

Overview

Linea Research M and C Series amplifiers are designed to automatically configure themselves for correct operation in either 115V 60Hz or 230V 50Hz nominal mains environments. The thresholds of these ranges are as follows :

From firmware version V1.112 (22/12/2015)

115V range : 75 - 138Vrms
230V range : 138 - 275Vrms

Prior to firmware version V1.112 (22/12/2015)

115V range : 75 - 134Vrms
230V range : 181 - 264Vrms

Please note that although the amplifiers will operate if the mains is within the ranges above, performance, particularly the maximum output power will be compromised if the mains voltage differs significantly from nominal.

Once an amplifier has configured itself for a particular range it will not change range, even if the mains voltage varies wildly, unless power is completely interrupted for several seconds or is cycled by the user.

During startup the amplifier assesses the mains environment, displaying one of the following messages if a problem is detected with the quality of the incoming mains supply.

Problem and M Series Message	Description of the problem
Mains too low	During startup the unit waits for the mains to settle within either the 115V or 230V ranges. If the mains is taking a long time to settle and the voltage measured is <i>below</i> the 115V range this message is displayed.
Mains too high	During startup the unit waits for the mains to settle within either the 115V or 230V ranges. If the mains is taking a long time to settle and the voltage measured is <i>above</i> the 230V range this message is displayed.
Mains unstable	During startup the unit waits for the mains to settle within either the 115V or 230V ranges and remain there for a settling time. If the mains is taking a long time to settle but the voltage measured is currently in either the 115V or 230V ranges this message is displayed.

When an amplifier is running normally the mains is continuously monitored to ensure that it remains within the initially selected range. If the mains voltage is outside that range the amplifier will enter a protection mode and briefly display the message below. When in this mode audio will be muted but communication will still be possible.

Fault: Mains out of range	Amplifier was running but the measured mains voltage was outside the initial range.
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While in a protection mode caused by an unstable mains supply the amplifier will continually monitor the mains and automatically resume normal operation if it is assessed to be stable and within the *initial* range selected when the unit was first powered up. While the mains remains out of range one of the following messages will be displayed :

Problem and M Series Message	Description of the problem
Mains too low	During restart the unit waits for the mains to settle within the <i>initial</i> range. If the mains is taking a long time to settle and the voltage measured is <i>below</i> the 115V range this message is displayed.
Mains too high	During restart the unit waits for the mains to settle within the <i>initial</i> ranges. If the mains is taking a long time to settle and the voltage measured is <i>above</i> the 230V range this message is displayed.
Mains unstable	During restart the unit waits for the mains to settle within the <i>initial</i> range and remain there for a settling time. If the mains is taking a long time to settle but the voltage measured is currently in either the 115V or 230V ranges this message is displayed.

C Series Amplifiers

As C Series amplifiers do not have a text display, problems are indicated on the front panel LEDs.

To notify that a fault code is being displayed the SIG and CLIP LEDs of DSP input channels C and F flash alternately with the actual fault code being indicated by the number of LEDs in the output section being illuminated.

In the case of mains power issues, all the conditions in the tables above are combined in to fault code 7 (mains supply problem) which is indicated by the first 7 LIMIT LEDs being lit.