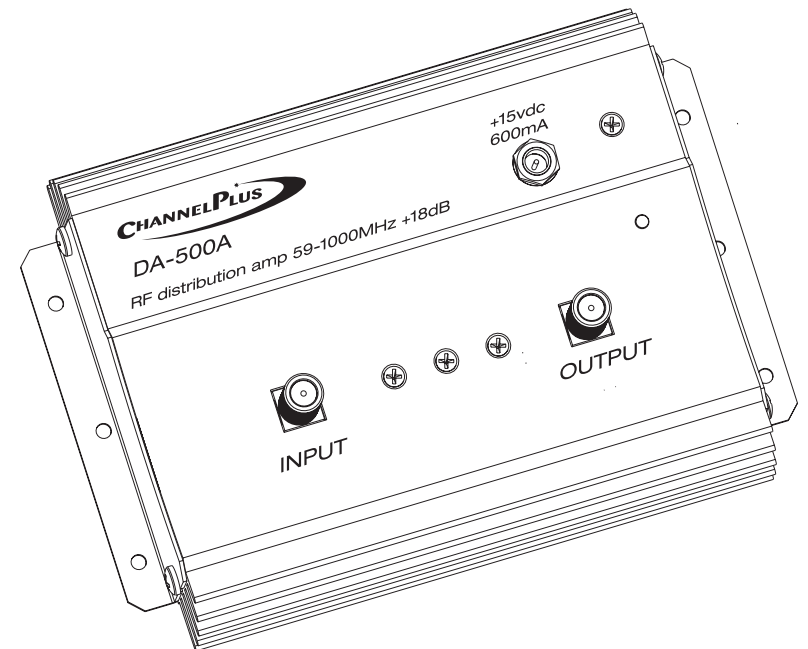




Innovations in Video, Voice and Data

# DA-500A



## LIMITED WARRANTY STATEMENT

Linear LLC warrants this product to be free from defects in material and workmanship for 2 years. The time period will be measured using the date code labeled on the product. Linear LLC is not responsible for damage to the product resulting from the buyer's improper handling, stocking or warehousing of the product. Any implied warranty arising from the sale of the product including implied warranties of merchantability and fitness for purpose are limited. Linear LLC shall not be responsible for any losses, damages or expenses, whether direct, consequential, or incidental arising from the use or the inability to use the product. Some states and countries do not allow limitations on how long an implied warranty lasts or the exclusion or limitation on incidental or consequential damages, so the above exclusions may not apply. The Linear LLC warranty gives specific legal rights in addition to other rights, which may exist and vary from state to state and country to country.

The warranty is limited to repair or replacement of products returned, freight prepaid, to Linear LLC, there is NO PROVISION FOR LABOR COST OR OTHER REIMBURSEMENTS OF ANY KIND.

1. Failures due to product abuse, such as negligence, improper use, and electrical surge including damage from lightning, water damage or other damage due to natural disasters are not covered by the warranty. The most common form of product abuse is surge damage caused by lightning.
2. The warranty shall also be voided by any tampering with the date code, labels or other markings on the product.
3. Products that are damaged in transit to Linear LLC due to improper packaging or by the carrier (shipping company) will not be covered under the warranty. If the product was damaged or lost by the carrier, it is the sender's responsibility to create a claim against the carrier.
4. The user is responsible for all labor costs associated with removing, reinstalling and returning the product to Linear LLC.

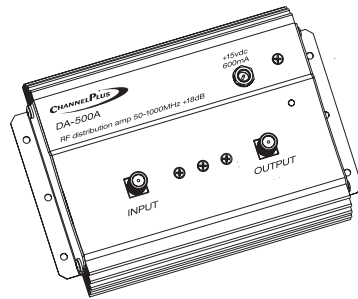
Linear LLC, at its option, will repair or replace the defective product. Replacements will be made from B-Stock, if an exact replacement is not available, Linear LLC, at its option, will select the nearest equivalent product. The user is responsible for freight charges to Linear LLC. Linear LLC will return warranted repaired or replacements by UPS Ground or an equivalent service. A customer may pay the additional costs for second-day or next-day service.

All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Services at 1-800-421-1587 for an RPA# and other important details.

**Linear**<sup>®</sup>  
Building On Innovation.

USA & Canada (800) 421-1587 & (800) 392-0123  
(760) 438-7000 - Toll Free FAX (800) 468-1340  
[www.linearcorp.com](http://www.linearcorp.com)

The ChannelPlus DA-500A is a high power, low noise, low distortion RF distribution amplifier. It features flat response from 50MHz to 1000 Mhz. The DA-500A is suitable for all off-air and all uni-directional CATV applications, VHF (high and low), FM, Midband, Superband, Hyperband, Ultraband and UHF. The low distortion push-pull circuit design incorporates surface mount and strip line technologies for high reliability and small size. The DA-500A is designed for indoor use only.



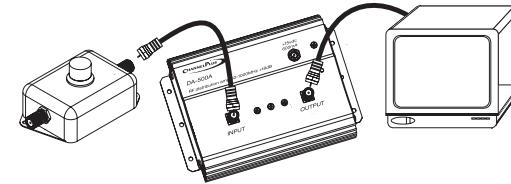
### Specifications: typical @ 25°C ± 5°C

<b>Gain:</b>	<b>18dB</b>
<b>Bandwidth:</b>	<b>50-1000MHz</b>
<b>Flatness:</b>	<b>+/- 1.5dB</b>
<b>Max output @ all freqs:</b>	
<b>6 channels</b>	<b>48dBmV</b>
<b>12 channels</b>	<b>45dBmV</b>
<b>24 channels</b>	<b>42dBmV</b>
<b>48 channels</b>	<b>39dBmV</b>
<b>Noise figure:</b>	<b>5.5dB</b>
<b>Power supply (included):</b>	
<b>350-079</b>	<b>15 VDC @ 600 mA</b>

### Troubleshooting Tips

#### Herringbone patterns on several channels.

A wavy pattern on the TV picture is caused by one or more spurious signals in the 6MHz reserved for that TV channel. These spurious signals, or 'spurs' can come from several places. For example, a modulator at channel 16 will interject a spur into channel 15. But the prime cause of spurs is an over-driven distribution amplifier. (This is also known as IM or InterModulation distortion.) To determine if an amplifier is causing this distortion, an inexpensive variable attenuator will allow you to perform this simple test:



Insert the variable attenuator before the amp. (If you have splitters between the amp and TV, that's OK.) By *increasing* the attenuation, you are *decreasing* the signal that reaches the amp. If you find that the herringbone patterns disappear, then your problem is an over-driven amplifier.

Causes of an over-driven amp:

- 1) Too much gain in the system. Use the variable attenuator to find a setting where the signals are not noisy, and the amp is not being over-driven.
- 2) Strong local FM signal. If you have a nearby FM transmitting tower, you may need to install an FM trap before the amplifier.
- 3) Strong local TV signal. If you have a nearby TV transmitting tower, you may need a tuned filter to reduce this station's signal. Often the station management can supply filters for their neighbors.

Variable attenuators and FM traps are available at many hardware stores and most electronic stores.

For more troubleshooting tips and installation advice, visit us on the web at [www.channelplus.com](http://www.channelplus.com).