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# DIGITAL LINE ISOLATOR MODEL DI-4840S

## PRODUCT DESCRIPTION AND INSTALLATION DETAILS

### ACA PERMIT

Design Two Thousand Pty Ltd ACA Supplier's Code N468

### DESCRIPTION

The Digital Line Isolator DI-4840S is used for isolating equipment connected to Dedicated Data Service lines (DDS), providing isolation for synchronous data appliances and also eliminating ground loop problems.

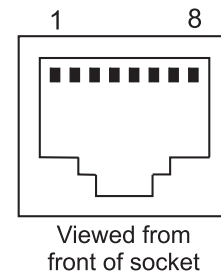
The unit provides up to ten circuits in a 4 unit high 19" half depth rack. The inputs (equipment) and outputs (line) are provided on RJ45 connectors.

The DI-4840S guards against dangerous voltages being passed from Customer Equipment to the DDS. The DI-4840S also reduces the risk of electric shock to the customer and/or damages to Customer Equipment, should dangerous voltages be accidentally imposed on the DDS line.

The DI-4840 provides greater than 3500 Volts AC and greater than 5000 Volts DC isolation for more than one minute between the Equipment and Line.

### CONNECTION

Equip. & Line	Pin 1	Rx Timing
	Pin 2	CD
	Pin 3	Tx Timing
	Pin 4	Sig. Gnd.
	Pin 5	Rx data
	Pin 6	Tx data
	Pin 7	CTS
	Pin 8	RTS

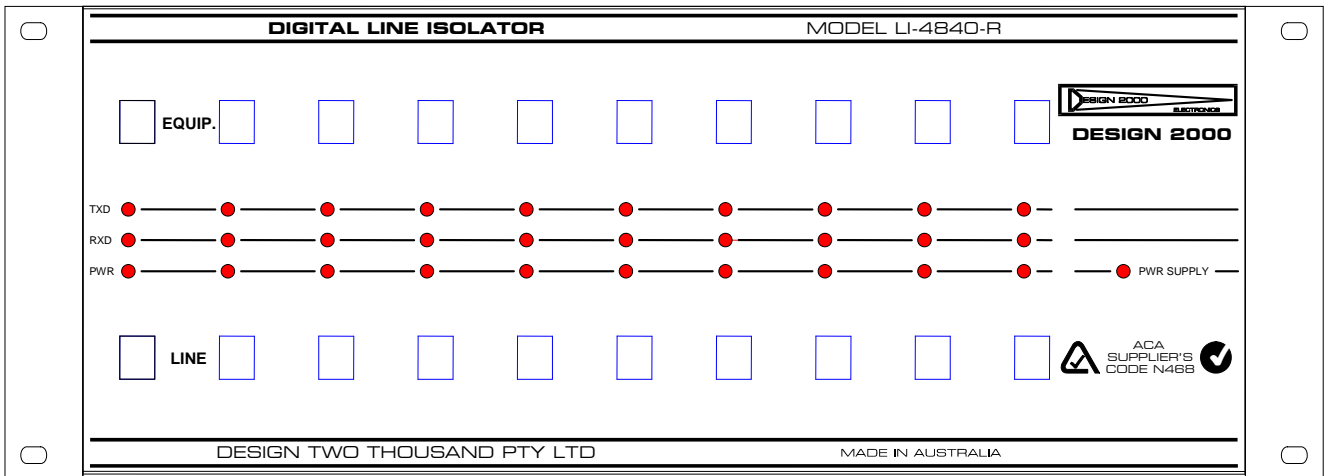


All Equipment connections share a common power supply rail and all Line connections share a common power supply rail, with the required isolation between each rail.

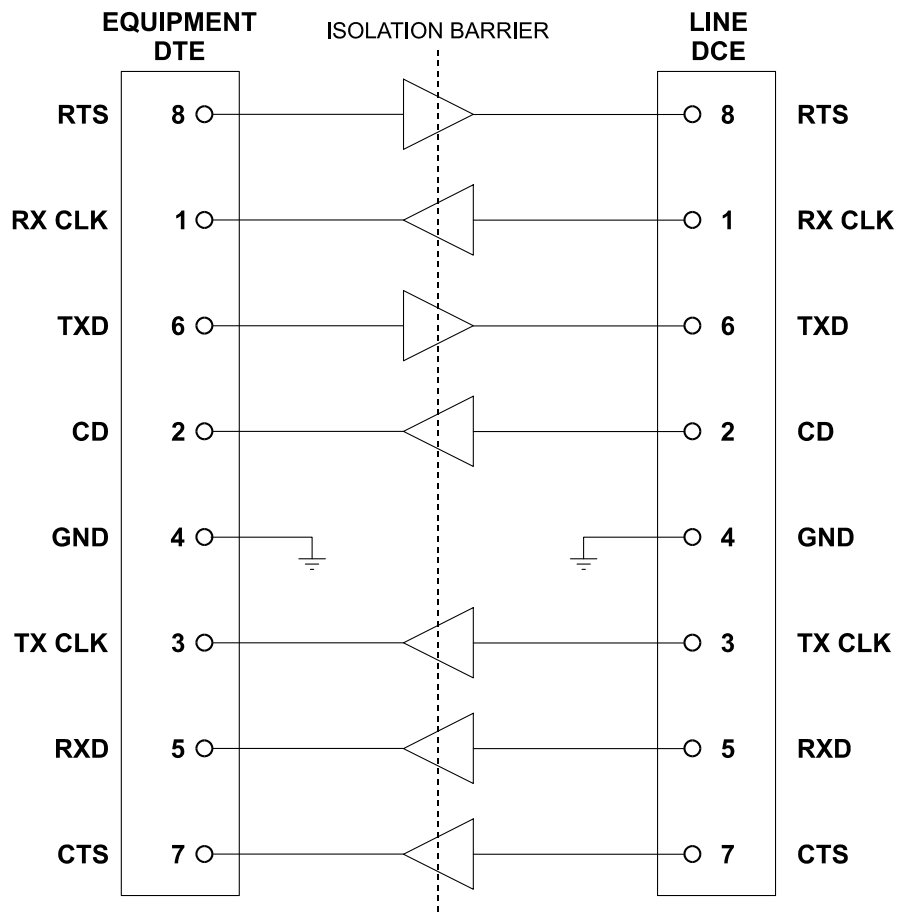
**LED Indicators:** TXD  
RXD  
Power

**Power requirement:** 24 Vdc nominal (20 - 30 Vdc) polarity insensitive, supplied via three-pin pluggable screw terminal at rear of rack

# FRONT PANEL DIAGRAM



# BLOCK DIAGRAM



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## SPECIFICATIONS

Input Voltage	20 → 30 Vdc, Polarity Insensitive, -ve Earth
Supply Current	≤ 750 mA (75 mA per card max.)
Signaling Protocol Interface	V24 (Synchronous RS232C)
Signal Delay	≈ 3 μs
Rise Time	≈ 1.5 μs
Data Rate	> 30 kbs
Nominal RS232 Signal Level	± 12V
Minimum RS232 Signal Level	± 5V
Maximum RS232 Signal Level	± 15V
Abs Maximum RS232 Signal Level	± 25V

## PART NUMBERS

RA-4841	LI-4840-R Digital Line Isolator 4RU 19" Sub-rack, Motherboard & PC-4854 Power Supply Card, 24V in
PC-4934	Digital Isolation Card, synchronous, with RJ45 connectors

Designed and Manufactured in Australia

**design2000**

Design Two Thousand Pty Ltd  
Melbourne Australia

Telephone: 03 9758 5933

Facsimile: 03 9758 5560

Email: [info@design2000.com.au](mailto:info@design2000.com.au)

Web site: [www.design2000.com.au](http://www.design2000.com.au)



N468

