

The BCD LAB-1 enables AES-3 signals on twisted pair to be recovered from long cables. Normal AES-3 equipment is capable of 100 metres and specially equalised equipment is capable of 200 metres use; the LAB-1 extends this range to 500 metres.



Specification– Input

AES-3 digital audio inputs on pins 2&3.
Ground pin 1 of XLR.
Input impedance 110R.
Electronically balanced with input RF filter.
Minimum input level better than 50mV P-P.

Input carrier level detection

Carrier level detection of 100mV, 300mV, 1V and 3V p-p.

Specification – Digital

Transformer balanced AES-3 output.
Output impedance 110R +/-10%.
Output level 3V p-p, loaded.
Output jitter better than 20nS, dependant on length of cables used.

Power requirements

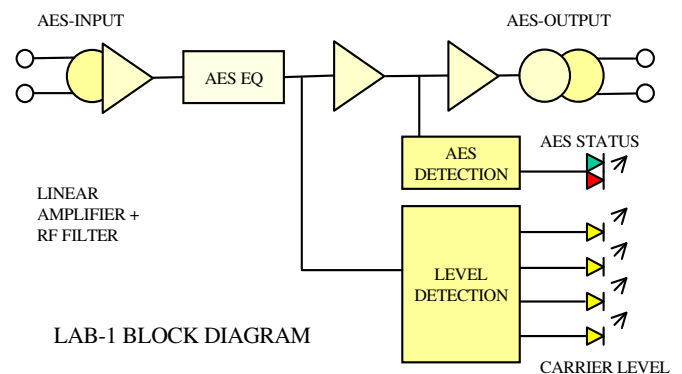
DC input, with +ve on centre pin.
Minimum input voltage 8V, maximum 30V.
Recommended input voltage 12 to 24V DC.
Power consumption at 12V input 80mA.

Features

AES3 low-level input on XLR.

AES3 transformer balanced output on XLR.

Wide range DC power inlet on 2.5mm socket.



Description

The LAB-1 recovers low-level AES-3 signals from twisted pair, enabling long cables to be used. The AES input is passed via an RF-filter to a wide-band linear amplifier, and then equalised.

The signal level is monitored, and displayed on front panel LEDs, giving an indication of the received carrier strength.

The AES signal is passed to a high-speed comparator, and to an RS422 transformer balanced output for final output.

An AES receiver is connected to the signal, and a bi-colour LED indicates whether the signal is suitable for use. Sample rates from 24KHz to 200KHz are supported.