



# LINE ISOLATOR / AUDIO DRIVER TYPE LI-4302AF

## GENERAL

The LI-4302AF Line Isolation Unit interfaces an audio source to an analogue telephone or to an analogue trunk port of a telephone system.

The LI -4302AF unit provides a complex impedance on the audio source ('LINE') side and a 48 Vdc, 35 mA line feed to the telephone ('EQUIP') side.

As standard, an RCA lead (male) connects to the audio source and an RJ12 socket (centre pair) marked 'EQUIP' goes to the phone or phone system, meeting the specifications below.

## FEATURES

1. Provides the necessary 3.5 kV ac isolation for more than one minute.
2. Provides 48 V line feed to the telephone equipment.
3. Detects off hook condition and sets up the audio path.
4. Is capable of transmitting signals across the voice frequency spectrum in both directions including DTMF signals.

## HOW IT WORKS

*In the AF mode, the 'equipment' side is connected to the telephone system and the 'line' side is connected to the line level audio source. Simply picking up the telephone or the designated line button will immediately connect you to the audio source.*

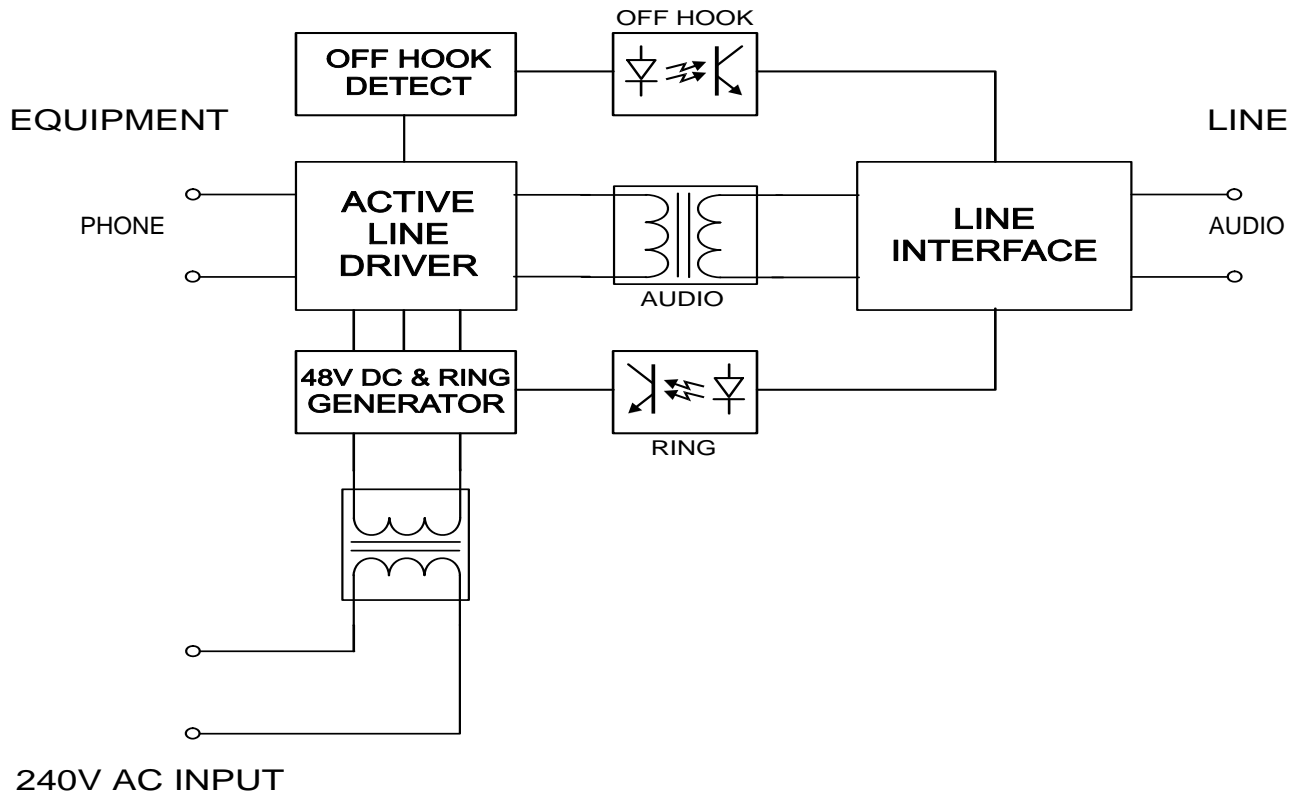
## SPECIFICATIONS

Isolation	>3.5 kV ac, >5 kV dc
Insertion loss	< 2 dB
Return loss (Terminated at customer end with AUSTEL Reference Impedance)	> 20 dB at 300 Hz > 30 dB from 600 Hz to 3400 Hz
Seizure, hold and pulse dialing current	Complies with AUSTEL Specification TS 002
Pulse dialing response	< 150 micro seconds
Ring detect threshold	30 V rms. @ $\geq 16 \frac{2}{3}$ Hz
Ring output	60 V ac rms. @ 50 Hz superimposed on 48 V dc, at nominal mains (minimum 20 V zero crossing)
Ring transfer response	< 50 milliseconds
Line seizure & decadic dialing detect current	$\geq 12$ mA (pick up detected at $\leq 2.5k\Omega$ across the line but not at $\geq 10k\Omega$ DC loop resistance).
Output Equivalent Circuit	48 V in series with 900 $\Omega$ , current limited to 35→40 mA, at nominal mains
Mains input	240 Vac 50/60 Hz. (other voltages to order)
Power Consumption	20 mA $\approx$ 5 VA maximum.
Mains cord length	1.8 meters
AUSTEL Certified Component Listing No.	A95/TI/0215
ACMA Supplier's Code	N 468
Dimensions (single port)	W 110 mm x H 52 mm x D 85 mm
Ordering Code	LI-4302AF (SY-4781)





**BLOCK DIAGRAM**



MADE IN AUSTRALIA

**design2000**

**DESIGN TWO THOUSAND PTY LTD**

TELEPHONE: 03 9758 5933  
E-MAIL: gen@design2000.com.au

FACSIMILE: 03 9758 5560  
WEBSITE: www.design2000.com.au



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