



# VCLX NM2

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Important information on the safe installation and operation of this product. Read this information before operating the product. For your personal safety, read these instructions. Do not operate the product if you do not understand how to use it safely. Save these instructions for future reference.

## Warning Symbols Used in these Instructions

**⚠ Warning** Where there is a risk of personal injury or injury to others, comments appear supported by the warning triangle symbol. Where there is a risk of damage to the product, associated equipment, process or surroundings, comments appear supported by the word '**Caution**'.

**⚠ Warning** Where there is a risk of electric shock, comments appear supported by the hazardous voltage warning triangle.

## Intended Use

The Anton/Bauer VCLX NM2 Lithium-ion battery is specifically designed and optimized to be charged with current Anton/Bauer chargers. The VCLX NM2 battery Series are compatible with Anton/Bauer chargers and have been tested on industry recognized competitive chargers as well. For optimal performance and enhanced battery longevity, we recommend using Anton/Bauer chargers.

## Full Documentation

This Quick-Start Guide will provide you with a brief overview of the key features and functionality of the VCLX NM2. For more detailed information you can explore the full manual. The manual can be accessed via the Product page on the Anton/Bauer website. <https://www.antonbauer.com/en/products/vclx/>



## Electrical Connection

**⚠ Danger** Risk of electric shock. Do not remove cover, no user serviceable parts inside the product.

**⚠ Warning** Risk of electric shock. Always check cables for signs of damage. Damaged cables can cause personal injury and/or damage the equipment.

**⚠ Caution** Do not exceed the current output limit of the product when powering auxiliary devices.

**⚠** Refer servicing to qualified service personnel.

## Operation

**⚠ Warning** Special precautions and handling instructions are contained in this user guide and should be strictly adhered to for safe and reliable operation.

**⚠ Warning** Never use flammable or combustible materials and solvents around batteries or chargers.

**⚠ Caution** The product should not be used outside the operating temperature limits. Refer to the product technical specifications for the operating limits for the product.

**⚠ Warning** While we offer the protection against water ingress, we still generally advise against doing so as part of good practice. We don't formally have an IP rating, so this is a bit of a catch all.

**⚠ Warning** When cleaning the product, use a soft damp cloth only. Do not wet the exposed metal parts of the battery. Do not use solvents, detergents or scouring agents.

**⚠ Caution** All Nickel-Metal Hydride (NiMH) batteries have a finite life. If the battery exhibits noticeably shortened run-time the battery should be replaced immediately. Shortened run-time is indicative of at least one cell, which has reached end of life. Under no Circumstances attempt to "recondition" this battery by repeated charging and discharging.

**⚠ Danger** 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.

## Charging

**⚠ Danger** The VCLX NM2 Battery can only be charged with the VCLX NM2 charger. Do not attempt to charge on non-InterActive chargers or chargers not manufactured by Anton/Bauer.

## Maintenance

**⚠ Danger** The fitting of non-approved parts or accessories, or the carrying out of non-approved alterations or servicing can be dangerous and could affect the safety of the product. It may also invalidate the terms and conditions of the product warranty.

**⚠ Danger** Never attempt to service this battery. Refer servicing to qualified service personnel.

**⚠ Danger** Never attempt to open this battery. The electronic circuits inside the battery can be damaged causing malfunction and/or potential hazard to person and property.

Periodic cleaning of both the charger terminals and battery terminals will ensure continued reliable operation. Clean the

terminals occasionally with a pencil eraser or lightly scrape the surface with a blunt instrument to help reduce the likely hood of build up causing poor communication or charging.

Contact Anton/Bauer Customer Support Group with additional inquires as to maintenance.

## Storage

**⚠ Caution** Sustained elevated temperatures are the primary reason for premature failure of Nickel-metal hydride batteries.

**⚠ Caution** Charge batteries at room temperature. In warm climates keep chargers in air conditioned rooms for best performance.

**⚠ Caution** Although Nickel-metal hydride has good self discharge characteristics, batteries should be stored for long term storage in a fully charged condition.

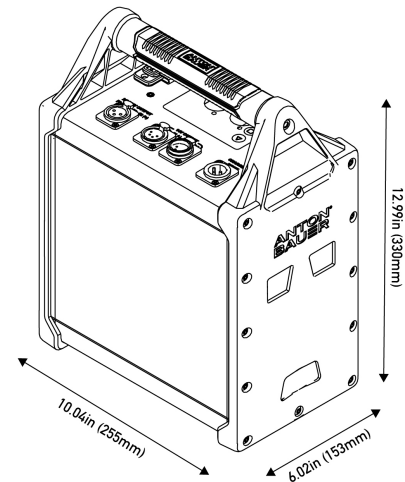
**⚠ Caution** Batteries should be stored in a fully charged state with the button in the OFF position to minimize the self-discharge. The battery will "wake up" with the push of the button if it hasn't self-discharged entirely, otherwise will "wake up" when placed on a charger.

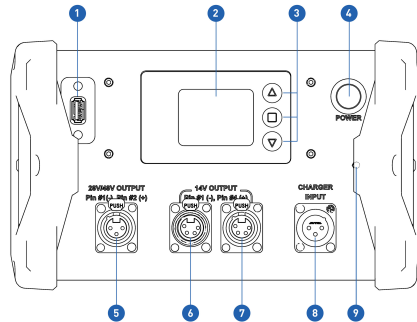
# Technical Specifications



<b>Battery Capacity</b>	600Wh
<b>Chemistry</b>	Nickel-Metal Hydride (NiMH)
<b>Charge Time (To full)</b>	3.5 hours
<b>Output Voltage (Regulated)</b>	5V (USB), 28V or 48V
<b>Output Voltage (Variable)</b>	12 - 17V
<b>Continuous Output Current (A)</b>	Max load 700W in total 48VDC: 12A   28VDC: 16A   12-17 V: 24A
<b>Output Ports</b>	2 x 4-pin XLR for 14.4 1 x 3-pin XLR for 28v/48V 1 x USB-A
<b>Fuse Protection</b>	Smart electronic fuses controlled internally
<b>Weight</b>	29.35 lbs (13.3 kg)
<b>Fleet Management</b>	Yes, Wi-Fi Included

<b>Display</b>	2.4" LCD
<b>Operating Temp Range - Charge</b>	23 to 95°F / -5 to 35°C
<b>Operating Temp Range - Discharge</b>	0 to 122°F / 0 to 50°C
<b>Dimensions (WxHxD)</b>	10.04in (255mm) x 12.99in (330mm) x 6.02in (153mm)





**Power Button:** Press to turn the battery on.

**Up Button:** Increase a value, navigate upwards, increases the brightness of the screen when pressed and held on the home-screen.

**Down Button:** Decrease a value, navigate downwards, decreases the brightness of the screen when pressed and hold on the home-screen.

**Enter / Save Button:** Enter / Save Button: Enter selection / press and hold to save value.

**USB Update / Import / Export / 5V Output port:** USB Port for performing software updates, Report Export or Wifi Information Import with a USB Thumb Drive.

## Power Button Status Light

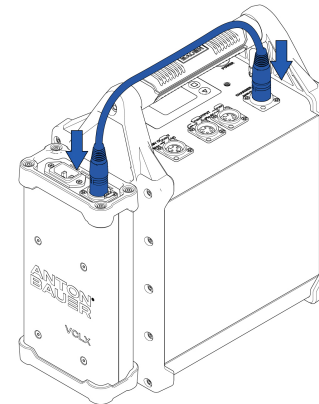
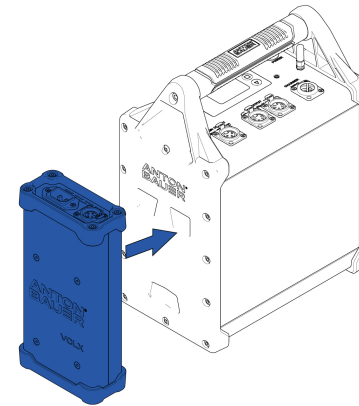
- **Solid Blue** - Indicates System Idle State (or Powering Load)
- **Solid Green** - Fully Charged / Optimization Cycle Complete / Ready to use
- **Flashing Green** - Optimization Cycle in Process
- **Solid Yellow** - Charging paused due to temperature.
- **Solid Red** - Indicates System Fault State / Cell Pack(s) ERROR
- **Flashing Red** - Indicates Charging

1	USB Update / Import / Export / 5V Output port
2	LCD Screen
3	Controls - Up, Enter, Down
4	Power On / Off
5	28V/48V 3 Pin XLR OUTPUT
6	14.4V 4 Pin XLR OUTPUT
7	14.4V 4 Pin XLR OUTPUT
8	3 Pin XLR Charger INPUT
9	WiFi Antenna

## Charging with the VCLX NM2 Charger

Charge this battery fully before using. Allow the battery to reach a steady green mode before using. Charging is automatic. The following are the standard indications when connected to the official VCLX NM2 charger.

- **Solid Yellow** - Charging paused due to temperature.
  - **Solid Green** - Fully Charged / Optimization Cycle Complete / Ready to use
1. The Anton/Bauer VCLX NM2 Charger features magnetic connectivity. Place the Charger with the connection pointing upwards on one of the sides of the VCLX NM2.
  2. Use the standard IEC Cable, which comes with the VCLX NM2 charger, to plug it to a mains outlet.
  3. Use an official Anton/Bauer charging cable 8075-0339 or 8075-0343 to attach the charger to the VCLX NM2.
  4. The red-flashing Power-Button indicates the charging status. The top status bar on the LCD Display will turn green and the display will cycle through the state of the charge and the time to full.
  5. The VCLX will be fully charged within ~3.5 hours. A fully charged battery will be stated by a solid green Power-on button and you'll stop seeing the "Time to Full", only the percentage.



## Software Interface Layout

1 **Fuel gauge** (Shows % when no device is attached; shows remaining runtime in hours and minutes when device is attached)

2 **Report Indicator**

3 **USB Indicator**

4 **Wifi Status**

5 **Up Button** - Increase a value or navigate Upwards

6 **Settings / Enter / Save / Back Button**

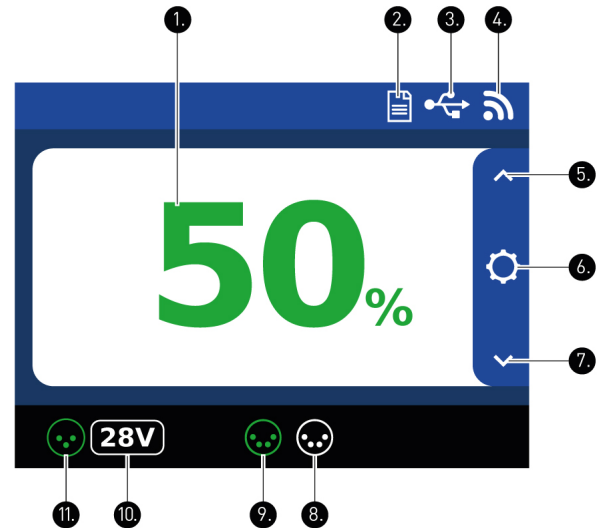
7 **Down Button** - Decrease a value or navigate Downwards

8 **4-Pin XLR-R Output Status**


9 **4-Pin XLR-M Output Status**

10 **3-Pin XLR Output Voltage (28V or 48V)**

11 **3-Pin XLR-L Output Status**



## Icon/Symbol explanation

 **Settings** - Enter the basic settings menu, which includes Firmware Info, Fault Info, LCD Settings and the 28V/48V Toggle

^ **Up Button** - Increase a value or navigate upwards

∨ **Down Button** - Decrease a value or navigate downwards


↵ **Enter Button** - Enter selection, Save Value


⏪ **Back Button** - Cancel or sends you back to the sub screen.


### **Active Wifi Connection with good signal**


 Active WiFi Connection with bad signal


### **No active Wifi Signal**

 **USB Status** - When a USB Device is plugged-in the icon will appear in the top status bar

 **Report** - Icon will appear in the top status bar when a report is generated. A green arrow will appear over the icon when the report is uploading.

 **3-Pin XLR Status** - Will turn green when a device is attached to this port.

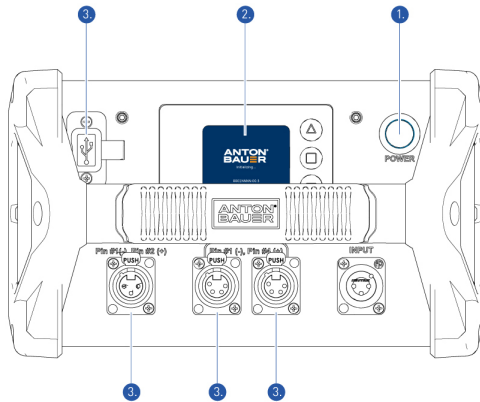
 **3-Pin XLR Output Voltage** - Show the current output voltage for the 3-Pin XLR output, which can be [set in the basic menu](#).

 **4-Pin XLR Status** - Will turn green when a device is attached to this port.

## Basic Operation

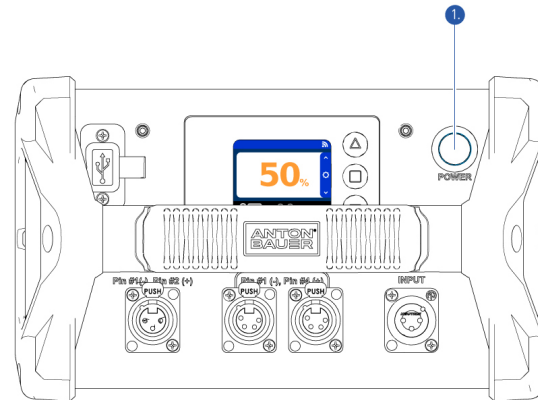
### Turning on and powering a device

1. To turn on the VCLX NM2 press the Power-on button. (1) You will see a solid blue light around the Power-on button.
2. The loading screen (2) will show a Anton/Bauer Logo with the current Firmware listed below. After a few second the home screen will appear.
3. Now use any of the four outputs (3) to power any device. As soon as a draw is attached to the VCLX NM2, the output icon will turn green and the remaining runtime will show in minutes on the home screen.



### Turning off the VCLX NM2

To turn off the VCLX NM2 simple press the Power-on button (1).



## Menu Structure

### Basic Menu

- 1. Firmware Info**  
Display the current Firmware installed on the VCLX NM2.
- 2. Fault Info**  
In case of any Fault, the relevant info will be displayed.
- 3. LCD Settings**  
Adjust the brightness of the LCD screen, as well as adjusting the "Idle Off" settings
- 4. 28V/48V Toggle**  
Toggle the voltage from 28v to 48V, or vice versa, of the 3-PIN XLR output.
- 5. Advanced Settings**  
Entering the Advanced Settings of the VCLX NM2. A [Pin is required \[15\]](#) to access this area.
- 6. Home**  
Brings you back to the home-screen.



## Advanced Menu

### 1. System Info

View your System Info like Serial Number, FCC, Health and Cycles.

### 2. System Settings

Enable/disable the users' ability to toggle between 28/48V in the 'Basic Menu'. If this feature is disabled, then the unit will only have a 28V output.

### 3. Reports

Generate Reports and load them either on a USB drive or load them to you FTP destination.

### 4. WiFi Settings

Enable or disable the Wifi on your Battery

### 5. WiFi Info

View the current status of the Wifi connection, including the FTP details and info about the last sync.

### 6. Set Unlock Pin

Set your unlock Pin for your VCLX NM2

### 7. Export Settings

Export all settings from your VCLX NM2, to load them onto another VCLX NM2

### 8. Built in Self Test

Start the "Built in self test" and save the results on a USB drive

### 9. Back

Sends you back to the Basic Menu

### 10. Home

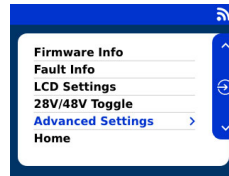
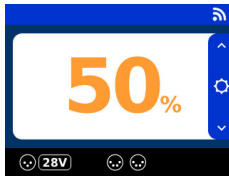
Brings you back to the home-screen.



## PIN Code

Advanced Settings are only available for the owner of the battery. To secure them you will need a PIN code to access those.

1. To set the unlock PIN Code you will need to access the advanced settings. Press the settings button on the home screen to access the basic settings. Navigate to "**Advanced Settings**" by using the up and down buttons and confirm your selection with the enter button .



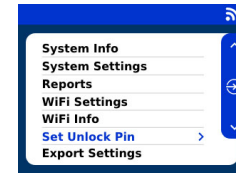
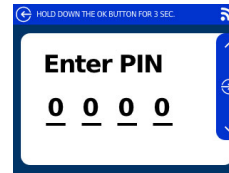
2. To access the advanced settings you will need your PIN code. The factory standard PIN Code is **0000**. Select the numbers by using the up and down buttons and confirming each number with the enter button .



### TIP

After 30 seconds, you will automatically come back to the home screen if no buttons are pressed.

3. In the Advanced Settings menu select "**Set Unlock Pin**" by using the up and down buttons and confirm with the enter button .



4. Use the up and down buttons to select a number from 0-9 and confirm each number by the enter button . To cancel to process press and hold the enter button for 3 seconds.



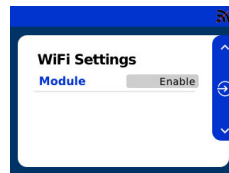
- If the PIN CODE has been forgotten, please contact customer support.

## How to setup WiFi

Use WiFi to upload reports to a FTP Server or to use the Anton/ Bauer Fleet Management.

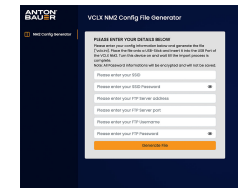
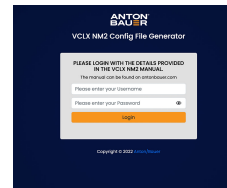
To use the Wifi Module in the VCLX NM2, you will need to create a config file which contains your WiFi information, as well as FTP details for your report upload. Follow these steps to generate the file and load into you VCLX NM2. You will need a Computer and USB drive (Ensure the USB drive is formatted to use FAT32 file system) to complete this procedure.

1. Start by enabling WiFi through the advanced settings menu (To access the advanced settings menu, follow step 1 and 2 on the [PIN Code Settings \[15\]](#)) and select the WiFi settings by using the up ^ and down v buttons, confirm the selection with the enter button ↵.
2. Use the up ^ or down v button to enable the the WiFi module. Confirm the selection with the enter button ↵



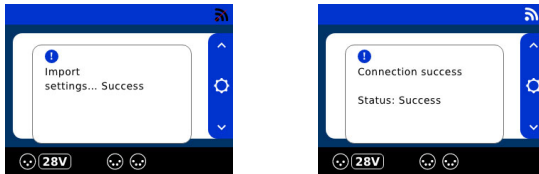
3. Now turn off the VCLX NM2 by pressing the Power-on button.

4. Visit [vclx.antonbauer.com](http://vclx.antonbauer.com) and login using the following credentials.
  - User: **VCLXNM2**
  - Password: **AntonBauer155**
5. Now fill in your WiFi information and FTP Details and press "**Generate File**".
  - Your Information will not be saved and all password details are fully encrypted.



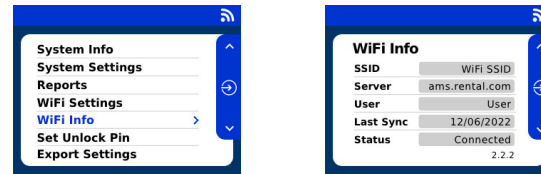
6. You will receive a **vclx.ini** file. Please place it onto the root folder of a USB drive.

7. Insert the USB drive into the USB Port of the VCLX NM2. Power on the battery until the import process is complete. The Battery will try to login to your WiFi with the provided information, and will show a status screen after the connection attempt is complete. If the connection wasn't successful, then please repeat step 4 - 6 again.



8. To check the WiFi Status, navigate to the advanced settings menu (as in Step 1) and navigate to the **WiFi Info** menu item by using the up ^ and down v buttons and confirm the selection with the enter button ↵

9. You will receive information about the SSID which the battery is connected to, as well as the FTP Server info. The WiFi Info screens also shows the last Sync informations and the current WiFi status. To go back to the advanced setting menu, press the back button ⏪



## Warnings and Errors

Notification	Classification	Solving
Charge Error	Error	<p>If a charging error, then remove charger and re-insert. Power Cycle Unit To Clear Error.</p> <p>If fault continues call service.</p>
Charge Warning	Warning	<p>Charging Paused - Allow Time For Pack(s) To Cool.</p> <p>Charging Will Resume Automatically</p>
Discharge Error	Error	Remove Devices, Power Cycle Unit To Clear Error.
Invalid Pack Error	Error	Call For Service
Temperature Error	Error	Call For Service
XLR Load Error	Error	<p>Reconnect devices one at a time and use the visual output connector warning on the display to see if you are overloading that XLR output.</p> <p>If fault continues call service.</p>
XLR Current Warning	Warning	You are within 90% of the max load for this output.

Notification	Classification	Solving
Max Load Warning	Warning	Total System Load Exceeding 700W Rating, Please Remove Devices. If devices aren't removed the unit may shut down to protect itself.

## VCLX NM2

### EU Declaration of Conformity



Videndum Production Solutions Ltd. declares under our sole responsibility, supported by Videndum Production Solutions GmbH - our authorized representative, that the product detailed in this manual conforms with all relevant provisions of the following EU directives:

- Restriction of Hazardous Substances Directive 2011/65/EU

A copy of the declaration is available on request.  
EU contact: Videndum Production Solutions GmbH, Parkring 29, 85748 Garching, Germany

### UK Declaration of Conformity



Videndum Production Solutions Ltd. declares under our sole responsibility that the product detailed in this manual conforms with all relevant provisions of the following UK Regulations:

- The Electrical Equipment (Safety) Regulations 2016
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

A copy of the declaration is available on request.

UK contact: Videndum Production Solutions Ltd, William Vinten Building, Easlea Road, Bury St. Edmunds, IP32 7BY

## FCC Compliance Statement



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.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

## Environmental considerations



### **European Union Waste of Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC)**

This symbol marked on the product or its packaging indicates that this product must not be disposed of with general household waste. In some countries or European Community regions separate collection systems have been set up to handle the recycling of electrical and electronic waste products. By ensuring this product is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health. The recycling of materials helps conserve natural resources. Visit our website for information on how to safely dispose of this product and its packaging.

### **In countries outside the EU:**

Dispose of this product at a collection point for the recycling of electrical and electronic equipment according to your local government regulations.

## Pollution statement

This equipment is designed for operation in Pollution Degree 2 environments.

At Videndum Production Solutions we take great pride in the quality of our products and we also recognize that your experience with our products will be even more positive and productive with strong, effective support to back them up. Videndum Production Solutions Service Centers are there to provide technical support for customers and partners, via telephone or email. For more information, including complete contact details, please go to:

<https://www.antonbauer.com/en/product-support/service-centers/>



This warranty for the product specified in this document ("Product") is given by Videndum Production Solutions ("Anton/Bauer"), 14 Progress Drive, Shelton, Connecticut 06484. If you (the purchaser of the Product from Anton/Bauer, or the person for whom the Product was purchased, if it was a gift) have any questions regarding Product applications, Product specification, or to obtain warranty service on this or any Anton/Bauer product, contact the company at the address above.

THIS PRODUCT MUST BE REGISTERED WITH ANTON/BAUER WITHIN 30 DAYS OF PURCHASE TO ENSURE WARRANTY COVERAGE.  
REGISTER ONLINE AT:

[www.antonbauer.com](http://www.antonbauer.com)

Warranty 5 years: for the cell and inverter. MAXX II Warranty 24 months: Anton/Bauer will repair or replace the Product at Anton/Bauer's option and cost.

This warranty shall be effective only if Anton/Bauer receives notice of such defects in materials or workmanship during the period of the warranty. The liability of Anton/Bauer hereunder is expressly limited to a claim for repair or replacement of the Product or as otherwise stated herein at Anton/Bauer's sole discretion. Notice of any claim under this warranty shall be delivered to Anton/Bauer during the period of the warranty and the Product shall be returned with its packaging promptly, at your expense, to an

Anton/Bauer Customer. Wear and tear for consumables such as tyres is not covered.

Support Center or to the address above. Upon receipt of the Product and a record of your compliance with the conditions of this warranty, Anton/Bauer will repair or replace the Product and return it to you, or issue a credit, as applicable. You are responsible for all shipping and handling charges to and from authorized facility.

THIS WARRANTY DOES NOT APPLY TO AND IS VOID IN THE CASE OF DEFECTS OR DAMAGE RESULTING FROM ACCIDENTS, DISASTER, NEGLIGENCE, MISUSE, IMPROPER INSTALLATION, IMPROPER OR UNAUTHORIZED SERVICE OR MAINTENANCE, UNAUTHORIZED REPLACEMENT PARTS OR ATTACHMENTS; OR DYSFUNCTION OR MALFUNCTION OF, OR CAUSED BY, ANY OTHER PRODUCT OR DEVICE.

Misuse includes any use of the Product in other than its intended application, including the use of this Product with any charging device or accessory not manufactured by and/or specified by Anton/Bauer. This warranty does not cover, and Anton/Bauer assumes no responsibility for, any equipment or devices used in conjunction with the Product.

ANTON/BAUER DISCLAIMS ANY LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY OF THE PRODUCT. UNDER NO

## Warranty



CIRCUMSTANCES WILL ANTON/BAUER BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

This Warranty is to be construed and enforced in accordance with the law of the State of Connecticut, including the provisions of the Uniform Commercial Code as adopted and from time to time amended in the State of Connecticut, and not the Convention for the International Sale of Goods. This choice of Connecticut law is exclusive of any Connecticut law that would require reliance on any law foreign to Connecticut.

Should any action of law or in equity be brought by any person under this Warranty, such action shall be brought only in the United States District Court for the District of Connecticut, or in any Superior Court in Fairfield County, Connecticut, USA. Some states do not allow limitations on how long a warranty lasts, so the time period limitation herein may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other legal rights which may vary from state to state. Use of unauthorized equipment in conjunction with Anton/ Bauer products constitutes misuse under our warranties and may limit or void those warranties. Anton/Bauer does not authorize, condone, recommend, or otherwise assume any liability or responsibility resulting from the use of any battery, charger, or accessory made by Anton/Bauer with any battery, charger or accessory not manufactured, produced or sold by Anton/Bauer. Anton/Bauer

only authorizes the use of original Anton/Bauer products with this Product. Use only original Anton/Bauer equipment with this Product.







**ANTON<sup>®</sup>  
BAUER**

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