



LLC 115 FM
MTD 115 LLCa
MTD 112 LLCa

GUIDELINES FOR AMPLIFIER GAIN STRUCTURE

LLC Series Controllers (LLC 115FM, MTD115 LLCa, MTD112 LLCa) are intended to be used with amplifiers having 32 dB gain structure.

Protection circuitry employed in all LLC Series Controllers is calibrated and optimized for 32 dB amplifier gain.

For L-ACOUSTICS LA amplifiers, please refer to the table below:

L-ACOUSTIC LA AMPLIFIER GAIN

Amplifier Model	GAIN (dB)	Sensitivity (Vrms)	Sensitivity (dBV)	Sensitivity (dBu)
LA 15	32	0.93	-0.7	1.6
LA 17	32	1.46	3.3	5.5
LA 24	32	1.88	5.5	7.7
LA 48	32	2.30	7.2	9.5

Note: previous versions of L-ACOUSTICS LA 17, LA 24 and LA 48 amplifiers had switchable gain. All of these amplifiers should be used with the gain switch engaged (IN POSITION) to provide 32 dB gain.

LLC Series Controllers can be safely used with amplifiers having less than 32 dB gain, however, the maximum SPL output obtainable from your loudspeaker system will be less than optimum.

If your amplifier has greater than 32 dB gain, in extreme cases, oscillation of the sense return circuitry can occur resulting in potential damage to your loudspeaker and/or amplifier. In addition, due to the higher input sensitivity of higher gain amplifiers (i.e., less input signal level is required in order to drive the amplifier to clip) it is also possible that LLC controller limiting circuitry will not operate correctly. This could allow amplifiers to be operated under continuous clipping conditions and may result in damage to your loudspeaker.

If you use an amplifier with greater than 32 dB gain, please contact your amplifier supplier for technical support regarding how to calibrate your amplifier for 32 dB gain.

If any L-ACOUSTICS loudspeaker product is damaged while powered by an amplifier having greater than 32 dB gain the loudspeaker warranty shall be considered void.