BIZTALK™
Business Solutions by **MIDLAND®**

FAQ's, Troubleshooting Tips and Tricks

Frequently Asked Questions

Question	Answers
What are the major improvements over the BR200?	**1. More Power** = Better range and voice clarity • 2X the power of the BR200, or other 2-watt radios. **2. Increased Range** • 40% more coverage than the BR200, or other 2-watt radios. • BR200: Up to 20 floors or 250,000 sq. feet. • MB400: Up to 30 floors or 350,000 sq. feet. **3. Increased Durability** • Die cast metal frame. *PLUS* • IP67 for protection against dust and complete water immersion. (See what IP67 means below.) **4. Better Value** • Up to 30% lower than the Motorola or Kenwood radios with the same power, features and functions. (Comparing their street price to our MSRP.)
What is IP67?	**IP = Ingress Protection** 1. First digit is for protection against solid objects: • **6 = Dust tight, complete protection from dust or similar materials.** 2. Second digit is for protection against liquids: • **7 = Water tight, protection from complete immersion in 1 meter of water for up to 30 minutes.** IMPORTANT: The radio will not be IP67 when the accessory cover is removed.

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Will the MB400 work with…?	The MB400 is a UHF radio that can be programmed to Business & Industrial Pool frequencies between 450-470 MHz (451.1875 to 469.5625 MHz to be exact), making it compatible with the BR200, and the same radios the BR200 is compatible with. (See the BR200 Compatibility chart.) **Why the "B & I Pool" disclaimer?** • There are frequencies within 450 to 470 band that CANNOT be used for B & I, such as FRS, GMRS, and other restricted use frequencies.
Will work with;	1. Other Analog UHF radios programmed to the same B&I frequency and privacy code. 2. 1, 2 or 4 watt UHF radios, understanding there will be a range/coverage difference. For example, the MB400 may be able to reach a 1 watt radio, but the 1 watt radio may not be able to reach back to the MB400.
Will **NOT** work with;	1. VHF (136-174 MHz), 800, 900 MHz or any other frequency band beside UHF. 2. DMR/Digital radios using FDMA, TDMA, such as Motorola MotoTrbo, Kenwood NXDN-NEXEDGE, *UNLESS* they are programmed as backwards compatible with analog. (Too hard box-recommend easy answer…"NOPE")
Is the MB400 a digital or analog radio?	Analog

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Do I require an FCC license to operate the radio?	1. Yes, a business license is required. You can obtain it directly from the FCC: Call them at 1-888-CALLFCC (1.888.225.5322) or http://www.fcc.gov and request form 601. 2. Refer them to a frequency coordinator; Dave Smith Forest Ind. Telecommunications 541.485-8441 dave@landmobile.com
How much does a FCC License cost?	1. Fees are about $170 and are good for 10 years. 2. Check the FCC website for any updates to fees or for any other questions you may have.
What comes with my MB400?	1. Radio 2. 1500 mAh Li-ion rechargeable battery 3. Antenna 4. Belt clip 5. Desktop charger 6. AC wall adapter for charging 7. Owners manual
How Long do I need to charge the MB400 battery?	It takes up to 4 hours to recharge a fully discharged battery.
How long will a fully charged battery last?	The battery is rated for up to 10 hours at the standard 5-5-90 duty cycle (5% Transmit, 5 % Receive, 90% standby). You will get more, or. Less than this based on your actual usage. NOTE: The 5-5-90 measurement is the industry standard.
What is the MB400 Frequency Range?	UHF (Ultra High Frequency) 451.1875 to 469.5625 MHz

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Is the MB400 Intrinsically Safe?	Sorry, no. It should not be used around highly flammable or explosive materials.
What is the coverage-range of the MB400?	Up to 30 floors, or up 350,000 square feet, but your range will vary based on conditions. (See about range) NOTE: It is not typically expressed in miles. For the B&I market. TIP: Make sure they are on High power with a fully charged battery to get the max range.
What is the output transmit power of the MB400?	4 – Watts, it also has a 1 watt low power setting.
Why is the Multi-Unit Charger (AKA: Gang Charger) so much more expensive that the one for the BR200.	The battery for the MB400 is twice the voltage than the BR200 battery, requiring a more powerful charging adapter.
Will the BA accessories work with the MB400? Why not?	1. Sorry, no. The MA accessories are designed to work with the MB400. 2. The MA and BA accessories use different connectors with the MA series designed to be compatible with Motorola on-site business radios with a 2 pin connector. 3. The BA works with our BR200 and Kenwood on-site business radios.

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Troubleshooting Tips and Tricks

Symptom	Solution
Need help with DIY programming.	1. Send them the programming instruction guide. (See separate trouble shooting guide below or in the programming instructions.) 2. Soft handoff to tech support.
The other person can hear me, but I can't hear them.	1. Check the power output of the other radio. It may not have enough power to reach back to you. 2. Make sure your radio is On and the volume is turned up. 3. Make sure you are within range of the other person.
No Power, radio will not turn on.	1. Make sure battery is fully charged. MB400 Tip – Check alignment in the charger base. 2. Make sure he ON/Off Volume control is turned on. 3. Make sure the battery pack is installed correctly on the radio.
Charger not functioning.	1. Make sure the contacts are clean, and no obstructions between the battery contacts and the charge base contacts. MB400 Tip – Check alignment in the charger base. 2. Make sure the charger is plugged in and has power to the AC Outlet.

FAQ's, Troubleshooting Tips and Tricks

Troubleshooting Tips and Tricks

Symptom	Solution
Can't receive messages.	1. Confirm you are set (programmed) to the same frequency and privacy code. 2. Make sure you are within range of the other radio, and there are not any obstructions between you and the other radio.
I don't see my frequency listed in your channel bank.	1. Do you have a *FCC Licensed* frequency outside of the B&I Industrial Pool? If so, send us your programming information and we can send you back a data file to program your radio with. (Tech support)
My MB400 does not work/talk with my other radio(s).	What is the "Other radio"? 1. If not a *UHF* Business band radio -STOP, different technology, they will not work together. 2. If it is another UHF Business radio, the MB400 will need to be programmed to work with your existing radios. Either DIY or send them in and we can do it for you. 3. If you know the frequency and codes your radios are programmed to, you can do it yourself. You will need a programming cable; MPC400, $19.99, and programming software is free, download it from our website www.Midlandusa.com , support tab. 4. If you do not know the frequency and code of your existing radios, send it to us and we will take care of it for you.
I don't see my frequency listed in your channel bank.	1. Do you have a *FCC Licensed* frequency outside of the B&I Industrial Pool? 2. Is it a UHF frequency? 3. If so, send us your programming information and we can send you back a data file to program your radio. (Tech support)

Programming, Troubleshooting Tips and Tricks

Programming Troubleshooting Tips and Tricks

Symptom	Solution
The programming data will not transfer to the radio from the computer, I keep getting an error code when I click "start".	1. Make sure the programming cable is correctly installed between the radio and computer. Un-plug and re-install the cable, or replace it if necessary. 2. Make sure the radio has a charged battery and is turned on. (Do not program a radio while in the charger.) 3. Check your COM port. It should be using COM3, but your computer may be set up differently and you may need to try a different COM port. 4. Install a USB to Serial Port conversion driver. The programming cable includes this driver and should automatically install on your computer the first time you use it. You can install a standard driver if necessary from: http://www.prolific.com.tw/US/ShowProduct.aspx?p_id=225&pcid=41
The programming software will not install or run on my computer.	1. Make sure your computer meets the minimum requirements. 2. Software will not work on an Apple (Mac) computer. Use a Windows PC. 3. Uninstall and re-install the program. 4. Check with your IT administrator.
I am not sure what to use for a certain setting.	Use the default value. TIP: Reset the radio to its default values as described above and change ONLY the settings necessary, leave all others as is.

Programming, Troubleshooting Tips and Tricks

Programming Troubleshooting Tips and Tricks

Symptom	Solution
I programmed the radio but it still doesn't work with my other radios.	1. Use the "Read" function of the software to make sure the data you sent to the radio is correct. 2. Check the settings on both radios making sure they are the same, especially the TX/RX frequency and Privacy Codes by channel. These must match for the radios to work together.

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Accessories

Audio

Over the Ear Headset
Midland Model:MA1
MSRP: $29.99

Concealed Headset
Midland Model: MA2
MSRP:: $39.99

Speaker Mic
Midland Model: MA3
MSRP: $39.99

Power

Multi-Unit Charger
Midland Model: MGC400
MSRP: $249.99

Desktop Charger with AC Adapter
Midland Model: MDC400
MSRP: $29.99

1600 mAh Li Ion Spare Battery
Midland Model: MRB400
MSRP: $29.99

Service

Programming Cable
Midland Model: MPC400
MSRP: $19.99

Cloning Cable
Midland Model: MCC400
MSRP: $19.99

Antenna
Midland Model: MA6
MSRP: $19.99

Belt Clip
Midland Model: MA5
MSRP: $9.99