

Pro Note

How to be sure the C1504 or C1504D is right for your installation



At FlatPanel Audio, we love LEA Professional amplifiers, including the C1504 and CS1504D. They carry 1500 watts of power x 4 channels, while maintaining all of the cloud-managed and integrator-friendly features of the lower-power amplifiers. Astute integrators will note that the DML500 has a continuous power rating of 200w RMS, and a peak power rating of 600w RMS. So why use a 1500 watt per channel amplifier?

It's our experience that the DML500 responds very well when it is given lots of headroom, allowing brief bursts of the transient signals to come through. Using our recommended limiter settings, we can help to keep the DML500 from receiving too much power for too long (heat being one of the major killers of loudspeakers). We're not recommending that you use a 1500 watt amplifier of your own choosing—as our limiter settings have been meticulously established by our engineers to protect the DML500 as much as possible.

For speech, BGM, and live sound reinforcement of venues up to 200-250 seats, the LEA 704 (700w/ch w/ Smart Bridging enabled on the sub channel) will suit you just fine.*

For high energy music, multi-panel systems, and venues larger than 200-250 seats, the LEA 1504 will bring out the full capabilities of the DML500 and its associated subwoofers.*

For systems with more than two DML500, please contact us and we will happily create amplifier specification specific to your application and venue needs.

About power cabling

The LEA Professional C1504 amplifier is fully capable of delivering 1500w per channel (6000 watts total) continuously. Because of this, it comes with a NEMA L6-30P connector (with a PowerCon 32A connector at the amplifier side).



This cable is configured to be used with a 30a 110V mains supply to allow the amplifier to draw a full 30 Amps of power, as would be the case if all channels were being driven at maximum 1500w continuously. However, when used with a DML500, the amount of time that any of the amplifier channels would spend at a full 1500 watts would likely be measured in Milliseconds. Because of this, when used with a DML500, we would not expect an LEA 1504CS to draw more current than what is supplied with a standard 20A commercial circuit. Of course, your mileage may vary, and for specific we refer you to your electrician to confirm.

About power balancing

We do recommend balancing the amplifier load between DML Loudspeakers and Subwoofers—whenever possible—to avoid driving all subwoofers or all DML500 Loudspeakers with a 4 channel amp. The theory behind this is this: In the case where a 4 channel amp is being called upon to deliver 4 channels of the exact same content to the exact same type of loudspeaker, all channels are calling for the same audio at the same time—which can make peak demand on the amplifier's power supply occur sooner (all four channels called upon to deliver the same content at the same time.)

Whereas, if in the same 4-channel amp - 2 channels were driving DML500 Loudspeakers(main content) and one channel (smart-bridged) is driving a subwoofer, the amp is much less likely to hit peak power demand when each "half" of the amp is delivering unique content (mains vs sub)s In other words, in a 2x2 DML500 system with 2 LS212 subwoofers, use two channels of the LEA CS704 or CS1504 for DML Loudspeakers, and one bridged channel for the sub. The subs are more likely to want to extract the full load out of the amplifier's power circuit - balancing ½ sub and ½ DML500 keeps the amplifier's power supply from having to run at max (and as a result, draw closer to 30A off of the mains.)

*The 200-250 seat guideline is a very general estimate. There may be larger venues where a C704 or C704D are appropriate and there may also be smaller venues that would truly benefit from the additional wattage of the CD1504 or C1504D. We've seen both cases. so please contact us for guidance on amplifier selection.