Broadcast Battery Manufacturer since 1991







Manual Version 1



Welcome to your new Rampart

Introducing the latest innovation in high-capacity, portable power solutions: The Rampart MXB-R1000. Building on the legacy of the renowned Hawk-Woods X-Boxx series, the Rampart MXB-R1000 is a game-changer in the realm of professional-grade power supplies.

Designed specifically for powering high voltage camera systems and other demanding equipment, the Rampart MXB-R1000 is more than capable of meeting the needs of professional cinematographers, photographers, and videographers.

Experience the next level of 26v portable power with Rampart.



Our batteries cells are sourced from a reputable known brand LG with excellent performance (3.62v rating / 10A discharge!)

Specification

The Rampart specification provided below covers all the information we believe you would require, however if you need more information please don't hesitate to contact us.

| Product Name: | Rampart |
|-----------------------------|-------------------------------|
| Model: | MXB-R1000 |
| Description: | 26V Lithium-Ion Floor battery |
| Nominal Voltage: | 26V |
| Operation Voltage Range: | 19.3v ~ 29.4v |
| Capacity: | 1050wh |
| Max Load: | 32A |
| Dimensions (W x H x D): | 26.8 x 20 x 16.1 cm |
| Weight: | 9.2kg |
| Cell Technology: | Lithium-Ion |
| Power Display: | LCD Display |
| Operation Temperature: | -20°C to +60°C |
| IP rating: | N/A |
| Flight Safe: | No |
| Battery Management: | Yes |
| On-board Battery Diagnosis: | No |
| Grounded Equipment: | Yes |
| Class I (Single insulated): | Yes |
| Rubber Grading: | EPDM |
| Cap Bolts: | UNC Bolts 3/8" |
| Handle Bolt Torque: | 45 Newton metres |

Capacity

This product has a capacity of 1050Wh or 41.7Ah. Our cells are sourced from LG, a reputable manufacturer of long standing within the industry. Our specifications may therefore be relied upon for accuracy, with no tendency to exaggerate or engage in specmanship. The battery may be used at temperatures between -20° C and $+60^{\circ}$ C, making it ideal for all round shooting wherever your projects take you. Charging should be carried out at temperatures between 0° C and 45° C.



figure 1a Internal Cells

LCD Display

The Rampart comes with a built in LCD screen positioned below the carrying handle. The display indicates the remaining run time as both percentage and a bar graph. The example (figure 2b) depicts a remaining capacity of 63%. At the bottom of the display (figure 2a) from left to right are the following indicators:- Battery Voltage. The battery pack current drain when in use when a '-' sign is display or the charge current which registers a positive current flow. The temperature of the pack. Finally on he right hand side, the status of the 12v output from the 4pin XLR socket, red for off and green for on.



figure 2a LCD display



Note any current drawn from the 12V output will register as held of the current actually drawn because it is a lower voltage supply. The current indicated is the amount drawn from the 26V pack. Press the 'check' button to activate the screen.

Alternatively, plugging a load into the 26V 3 pin XLR sockets will activate the screen automatically. If no load is connected the screen will switch off after 20 seconds. If the load remains connected the screen will remain illuminated. Removal of the load will leave the screen on until 15 seconds following disconnection.

Outputs

The Rampart comes with 4 outputs in total supplied via industry standard XLR outputs. The nominal 26V is supplied by two XLR 3-pin outputs, this output is unregulated and is the true strength of Rampart wasting no energy to regulated the voltage and delivering 26v only to the source needs it the most; your equipment.

Enable 12v Regulation

To activate the 12V regulated output, push and hold the 'check' button for 3 seconds. The 12V indicator (bottom RHS) will change from red to green and the battery will remain on until fully discharged regardless of the load applied. To switch off, press and hold the button again for 3 seconds. Connecting a charger will also disable the 12V output. The display remains on for longer following use of the 12V output, even when the load has been disconnected (approx. 15 minutes)

When the battery capacity has fallen below about 20% it will not be possible to activate the 12V output until the charger has brought the battery back above the 20% level. This feature has been added to prevent failure of the 26V supply and interruption of a shoot, should you inadvertently connect a heavy load to the 12V output under low battery conditions.

The maximum total current that may be drawn from the two 4pin 12V XLR connectors is 10A. 10A from one connector only, 5A from both connectors at the same time, 2A from one and 8A from the other and so on.....





figure 3a XLR 3-pin (26v)



figure 3b XLR 4-pin (12v)

Charging the Rampart

This product has an internal charger rated at 5A which will charge the battery from depletion in about 10 to 12 hours. 80% charge will be achieved in about 9 hours. A mains lead is supplied appropriate for use in your region, however we can supply an alternative if required.

This plugs into the IEC connector (colloquially and inaccurately known as a 'kettle' plug) beneath the handle and to the left of the display, (see fig 4a). For more information please contact our sales team.



figure 4a AC Mains Power

Rampart Charger (Built in)

| Input: | 100-240VAC 50/60Hz |
|------------------|-------------------------|
| Output: | 29.4v |
| Charge Current: | 5A |
| Charge Time: | 9 hours <i>(to 80%)</i> |
| Connection Type: | IEC plug |



figure 4b Supplied UK IEC cable

External Charger

An appropriate 29.4V charger may be applied to pins 1 (-ve) and 2 (+ve) of either of the two 3 pin XLR connectors. The current rating of this charger must not exceed 6A We can supply an appropriate external charger. The Hawk-Woods XB-25C 26V 4A charger would be suitable for the purpose.

Accessories

Hawk-Woods provide many power solutions for the end user and to further support our new and existing product range.

The Rampart has an additional handle that can be purchased separately or as part of the base model. (*figure 5a*)

The cheese plate handle (**MXB-CHI**) is named to follow the industry naming convention which describes the multitude of mounting holes that can be used to mount the battery securely.

To install the optional cheese plate handle you will require an Allen key that can tighten and loosen UNC bolts 3/8" and we recommend the bolts should be tightened to 45 newton metres to ensure a secure tight fit.



figure 5a Cheese plate handle

Power Cables

We manufacturer a wide range of power cables that can be used to take power from the Rampart battery to power your device. We can create cables in house to suit your specific needs if required.



XB-CAB5 XLR 4-Pin Male to Lemo 8-pin Female (2 meter length)



XB-CAB11 XLR 4-Pin Male to Lemo 8-pin Female (3 meter length)



XB-CAB12 XLR 4-Pin Male to Lemo 8-pin Female (5 meter length)



LD-4S XLR 4-Pin Male to XLR 4-pin Female (3 meter length)

Warranty

Hawk-Woods Limited stands behind the quality of every item we manufacture, offering a warranty period of 12 months from the date of purchase from the manufacturer & 18 months where the product is a battery. Please note that the warranty period may vary depending on the product; specific details can be provided upon request. In the event of a product failure covered by our warranty, Hawk-Woods Limited will, at our discretion, either repair or replace the product with a new one.

It's important to mention that the warranty does not apply in cases where evidence of modification, misuse, tampering, neglect, water damage, or drop damage is discovered during our inspection. For any necessary repairs, please send the item along with your complete contact details and fault description to the following address:



Hawk-Woods Ltd

Unit 8, Fairwood, Industrial Estate Suffolk Drive (off Leacon Road) Ashford, TN23 4FD England

Please ensure that your return address and contact information are included, as we handle multiple packages and need to accurately identify each one.

We strongly recommend taking precautions in packaging your item to prevent any damage during transit. Hawk-Woods Limited does not accept liability for packages damaged on their way to us. It is the customer's responsibility to package the item securely. We also advise using recorded delivery, as proof of postage alone is not considered proof of delivery.

Upon receiving the product, our engineer will conduct tests to identify the reported fault. If no fault is found, Hawk-Woods Limited will return the product to you, with the cost of carriage being the responsibility of the customer. Please be aware that the warranty will not apply if the product has been altered, worked upon, or damaged by the customer or its employees, or any other third party.

Repairs

If you find yourself in need of a repair covered by the warranty, we would be delighted to perform a thorough diagnostic on your device to provide you with expert recommendations regarding the required work. In cases of urgency, we can promptly dispatch a replacement while we diligently repair your faulty device.

Re-celling?

Hawk-Woods offers the service to Re-cell your battery pack should it have survived beyond the life expectancy of the cells. We can refurbish your old and fault batteries in a timely manner and respectable price.

Call out repairs team listed below to see how we can support you and your battery.

Disclaimer

The information contained in this manual is believed to be correct at the time of printing. Hawk-Woods reserves the right to make the changes to the information or specifications without obligation to notify any person of such revisions or changes. We are making every effort to ensure that our manuals are updated on a regular basis to reflect changes to the product specifications and features. You can access the latest revision of this manual from our website.

Symbols

| € | European Conformity |
|----------|------------------------------|
| UK CA | UK Conformity Assessed |
| | Grounding Symbol |
| Li-lon | Mobius Loop (recyclable) |
| X | Waste Electrical & Batteries |

J Temperature

Store lithium-ion batteries in a cool, dry place. Avoid exposing them to high temperatures or direct sunlight, as extreme heat can cause damage or shorten their lifespan. The recommended temperature range for storage is between 17°C to 30°C (62°F to 86°F).

* Avoid Extreme Environments

Do not store lithium-ion batteries in humid or excessively cold environments. High humidity can lead to corrosion, while freezing temperatures can damage the battery's internal components.

🤣 Battery Protection

Ensure that the battery terminals are protected from contact with metal objects or other batteries during storage. Exposed terminals can cause short circuits, leading to safety risks or discharge of the battery.

🕕 Charge Level

If you plan to store lithium-ion batteries for an extended period, it's best to store them with a charge level between 40% and 60%. This charge level helps to maintain the battery's capacity without stressing it too much. Avoid storing batteries fully charged or completely discharged, as this can lead to degradation or potential safety hazards. We advise to charge your batteries every 3-6 months from purchase of the battery.

🗹 Regular Checks

Periodically check the stored batteries for any signs of damage, leakage, or swelling. If you notice any abnormalities, do not use or store the battery further and dispose of it properly following the relevant recycling or disposal guidelines for your area.

🗂 Storage

Lithium-ion batteries do experience a gradual loss of charge over time, even when not in use. On average, they can lose about 2-3% of their charge per month due to self-discharge. Therefore, it's crucial to store lithium-ion batteries in a cool and stable environment to minimise the impact of self-discharge and prolong their overall lifespan.

Lithium-ion batteries should not be stored fully charged for long periods, as this can also have a negative impact on their longevity. Ideally, they should be stored at a charge level between 40-60% for extended storage periods. This range helps to strike a balance between minimising self-discharge and avoiding overcharging, which can be detrimental to the battery's health.

Safety Warnings



WARNING! This battery contains specialised electronic circuits, which are designed to protect the Lithium-ion cells from over-charge, over discharge and over-current. protection devices are designed to operate if the battery voltage is abnormally high or low and if the temperature of the battery exceeds operating specifications.



WARNING! Do not drop, puncture or crush this battery. Do not use the battery if the case is damaged or broken. Do not open or attempt to service this battery if damaged.



WARNING! These electronic devices can be damaged if the battery is subject to abuse or damage. Do not use a battery that has been subjected to excessive mechanical shock or water damage.

On a weekly basis or whenever necessary, make sure to clean the device, its associated components, and accessories using a slightly damp, non-saturated cloth or a paper towel. Please avoid getting the exposed metal part of the battery terminals wet. Refrain from using solvents or abrasive cleaning agents.



CAUTION! Keep batteries cool or at room temperatures whenever possible. Sustained elevated temperatures are the primary reason for premature failure of Lithium-Ion batteries.



CAUTION! Charge batteries at room temperature. In warm climates keep chargers in air conditioned rooms for best performance.



CAUTION! The batteries should be discharged to 50% before storing for a long period of time.



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