



# Model TA-25-RP-4 (5-40, 50-870 MHz) Bi-directional Cable TV Distribution Amplifier

## Product Description

The TA-25-RP-4 is a high-performance TV amplifier with four outlets. It is designed for residential and small system cable TV signal distribution. It provides higher quality signal and greater signal strength for multiple outlets, long cable runs and large screen televisions (See Figures 1 & 2).

### Features:

- Easy to install; includes adjustable and precise level control to optimize input signal level.
- Internal RF splitter provides up to 4 high level outputs (minimum +18 dBmV) for long (200+ ft) cable runs or further signal splitting.
- State-of-the-art GaAs p-HEMT SMD amplifier ICs
- High gain and low noise will optimize big screen picture quality
- Digital cable ready (bi-directional) - possible to connect Cable Modems, Set Top Box, Pay TV Decoders
- HDTV antenna distribution models also available
- Powered with UL-approved AC power adapter
- Full technical support and two-year warranty



Figure 1: TA-25-RP-4

## Product Specifications

|                                |                        |                                   |                                |
|--------------------------------|------------------------|-----------------------------------|--------------------------------|
| <b>Frequency Range (Mhz)</b>   | 5-40, 50-870           | <b>Return Filter Thru loss</b>    | 1 dB                           |
| <b>Power Gain (dB)</b>         | 25                     | <b>Cross Modulation</b>           | 110 chs; Vo=+25dBmV, -80dB     |
| <b>Gain Flatness(dB)</b>       | ±1.0                   | <b>Composite Triple Beat (dB)</b> | 110 chs flat, V=+25dBmV, -65dB |
| <b>Noise Figure (dB)</b>       | 2 dB                   | <b>Composite 2nd order</b>        | 110 chs flat, V=+25dBmV, -60dB |
| <b>Input Return Loss(dB)</b>   | 12                     | <b>Connectors, Impedance</b>      | F-female, 75 ohms              |
| <b>Output Return Loss(dB)</b>  | 10                     | <b>Dimensions (LxWxH)</b>         | 7.5" x 4" x 2" (192x102x50 mm) |
| <b>Number of outputs</b>       | 4                      | <b>Weight (lbs)</b>               | 3                              |
| <b>Signal level at outputs</b> | +18 dBmV (0dBmV input) | <b>Operating Temperature</b>      | -15 to +90 C                   |
| <b>Maximum in/out levels</b>   | +8 dBmV / +26 dBmV     | <b>Power Requirements</b>         | 18V DC, 250 mA                 |
| <b>Return Filter Isolation</b> | 55 dB min              | <b>Power AC Adapter</b>           | Included                       |

## Example Application

TA-25-RP-4 amplifier for CATV signal distribution in a residential or small building system.

Figure 2 shows typical signal levels (at 750 MHz) at the amplifier input, outputs and, after cable loss (RG-6), to each TV.

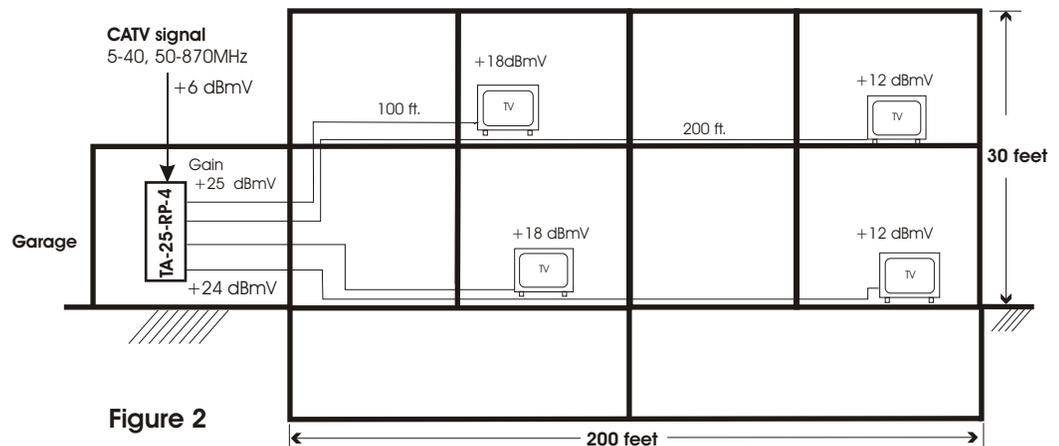


Figure 2

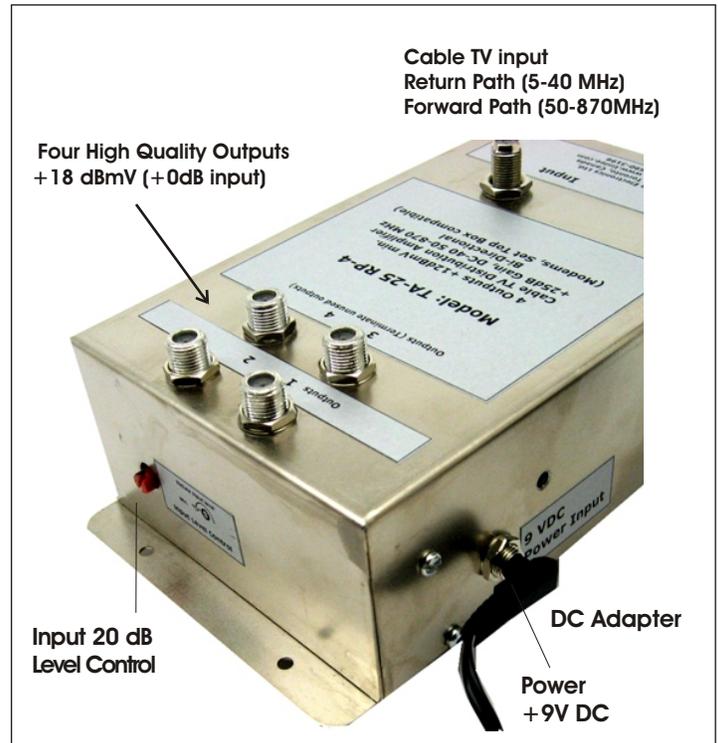




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## Installation Notes and Warranty Information:

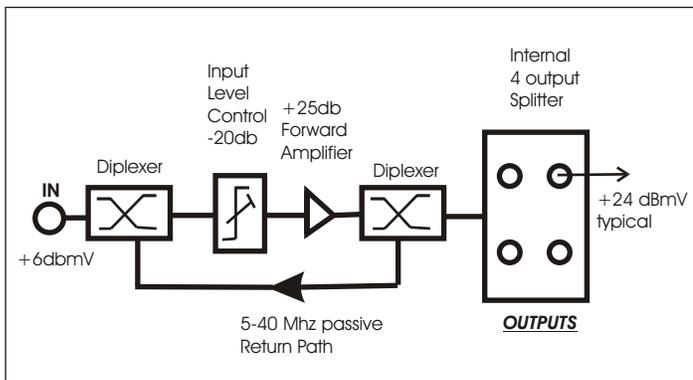
- 1) Unpack the TA-25-RP-4 distribution amplifier and DC power supply.
- 2) Locate the TA-25-RP-4 in a dry area, near AC power outlet. The TA-25-RP-4 has 4 mounting holes for wall mounting.
- 3) Before applying power to the amplifier, turn the **Input Level Control**, fully *Counterclockwise*- the input signal level is reduced by -20dB.
- 4) Connect the input CATV signal and output distribution cables to the amplifier. Terminate unused amplifier output ports.
- 5) Connect AC to Wall outlet, and, plug DC to Amplifier power jack
- 5) Adjust the **Input Level** by turning **Level Control** *Clockwise* and stop when the picture quality at TV sets and set top boxes are received clearly.



### Important Safety Precautions

To avoid electrical shock, do not take apart this unit  
Do not overload the wall outlets or extension cords. This could result in the risk of fire or electrical shock  
This amplifier should be used only with the power supply included

### TA-25-RP-8 Block Diagram



### Warranty:

**Tin Lee Electronics (TLE)** products are guaranteed for TWO YEARS from the date on the original invoice (includes parts & labour). All Products are guaranteed to perform to our specifications under intended operation. Warranties do not cover misuse, improper installation, abuse, tampering, or Act of God damage.

#### **To obtain warranty service:**

- 1) Retain invoice or original proof of purchase to establish the start of the warranty period.
- 2) Notify TLE as soon as possible if defect or problem found
- 3) The product can be shipped back to TLE prepaid after it has been agreed by TLE that the product is defective.
- 4) All tampering, modifications, or unauthorized repairs will void product warranty.

#### **For Service Information contact:**

**Service Department**  
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