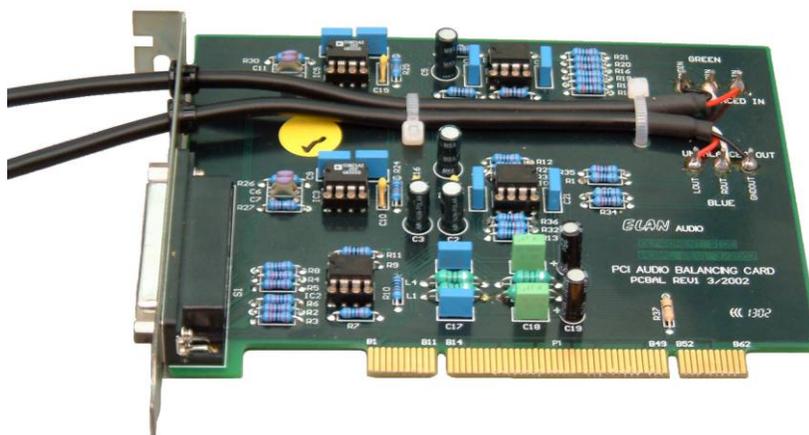


PCI FORMAT LINE BALANCING BOARD FOR PC SOUND CARDS



The PC-BAL is a plug in board for personal computers designed as a quality stereo interface between balanced +4 dBu standard broadcast line level systems and unbalanced computer sound cards.

The majority of onboard sound cards supplied with computers are actually very good and are capable of giving high quality audio performance warranting their use in professional broadcast systems. Unfortunately, proper audio grounding techniques are rarely if ever applied in the design and circuit board layout of computers making it impossible to realise the full performance of sound cards without special interfacing. The main problems are hum loops and ground induced noise for which the PCBAL is designed to overcome.

The PCBAL is designed to fit into a normal PCI slot and takes its + and – 12V DC power supply and ground from the PC.

Also available is the PCBAL0.5 version, designed to fit half height PCI slots to suit low profile desktops.

The PCBAL is a slave card therefore no drivers or software are required for installation.

The stereo balanced line inputs and outputs are via a female DB25 connector with audio levels being standard +4 dBu.

The stereo unbalanced line inputs and outputs are via leads fitted with 3.5mm stereo jacks intended to plug directly into the sound card. Audio levels are standard 300 mV Hi-Fi levels compatible with normal sound cards.

Technical Performance

Audio performance of the PCBAL is considerably better than standard sound cards, however overall performance is entirely dependent on the quality of the onboard PC sound card.

Performance attained from a PCBAL with a Soundblaster Live sound card, linear 48 KHz sampling.

| | | | |
|------------------------|-----------------|-----------------|-------------------|
| Signal to Noise Ratio: | 20 Hz to 20 KHz | All Muted | 89.3 dB |
| | | Stopped | 60.7 dB |
| | | Playing Silence | 60.6 dB |
| Frequency Response: | +0 –1 dB | Rec/Play | 10 Hz to 21.3 KHz |
| Distortion: | at 1 KHz | | 0.06% (THD) |