SEPIA L6 Implementation Guide

Model: **SEPIA L6 Host**
Document ref: **L6-UM-v0.1**

Thank you for choosing the **SEPIA** L6 by Karno Sound Limited.
Please read this safety pamphlet carefully before using the product
and retain it for future reference.

Table of Contents

Safety Warning: Do not expose this equipment to rain, moisture, or liquids — risk of fire or electric shock. Do not attempt to open or remove the cover. This device contains no user-serviceable parts. Servicing must only be carried out by qualified service personnel.

1. Safety, Intended Use & Compliance

1.1 Intended Use

SEPIA L6 is a modular audio host designed for professional audio applications (studio, live, broadcast). It routes and controls **SEPIA** modules and provides assignable I/O via the host chassis and option cards. **It is not a toy, consumer appliance, life support, or safety critical device.** Operate only as described in this manual.

1.2 General Safety Warnings

- **DANGER – Mains voltage.** The L6 is powered from AC mains via an IEC inlet. Risk of electric shock. Only connect to a properly earthed outlet matching the rating on the rear label. Do not open the enclosure; no user serviceable parts inside. Service must be performed by qualified personnel.
- **WARNING – Hot surfaces.** During normal operation, the chassis and modules can become hot to the touch. Avoid contact with internal metalwork and rear heat dissipating surfaces. Handle install/remove using the front accessible latch/buttons and other designated touch points. Allow cooling before handling after power off.
- **WARNING – Ventilation.** Do not block vents or fans. Provide adequate clearance on all sides. Install in a well ventilated rack/space.
- **CAUTION – Hearing risk.** High audio levels can cause permanent hearing loss. Start with low monitor levels; raise gradually.
- **CAUTION – ESD.** Use anti static precautions when handling modules.
- **CAUTION – Stability.** Secure rack installations to prevent tip/impact hazards.
- **Moisture & liquids.** Keep away from rain, liquids, and condensation. Do not place objects containing liquid on or near the unit.
- **Location restriction.** The equipment is not suitable for use in locations where children are likely to be present.
- **Cleaning.** Disconnect power. Use a dry, soft cloth only. No solvents or sprays.
- **Transportation.** Remove/

secure modules before shipping. Use original packaging if possible.

Shielded cabling for EMC: Use screened interface cables for analogue and digital connections to help ensure electromagnetic compliance. (Analogue XLR/TRS: screen to XLR pin 1 or TRS sleeve; coax runs should be properly screened with the shield connected at both ends.)

Professional warm up guidance (analogue modules): For critical analogue work, allow equipment to reach thermal stability after power on before making sensitive level/bias decisions. (Industry practice reference.)

1.3 Compliance Overview

- **EU/UK:** Designed for conformity with **[EN 62368 1] (safety), [EN 55032] (EMC emissions), [EN 55035] (EMC immunity)**. Designed and manufactured in accordance of applicable UK and EU regulations. The product bears the **CE** marking to demonstrate conformity with safety, health, and environmental protection standards. Manufacturers address: 20 Water Street, London, United Kingdom, E14 5GX.
- **USA (FCC):** Part 15 Class **[A/B]**
- **Canada:** ICES 003 Class **[A/B]**
- **Environmental:** return address / contact for disposal – 20 Water Street, London, United Kingdom, E14 5GX / contact: contact@karno.com

2 What's in the Box & Identification

- SEPIA L6 Host (model label on rear/underside)
- IEC mains power cord (region specific)
- Quick start card **[optional]**
- Safety & compliance insert **[optional]**
- Packaging for safe transport/ storage

Verify the model/serial on your proof of purchase for warranty records. **Record:** Serial [____], Date [____], Dealer [____].

3 Product Overview

SEPIA L6 is a 6 slot host that accepts SEPIA modules and provides fixed and assignable I/O through its rear panel and

optional cards. SEPIA's control application (Client/Plugin) lets you discover the host on the network, configure signal paths (drag & drop), monitor levels, adjust module settings, save Snapshots, and Gang identical modules for linked control. Audio continues to pass without the client; the client/network are only required to make changes.

4 Front & Rear Connections

- **Mains inlet & Power switch:** IEC C14 inlet with rocker switch. Refer to rear label for input rating [e.g., 100–240 V~, 50/60 Hz, [x] A].
- **Network (RJ45):** 10/100/1000Base T Ethernet for discovery/control from the SEPIA Client/Plugin.
- **Analogue inputs:** 6 × XLR — hard wired to module slots 1–6; these input mappings cannot be altered.
- **Aux analogue inputs:** 2 × TRS (assignable) Aux inputs.
- **Option cards (rear):**

1. A1 (Analogue Out): 8 assignable analogue outputs.
2. N1 (Network I/O): 8 assignable digital inputs/outputs over Dante/AVB (see Section 14 for mapping/notes).

The specific back panel layout can vary with options fitted. Always check the rear panel legends and the Library view in the client to confirm installed

Figure 1 HXA1 Rear Panel

Figure 2 HXN1 Rear Panel

Figure 3 HXM1 Rear Panel

modules/cards.

Cabling note (EMC): Use shielded analogue and digital cables to reduce emissions/susceptibility.

5 Installation & Environment

- **Location:** Clean, dry, stable surface or 19″ rack with adequate ventilation and cable strain relief.
- **Clearance:** Leave space around vents/fans. Do not install near heat sources.
- **Temperature/humidity:** 0–40 °C, ≤85% RH non condensing
- **Rack mount:** Rear rack supports are required if the L6 is being transported in a rack or if heavy cabling is used.
- **ESD:** Open modules only in an ESD safe area; keep modules in anti static packaging until fitting.

6 Powering Up & Shutdown

1. Connect the IEC cord and switch on at the rear.
2. Boot sequence: allow approximately ~1 minute for initialisation; you may hear multiple relay clicks as internal subsystems engage.
3. After routing/module changes are applied (see §9), audio passes as configured.
4. Shutdown: Mute downstream monitoring before switching off.

Note: On reboot, the system recalls the last settings (if the same modules are present). This recall happens ~30 seconds after the boot sequence completes.

7 Module Handling

Safety first: Power off and disconnect mains before inserting/removing modules unless explicitly instructed by Karno that hot swap is supported for your module set. Surfaces may be hot after use; allow cooling time.

- If modules are not already installed, push the module firmly into a slot until both front buttons latch flush. Within ~20 s the module appears in the Library tab.
- Use the front latch/buttons as the designated touch points (see Figure 4); avoid contact with internal metalwork or rear surfaces which may become

hot.

- If modules are not inserted correctly, (as shown in Figure 5), remove and push the module into the slot again until both front buttons latch flush.

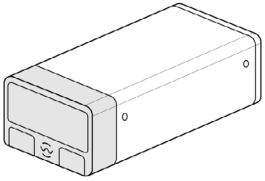

Figure 4 Touch Points

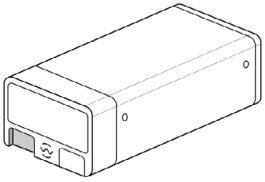

Figure 5 Incorrect Module Insertion

8 Network Control & SEPIA Client/Plugin

- Connect Ethernet (Cat5 or better) from L6 to your network or directly to a computer.
- Launch SEPIA Client/Plugin; the L6 Host will appear in the Setup tab for selection.

Audio independence: SEPIA does not require the client or a network connection to pass audio. They are only required to make changes.

9 Creating Paths (Routing)

- In the Creator view, drag and drop modules to auto create a valid audio path. If needed, click the path label to change sources/destinations.
- After any routing change, the Update Host button turns blue; click it to apply changes to the L6.

Available internal/external busses & I/O: L6 supports multiple internal busses, fixed 6 × XLR inputs (slots 1–6), 2 × TRS Aux inputs (assignable), A1 (8 analogue outs), and N1 (8 Dante/AVB in + 8 out). See §13 for mapping notes.

10 Dashboard View & Channel Control

Use Dashboard to control the whole chain and view global metering. You can reorder chains (drag without changing routing), adjust density (compactness), and expand a given path to focus on it.

Module controls are live once

modules are in a path but always click Update Host after routing changes to commit them to the hardware.

11 Snapshots (Save/Recall Setups)

- Save a Snapshot via the Snapshot icon; recall by clicking its name.
- You can load previous Snapshots via the load icon.
- Snapshots require the same modules to be present in Library to load successfully.

12 Gangs (Linking Identical Modules)

Use the Gang tab to link identical modules for common control (e.g., stereo/5.1 groups).

13 I/O Mapping Notes

- 6 × XLR inputs on the host are wired directly to slots 1–6 and cannot be remapped.
- 2 × TRS Aux inputs are assignable via the Creator/Dashboard workflow.
- A1 analogue option card: 8 assignable analogue outputs.
- N1 Dante/AVB option card: 8 assignable digital inputs and 8 assignable digital outputs exposed to the network. When using Dante, configure subscriptions in Dante Controller; when using AVB/Milan, configure streams and talkers/listeners per your AVB controller.

General AoIP good practice: On AoIP networks, use appropriate switches, QoS, clocking/sync, and VLANs as needed for scale/sample rate.

14 Troubleshooting

L6 not appearing in SEPIA Client/Plugin

- Verify Ethernet cabling and that your computer and L6 are on the same network/subnet.
- Power cycle L6; wait through the ~1 min boot and ~30 s settings recall.
- Disable OS firewalls temporarily or add the client as an exception.
- Try direct connection (computer ↔ L6) with a manual IP if DHCP is unavailable.

No audio after routing changes

- Confirm the Update Host

button was clicked and turned back to inactive state.

- Ensure required modules are present in Library and placed in a path. Modules outside of a path will not pass audio.

Snapshot won't recall

- Snapshot requires the same module set to be present. Insert missing modules or use a different Snapshot.

Dante/AVB audio not passing

- Dante: Verify subscriptions in Dante Controller and clock master.
- AVB/Milan: Verify streams, talker/listener bindings and switch AVB support. (AoIP best practice template.)

Overheating / thermal alarms

- To improve ventilation; remove obstructions; allow cooler ambient air; reduce load density.
- Power down, allow to cool, then investigate airflow and fan operation.
- If the unit has been on for more than two hours, it is recommended that the L6 be switched off and left for 15 minutes before any modules are ejected or the L6 rack is removed from the 19-inch holding rack.
- When the ambient temperature increases above 26 degrees, it's recommended to leave space above the L6. If the ambient temperature is above 32 degrees, you must leave space above and below the L6.
- It is critical that the unit has adequate side ventilation. A channel passage of at least four centimeters and no obstructions behind the rear of the unit is recommended.
- Avoid positioning high heat generating equipment too close to the L6 in the rack
- The amount of heat the L6 generates is dependent on the number of modules inserted. More attention must be paid to air-flow with a higher number of modules, the assistance of external fans to force the air-flow may be required.
- L6 will generate a Thermal Shutdown at 100 degrees from the internal thermostat.

Module not recognised

- Power down, reseat module (use front latches), check for damage/ESD.
- If still absent from Library

after ~20 s on restart, contact support.

- If at any time a SEPIA module is found to 'rattle' with slight movement, do not continue to use or insert the module into the L6. Please refer to your authorised dealer.

15 Care, Maintenance & Firmware

- **Routine:** Keep vents clear. Inspect cables and connectors periodically.
- **Firmware/Software:** SEPIA Client/Plugin will notify when updates are available. Follow release notes from Karno.
- **Service:** No user serviceable parts inside; contact authorised service.

16 Warranty & Service

Limited warranty: 2 years from original purchase date against defects in materials and workmanship under normal, intended use. Karno's obligation is limited to repair or replacement at Karno's discretion. This warranty excludes misuse, modification, improper installation, operation outside stated environmental limits, and damage from external causes (liquids, power anomalies, acts of nature). Incidental or consequential damages are disclaimed to the maximum extent permitted by law.

RMA: Obtain an RMA before shipping any product. Include proof of purchase, problem description, return address, and contact details. Back up Snapshots before service. Please contact contact@karno.com

17 Regulatory & Legal Notices

EU/UK Safety & EMC: Conforms to [EN 62368 1], [EN 55032], [EN 55035]. CE/UKCA marking affixed. DoC available from Karno Sound Ltd., 20 Water Street, London, E14 5GX.

FCC (USA): This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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. If interference occurs, try: reorient/relocate the receiving antenna; increase separation; connect to an outlet on a different circuit; consult a technician. Changes or modifications not

expressly approved by the manufacturer could void authority to operate.

Canada: This digital apparatus complies with ICES 003 Class [A/B]. / Cet appareil numérique est conforme à la norme NMB 003, classe [A/B].

Environmental: WEEE/RoHS: This device has been manufactured in compliance with the Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU (and its amendments). In accordance with the Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU, this product must not be disposed of as unsorted municipal waste. Return address/contact for disposal – Karno, 20 Water Street, London, United Kingdom, E14 5GX / contact: contact@karno.com

Cabling for EMC: Use shielded interface cabling; keep analogue and digital looms separate where practical.

18 Trademarks & Acknowledgements

19 Company & Support Contact

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SEPIA®

BY KARNO