Amplifier Status LED Colors & What they Represent

JL AUDIO | Help Center

All JL Audio amplifiers have built-in LED's that signify the operational status of that amplifier. It may show that the amplifier is working correctly, or identify a problem with the amplifier, installation or audio system itself. Read below for a list of what the various LED colors are identifying and some troubleshooting solutions to situations that are being identified.

HD / MHD Amplifiers

LED COLOR	DESCRIPTION
Green Flashing	Amplifier is powering up.
Green Solid	Amplifier is powered and functioning properly.
Red	Amplifier has reached its thermal limits. Advanced Rollback Protection engaged.
Amber (Yellow)	Low Impedance
Green/Red (Alternating)	Low voltage

Slash v3 Amplifiers

LED COLOR	DESCRIPTION

Green	Amplifier is powered and functioning properly. At least 10v DC are detected.
Red	Amplifier has reached its thermal limits. Advanced Rollback Protection engaged.
Amber (Yellow)	Low Impedance
Blue*	Low voltage (Under 8v). Amplifier turns off at 8v DC and turns back on when 9v DC is detected.

** 1200/1v3 only*

XDv2 / M-Series Amplifiers

LED COLOR	DESCRIPTION
Green Flashing	Amplifier is powering up
Green Solid	Amplifier is powered and functioning properly. At least 10v DC is detected.
Red	Amplifier has reached its thermal limits. Advanced Rollback Protection engaged.
Amber (Yellow)	Low Impedance

RD Amplifiers

LED COLOR	DESCRIPTION
Blue	Amplifier is powered and functioning properly. At least 10v DC is detected.
Red Constant	Amplifier has reached its thermal limits. Output is muted until safe operating temperature detected.
Red Temporarily (1/2 Second)	Low Impedance/Over Current, output muted. Will attempt to restart amplifier (Blue LED)
Red/Blue (Alternating)	Continuous over current condition. May be audibly heard as repetitive ticking or thumping.

MX Amplifiers

LED COLOR	DESCRIPTION
Green	Amplifier is powered and functioning properly. At least 10v DC is detected.

Red	Amplifier has reached its thermal limits or too low of an impedance detected. Output is muted until safe operating temperature detected. *OR* There is a short circuit, an audible "popping" noise might be heard.
Green/Red (Alternating)	Low Impedance/Over Current

JX Amplifiers

LED COLOR	DESCRIPTION
Green	Amplifier is powered and functioning properly. At least 10v DC is detected.
Red	Amplifier has reached its thermal limits. Output is muted until safe operating temperature detected.

Troubleshooting

Thermal Protection (Amplifier reaches unsafe operating temperature):

- Ensure Input Sensitivity is properly set (Learn how to Properly Set Input Sensitivity)
- Reduce any excessive boost
- Final impedance load is within amplifier's operating range (Read the Speaker Wiring Tutorial and how to wire SVC & DVC subwoofers)
- Excessive resistance at the power/ground inputs due to:
    - Improper grounding
    - Insufficient sized power & ground wire
    - Copper Clad Aluminum (CCA) wire being used
    - Lose or insecure connections
- Amplifiers are close to a heat source and or poor ventilation

Low Impedance/Over Current:

- Incorrect speaker(s) used (measure voice coil impedance with digital volt meter)
- Speaker(s) improperly wired (Read the Speaker Wiring Tutorial and how to wire SVC & DVC subwoofers)
- Blown or damaged voice coil
- Short in wiring

Low Voltage:

- Measure input voltage & current draw at amplifier
- Check alternator's current output compared to amplifier current draw
- Insufficient sized power & ground wire (Read about Choosing the Correct Power Wire)
- Using Copper Clad Aluminum (CCA) instead of Oxygen Free Copper (OFC)
- Improper grounding (Read about Augmented Grounds)