



**CXL-400**  
Installation Guide v2.0

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# CXL-400 Installation & User Guide

## 1 Introduction

The CXL-400 is a 100/70V-line module consisting of 4 transformers intended for use in high quality background music and public address systems up to 40W rms. It can be installed internally to the 44/50 and CX-A200.

## 2 Installation Information

The CXL-400 is supplied with 10 M3×6 screws an 8-way cable and 2 10mm M3 hex spacers. The transformers are mounted on a PCB with M3 fixing bushes and screw terminal output connectors. The CXL-400 is fitted inside the 44/50 and CX-A200. 70V/100V-line systems are capable of delivering an electrical shock so must be wired with the appropriate level of care.

## 3 Signal Requirements

The CXL-400 can be used at full power with frequencies down to 50Hz. If it is operated with high level input signals at frequencies below 50Hz it may saturate and cause the driving amplifier's VI limiter to operate. Care must be taken to ensure that high level low frequency input signals (50Hz and below) are removed from the signal when using a CXL-400.

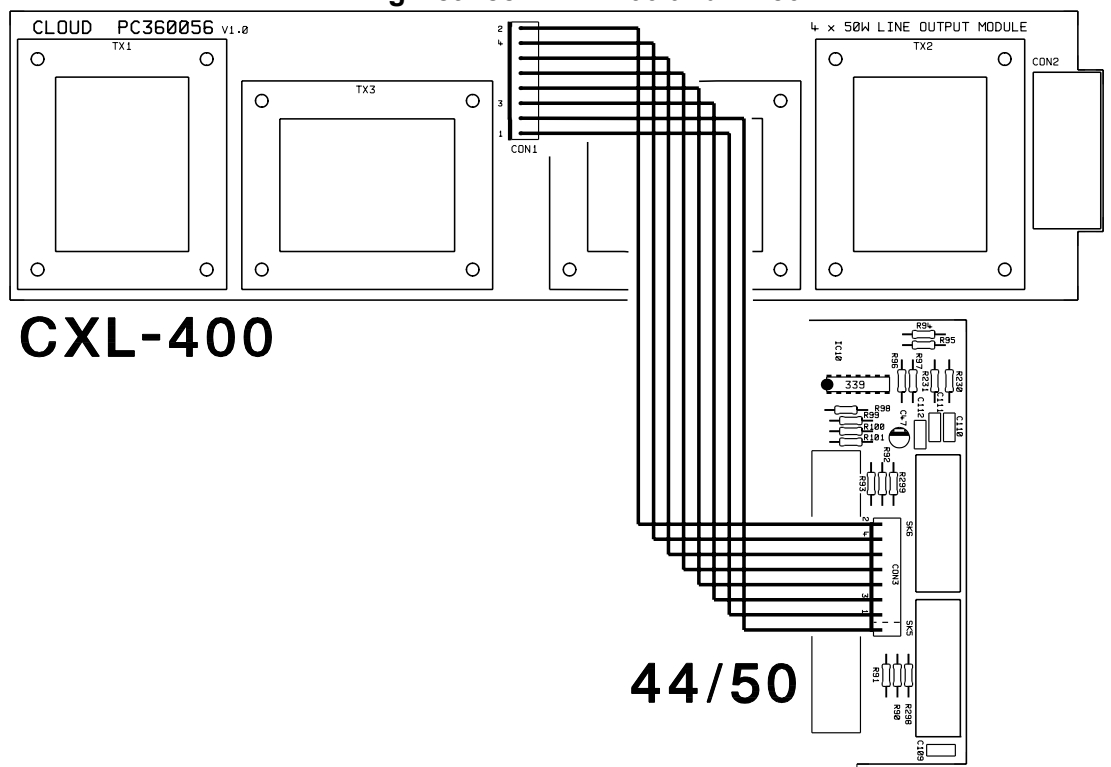
## 4 44/50 Installation Instructions

1. Turn the power off and remove the mains cable
2. Remove top panel
3. Remove the mains socket and mains switch from the chassis leaving the wires connected
4. Set the relevant transformers (see below) to 70V operation if required by moving the solder link on the underside of the PCB from 100V to 70V, the factory default is 100V.

**TX1 = Zone 1, TX2 = Zone 4, TX3 = Zone 3 & TX4 = Zone 4**

5. Carefully place the CXL-400 board in the chassis alongside the power supply transformer with the output connector protruding through the rectangular cut out in the rear of the chassis and the transformers facing inside the chassis.
6. Secure the CXL-400 to the side of the chassis with the 8 provided M3×6 screws.
7. Reinstall the mains switch and socket
8. Connect the CXL-400 to the main board using the 8-way cable (see note).
9. Replace the top panel and fit the protective cover over the outputs of the CXL-400 using the two 10mm M3 hex spacers and remaining two screws

### Wiring Between CXL-400 and 44/50



**NOTE:** If you wish to disable a transformer on any zone simply remove its relevant wire, from the 8-way connector. The zone numbers are clearly marked near the connector on the CXL-400 and 44/50 PCB (See diagram on right).

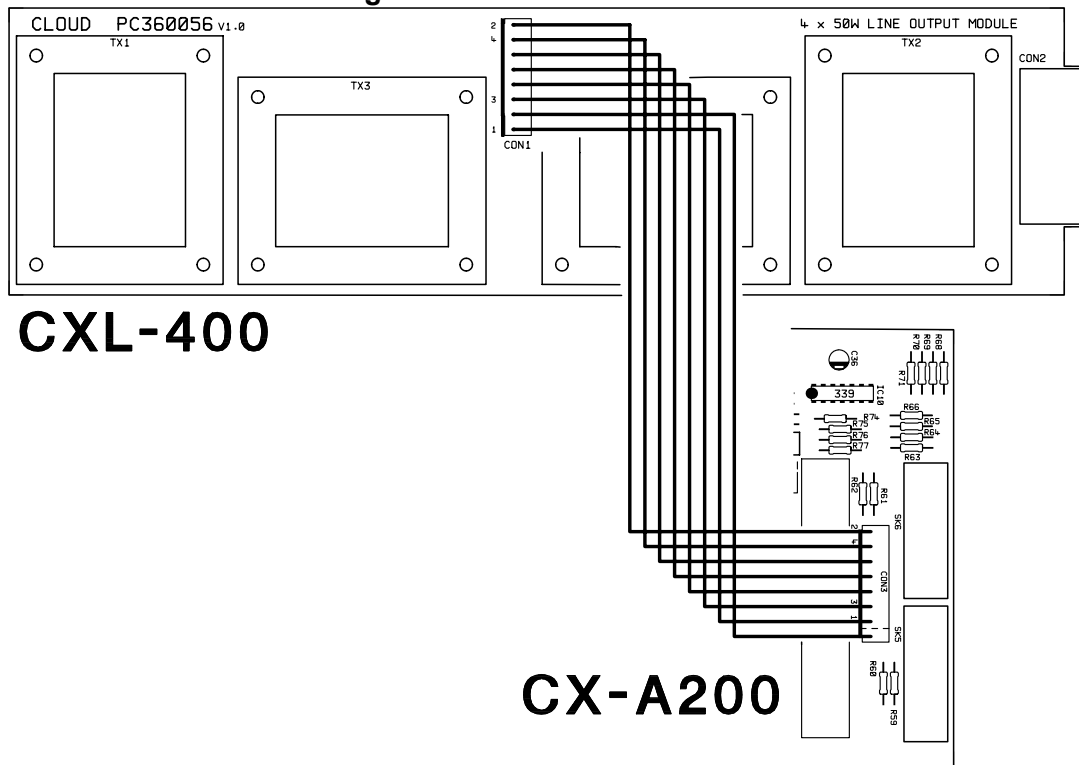
## 5 CX-A200 Installation Instructions

- 1) Turn the power off and remove the mains cable
- 2) Remove top panel
- 3) Remove spade terminals from the Mains Switch (taking note of the wiring) then remove the switch from the front panel.
- 4) Set the relevant transformers (see below) to 70V operation if required by moving the solder link on the underside of the PCB from 100V to 70V, the factory default is 100V.

**TX1** = Channel 1, **TX2** = Channel 2, **TX3** = Channel 3 & **TX4** = Channel 4

- 5) Carefully place the CXL-400 board in the chassis alongside the power supply transformer with the output connector protruding through the rectangular cutout in the rear of the chassis and the transformers facing inside the chassis.
- 6) Secure the CXL-400 to the side of the chassis with the 8 M3×6 screws.
- 7) Rewire the mains switch
- 8) Connect the CXL-400 to the main board with the 8-way cable (see note).
- 9) Replace top panel and fit the protective cover over the outputs of the CX-A200 using the two 10mm M3 hex spacers and remaining two screws

### Wiring Between CXL-400 and CX-A200



**\*NOTE:** Should you wish to disable a transformer on any channel simply remove the relevant wire, from the 8-way connector. The channel numbers are clearly marked near the 8-way connector on both the CXL-400 and CX-A200 PCB.

## 6 Output Cable Requirements

The cable used for the 70V/100V-line output must be 0.75mm<sup>2</sup> or more, double insulated and capable of carrying at least 1A rms. With long distances, it may be advantageous to use thicker cable. The CXL-3120 transformers are not of the auto transformer type and hence provide a fully balanced output signal which is isolated from the amplifier.

## 7 Technical Specifications

<b>Maximum Input Voltage</b>	16V rms
<b>Input Impedance</b>	4 Ohms (with 250 Ohm secondary load)
<b>Output power rating</b>	40W rms.
<b>Minimum load impedance</b>	250 Ohms
<b>Distortion</b>	Typically 0.03% @ 1kHz

The CXL-400 is an accessory for specific cloud products, when installed to these products the CXL-400 will conform to the relevant European Electrical Safety and EMC Standards

### **CAUTION - Installation**

**THE CXL-400 IS SPECIFICALLY DESIGNED TO BE FITTED INTERNALLY TO THE 44/50 AND CX-A200, SHOULD THE UNIT BE MOUNTED IN ANY OTHER ENCLOSURE, THE ENCLOSURE MUST BE ELECTRICALLY SAFE AND MEET THE REQUIREMENTS OF BS EN 60065.**

**THE INSTALLATION OF THE CXL-400 IS BEYOND THE CONTROL OF CLOUD ELECTRONICS Ltd AND WE ACCEPT NO RESPONSIBILITY FOR HAZARDOUS INSTALLATIONS.**

In the interest of continuing improvements Cloud Electronics Limited reserves the right to alter specifications without prior notice.

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