Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /
› **Listen Technologies** /
› **Listen Technologies C14-2D C-Series MultiLoop Driver Instruction Manual**

Listen Technologies C14-2D

Listen Technologies C14-2D C-Series MultiLoop Driver Instruction Manual

Model: C14-2D

INTRODUCTION

The Listen Technologies C14-2D C-Series MultiLoop Driver is an advanced assistive listening technology designed for professional audio installations. This unit features digital signal processing (DSP) and networking capabilities, including Dante compatibility, to provide high-quality audio for hearing loop systems. Its highly energy-efficient Class-D amplifiers ensure low running costs and reliable performance. The C14-2D is equipped with two 14 Amp RMS current loop outputs, offering ample voltage headroom for diverse applications.

IMPORTANT SAFETY INFORMATION

Please read and understand all safety instructions before operating this device. Retain this manual for future reference.

- **Power Supply:** Connect the unit only to the specified AC power input (120/230 VAC, 45-65 Hz). Ensure proper grounding.
- **Ventilation:** Do not block ventilation openings. Ensure adequate airflow around the unit to prevent overheating.
- **Moisture:** Do not expose the unit to rain, moisture, or excessive humidity.
- **Servicing:** Refer all servicing to qualified service personnel. Do not attempt to open or repair the unit yourself.
- **Placement:** Install the unit in a stable environment, away from direct sunlight, heat sources, and strong electromagnetic fields.
- **EMC Compliance:** This device complies with Part 15 of the FCC rules. Operation is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

PRODUCT OVERVIEW

The C14-2D MultiLoop Driver is designed for ease of installation and operation. Below is an illustrative image showing the general layout of a C-Series driver, including front panel controls and rear panel connections. Note that specific details may vary slightly for the C14-2D model.

Figure 1: Illustrative view of a C-Series MultiLoop Driver (C10-2 shown). The C14-2D shares a similar design for front panel display, controls, and rear panel connectivity, including loop outputs, audio inputs, and networking ports.

Front Panel

The front panel provides access to the digital interface for configuration and monitoring.

- **Display Screen:** Shows operational status, menu options, and settings.
- **Navigation Controls:** Buttons and a rotary encoder for navigating menus and adjusting parameters.
- **Status Indicators:** LEDs to indicate power, fault conditions, and loop status.
- **Power Button:** For turning the unit on or off.

Rear Panel Connections

The rear panel houses all input, output, and network connections.

- **AC Power Input:** Standard IEC power inlet for connecting to mains power.
- **Loop Outputs (Channel A & B):** Two 4-way 5mm euroblock screw terminals for connecting the hearing loop cables. Supports twisted pair or star-quad configured feed cables.
- **Audio Inputs (Input 1 & 2):** Two 3-way 3.5mm euroblock screw terminals for balanced microphone or line-level audio sources. Selectable 24V phantom power for microphones.
- **100V Line Input:** A 2-way 5mm euroblock screw terminal for connecting 100V line audio sources.
- **Dante Ports:** Ethernet ports for Dante audio networking.
- **Ethernet Port:** For browser interface access, remote reporting, and monitoring.
- **USB Port:** For firmware updates.
- **DC Output:** For auxiliary power.
- **Audio Out:** For monitoring or cascading.

SETUP AND INSTALLATION

1. Physical Installation

- **Rack Mounting:** The C14-2D is designed for 1U 19-inch rack mounting. Brackets are fitted as standard. Secure the unit firmly within a standard equipment rack.
- **Freestanding:** The unit can also be used freestanding on a flat, stable surface. Ensure adequate ventilation around the unit.
- **Wall Mounting:** Optional wall-mounted brackets are available separately if this installation method is preferred.

2. Connecting Power

Connect the supplied AC power cord to the AC Power Input on the rear panel and then to a suitable mains power

outlet. Ensure the power supply matches the unit's requirements (120/230 VAC, 45-65 Hz).

3. Connecting Audio Inputs

- **Microphone/Line Inputs:** Use the 3-way 3.5mm euroblock screw terminals for connecting balanced microphone or line-level audio sources. Select the appropriate input type (Microphone or Line) via the rear panel switch. If using a condenser microphone, enable 24V phantom power as needed.
- **100V Line Input:** For 100V line audio sources, connect to the dedicated 2-way 5mm euroblock screw terminal.

4. Connecting Loop Outputs

Connect the hearing loop cables to the 4-way 5mm euroblock screw terminals for Channel A and Channel B Loop Outputs. Ensure correct polarity and secure connections. The C14-2D supports twisted pair or star-quad configured feed cables for optimal performance.

5. Networking

- **Dante:** Connect to a Dante-enabled network using the dedicated Dante Ethernet ports for audio over IP integration.
- **Browser Interface:** Connect the standard Ethernet port to your network for remote access via a web browser. This allows for remote reporting, adjustment, active status monitoring, and fault reporting.

OPERATION

1. Power On/Off

Press the power button on the front panel to turn the unit on. The display will illuminate, and status indicators will show the boot-up sequence. Press and hold the power button to turn the unit off.

2. Digital Interface Navigation

Use the navigation buttons and rotary encoder on the front panel to browse through the menu options on the display. The interface allows for accurate adjustment of various parameters.

- **Input Gain:** Adjust the input sensitivity for each audio source to prevent clipping or ensure adequate signal level.
- **Output Level:** Control the overall output current to the hearing loop.
- **Phase Shift:** The C14-2D features dual outputs with accurate and stable 90-degree phase shift, which can be configured for optimal loop performance.
- **Test Tones:** Utilize built-in test tones for system calibration and verification.
- **System Status:** Monitor the operational status, including temperature, current, and fault conditions.

3. Remote Monitoring and Control

Once connected to a network, access the unit's browser interface by entering its IP address into a web browser. This interface provides comprehensive control and monitoring capabilities, including:

- Remote adjustment of all settings.
- Active status monitoring and logging.
- Remote fault reporting via email or Telnet.

MAINTENANCE

1. Cleaning

Periodically clean the exterior of the unit with a soft, dry cloth. Do not use liquid cleaners or aerosols, as they may damage the finish or internal components. Ensure ventilation grilles are free from dust and debris.

2. Firmware Updates

Firmware updates may be released to improve performance or add new features. Connect a USB drive containing the update file to the USB port on the rear panel and follow the instructions provided with the firmware update package or via the browser interface.

TROUBLESHOOTING

If you encounter issues with your C14-2D MultiLoop Driver, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No Power	Power cord disconnected; no mains power; blown fuse.	Check power cord connection; verify mains power; inspect and replace fuse if necessary (refer to specifications for fuse type).
No Audio Output	Incorrect input selection; low input gain; loop cables disconnected; fault condition.	Verify input source selection and gain levels; check loop cable connections; check front panel status indicators for fault warnings.
Distorted Audio	Input signal too high (clipping); incorrect loop impedance; environmental interference.	Reduce input gain; ensure loop impedance matches system requirements; check for sources of electromagnetic interference.
Cannot Access Browser Interface	Network cable disconnected; incorrect IP address; network configuration issue.	Verify Ethernet cable connection; ensure correct IP address is used; check network settings and firewall configurations.

If the problem persists after attempting these solutions, please contact Listen Technologies technical support.

SPECIFICATIONS

Feature	Detail
Model	C14-2D
Power	120/230 VAC, 45-65 Hz, 180W
Input 1-2 (Microphone/Line)	3-way 3.5mm euroblock screw terminal, balanced. Mic: 200-600 ohm, -67dBu sensitivity. Line: -42dBu sensitivity, max 17dBu. Selectable 24V phantom power on mic.
100V Line Input	2-way 5mm euroblock screw terminal, +7dBu sensitivity.
Loop Output Drive Voltage	48.1 VRMS (68Vpk) at maximum output current per channel
Loop Output Drive Current	14 ARMS (19.8Apk) up to 60 seconds continuous 1kHz sine wave. Cont. pink noise 26.6 ARMS short term peaks.

Feature	Detail
Loop Connectors	4-way 5mm euroblock screw terminal for each output.
Frequency Response	80Hz to 6.5kHz
Mounting Options	Freestanding, 1U 19-inch rack mount (brackets standard), Wall mounted (brackets available separately).
Dimensions (DxWxH)	7.48 x 16.92 x 1.73 inches (190 x 430 x 44 mm)
Item Weight	15 pounds (6.8 kg)
Connectivity Technology	Ethernet (Dante compatible)
Number of Channels	2

WARRANTY AND SUPPORT

Warranty Information

This product is covered by a manufacturer's warranty. For detailed information regarding warranty terms, conditions, and duration, please refer to the warranty card included with your product or visit the official Listen Technologies website. Keep your proof of purchase for warranty claims.

Technical Support

For technical assistance, troubleshooting beyond this manual, or service inquiries, please contact Listen Technologies customer support. Contact details can typically be found on the manufacturer's website or in the product packaging.