



Powered by Psyray

Pro One

scan device

User Manual

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Welcome

We're thrilled to welcome you to the Kalmoa user family. This user manual will walk you through how to set up and use the Kalmoa Pro One scan device, including important safety and warranty information, a troubleshooting guide, and other essential information

1 Safety Information

- **Please read this User Manual carefully** before using the Pro One, especially sections 2 through 6.
- **DO NOT** connect the Pro One to a direct power supply. Only connect the Pro One via a USB 3.x cable to a USB-C port (max 5 V / 500 mA) on the computer, smartphone, or tablet you intend to use with the Pro One. (See section 3.)
- The Pro One may only be used for its intended purpose: to perform a non-invasive brain scan, **in combination with the Kalmoa & Psyray app**. (Or as audio headphones, with the separately available audio converter and cable.)
- As defined in **section 6**, the user is responsible for ensuring all operational requirements are met. Kalmoa is not liable for invalid or misleading reports resulting from incorrect use.
- The Pro One does not contain an internal battery. Always use the supplied cables and avoid wireless setups to prevent signal interference. (See section 6)

2 General Information

When used in combination with the (mandatory) **Kalmoa & Psyray app**, the Pro One device facilitates a sophisticated, non-invasive brain scan, collecting the subject's data for analysis. **Failure to comply with the instructions defined in this User Manual will result in invalid or incomplete data, and the corresponding report may be inaccurate.**

The Pro One is suitable for both personal & professional and operates within a secure and structured environment involving:

- An active account and subscription.
- The **Kalmoa app**, for scan initiation and data visualisation
- The **Psyray app**, for the execution of the scan process.
- **Psyray Cloud Services**, where data is processed.

Scan Workflow | User journey:

1. Start a scan from the Kalmoa app
2. The Kalmoa app triggers the Psyray app to begin a scan process (data collection).
3. Data is sent securely to Psyray Cloud Services ("The Engine") for processing.
4. The final report is returned to the Kalmoa app, where it can be viewed.

Note: The Pro One is powered by your computer or smartphone/tablet via a USB-C cable.

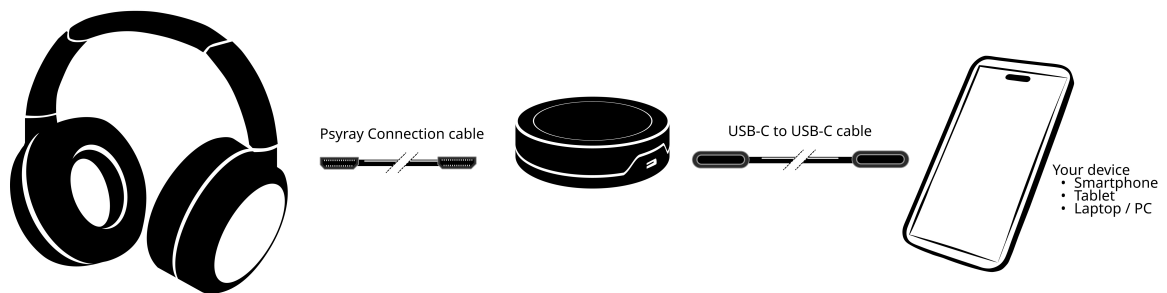
- The device does not contain an internal battery.
- Always use the supplied cable and avoid wireless setups to prevent signal interference.
- After use, store the Pro One properly in its original packaging, with the connection cable detached from the pod and headphone

3 Device Setup

Components:

- Pod
- Headphone with integrated scan sensors
- Special headphone connection cable
- USB-C (3.2-compliant) cable

Connection Steps:



1. Connect the pod to the headphone using the supplied headphone-connection cable.
2. Use the USB-C cable to connect the pod to the computer, smartphone, or tablet running the Psyray App.
3. **DO NOT connect the pod to:**
 - a direct external power source
 - a USB-hub placed between the pod and your computer,
 - USB-C ports that produce more than 5 V or less than 4.5 V, or
 - USB-C to USB-A conversion cables.

Important Notes:

- Ensure that your computer, smartphone, or tablet has sufficient battery power.
- Use only the **original Psyray cables**.
- Avoid USB-C cables that are longer than 2 meters, non-compliant with USB 3.0 (or higher), or non-certified.
- Ensure all scan requirements are met for reliable operation. (See section 6)

LED Indicator Status:

Device State	LED Indicator
Device on, app inactive	White blinking
Device connected, app active	Yellow blinking
Headphone detected	Green blinking
Headphone worn correctly	Green
Scanning	Blue
Transmitting data	Blue flickering
Technical error	Red blinking
Factory reset button pressed	Red
Release button for firmware upgrade	Red flickering
Firmware update in progress	Yellow flickering

To reset the device: See section 12 - Maintenance.

4 Using the device

The device is ready to use once you have:

- A valid subscription (can be purchased via www.kalmoa.com).
- Installed the Kalmoa & Psyray app on your device.
- A stable internet connection.

Follow the steps outlined in section 3. If any step fails or errors occur, the process will abort.

5 Performing a scan

The **Kalmoa & Psyray App** must be installed on your device. Supported platforms:

- iOS 16 and above
- iPadOS 16 and above
- Android 13 and above

Scan duration: Averages approx. **5 minutes**, subject to the selected report.

What do you see on the screen of the Psyray app during the scan process?

During the scan process, you will see the following on the controlling device's screen:

1. A LED light, in sync with the LED light on the pod.
2. A picture of the organ or cross-section being scanned, with the dots reflecting the various markers that are being scanned.
3. A progress circle, with the dots reflecting the relative time still needed to complete the scan. A new 5-second progress circle will appear as each bodily organ is scanned.
4. Navigation button(s) at the bottom.

6 Scan Requirements

To ensure **reliable** scan data:

1. Scanning is only available for people aged 18 and older.
2. Make sure your device's battery is above 10%.
3. Be in rest for at least 15 minutes before starting a scan.
4. Alcohol or drug use will affect scan accuracy.
5. Do not scan when you are ill or have a fever, as this will produce inaccurate results.
6. Stay away from strong electromagnetic sources, such as microwave & ovens.
7. Silence your phone or enable Do Not Disturb, but keep an active internet connection.
8. Remove any head coverings before starting the scan.
9. Place the headset correctly on your head, with the cable on your left side and both earcups fully covering your ears.
10. Throughout the scan; sit still and follow the on-screen instructions.
11. When opening the Psyray scan app; you will be asked to enter your first and last name, date of birth, and biological sex. Filling out this information incorrectly will result in inaccurate results.

You are responsible for ensuring all these scan requirements are met. Any use that does not meet these parameters may result in unreliable, incomplete, or misleading reports, and Kalmoa is not liable in such cases.

7 Firmware

The Pro One contains embedded firmware that integrates with the **Psyray App**.

- Firmware updates are **automatically managed** and will be forced before further use of the scan device is allowed.
- Firmware upgrades are required after performing a manual reset.

8 Privacy information

Kalmoa & Psyray prioritize data privacy and ethical safeguards.

All client's data is considered as personal data and stored in a secure GDPR compliant cloud service. For more information please read the [Kalmoa Privacy statement](#).

Kalmoa is based on Psyray technology and has a technical integration with the Psyray platform. However, due to the design of the Psyray platform and its integration, no **personal data** is shared with that platform. To highlight some specific data that is asked for in the Psyray app:

- **The client's name** is stored locally and encrypted within the Psyray App on your device.
- **Date of birth and biological sex** data are sent to Psyray Cloud Services; but the user's **name is never transmitted**.
- Data is processed anonymously and returned to the Kalmoa app.

All systems (scan device, app, cloud) are built with **modern digital security protocols**.

9 Operating conditions

The Pro One needs to be operated in normal office / housing conditions (10–35 °C / 50–95 °F) with max. 80% humidity, subject to the requirements defined in section 6.

10 Calibration

The Pro One performs an automatic calibration each time the complete scan device is physically connected to a smartphone. If the calibration fails, an error message will appear in the Psyray app.

If, after several attempts, the error persists, or persists across sessions occurring on different days, please then contact the Kalmoa support department via email at support@kalmoa.com for further instructions and/or a replacement.

11 Troubleshooting Errors

Potential errors are communicated via your Psyray App’s messages, including clear instructions on resolving the issue in question. See the table below for the complete overview of all error messages:

Error message	Solution
Alert: Please fill out all mandatory fields	Fill in your complete and correct credentials, before the scan can be started
Connect the scan device	Connect the pod of the device via USB-C cable to your computer / smartphone / tablet
Connect the headphone	Connect the headphone to the pod using the Psyray connection cable
Wear headphones	Wear the headphones on your head, so that the scan process can begin, or select “Stop” to stop the scan process
No data received from headphones; check the connection and try again	Select “Retry” to restart, or “Stop” to stop the scan process
Calibration failed	Select “Retry” to restart the calibration process

See also the following table of LED status states and their meanings for additional troubleshooting help:

Device State	LED Indicator
Device on, app inactive	White blinking
Device connected, app active	Yellow blinking
Headphone detected	Green blinking
Headphone worn correctly	Green
Scanning	Blue
Transmitting data	Blue flickering
Technical error	Red blinking
Factory reset button pressed	Red
Release button for firmware upgrade	Red flickering
Firmware update in progress	Yellow flickering

In case of support required, please send email to support@kalmoa.com

12 Maintenance

The Pro One is designed to automatically monitor its own technical functionality and does not require manual maintenance. The Pro One is therefore maintenance-free in terms of periodic servicing.

Physical parts, namely the earcups of the headphones and the connection cable, may be subject to wear and tear through use. These parts are not covered by the standard warranty and can be replaced separately by the user. Replacement parts are available via the official Kalmoa website.

Resetting the Pro One

If the Pro One is not functioning normally, you can reset it by following these steps:

1. **Unplug the USB-C cable** from the pod, while keeping the headphone connected to the pod.
2. **Insert a paperclip (or similar object)** into the reset hole on the bottom of the pod, press the reset button, and keep it pressed.
3. **Reconnect the USB-C cable** to the pod to power on the scan device, while continuing to hold the reset button until the red flickering LED has stopped for a second.
4. During the firmware upgrade, the LED will flicker yellow. The pod will automatically **return to factory settings**. The reset is complete once the LED light stops flickering.
5. After the reset, a **firmware update** is required. This update will be carried out via the Psyray app.

13 Phasing

Each Kalmoa scan device comes with a **warranty of one (1) year**, except in EU it's two (2) years, subject to normal usage and following all requirements and recommendations laid out in this user manual.

This warranty is **void in cases of misuse**, physical damage, tampering, use of non-original cables, water (or other liquids) ingress, or use of unauthorized power sources. The warranty operates on a carry-in / return-to-manufacturer basis.

14 Disclaimer

1. Use of Psyray services

Psyray provides a platform as a tool that, by design, is used by Kalmoa, users, or applications. By using this platform, you allow Kalmoa & Psyray to:

- Capture user data through the Kalmoa & Psyray App in combination with a specific Kalmoa scan device (the Pro One),
- Transmit user data – on an anonymous basis – to Kalmoa & Psyray's cloud-based processing engine(s),
- Process the client data to create a report in accordance with the requested purpose and format, and
- Return such output (the report) to the Kalmoa app

2. Not medical or psychological advice

- Please note that the Pro One and the Psyray App do not themselves provide any information to the user. The Psyray Cloud Services provide the requested information at the end of the whole process to the Kalmoa application.
- Kalmoa (as well as Psyray) does not provide medical, psychological, or therapeutic services.
- The Pro One and the Kalmoa & Psyray services should not be used or deemed to provide medical diagnoses or treatment advice; only licensed healthcare professionals may do this.
- The user remains fully responsible for decisions made based on any analysis, reports, insights, or results from using the platform and the related services, and should never rely on these as a single source of information.
- When in doubt, the user should always seek professional advice, if the analysis, reports, insights, or results generate information that is not clear to the user. If you are experiencing mental-health issues, you are strongly advised to contact a qualified healthcare provider.

3. Responsibility for data management

Kalmoa (as well as Psyray) is not responsible for retaining or managing the output of any scans as a medical record. Where applicable, responsibility for maintaining such records lies with the user who instructs Kalmoa to perform the data processing. The user is also responsible for securing the output in accordance with ISO 27001 or comparable internationally recognized standards.

4. Limitation of liability

Kalmoa accepts no liability for the consequences of using the Pro One or the information provided as output of the Kalmoa services. Use of the scan device is strictly subject to the criteria published in this user manual. Kalmoa & Psyray shall not be held liable for damages or consequences arising from:

- Failure to comply with these criteria,
- Improper or unauthorized use of the scan device,
- Use of the scan device other than on a human head,
- Deliberate interference with the scan device, the brain, or the environment during scanning, or
- Opening or otherwise tampering with the scan device.
- A voided warranty due to misuse.

15 Registrations and Certifications

- The Pro One is registered as a *wellbeing device*.
- The Pro One has successfully passed tests for electrical safety and EMC.

16 Spare Parts and Accessories

Spare parts and accessories can be ordered via the Kalmoa support department.

17 Disposal

This scan device is covered by the WEEE Directive and must not be disposed of with household waste. Kalmoa complies with all applicable obligations regarding electronic-waste disposal through a certified external WEEE service provider.



18 Additional Help and Returns

If you have a question or issue not addressed in this guide, our support team is happy to help. Please reach out to them via email support@kalmoa.com

If we still cannot solve your problem, eligible devices may be returned to:

Psyray Products BV
3e Binnenvestgracht 23G
2312 NR Leiden
The Netherlands