

Milennia PRV15 / PRV16 Troubleshooting Guide

Prospec Electronics

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1.0. Wiring

Follow the wiring diagram below.

Outdoor Audio System

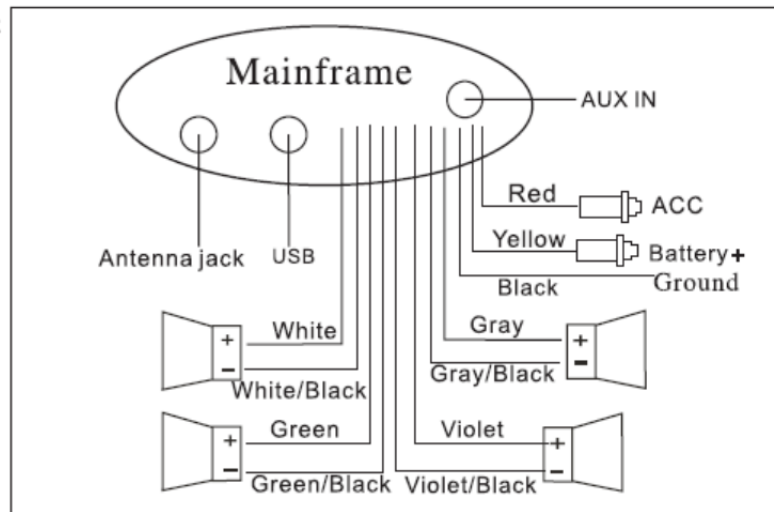
Frequency range:

FM:
87.5-108MHz
AM:
530-1710KHz

DC supply: 12VDC
Negative ground

Speaker impedance:
4-8 Ω

Notice:
Incorrect wiring may
cause device
failure



- 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.
- Both red ACC and yellow battery wires must be connected to 12V+ for the radio to turn on.
- 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.
- USB extension is supplied with radio.

2.0. Compatible Accessories

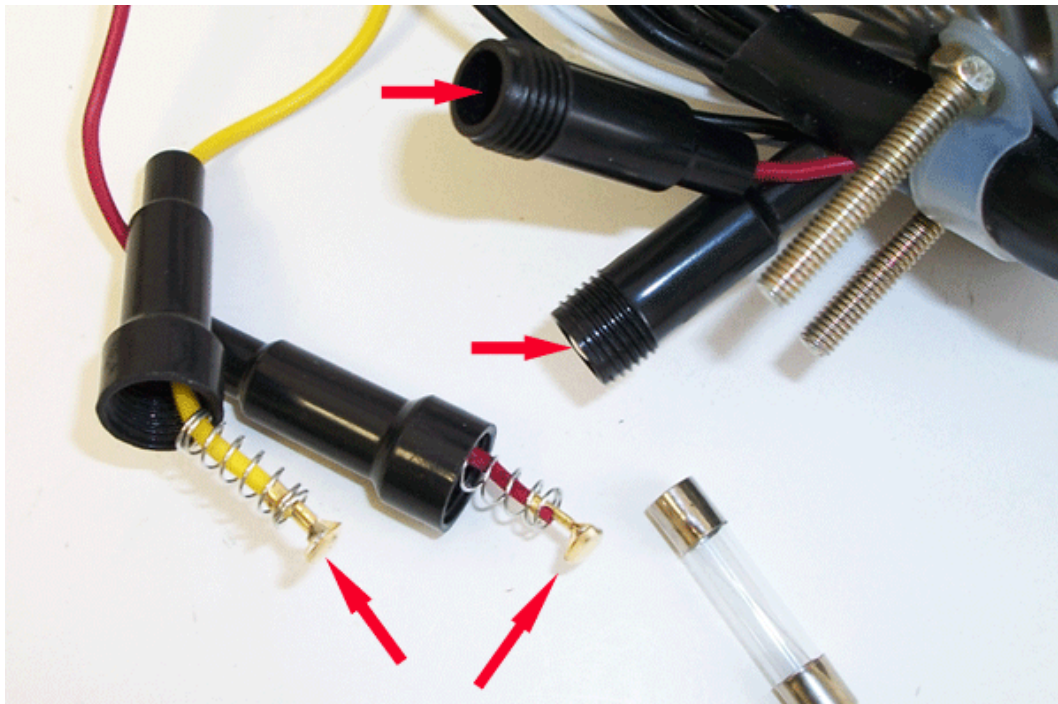
See our website for the following add on accessories:

- SEAMINI2
- SEAUSBMINI
- MIL-IDOCK

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 and yellow leads are connected to a good 12V+ source. Both must have power for the radio to turn on.
- Ensure black ground wire is connected to a good reliable ground source.
- Open the fuse holder and check the fuses. 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.
- While the fuse holders are open, inspect the fuse holder terminals to ensure they have spring tension and they are not stuck down inside the fuse holder(s). Also inspect the fuses and terminals for rust and corrosion. See below picture



- 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.

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. Wriggle connections while the radio is operating to produce the symptom and narrow down the loose connection.

3.3 Buttons/controls not responding

- Press each button to ensure a click is heard signifying the button is mechanically operational. If one or more buttons do not click, initiate a warranty claim.
- Reset the microprocessor - disengage the radio from power for at least 3 seconds, then reconnect. Both red ACC and yellow Memory wires must be disengaged to facilitate a reset of the microprocessor. If both ACC and Memory wires are connected to a main breaker or cut-off switch/ignition switch, any of these methods can be used in lieu of physically disconnecting the wires.

3.4 USB issues

3.4.1 iPod/iPhone not charging or playing – these devices are not supported. To play iPod/iPhone, use the headphone jack and connect to the AUX inputs of the PRV15. Recommended additional purchases are the SEAMIN2 or SEAUSBMINI.

3.4.2 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. Recommended additional purchases are the SEAMIN2 or SEAUSBMINI.

3.4.3 Flash Drive/ Thumb drive not playing

3.4.3.1 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.

3.4.3.2 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.

3.4.3.3 Only drives formatted to FAT are supported. Most flash drives come this way standard.

3.4.3.4 Some flash drives come preloaded with proprietary software or other media organizational software that will prevent the PRV15 from reading the contents. Best practice is to completely format the drive to erase all contents before loading music files.

3.4.3.5 Supported formats must not exceed a bit rate of 128 Kbps.

3.4.3.6 Check USB outlet for corrosion or rust.

3.5 Poor or no Reception

3.5.1 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).

3.5.2 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).

3.5.3 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 lighting to a brand that is guaranteed not to emit RF or EMI.

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

- Check Balance settings. To access and adjust these settings, hold MOD button for three seconds until "BAS" is displayed. Quickly press the MOD 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.
- If no audio and the above methods yield nothing, initiate a warranty claim.

3.7 Low Audio

- Check speaker specifications – recommended impedance is 4ohm
- Check sound enhancements - To access and adjust these settings, hold MOD button for three seconds until "BAS" is displayed. Quickly press the MOD button again and again until the desired setting is displayed. Use the volume buttons to adjust.
- LED lighting can cause low FM/AM audio – see section 3.5.3

3.8 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 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 3.5.3

3.9 Moisture in display

3.9.1 Water seen inside display after washing the mounting area

- Radio is not designed to withstand pressurized streams of water. When rinsing the radio or around the radio, a very low pressure spray is recommended.
- Monitor the display for possible evaporation without harm to the radio.
- Monitor the radio for strange or erratic behavior. If the issue persists, internal damage has occurred – seek to repair or replace.

3.9.2 Slight fog after operation – normal in colder weather but monitor

3.9.3 Heavy condensation

- The condensation may evaporate without harm to the radio.
- Monitor the radio for strange or erratic behavior. If the issue persists, internal damage has occurred – seek to repair or replace.