

# AUDIO LINE DRIVER MODEL LD-4812

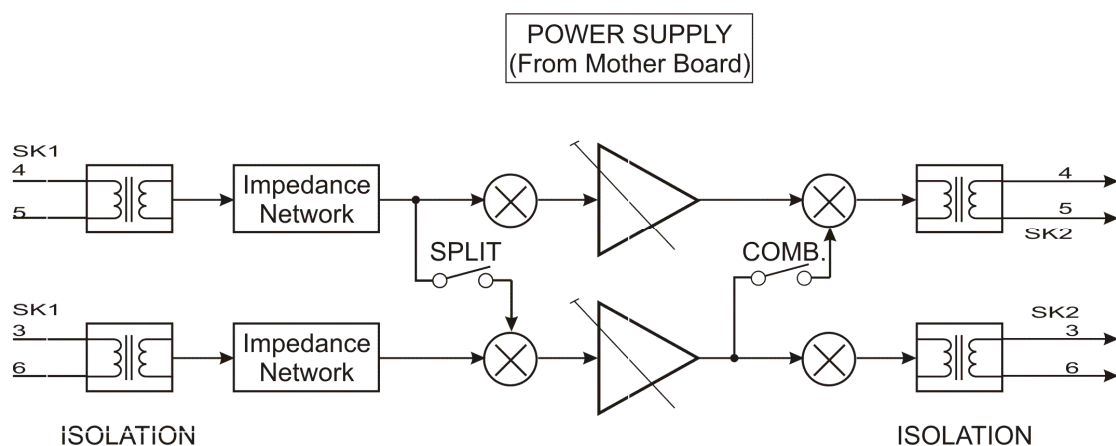
## PRODUCT DESCRIPTION

The Audio Line Driver is used for precisely boosting or attenuating audio levels on leased telephone lines. It can be used on two or four wire circuits.

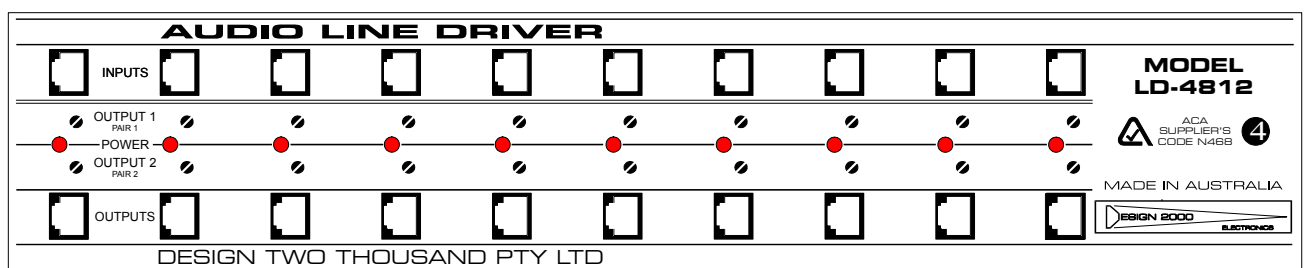
The unit provides up to twenty isolated 600Ω audio line drivers in a 2 unit high 19" half depth rack. The audio inputs and balanced outputs are provided on modular RJ45 sockets with level adjustment via the front panel.

It is powered from a single plug pack or external dc supply.

## BLOCK DIAGRAM



## FRONT PANEL

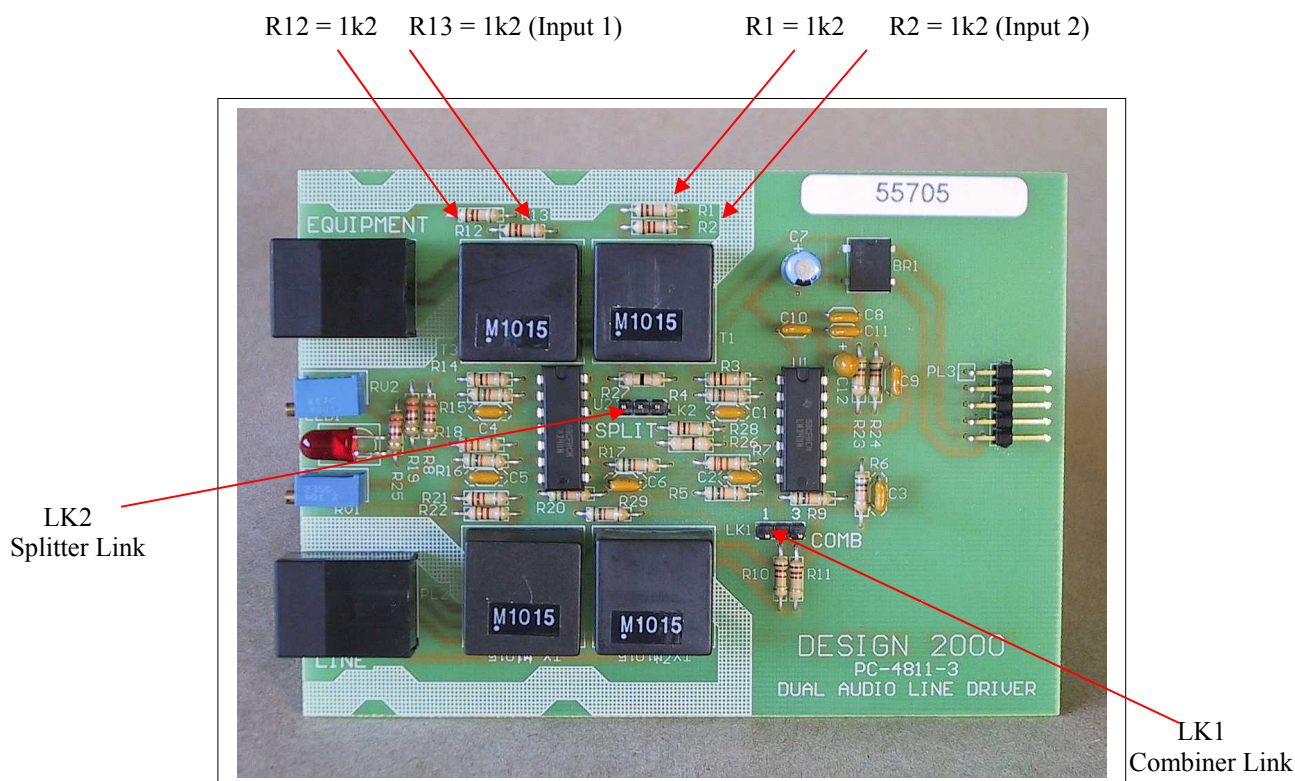


## LINK OPTIONS

The PC-4811 board can also be used as a Splitter (1 input to 2 outputs) or a Combiner (mix 2 inputs to 1 output).

### Splitter

To set the board as a Splitter, a shunt block is fitted to pins 1 & 2 of LK2 (these pins are the closest to the front (RJ-45 end) of the board). LK2 is labeled SPLIT. When this shunt is fitted, only Input 1 on pins 4 & 5 of the RJ-45 is used. Fitting the shunt to pins 2 & 3 will disable the Splitter function.



### Input Impedance

The PC-4811 normally has an input impedance of 600 Ohms on each input. This can be varied by the removal of one or two resistors to enable multiple boards to be paralleled for applications that require 1 input to be split to more than two outputs.

The 600 Ohms is set by resistors R12 & R13 (2 x 1k2 Ohm resistors in parallel) for Input 1 (pins 4 & 5 of the RJ-45) (and R1 & R2 for Input 2 (pins 3 & 6 of the RJ-45) when used as a Combiner).

### Combiner

To set the board as a Combiner, a shunt block is fitted to pins 1 & 2 of LK1 (these pins are the closest to the front (RJ-45 end) of the board). LK1 is labeled COMB. When this shunt is fitted, Input 1 on pins 4 & 5 and Input 2 on pins 3 & 6 of the RJ-45 input jack are used. The combined output is fed to pins 4 & 5 of the RJ-45 output jack. Fitting the shunt to pins 2 & 3 will disable the Combiner function.

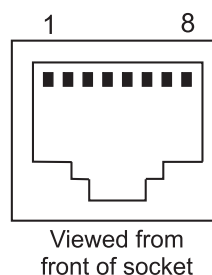
Do not enable both functions on the same board.

## SPECIFICATIONS

1. Two amplifiers/attenuators (Audio Line Drivers) per card.
2. Ten (10) Audio Line Driver cards per 2U high 19" sub-rack.
3. RJ-45 connectors for audio in and out.
4. Mounting brackets front or rear mountable.
5. The face of the sub-rack (connector side) recessed by 20 mm minimum (adjustable).
6. Input/output Impedance: 600 Ohms balanced (isolated). (8,200 Ohms with R1 & R2 removed).
7. Input level: up to +4dBm (diode clamping above +4dBm).
8. Output level: -26dBm → +6dBm continuously variable with respect to -10dBm input. (Gain range -16dB → +16dB).
9. Frequency Response:  $\pm 0.2$  dB in the range 300 Hz → 10 kHz.
10. THD:  $< 2\%$  @ +10dBm.
11. Gain adjustments accessible from front without removing any panels or cards.
12. 24 Vdc nom. operation (plug pack supplied separately).

## CONNECTION

|                 |        |            |
|-----------------|--------|------------|
| Inputs          | Pair 1 | Pins 4 & 5 |
|                 | Pair 2 | Pins 3 & 6 |
| Outputs         | Pair 1 | Pins 4 & 5 |
|                 | Pair 2 | Pins 3 & 6 |
| dc pass through | Pair 3 | Pins 1 & 2 |
| dc pass through | Pair 4 | Pins 7 & 8 |



## PART NUMBERS

RA-4812      Audio Line Diver 2RU 19" Sub-rack  
PC-4811      Audio Line Driver Card

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