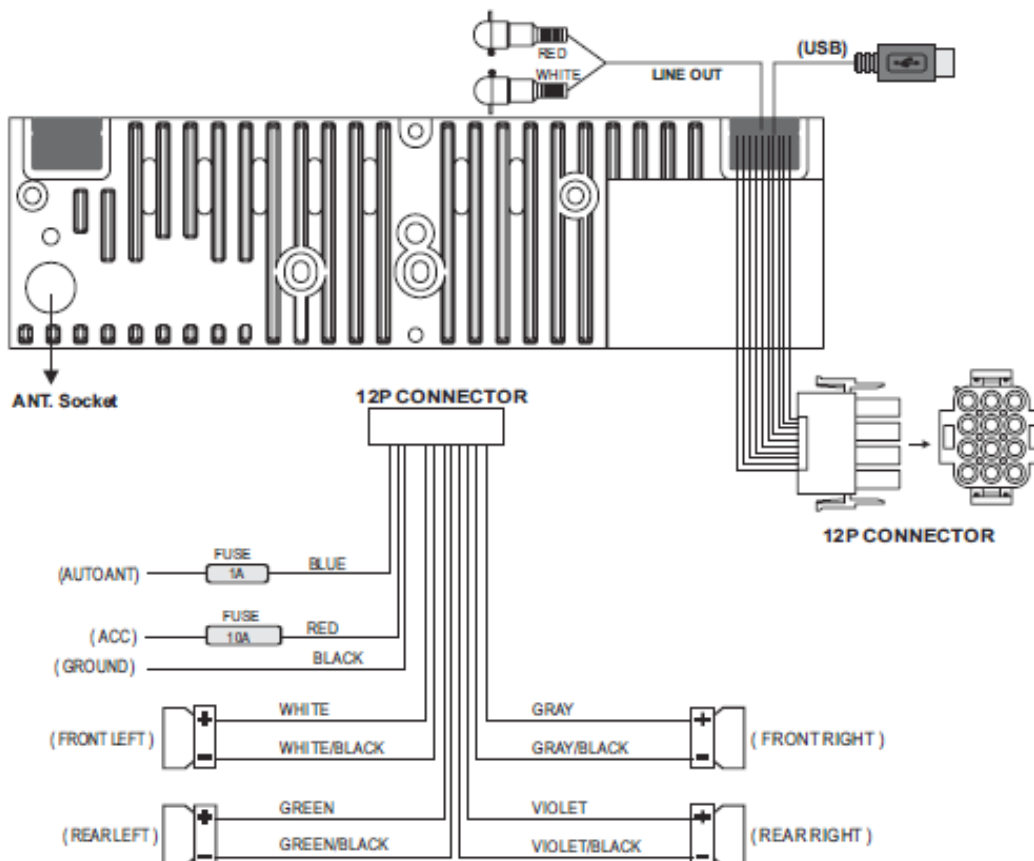


JBL MR145.3 Troubleshooting Guide

Prospec Electronics

Note: please click on highlighted words for links to parts of this document and our website.

- 1 Wiring
- 2 Compatible Accessories
- 3 List of common issues
 - 3.1. No power
 - 3.2. Intermittent Power
 - 3.3. Buttons/controls not responding or behaving erratically
 - 3.4. Poor reception or no reception
 - 3.5. No audio, speaker audio is unevenly distributed or some speakers not working
 - 3.6. Low audio
 - 3.7. Fluctuating Audio
 - 3.8 Moisture in Display
 - 3.9 CD Player won't work
 - 3.10 USB Issues
 - 3.11 No remote connection
- 4 External Amplifier Issues
- 5 Reset Procedure



1.0. Wiring: Follow the wiring diagram above.

- The red ACC wire is designed as the trigger to turn the radio on. It is recommended that this wire is connected to an on/off switch for purposes of lowering the current draw on the battery while the radio is not in use.
- The red wire must be connected to 12v constant DC power source.
- Ground (black) must be connected to a good 12V- source. Best source is directly to the battery.
- Speaker wires must be installed to the individual speaker's terminals as labeled, positive and negative, respectively. Do **NOT** combine any speaker wires as this will cause permanent damage to the radio's output IC. Tape off any unused speaker wires individually to prevent accidental shorting which can also harm the output IC.
- Antenna must be installed.

2.0 Compatible Accessories: See our website for the following add on accessories

- JBLREM30 (for hard wired option only)
- JBLREM-40GS (for hard wired option only)
- JBLREM21GSBB (for hard wired option only)
- JBLREM25 (for hard wired option only)
- REX20-6 (for hard wired option only)
- Any 4 ohm speaker with at least 50 watts power
- Any antenna
- Any 2 channel amplifier OR subwoofer

3.0. List of common issues

3.1 No Power

- Check each button on the control pad for sticking. Under normal conditions, a faint click is heard upon pressing each button. If any button does not click, initiate a warranty claim.
- Ensure red lead is connected to a good 12V+ source.
- Ensure black ground wire is connected to a good reliable ground source.
- Open the fuse holder and check the fuse. Note, while in most situations, a bad fuse can be spotted visually, this may not always be the case. The best method would be to use a multi-meter or a test light.
- Ensure the battery/power supply is putting out at least 12V while under load. The radio requires at least 11V to operate normally.
- Check all connections for corrosion, looseness, or other condition that can produce a bad ground. Corrosion or terminal looseness is the leading cause for most grounding issues and can cause excessive heat resulting in melting wires or terminals.
- If possible, connect the radio power directly to a 12V system, bypassing any toggle switches. If radio works connected directly to power, the problem might be with the toggle switch.
- If the above doesn't help, initiate a warranty claim if you are within warranty.

3.2 Intermittent Power

3.2.1 Powers on and off constantly

- Check voltage under load. At least 11V must be maintained consistently to operate the radio normally.
- If voltage cannot be maintained, load test the battery or power supply.
- Check all connections for corrosion, looseness, or other condition that can produce a bad ground.

3.2.2 Powers off and on while vehicle is moving

- Inspect all connections including the radio's harness for looseness. Wiggle connections while the radio is operating to produce the symptom and narrow down the loose connection. If radio cuts in and out while wiggling the wires on the radio side of the wire harness, initiate warranty claim so we can re-pin the radio for you.

3.3 Buttons/controls not responding or behaving erratically

3.3.1 Symptoms

- Stations scanning continuously
- Run away volume
- Controls frozen

3.3.2 Troubleshooting

- Check each button on the control pad for sticking. Under normal conditions, a faint click is heard upon pressing each button. This includes the volume and tuning knobs which should also click when presses. If any button does not click, initiate a warranty claim.
- Reset the radio by disconnecting the 12 pin connector plug from the power for 15 seconds. Try radio again. See 5 for reset procedure.
- Detach any additional equipment connected to the radio such as remotes, remote adaptors, and extensions. If the stereo returns to normal operation, plug one attachment in at a time until the discovering the defective part. Check all remote connections for water intrusion. This includes any extensions connected to the radio or remote. If any connections are corroded, replace the corresponding part. The best corrective measure to prevent this from happening again is to seal this connection with an adhesive shrink tube and heat gun. If these materials are not readily available, make sure all connections are higher than the mounting location of the remote and radio so any water entering these areas does not follow along the cable and into the connection. Also make sure these connections are in dry areas

3.4 Poor or no Reception

3.4.1 For an amplified antenna

- Ensure the antenna is connected to power and ground according to manufacturer's instructions
- The antenna wire should never be coiled or wound up.
- Check proximity of radio, speakers and antenna to gages, GPS equipment, depth finders, LED lighting or any other source of Radio Frequency Interference (RFI) and Electronic Magnetic Interference (EMI).

3.4.2 For all other antennas

- Inspect the antenna for torn wires.
- The antenna wire should never be coiled or wound up.
- Check proximity of radio, speakers and antenna to gages, GPS equipment, depth finders, LED lighting or any other source of Radio Frequency Interference (RFI) and Electronic Magnetic Interference (EMI).

3.4.3 LED lighting causes low FM/AM audio or poor reception

- Never bundle the power source wires of the LED lighting to the power wires of the radio.
- If needed, the LED power wires and radio power wires should intersect at a 90 degree angle.
- The radio's antenna must be as far away from the LED lights and power source as possible.
- The radio's speakers also must be as far away from the LED lights as possible
- If all fails, upgrade the LED lights to a brand that is guaranteed not to emit RF or EMI.

3.5 No audio, speaker audio is unevenly distributed or some speakers not working

- Check Balance settings. To access and adjust these settings, press SEL button. Quickly press the SEL button again and again until the desired setting is displayed. Use the volume buttons to adjust. Center the adjustment between left/right.
- Check speaker connections. Ensure each speaker wire is routed to the appropriate speaker terminal for which it is intended.
- Inspect all speaker wires for exposed wire and tape up as necessary. Make sure they cannot ground to one another or make contact with any other potential power source or ground. NEVER combine speaker wires.
- If some speakers are working but others are not and the above methods do not help, swap the known working speakers with the ones that are not working. This will help determine any defective speakers.
- **No audio on CD mode with amplifier:** Contact us so you can send your radio in for a software update that will solve the problem.
- If no audio and the above methods yield nothing, initiate a warranty claim.

3.6 Low Audio

- Check speaker specifications – recommended impedance is 4ohm
- Check sound enhancements - To access and adjust these settings, press SEL button. Quickly press the SEL button again and again until the desired setting is displayed. Use the volume buttons to adjust.
- Use the LOUD feature by holding hold the SEL button until the radio beeps, and then press the SEL button until LOUD appears. Turn LOUD on using the volume up button.
- LED lighting can cause low FM/AM audio

3.7 Fluctuating audio or FM signal - Audio level constantly raises and lowers when the engine is started or revved. *This issue is more frequently caused by power fluctuations than radio failure.*

- Check to ensure ground is good and no corrosion exists at connection points.
- Check all power wires for corrosion at connection points.
- Check for corrosion at battery terminals, bus terminals, and fuse panel.
- If in a boat or another motor vehicle, ensure the recommended plugs are being used on the engine. Resistor plugs can often block unwanted RF signal that can interfere with radio reception.
- LED lighting can cause fluctuating FM/AM audio – see section 3.4.3

3.8 Moisture in Display

3.10.1 Water seen inside display after washing the mounting area

- Radio is not waterproof
- **Note: the use of a water resistant cover is necessary if mounting the stereo where direct exposure to water is possible.** Please see our cover options here

3.9 CD player won't work

3.9.1 No amp on system

- Check to make sure the transit screws are removed. These are the 2 screws on the top of the radio.
- Make sure there is only 1 CD in the mechanism at a time.
- Make sure CDs are in Standard, MP3 or WMA format
- Reset the radio outlined in Procedure 5
- If nothing else works, initiate warranty claim.

3.9.2 Amp on the System

Please contact us so you can send the radio in for a software patch and updates.

3.10 USB Issues

3.10.1 **Smartphone not charging or playing** – these devices are not supported for USB playing. To charge, first disconnect your Smartphone. Next hold down the SEL button until “I-VOL” appears. Press SEL 3 times until CHARGOFF appears. Change to CHARGON using the SEL nob. **Note: When the USB is set to CHARGE mode, it will not play USB memory sticks.**

3.10.2 **MP3 player is not charging or playing** – not all mp3 players will play via USB. The difference is in the software of the mp3 player.

3.10.3 **Flash Drive/ Thumb drive not playing**

- Only MP3 or Windows Media files are supported. These files can be recognized by viewing their file extension on a computer; i.e., the file “My Favorite Song” will be followed by a “.” and the extension “mp3” or “wma”. Some computer operating systems have extension view disabled. The feature can usually be enabled in the computer’s folder properties.
- iTunes music files will not play as these are not in mp3 format. Software converters can be purchased to convert these files as others to mp3 format. Do not exceed a bit rate of 128 Kbps when converting.
- Only drives formatted to FAT or FAT2 are supported. Most flash drives come this way standard.
- Some flash drives come preloaded with proprietary software or other media organizational software that will prevent the JBLMR145.3 from reading the contents. Best practice is to completely format the drive to erase all contents before loading music files.
- Make sure that Charging mode is off as described in 3.10.1
- Supported formats must not exceed a bit rate of 128 Kbps.
- Check USB outlet for corrosion or rust. Initiate a warranty claim if rust is found and you are under warranty.

- If the above doesn’t work, initiate a warranty claim.

3.11 No Remote Connection on Radio

The MR145.3 does not come with a remote connection standard. Please contact us to send the radio in so we can wire it with a hard wired remote. A service charge will apply for the remote addition.

4 External Amplifier Issues

4.2 **Strong hiss** – reduce the input gain on the amplifier until the hiss is reduced to an acceptable level while still maintaining performance. Note, if both amplifier and stereo output can produce distortion, the input gain is much higher than it needs to be. In most situations, reduced gain levels will not produce detectable performance conditions.

4.3 **Amplifier volume fluctuates or amplifier turns off and on**

- Check the grounds to both amplifier as well as radio. Corrosion on any the contacts will reduce the ground.
- Check system voltage while operating radio and amplifier. If the voltage fluctuates and drops below 11.5 volts, load test the battery, check the charging system, and check all power and ground wires and contacts for looseness or corrosion.
- Ground the amplifier's chassis to the stereo's chassis.

4.4 **Audio is extremely low** - check the amplifier's gain setting and increase if necessary.

5 Reset Procedure

- Disconnect the 12 pin connector plug from the power and ground for 15 seconds.
- **Note: resetting the radio will sometimes fix erratic controls and frozen controls.**