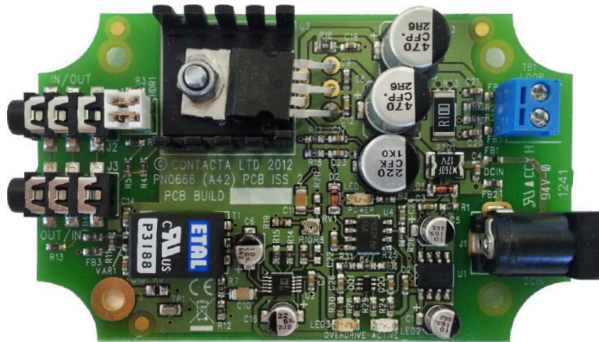


# Integrated Hearing Loop

## IL-A42 / IL-A42-02



# Setup Guide

October 2019

# Contents

Product Overview	3
Connections - IL-A42	4
Connections - IL-A42-02	6
Troubleshooting	8

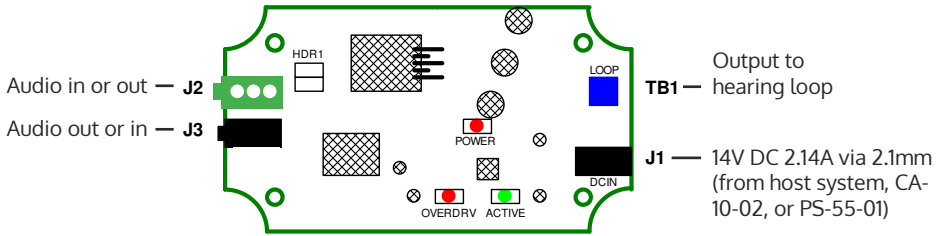
Contacta has a policy of continuous product development, therefore small specification changes may not be reflected in this manual. Images, labels, packaging, accessories and product colours are subject to change without notice.

# Product Overview


Our Integrated Hearing Loop Driver [IL-A42/IL-A42-02] is designed to be incorporated into third party manufacturers' equipment.

It provides an integral solution to machines and equipment requiring a hearing loop driver.

# Connections - IL-A42

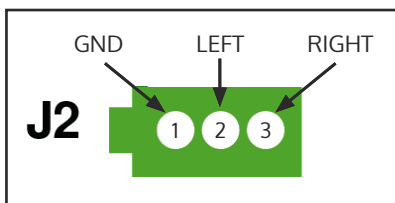
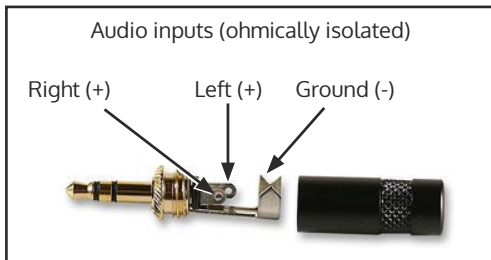


## Power Input

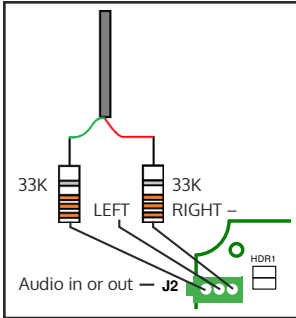
- The unit can be powered through a host system, a CA-10-02 Power Cable, or a PS-55-01 Power Supply through port J1. If using a host system, ensure the following specifications are met:
  - Supply voltage: 14V DC
  - Current output: 2A minimum
  - 2.1mm power connector jack
- J1 is a 2.1mm DC jack with centre pin positive. 

## Audio Input Connection

- J2 is an audio input connection [100V line]
- J3 is a 3.5mm audio jack



## For 100V line connection in J2:

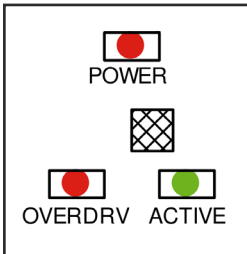


If connecting the unit to a 100V line, use two resistors with a voltage rating greater than 100V peak (200V peak-to-peak) as per the diagram on the left.

## Audio Input Signal

- Standard recommended input:  
Computer sound card signal with typical 1 volt RMS.
- Typical levels for larger speakers can be accepted by removing the two jumpers on header HDR1.
- 100V 'Line' can be accepted in J2.

## LEDs



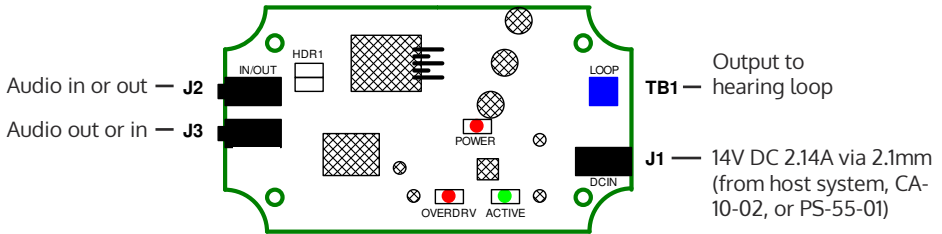
**POWER** - Constantly lit red to indicate the device is powered on.

**ACTIVE** - Illuminates green when a loop is being driven correctly.


**OVERDRIVE** - Becomes increasingly steady red as an audio signal increases. If it is continuously red, the drive level of the loop is too high and audio may be distorted.

If the ACTIVE LED is not illuminated and the OVERDRIVE LED is constantly illuminated, the induction loop is disconnected or open-circuit. Remedial action must be taken.

# Connections - IL-A42-02

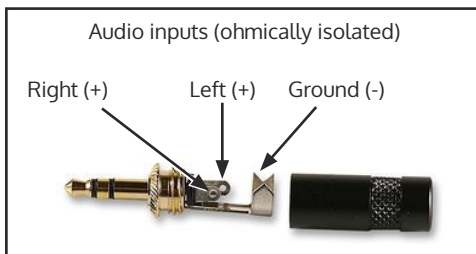


## Power Input

- The unit can be powered through a host system, a CA-10-02 Power Cable, or a PS-55-01 Power Supply through port J1. If using a host system, ensure the following specifications are met:
  - Supply voltage: 14V DC
  - Current output: 2A minimum
  - 2.1mm power connector jack
- J1 is a 2.1mm DC jack with centre pin positive. 

## Audio Input Connection

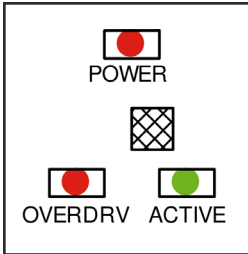
- J2 and J3 are interchangeable 3.5mm jacks connected in parallel. They are ohmically ground isolated and have series resistance to prevent interaction due to the paralleling of stereo channels within the IL-A42.



## Audio Input Signal

- Standard recommended input:  
Computer sound card signal with typical 1 volt RMS.
- Typical levels for larger speakers can be accepted by removing the two jumpers on header HDR1.

## LEDs



**POWER** - Constantly lit red to indicate the device is powered on.

**ACTIVE** - Illuminates green when a loop is being driven correctly.

**OVERDRIVE** - Becomes increasingly steady red as an audio signal increases. If it is continuously red, the drive level of the loop is too high and audio may be distorted.

If the ACTIVE LED is not illuminated and the OVERDRIVE LED is constantly illuminated, the induction loop is disconnected or open-circuit. Remedial action must be taken.

# Troubleshooting

Symptom	Possible Fault	Action Required
POWER LED not illuminated	Power supply disconnected or failed	Investigate power supply
POWER LED illuminated Other LEDs not illuminated	No audio input	Investigate audio feed
POWER LED illuminated ACTIVE LED flickering or steady OVERDRIVE LED off or occasionally flickering	Correct operation, although audio input is potentially low	Increase audio level (if possible)
POWER LED illuminated ACTIVE LED flickering or steady OVERDRIVE LED flickering regularly	Good operation	No action
POWER LED illuminated ACTIVE LED off OVERDRIVE LED illuminated	Induction loop disconnected, open circuit, or incorrect specification	Investigate loop and its connections
Interference (buzzing / whistling / hissing) is heard through hearing loop	Unscreened or poorly earthed third party equipment is being used in HOST or in close proximity  Incorrect power supply	Switch off any third party equipment to identify the source of interference  CA-10-02 Power Supply is recommended to aid in screening interference











Local dealer:

UK & ROW  
+44 (0) 1732 223900  
sales@contacta.co.uk

US & Canada  
+1 616 392 3400  
info@contactainc.com

[www.contacta.co.uk](http://www.contacta.co.uk)