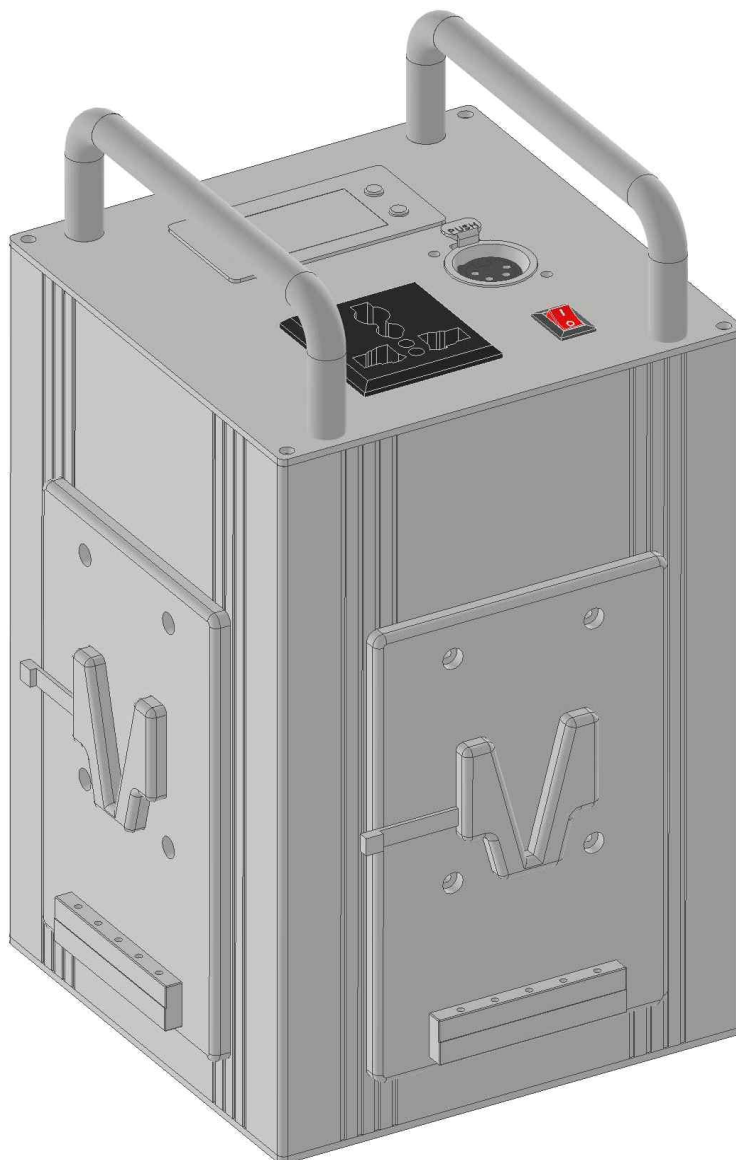


ML-PS1 POWER SUPPLY

User manual



Matrix Light

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- Please carefully read all safety guidelines in this manual before installing and operating this product.
- Changes and quality improvements to this product may be made without prior notice.
- Carefully read and understand this manual before installing and operating the product.
- This manual is available online at www.matrixlight.com

••• ABOUT PRODUCT

01. THE ML-PS1 •••

WORLD'S FIRST BP BATTERY-POWERED STARLINK™ POWER SUPPLY

Thank you for purchasing the Matrix Light ML-PS1 power supply. The ML-PS1 powers Starlink™ satellite antennas and other electronic equipment using V-mount BP batteries. In the event of a power outage caused by a natural disaster or the overloading of the local internet network, the ML-PS1 allows Starlink™ satellite antennas to transmit breaking news from anywhere in the world at speeds of up to 25 Mbps. The ML-PS1 is designed to reliably power crucial broadcasting equipment anywhere, in any circumstance.

INTUITIVE BATTERY LEVEL INDICATOR

The ML-PS1 supplies AC 220V and DC 14.4V. Its intuitive battery level indicator accurately displays real-time battery charge for convenience.

CARRY-ON COMPLIANT BP BATTERY

The ML-PS1 is compatible with V-mount BP batteries that are approved for carry-on during flights. In addition, depleted batteries can be replaced with ease without suspending active operation. This functionality allows live reporters to be on standby for extended durations in the absence of an AC power source.



RELIABLE. VERSATILE. ACCESSIBLE.

In addition to Starlink™ satellite antennas, the ML-PS1 can power miscellaneous devices such as lighting equipment, cameras, and outdoor monitors. The ML-PS1 supplies precise pure sine wave power to connected devices, ensuring stable and reliable operation of crucial broadcasting equipment.

02. BEFORE READING THE USER MANUAL •••

Please carefully read the following:

Safety icons

Icon	Name	Meaning
	Warning	This symbol indicates hazardous actions and situations that may cause serious injury or death.
	Caution	This symbol indicates hazardous actions and situations that may cause injury or property damage.

Safety information and warranty service

Carefully read all safety guidelines and recommendations outlined in this manual before operating the ML-PS1.

- The illustrations included in this manual may differ slightly from the actual product.
- Please consult the 'troubleshooting checklist' before contacting Matrix Light for repair service.

- Matrix Light will charge a service fee for repair requests for a non-defective product.
- Matrix Light is not responsible for any injury or damage to property caused as a result of violating instructions in this manual.
- Please check the performance and operating condition of the ML-PS1 before using.

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03. SAFETY AND WARNINGS ...

Not following the instructions below may result in serious personal injury or damage to property.

High voltage! Risk of electric shock and fire.

- ⚠ Read and understand all safety and operating instructions before installing and operating the ML-PS1.
- Failing to adhere to basic safety protocols while operating the ML-PS1 may cause serious injuries, death, or severe damage to the product.
- ⚠ Operate this product individually.
- ⚠ Always ensure that the local AC power supply matches the voltage and frequency rating printed on the product type label before using the ML-PS1.
- ⚠ Only use Matrix Light power supply units (PSU) and connecting cables intended for the ML-PS1.
- ⚠ When using a battery pack, always ensure that the voltage matches the voltage range printed on the product type label before connecting the battery pack to the ML-PS1.
- ⚠ Never use the power cables for transportation. Never hang heavy objects on the power cables. Do not hang the battery pack on the ML-PS1 connection cable.
- ⚠ Do not open or disassemble the product(s).
- Never repair any part of the product on your own. Maintenance and repair work is only done in the Matrix Light service center. Any unauthorized repairs on the ML-PS1 will void its service warranty.
- Never bypass, disable, or remove any safety features of the ML-PS1.

Humidity and condensation

- ⚠ Do not expose the product to rain or moisture. Do not use the product and let it dry for at least 2 hours when exposed to a large temperature difference as condensed moisture may damage the product when switched on.
- ⚠ Do not insert any metallic foreign objects into the DC connector of the ML-PS1. Risk of short circuit and damage to the connector.

Overheating and fire hazards

- ⚠ Do not operate the ML-PS1 if the ambient temperature exceeds 45°C.

- ⚠ Extended operation of the ML-PS1 may result in hot surfaces (up to 80°C). Make sure that the product is sufficiently cooled before handling.
- ⚠ Do not cover, block or obstruct the air vents of the ML-PS1. Keep a clearance around the vents and heatsink of at least 0.5m(1.65ft).
- ⚠ Do not place or operate the ML-PS1 near heat sources. Intense heat may damage the product and trigger automatic power offs.
- ⚠ Whenever installing, servicing, or moving the ML-PS1 or its accessories, block access below the workspace and work on a stable platform.
- ⚠ When using third-party accessories (e.g. battery pack and battery charger), please refer to their manuals. They may contain important safety and security information.
- ⚠ In addition to regular visual checks, Matrix Light recommends that all electrical products and accessories are tested for electrical safety by a licensed professional every 12 months.
- ⚠ If the ML-PS1 malfunctions before its specified operating life is over, contact the Matrix Light main office or authorized dealer, distributor, service agent, or other qualified persons.

Product maintenance

- ⚠ Do not clean the surface of the ML-PS1 with solvents or strong detergents.
- ⚠ Wipe the surface with a soft cloth moistened with a mild detergent. Do not rub with force.
- ⚠ Clean electrical contacts with a cotton swab soaked in isopropyl alcohol. Keep electrical contacts clean at all times and replace corroded parts before using.
- ⚠ The ML-PS1 must be used in a dry environment. Always follow all relevant safety guidelines. Uses other than those described in this manual are not permitted and may cause damage to the product, short circuits, fires and electric shock.
- ⚠ Do not expose the installed battery level display to high temperatures or excessive shock, force or pressure. The LCD display and internal circuits may deform or become damaged due to heat or shock.

Installation / operation

- ⚠ Do not install or operate in a smoky, dusty, humid (wet), or oily environment.
- ⚠ Exposure of the ML-PS1 to oil or moisture may cause electrical shock or fire.
- ⚠ Do not cover the bottom air vents of the ML-PS1 while it is operating. Doing so may shorten the lifespan of internal components and cause fires.
- ⚠ Only use specified power connector cables and authorized BP batteries. Using unauthorized third-party power sources may cause damage to equipment and lead to fires.
- ⚠ If the ML-PS1 becomes submerged in water, or if its exterior casing is severely damaged, immediately power off and unplug the product from all power sources and accessories. Risk of fire and electric shock. Contact the Matrix Light service center as soon as possible.
- ⚠ Do not disassemble, repair, or modify the ML-PS1. Risk of equipment damage, fire, and electric shock. Contact the Matrix Light service center for all repairs.
- ⚠ Do not operate or store the ML-PS1 near flammable sprays or substances. Risk of explosion

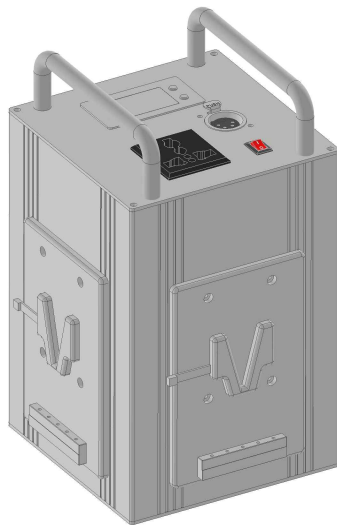
and fire.

- ⚠ Do not insert any objects into the air vents and power terminals of the ML-PS1. Risk of electric shock and fire. Power off and unplug all power connectors and accessories immediately if water or any foreign objects enter the ML-PS1. Then, contact the Matrix Light service center for repairs.
- ⚠ Avoid humidity and extreme temperature changes when operating the ML-PS1. Risk of electric shock and fire. Outdoor use of the ML-PS1 during thunderstorms may cause damage to product and electric shock.
- ⚠ Do not clean the ML-PS1 with Benzene or paint thinner. Risk of discoloration and deformation.
- ⚠ Keep small parts out of reach of children. Choking hazard. If swallowed, contact a doctor right away.
- ⚠ Do not handle or operate the ML-PS1 with wet hands. Risk of electric shock and damage to product.
- 🔍 Store in a cool, ventilated area after use.

04. PACKAGE CONTENTS ●●

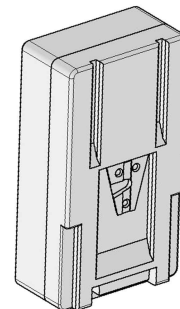
Ensure that your package contains all products and accessories before use. Different package types may contain different products and accessories.

Standard contents●●●



[ML-PS1 Power Supply Unit]

Optional Accessories ●●●

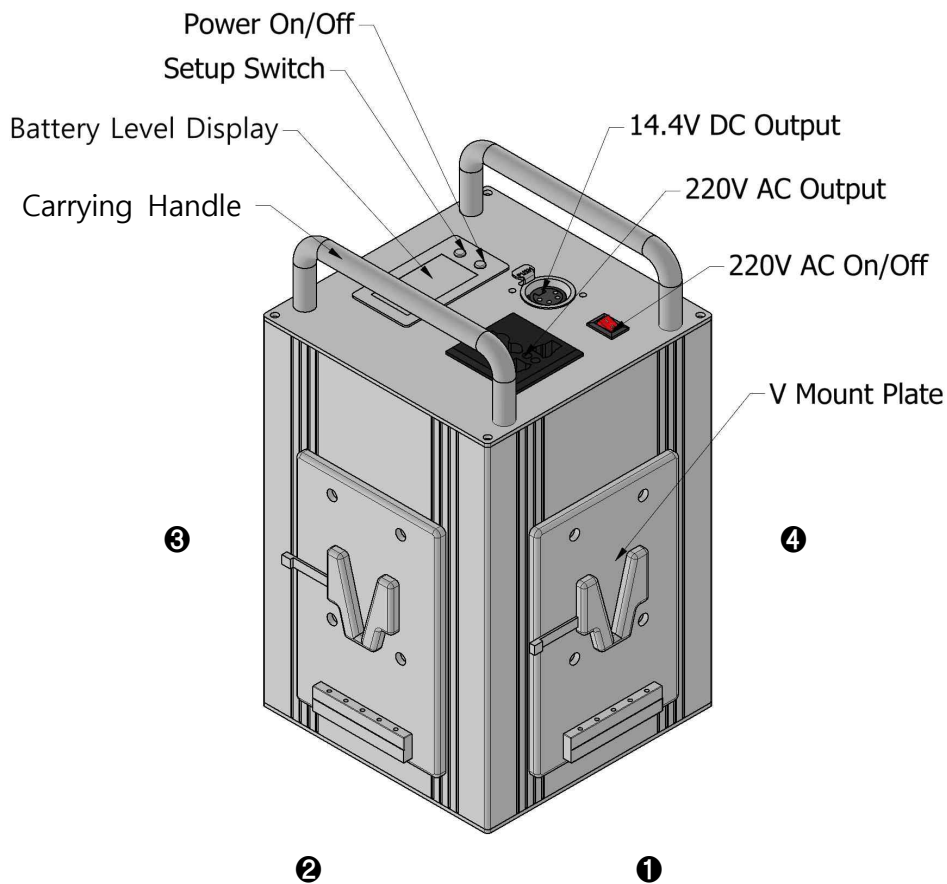


[BP Battery]

- Included/additional accessories are available online for purchase at www.matrixlight.com
- Only use accessories (eg. power cable, battery, power supply) provided by Matrix Light. Matrix Light does not provide warranty for damages caused by using unauthorized third-party accessories.

••• ML-PS1 FEATURES

01. ML-PS1 POWER SUPPLY FEATURES •••



••• INSTALLING & OPERATION

01. ML-PS1 INSTALLATION & USAGE •••

BP Battery Installation & Replacement

The ML-PS1 supplies power via v-mounted BP Batteries. The batteries must be connected in groups of two to either the 1st and 3rd V Mount Plate or the 2nd and 4th V Mount Plate as indicated in the above diagram. When using four BP batteries at once, always replace either the 1st and 3rd or the 2nd and 4th batteries together when needed to ensure that the ML-PS1 continues to provide power via the remaining pair during the exchange.

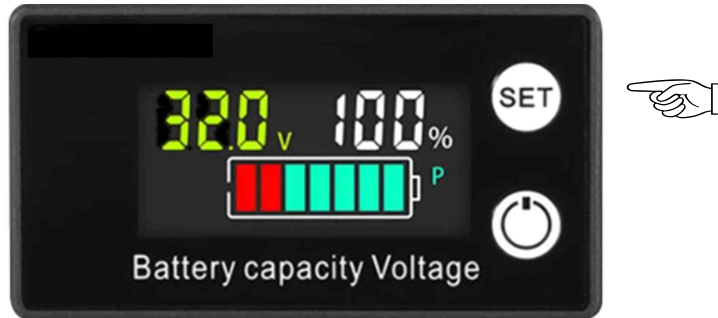
Device Connection

Install the BP batteries to the ML-PS1 as explained in the above section. Then, connect the ML-PS1 to the desired device via a power cable. Press the AC 220V On/Off switch to supply AC 220V power.

02. BATTERY DISPLAY SETTINGS ...

Battery Level Display Menu Setting

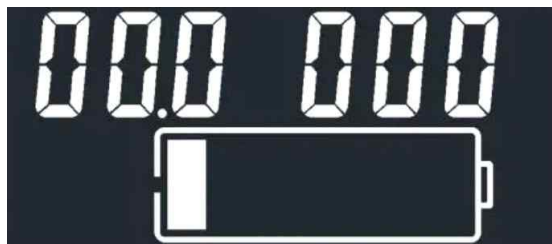
1. Press and hold the "set" button on the upper right corner of the battery level display for 2 seconds to enter the main menu.



2. Press the "set" button two times to enter menu 3, then press the power button below the "set" button to set the battery settings to 03.



3. Press the "set" button once more to enter menu 4, then set the minimum voltage on the left to 22.6, the maximum voltage on the right to 32.6. Press the power button to increment the numerical values. To edit the next digit, press and hold the power button for 2 seconds. Press the "set" button to move onto the next menu once the minimum and maximum voltages have been properly set.



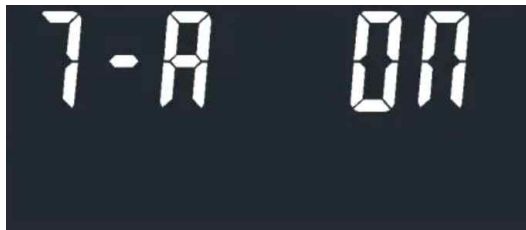
4. Once the minimum and maximum voltages have been set, press the "set" button to enter menu 5: display auto-turn off. Press the power button to toggle ON or OFF as shown. ON means that the display backlight will automatically turn off after 10 seconds. OFF means that the display backlight will be on all the time.



5. Press the "set" button once more to enter menu 6: low voltage warning. This setting outputs a warning sound if the battery voltage drops below the set low voltage threshold. To change the low voltage threshold from the default value referenced from menu 4, press the power button to increase each digit. To edit the next digit, press and hold the power button for 2 seconds.



6. Press the "set" button once more to enter menu 7: alarms. Press the power button to toggle ON or OFF as shown. ON allows alarms; OFF silences them.



To exit out of the battery settings menu, press and hold the "set" button for 2 seconds.

••• TROUBLESHOOTING

01. TROUBLESHOOTING CHECKLIST •••

Refer to the following checklist for troubleshooting common issues. If the problem persists, contact the nearest Matrix Light authorized dealer or the Matrix Light service center.

Issues	Check the following
<p>The ML-PS1 does not turn on.</p>	<ul style="list-style-type: none"> ■ Check that the BP batteries are securely connected to the V-mount plates. ■ Check that the power cable is properly connected to the AC 220V Output. ■ Check that the AC 220V power switch is turned ON. If OFF, turn the switch ON
<p>Devices connected to the ML-PS1 via power cable do not turn on.</p>	<ul style="list-style-type: none"> ■ Check the battery level. Ensure that the BP batteries are sufficiently charged. ■ Check if the power cables are properly connected to the right output.
<p>The ML-PS1 turns off on its own.</p>	<ul style="list-style-type: none"> ■ Press the "set" button on the LCD display and check the internal temperature of the ML-PS1. If the temperature is too high, turn the ML-PS1 off and let it cool sufficiently. ■ Check if the current draw of the connected devices exceed the maximum output of the ML-PS1. Ensure that the maximum current output of the ML-PS1 exceeds the combined current draw of all connected devices.

••• ADDITIONAL INFORMATION

01. WARRANTY•••

- Product warranty is valid for 1 year from purchase.
- Product damages caused by natural disasters or user negligence are not covered by warranty.
- To claim warranty, please send the defective product and purchase receipt to the Matrix Light head office or authorized dealer, or visit the Matrix Light service center in person.

02. STORAGE INSTRUCTIONS •••

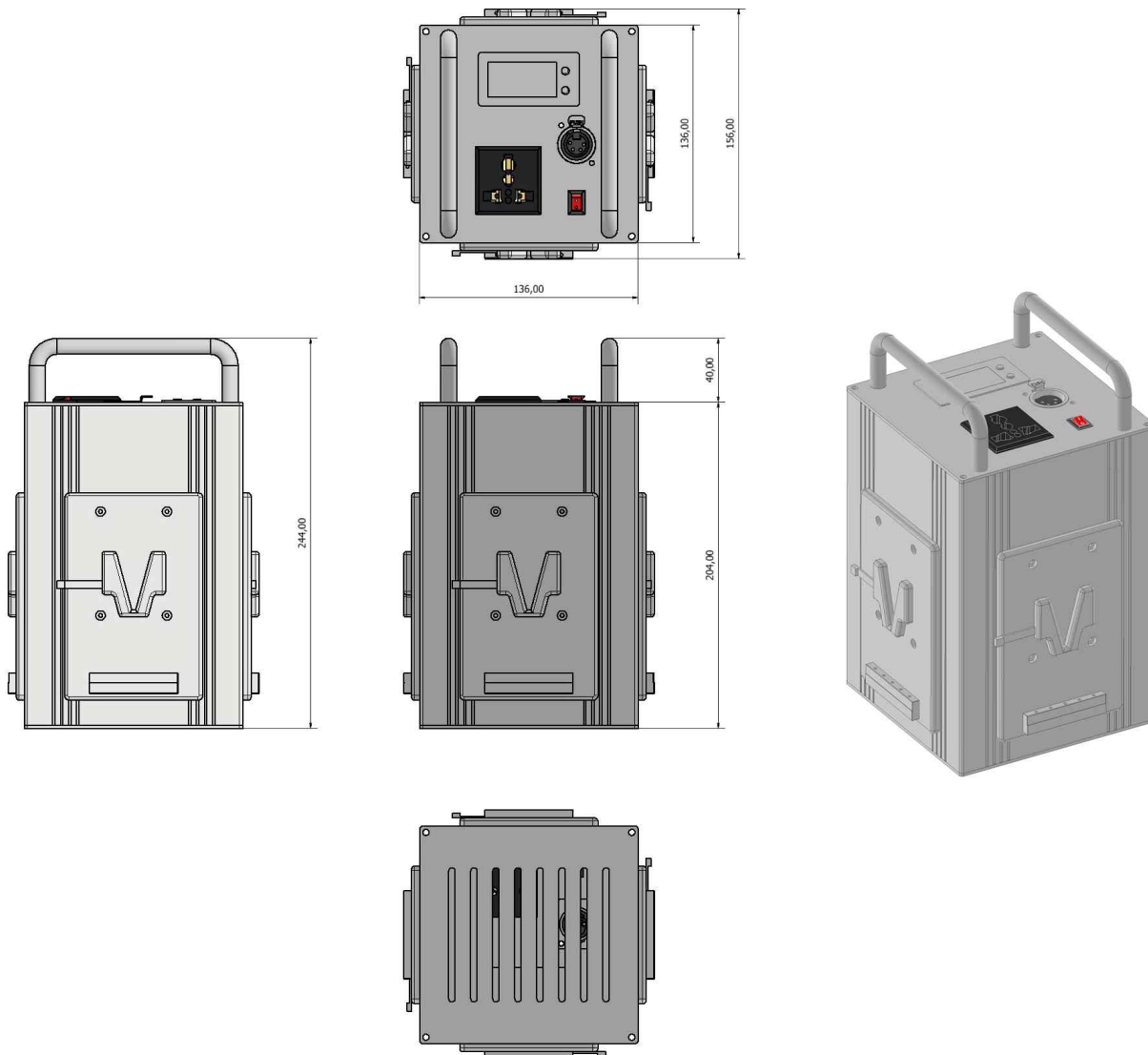
- Store in a dry, ventilated area.
- Do not store near products containing naphthalene or objects that emit electromagnetic radiation.
- Do not store in hot and humid environments for extended periods of time.
- Disconnect the power supply unit and power cable after use.
- Do not expose to extreme temperature differences as this may cause condensation to form within the product.

03. PRODUCT SPECIFICATIONS...

ML-PS1 Power Supply	
Power Supply Input Range	24V DC / 16A / 400W (In case of Connect 4 BP Batteries)
Power Supply Output Range	14,4V DC / 4A / 48W MAX 220V AC / 2A / 400W Max
Power Input Connection	V mount BP Battery Plate
Weight	2.3Kg / 5lbs (Without BP Batteries)
Handling	Carrying Handle
Control	On-Board Controller / Battery Level Display
Housing Color	Silver / Black
Dimensions	136 x 136 x 244 mm / 5.4 x 5.4 x 9.6"
Protection Class / IP Rating	II / IP20

Product Dimension

ML-PS1 Power Supply



04. AFTER SALES SERVICE ●●

- Please visit www.matrixlight.com or call 010-7232-2888 for after sales service inquiries in South Korea.
- Please visit www.matrixlight.com or email csmatrixlight@gmail.com for international after sales service inquiries.
- Please make sure to detail the product serial number, purchase date & location, and issue with the product for a faster service. ▲▲▼

Thank you.