

Troubleshooting – Fusion Apollo Marine Amps

MS-AP61800 FUSION, 6 Ch Marine Amplifier, Apollo NF

GARMIN PN: 010-02284-65

AVALON PN: 128963

MS-AP82400 Fusion 8 Ch Marine Amplifier, Apollo NF

GRAMIN PN: 010-02284-85

AVALON PN: 128962

MS-AP12000 Fusion 1 Ch Marine Amplifier, Apollo NF

GARMIN PN: 010-02284-15

AVALON: 128964

AP-DA214 Fusion, 2 Ch Marine Zone Amplifier, Retail

GARMIN PN: 010-02569-00

AVALON PN: 128965

Fusion Amplifier Displaying a Red LED

When a Fusion amplifier displays a red LED, this indicates that the amplifier is in protection mode. An amplifier will usually enter protection when there is a safety or product concern such as over- or under-powering the amplifier, the amplifier overheating, or connected speakers trying to draw more power than the amplifier is able to supply.

To troubleshoot this, first check that the amplifier is in a well-ventilated area. Amplifiers get very warm while in use and must stay between 32-122 degrees Fahrenheit (0-50 degrees Celsius). Next, check that the amplifier's fuses and power wires meet the specifications outlined in the [installation manual](#). Lastly, follow the steps in [How to Reset a Fusion Marine Amplifier](#).

How to Reset a Fusion Marine Amplifier

1. Turn off all power going to the amplifier, including batteries and stereo
 2. Remove all wires from the amplifier including power, ground, remote on, RCA connectors, and speaker wire
 - Some batteries and switches will prevent any power from transmitting at all when turned off. This is not sufficient. The amplifier must be physically disconnected from the battery and all other wires
 3. Leave the amplifier disconnected from all wires and cables for 10 minutes
 4. Reconnect only the power, ground, and remote on wires to the amplifier
 5. Turn the battery back on
 6. Turn the stereo on
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If the amplifier powers on with a green light then the RCA connectors, speaker wires, and speaker terminals will need to be tested for any grounds or shorts to determine what caused it to enter protection mode. If the amplifier still powers on with a red light, obtain the model number, serial number, and original proof of purchase and [contact Product Support](#).

Note: Regardless of whether the amplifier displays a green LED after the reset, resistance on the speakers must be tested at the speaker terminals before reconnecting them. If resistance is lower than what the speaker should be, the speaker is damaged and must be replaced. Failure to test resistance or to replace a speaker with lowered resistance could result in damage to a connected amplifier or stereo.

Fusion Apollo Amplifier Compatibility

The Fusion Apollo Series amplifiers should only be used with full Fusion audio systems and Fusion head units that utilize Digital Signal Processing (DSP) settings. Due to the Apollo amplifiers not having built-in electronic crossovers they are incompatible with third-party audio systems and could cause damage to third-party speakers because of the Apollo amplifier power output.

No Audio from a Speaker or Subwoofer

When audio stops playing on a stereo system with an external amplifier, first check if the amplifier is going into critical fault (or protection) mode. On Fusion amplifiers, this is indicated by a red status light on the amplifier and the steps in [Fusion Amplifier Displaying a Red LED](#) should be followed.

If a speaker or subwoofer is producing no / very quiet or distorted audio, switch the channel that the speaker is connected to.

Example: A pair of speakers on channel 1 works but a pair on channel 2 does not.

Test: Attach the pair of speakers on channel 2 to channel 1 and the pair from channel 1 to channel 2 to determine if the poor audio follows the speakers or the channel.

- If the poor audio follows the channel the speakers are connected to, the amplifier / stereo is next to test. If the poor audio follows the speakers then the speakers are faulty

If an amplifier is playing no / very quiet or distorted audio through one channel but is playing audio through another channel, switch where the zone line out from the stereo is connected.

Example: Zone 1 from the stereo is connected to channel 1 on the amplifier and zone 2 is connected to channel 2, and channel 2 is not playing audio but channel 1 is

Test: Switch zone 1 from the stereo to channel 2 and zone 2 to channel 1.

- If channel 1 plays no audio after switching, the line out from the stereo is next to test. If channel 2 continues to play no audio, it is a faulty channel on the amplifier

If the amplifier is determined to be the problem:

- Check that it is connected to the battery using a 4 gauge wire (if 10 feet or less from the battery) or 2 gauge wire (if 20 feet or less from the battery). It should be no more than 20 feet from the battery or lower than 2 gauge wire
- Check that it is getting at least 12 volts from the battery

If a stereo is playing no audio from a line out, switch the RCA cable extension connections.

Example: Zone 1 from the stereo is outputting audio but zone 2 is not

Test: Unplug the RCA extension from zone 2 and plug it into zone 1, and unplug the RCA extension from zone 1 and plug it into zone 2.

- If zone 1 stops playing audio but zone 2 starts, the RCA extension is faulty and should be replaced. If zone 2 continues to play no audio, the zone on the stereo is faulty

If the stereo is determined to be the problem:

- Check that the stereo's software is up to date according to [Updating a Fusion Stereo](#)
- Check that the wires are seated firmly in the wiring harness of the stereo so that the pins are making contact with the pins on the back of the stereo
- Check that the stereo is getting adequate power. At least 12 volts at the wiring harness going to the power wire and, if applicable, the ignition wire

Once the problem is determined, obtain the exact model number, serial number, and a proof of purchase for the hardware in question and [contact Product Support](#) to discuss options.


Troubleshooting the Fusion-Link App

If the Fusion-Link app crashes on startup or during use, some steps can be taken to prevent it:

- Uninstall and reinstall the app to make sure it is up to date
 - Check that the software on the smart device being used is up to date
 - Update the Fusion stereo
 - See **Related Content** for more information
 - Connect the smart device to the Fusion stereo before opening the Fusion-Link app
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- If the internal memory of the smart device is nearly full, clear additional memory by transferring photos, music, or other data to another storage device

If the app still still does not perform as expected, perform these steps if able and contact Product Support:

1. Make note of exactly what is happening and when
2. Get a screenshot or take a picture of the stereo software by selecting **Settings > About**
3. In the Fusion-Link app select  **Settings > About** and take a screenshot
4. On the smart device being used select **Settings > General** (on Apple devices) **> About** and take screenshots

As problems with the Fusion-Link app are very uncommon, Product Support may ask for this information for testing purposes.
