below to turn Vibrate Alert ON. The Vibrate Icon  will be displayed when the vibrate function is on.

These features are designed to work together to keep disruption to a conversation at a minimum.

### CALL ALERT ON - Only

1. Quickly double press the **CALL/MENU** Button to send your Call Tone to other radios.
2. Receiving radios with Vibrate ON, will only vibrate. They will not sound the Call Tone.

### CALL ALERT and VIBRATE ALERT - Both ON

1. Quickly double press the **CALL/MENU** Button to send your Call Tone to other radios.
2. Receiving radios with Vibrate ON, will only vibrate. They will not sound the Call Tone.

## VIBRATE ALERT ON – Only

1. Pressing the **TALK** button will briefly vibrate the receiving radios.

Note: There is a 30 second “time-out” after each time the **TALK** button is pressed as not to vibrate again and disrupt a conversation.

2. Call Tones will not be sent to, or heard by, other radios.



Other radio brands may or may not respond to a Call or Vibrate Alert sent from a BR180.

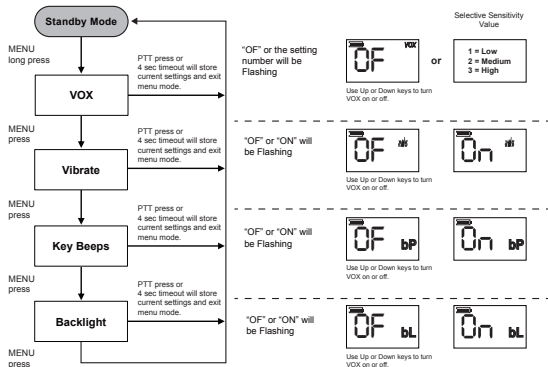
## MENU SETTINGS

Set-up additional features through the radio menu.

- **VOX:** Sensitivity Level: Provides Hands-free operation by speaking directly into the microphone without having to press the **TALK** button.
- **Vibrate Alert:** Replaces a Call Alert tone with a physical sensation to create a quiet environment.
- **Keypad Beeps (Tones):** Provides positive feedback when a button is pressed. Turn them off to create a quiet environment.
- **Backlighting:** Briefly illuminates the display when a button is pressed. Turn it off to increase battery life.

**Press and hold the Menu button for 3 seconds to enter the Menu mode.**

1. Only the menu, TALK, up and down arrow buttons are active when using the menu function.
2. Press the **TALK** to exit the menu at any time.
3. You cannot enter Menu if the keypad is locked.
4. The menu function will time out after 4 seconds of inactivity.



## NOAA WEATHER ALERT

The BR180 is equipped with **Listen to Weather** and **Weather Alert** that provides information directly from the National Weather Service ("NWS") for severe weather events or civil emergencies so you can take appropriate actions to stay safe.



- The BR180 must be programmed to the correct Weather Channel for your area for the feature to work correctly.
- Check with your local NWS office or go to the NWS website at [https://www.weather.gov/nwr/station\\_listing](https://www.weather.gov/nwr/station_listing) to find your frequency. Use the chart to locate the weather channel setting number to be programmed into the radio.

| Channel | Frequency |
|---------|-----------|
| 1       | 162.550   |
| 2       | 162.400   |
| 3       | 162.475   |
| 4       | 162.425   |
| 5       | 162.450   |
| 6       | 162.500   |
| 7       | 162.525   |
| 8*      | 161.650   |
| 9*      | 161.775   |
| 10*     | 163.275   |

\*Canadian Maritime Frequency

### 1. Set the Weather Channel

- Briefly press the **WX/Lock** button.
- Press and hold the **Menu** button for 3 seconds to enter Weather setup.
- Press **Menu** again to set the Weather Channel.
- Use the **Up/Down** arrows to select your weather channel.
  - You will hear the NWS broadcast. If not, check the frequency-channel assignment.
- Press the **Menu** or **TALK** button to save your setting and Listen to Weather.

### 2. Listen to Weather

- Briefly press the **WX/Lock** button to listen to the NWS weather broadcast.
- The radio will display the weather icon and the weather channel.
- Press the **WX/Lock** or **TALK** button to exit Listen to Weather.



- The BR180 will not send or receive calls while in Listen to Weather mode.
- Scan, Call Alert, and Monitor are inactive in Listen to Weather mode as not to disrupt the NWS broadcast.

### 3. Weather Alert

- Briefly press the **WX/Lock** button to Listen to Weather.
- Press and hold the **Menu** button for 3 seconds to enter Weather Alert setup.
- Press the **Up** or **Down** arrow button to turn Weather Alert On or Off.
- The Weather Icon will flash if Weather Alert is turned on.
- Press **Menu** and advance to Set the Weather Channel or press the **TALK** button to save your setting and exit the Weather Set up mode.



- All functions of the radio will continue to operate normally when Weather Alert is on.
- Receiving an Alert will override all other functions of the radio to ensure you hear the complete message from the NWS.

## PROGRAMMING YOUR RADIO

You can easily configure your BR180 radio by using the FREE Programming software or by using the Keypad programming outlined below for basic functions. You can transfer the entire programming from one radio to another using the Radio-to-Radio Cloning feature.

## PROGRAMMING SOFTWARE

Use the PC programming software to fully configure your BR180 Radio. Download the FREE software with instructions from the BizTalk support page at the [www.midlandusa.com](http://www.midlandusa.com) website. With the PC Software you can configure:

- Channel Frequency • Privacy Codes • Squelch Level • Keypad Beeps • Roger Beep
- Vibrate • Backlight • Battery Save • Call Tone • Vox Level • Weather Channel/Alert
- Microphone Gain • Time Out Timer

The BA1 Programming Cable is required to program the radio. It is listed in the back of this manual and available at [www.midlandusa.com](http://www.midlandusa.com).

## KEYPAD PROGRAMMING

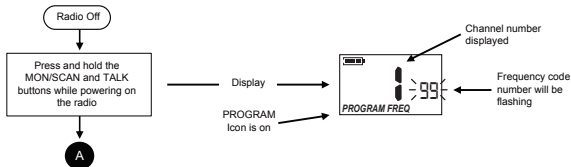
The basic functions of the radio can be configured using the Keypad Programming feature, eliminating the need for a computer to customize your radio.

- Channel Frequency Selection • Privacy Code Selection by Channel • Roger Beep On/Off
- Call Tone selection • Time Out Timer Duration • Power Save Mode

**TIP:** Before programming, go to the Available Frequency and the Privacy Code charts below, and make note of the Frequency and Privacy Code numbers you will program into the radio.

### Enter Keypad Programming Mode

1. Turn the radio off.
2. Press and hold the **Mon/Scan** and the **TALK** buttons at the same time and turn the radio on.
3. The “PROGRAM” Icon will come on, the Channel number will be displayed, and the Frequency Code Number will flash to confirm you are in the Programming mode.
  - Only Menu, TALK, Up and Down arrow buttons are active when in the Programming mode.
  - Programming mode will time out after 15 seconds of inactivity.
  - You can press **TALK** at any time to save the setting and exit the Programming mode.



## Channel Frequency and Privacy Code Settings

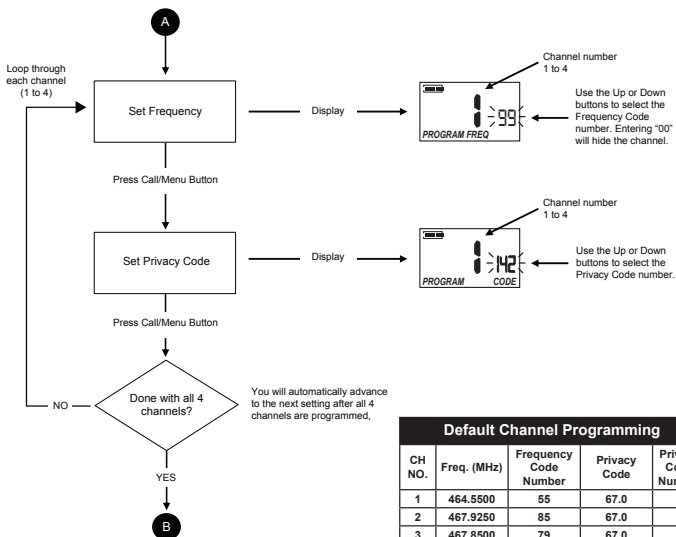
1. Use the **Up/Down** arrow buttons to make your Frequency Code selection.
2. Use the **CALL/MENU** button to advance to the next step.
3. Use the **Up/Down** arrow buttons to make your Privacy Code selection.
4. Use the **CALL/MENU** button to advance to the next Channel.
5. Repeat steps 1-4 until all 4 channels are programmed.
6. You will automatically advance to the next setting after all 4 channels have been programmed.

## CUSTOMIZE THE NUMBER OF CHANNELS

Increase ease of operation by customizing your BR180 to only the number of channels you need by "Hiding" un-needed channels.

**Hide a channel by entering "00" for the frequency code when prompted.**

(It is not necessary to change the Privacy Code setting.) The radio will only recognize a channel with an assigned Frequency Code, defaulting operation to the 1, 2, 3, or 4 channels that are programmed with a Frequency Code.



| Default Channel Programming |             |                       |              |                     |
|-----------------------------|-------------|-----------------------|--------------|---------------------|
| CH NO.                      | Freq. (MHz) | Frequency Code Number | Privacy Code | Privacy Code Number |
| 1                           | 464.5500    | 55                    | 67.0         | 1                   |
| 2                           | 467.9250    | 85                    | 67.0         | 1                   |
| 3                           | 467.8500    | 79                    | 67.0         | 1                   |
| 4                           | 467.8750    | 81                    | 67.0         | 1                   |

## ADVANCED SETTINGS

B

Set Roger Beep  
(On / Off)

Press Call//Menu Button

Roger Beep lets others know when you are done transmitting and the channel is clear for someone else to use.

Display

Use the Up or Down buttons to turn  
Roger Beep On or Off.  
Default Value is Off

Set Call Tone

Press Call//Menu Button

Assign yourself a Call Tone so when you send it, others will know it is you.

Display

Use the Up or Down buttons to select a  
Call Tone (1-5) or turn them Off  
Default Value is 0 or OFF

Set Tx timeout

Press Call//Menu Button

T-O-T prevents the radio from overheating or from someone dominating a  
conversation by turning off the transmission after a set time.

Display

Use the Up or Down buttons to select the Time Out  
Timer duration of 30, 60, 90 or 120 seconds.  
Default Value is 30Set PowerBeep  
On / Off

Press Call//Menu Button

Power Save mode puts your radio to "sleep" when it is not active, saving battery  
life. Press TALK and wait a second before transmitting to "wake up" the radio.

Display

Use the Up or Down buttons to turn  
Power Save mode On or Off.  
Default Value is Off.

Standby

Programming is complete.  
The radio return to stand-by mode.

TIP: Use the Default Value if unsure what setting to use.

## RADIO TO RADIO CLONING

The settings from a BR180 radio can be directly transferred to another BR180 radio, bypassing the need to individually program radios. The BA22 cloning cable is required and is listed in the back of this manual and available on the [www.midlandusa.com](http://www.midlandusa.com) website.

1. Turn off both radios.
2. Connect the programmed (Host) radio to the radio to be programmed (Clone) using the BA22 Cloning cable.
3. Turn on the Host radio.
4. Press and hold both the **Up** and **Down** arrow buttons and turn on the radio to be Cloned.
  - a. "PROGRAM" will flash in the display to confirm you are in Cloning mode.
  - b. The display will count upwards to 100 to show the data transfer.
  - c. The Cloned radio will restart after cloning is complete.
5. Unplug the radios and check the radios' operation as the final conformation.

## FULL FACTORY RESET

You can reset the radio to its original factory (default) settings by pressing and holding down the **TALK** and **UP Channel/Menu** arrow buttons while turning the radio on.

## FREQUENCIES

The radio comes pre-programmed with the most commonly used Frequencies and Privacy Codes already assigned to a channel.

## DEFAULT FREQUENCIES AND PRIVACY CODE CHART

| CH NO. | Frequency (MHz) | Frequency Code Number | Privacy Code | Privacy Code Number |
|--------|-----------------|-----------------------|--------------|---------------------|
| 1      | 464.5500        | 55                    | 67.0         | 1                   |
| 2      | 467.9250        | 85                    | 67.0         | 1                   |
| 3      | 467.8500        | 79                    | 67.0         | 1                   |
| 4      | 467.8750        | 81                    | 67.0         | 1                   |

You may change the channel assignment using the FREE Programming Software or the Keypad Programming as shown above.

## AVAILABLE FREQUENCIES CHART (Channel Bank)

| Freq. Code | Frequency (MHz) | Freq. Code | Frequency (MHz) | Freq. Code | Frequency (MHz) | Freq. Code | Frequency (MHz) |
|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|
| 1          | 451.1875        | 26         | 461.0375        | 51         | 464.4875        | 76         | 467.7875        |
| 2          | 451.2375        | 27         | 461.0625        | 52         | 464.5000        | 77         | 467.8125        |
| 3          | 451.2875        | 28         | 461.0875        | 53         | 464.5125        | 78         | 467.8375        |
| 4          | 451.3375        | 29         | 461.1125        | 54         | 464.5375        | 79         | 467.8500        |
| 5          | 451.4375        | 30         | 461.1375        | 55         | 464.5500        | 80         | 467.8625        |
| 6          | 451.5375        | 31         | 461.1625        | 56         | 464.5625        | 81         | 467.8750        |
| 7          | 451.6375        | 32         | 461.1875        | 57         | 466.0375        | 82         | 467.8875        |
| 8          | 452.3125        | 33         | 461.2125        | 58         | 466.0625        | 83         | 467.9000        |
| 9          | 452.4125        | 34         | 461.2375        | 59         | 466.0875        | 84         | 467.9125        |
| 10         | 452.5125        | 35         | 461.2625        | 60         | 466.1125        | 85         | 467.9250        |
| 11         | 452.5375        | 36         | 461.2875        | 61         | 466.1375        | 86         | 468.2125        |
| 12         | 452.7625        | 37         | 461.3125        | 62         | 466.1625        | 87         | 468.2625        |
| 13         | 452.8625        | 38         | 461.3375        | 63         | 466.1875        | 88         | 468.3125        |
| 14         | 456.1875        | 39         | 461.3625        | 64         | 466.2125        | 89         | 468.3625        |
| 15         | 456.2375        | 40         | 462.1875        | 65         | 466.2375        | 90         | 468.4125        |
| 16         | 456.2875        | 41         | 462.4625        | 66         | 466.2625        | 91         | 468.4625        |
| 17         | 456.3375        | 42         | 462.4875        | 67         | 466.2875        | 92         | 468.5125        |
| 18         | 456.4375        | 43         | 462.5125        | 68         | 466.3125        | 93         | 468.5625        |
| 19         | 456.5375        | 44         | 462.7625        | 69         | 466.3375        | 94         | 468.6125        |
| 20         | 456.6375        | 45         | 462.7875        | 70         | 466.3625        | 95         | 468.6625        |
| 21         | 457.3125        | 46         | 462.8125        | 71         | 467.1875        | 96         | 469.4875        |
| 22         | 457.4125        | 47         | 462.8375        | 72         | 467.4625        | 97         | 469.5125        |
| 23         | 457.5125        | 48         | 462.8625        | 73         | 467.4875        | 98         | 469.5375        |
| 24         | 457.7625        | 49         | 462.8875        | 74         | 467.5125        | 99         | 469.5625        |
| 25         | 457.8625        | 50         | 462.9125        | 75         | 467.7625        |            |                 |

## PRIVACY CODES

Your BR180 radio has 142 Privacy Codes, which can be used on any channel and can be set using the FREE programming software downloaded from the [www.midlandusa.com](http://www.midlandusa.com) website or the Keypad Programming as explained above.

Privacy Codes are CTCSS (Continuous Tone Coded Squelch) and DCS (Digitally Coded Squelch) that allows several radios to use the same frequency without disturbing each other.

- When a transmission with the same Frequency and Privacy Code is received, the channel un-mutes and the voice audio can be heard.
- Transmissions with the same Frequency but a different Privacy Code will not be heard.
- Frequencies without a Privacy Code can hear all transmissions on the same frequency but will not be able to join the conversation. (This is known as "Open Squelch".)
- You can assign a different Privacy Code to the same frequency multiple times to create separate channels.
- Programming a new Privacy Code overwrites any previous code programmed.

## CTCSS PRIVACY CODE CHART

| Privacy Code No. | CTCSS Freq. (Hz) | Privacy Code No. | CTCSS Freq. (Hz) |
|------------------|------------------|------------------|------------------|
| 1                | 67 .0            | 20               | 131 .8           |
| 2                | 71 .9            | 21               | 136 .5           |
| 3                | 74 .4            | 22               | 141 .3           |
| 4                | 77 .0            | 23               | 146 .2           |
| 5                | 79 .7            | 24               | 151 .4           |
| 6                | 82 .5            | 25               | 156 .7           |
| 7                | 85 .4            | 26               | 162 .2           |
| 8                | 88 .5            | 27               | 167 .9           |
| 9                | 91 .5            | 28               | 173 .8           |
| 10               | 94 .8            | 29               | 179 .9           |
| 11               | 97 .4            | 30               | 186 .2           |
| 12               | 100 .0           | 31               | 192 .4           |
| 13               | 103 .5           | 32               | 203 .5           |
| 14               | 107 .2           | 33               | 210 .7           |
| 15               | 110 .9           | 34               | 218 .1           |
| 16               | 114 .8           | 35               | 225 .7           |
| 17               | 118 .8           | 36               | 233 .6           |
| 18               | 123 .0           | 37               | 241 .8           |
| 19               | 127 .3           | 38               | 250 .3           |

## DCS PRIVACY CODE CHART

| Privacy Code No. | DCS Code | Privacy Code No. | DCS Code | Privacy Code No. | DCS Code | Privacy Code No. | DCS Code |
|------------------|----------|------------------|----------|------------------|----------|------------------|----------|
| 39               | 23       | 65               | 165      | 91               | 413      | 117              | 731      |
| 40               | 25       | 66               | 172      | 92               | 423      | 118              | 732      |
| 41               | 26       | 67               | 174      | 93               | 431      | 119              | 734      |
| 42               | 31       | 68               | 205      | 94               | 432      | 120              | 743      |
| 43               | 32       | 69               | 223      | 95               | 445      | 121              | 754      |
| 44               | 43       | 70               | 226      | 96               | 464      | 122              | 36       |
| 45               | 47       | 71               | 243      | 97               | 465      | 123              | 53       |
| 46               | 51       | 72               | 244      | 98               | 466      | 124              | 122      |
| 47               | 54       | 73               | 245      | 99               | 503      | 125              | 145      |
| 48               | 65       | 74               | 251      | 100              | 506      | 126              | 212      |
| 49               | 71       | 75               | 261      | 101              | 516      | 127              | 225      |
| 50               | 72       | 76               | 263      | 102              | 532      | 128              | 246      |
| 51               | 73       | 77               | 265      | 103              | 546      | 129              | 252      |
| 52               | 74       | 78               | 271      | 104              | 565      | 130              | 255      |
| 53               | 114      | 79               | 306      | 105              | 606      | 131              | 266      |
| 54               | 115      | 80               | 311      | 106              | 612      | 132              | 274      |
| 55               | 116      | 81               | 315      | 107              | 624      | 133              | 325      |
| 56               | 125      | 82               | 331      | 108              | 627      | 134              | 332      |
| 57               | 131      | 83               | 343      | 109              | 631      | 135              | 356      |
| 58               | 132      | 84               | 346      | 110              | 632      | 136              | 446      |
| 59               | 134      | 85               | 351      | 111              | 654      | 137              | 452      |
| 60               | 143      | 86               | 364      | 112              | 662      | 138              | 454      |
| 61               | 152      | 87               | 365      | 113              | 664      | 139              | 455      |
| 62               | 155      | 88               | 371      | 114              | 703      | 140              | 462      |
| 63               | 156      | 89               | 411      | 115              | 712      | 141              | 523      |
| 64               | 162      | 90               | 412      | 116              | 723      | 142              | 526      |

## TROUBLESHOOTING GUIDE

| Problem                                         | Problem                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>No Power, the radio will not turn on.</b>    | <ol style="list-style-type: none"><li>1. Make sure the battery is fully charged and correctly installed.</li><li>2. Check the On/Off Volume control to make sure the radio is turned on.</li></ol>                                                                                                                                                                                                                                                                                                                                                                |
| <b>I don't hear any of the other radios.</b>    | <ol style="list-style-type: none"><li>1. Confirm the radios are set to the same channel frequency and privacy code setting.</li><li>2. Make sure you are within range of the other radio (see About Coverage).</li><li>3. Make sure there are not any major obstructions between you and the other radio (see About Coverage).</li></ol>                                                                                                                                                                                                                          |
| <b>I can hear them, but they can't hear me.</b> | <ol style="list-style-type: none"><li>1. Check the frequency and privacy code settings and make sure they are the same between the radios.</li><li>2. Check to make sure you are using a Privacy Code. Frequencies without a privacy code setting can hear other radios on the same frequency with a Privacy Code, but they will not be able to hear you.</li><li>3. Make sure you are within range of the other radios.</li><li>4. Check the battery charge level. If low, it will not be able to fully power the transmitter, reducing your coverage.</li></ol> |
| <b>Charger not charging the battery.</b>        | <ol style="list-style-type: none"><li>1. Make sure the contacts on the bottom of the radio are clean, nothing in the way of making connection with the charger contacts.</li><li>2. Make sure the charger is plugged in and the outlet has power.</li><li>3. Make sure the battery pack is installed properly.</li></ol>                                                                                                                                                                                                                                          |

For further assistance, contact the Midland Customer Service Team at (816) 241-8500 (8 AM to 4:30 PM CT, M-F). Most problems can be remedied over the phone without returning the radio for service.

## SPECIFICATIONS

Channels: 4

Privacy Codes: 142

Operating Frequency: UHF Band, 450~470MHz

Power Source: 3.7 VDC Li-ion Battery Pack

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

## **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 BizTalk BR180 which fails due to a defect in material or workmanship within Two Years 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 One Year warranty from date of purchase, including any charge cables, headsets, or batteries. This warranty does not include the cost of labor for removal or re-installation of the product in a vehicle or other mounting.

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 LAW.

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

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**

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.

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.

## ACCESSORIES

Accessories can be purchased from your local dealer or at [www.midlandusa.com](http://www.midlandusa.com).



**BATT18L**  
Li-Ion Spare Battery  
\$29.99



**BA5**  
Holster  
\$19.99



**BA2**  
Over the Ear  
Headset  
\$29.99



**BA3**  
Concealed Headset  
\$39.99



**BA4**  
Speaker Microphone  
\$39.99



**BA9**  
D-Ring Headset  
\$29.99



**BA1**  
Programming Cable  
for BR180  
\$19.99



**BA22**  
Cloning Cable for BR180  
\$9.99



**BGC180**  
Multi-Unit Charger  
(w/ AC Adaptor)  
\$99.99



**BDC180**  
Desktop Charger  
(w/o AC Adaptor)  
\$14.99



5900 Parretta Drive  
Kansas City, MO 64120  
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](http://midlandusa.com)

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



MIDLAND promotes environmental sustainability by providing battery recycling. Call 1.800.822.8837 for the nearest drop off site to you.