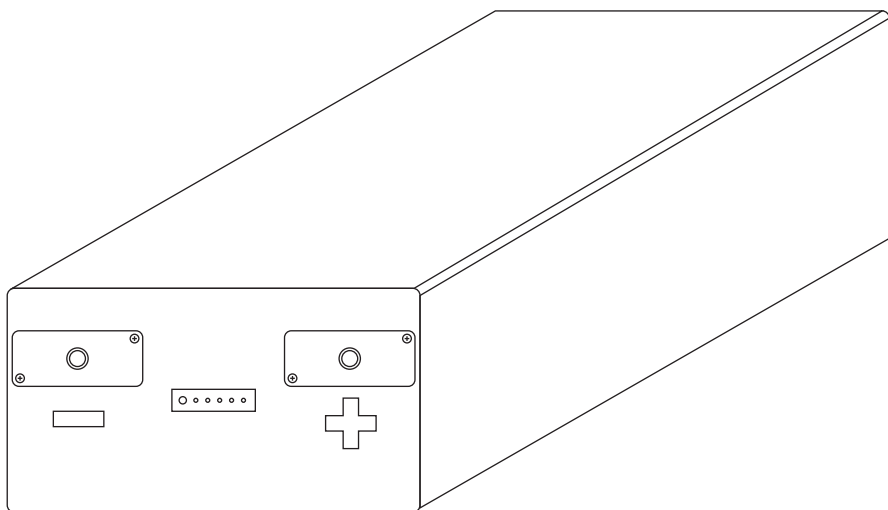


USER MANUAL

HUMLESS 10 kWh



ATTENTION:

Strictly follow this user manual and pay close attention to all warnings. Please **DO NOT** operate before reading this **USER MANUAL**.

NOTICES

- HUMLESS™ products are protected by patent law.
- HUMLESS reserves the right to modify or change parts of or all the specifications and pricing policies at company's sole decision.
- HUMLESS shall not be liable for losses caused by either incidental or consequential use in connection with the furnishing, use or performance of this manual as well as any information contained therein.
- Any part of this document is forbidden to be copied or rearranged without prior written approval of HUMLESS.
- Information in this publication replaces all previously corresponding material.

PRODUCT CERTIFICATION

HUMLESS guarantees this product conforms to the national and industrial standards or that the standard conformance certification is in progress.

CONTACT US

If you have any problems or need help when using our products, please contact HUMLESS LLC, your local distributor, or visit www.humless.com

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The Information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contain herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of the products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Humless nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

TABLE OF CONTENTS

| | |
|---------------------------------------|---|
| 1. SAFETY INSTRUCTIONS | 1 |
| 2. FREQUENTLY ASKED QUESTIONS | 2 |
| 3. BATTERY SPECIFICATIONS | 3 |
| 4. PROTECTIVE THERMAL INSULATOR | 4 |
| 5. BATTERY WARRANTY | 4 |

1. SAFETY INSTRUCTIONS

WARNING! Read this entire manual prior to use or storage. Keep this manual in a safe easy to get to location.

1. Keep out of reach of children.
2. **DO NOT** charge and discharge at the same time
3. Keep all ports closed when not in use.
4. Do not re-charge the device in wet or damp areas.
5. Charging device and cable are for indoor use only.
6. Re-charge the device when voltage is 48.1V.
7. **DO NOT** open/break the seal on the case.
8. All warranties are void if the seal is broken.
9. Device should be serviced by authorized personnel only.
10. Follow local guidelines for battery disposal.
11. May be recycled as Lithium-ion cells.

WARNING! DO NOT TOUCH ANYTHING INSIDE THE SYSTEM ENCLOSURE WHILE THE UNIT IS ON!

Failure to observe any of these precautions or any of the instructions contained in this manual may cause electrical shock and or cause damage to this equipment and consequently void the warranty.

DO NOT tamper with or attempt to adjust or modify, any of the electronics in the system enclosure.

A qualified electrician or electrical trades's person should carry out all electrical wiring required for the installation of this equipment.

In most international situations it is illegal to work on electrical systems exceeding 50V without an electrical license.

UNAUTHORIZED TAMPERING WILL VOID THE WARRANTY

2. FREQUENTLY ASKED QUESTIONS

Q: Does overcharging damage batteries?

A: Overcharging is the most destructive element in the battery service. During overcharging, excess current causes the oxides on the plates of the battery to “shed” and precipitate to the bottom of the cell, this causes the battery to heat up.

Q: Does over discharging damage batteries?

A: Over discharging is a problem which originates from insufficient battery capacity causing the batteries to be overworked. Discharges deeper than 50% significantly shorten the cycle life of a battery without increasing the usable depths of cycle infrequent or inadequate couple charging can also cause over discarding symptoms call sulfation.

Q: What are the advantages of the Humless 10 kWh batteries compared to other rechargeable batteries?

A: They have a higher energy density than most other types of rechargeable butterfly. This means that for their size or weight they can store more energy than other rechargeable batteries.

Q: How man hour of backup do I get from my battery bank?

A: Duration depends on how much power is being drawn. If there is a 10 Amp draw on an 104 Ah pack it will last 10.9 hours.

DO's

- Upon receipt of shipment unload and store the batteries in a covered area.
- Read the installation and operating sections of this manual prior to usage/storage of batteries.
- Clean the batteries when dust accumulates. Provide sufficient ventilation, if the batteries are placed in cubicle. Keep the batteries away from heat source, sparks, fire, and etc.

- Charge the batteries once in every six months if stored for long periods.
- After a discharge recharge the batteries Immediately.

DONT's

- Do not over tighten the terminal bolts.
- Do not mix ordinary conventional / low maintenance batteries with Humless 10 kWh batteries.
- Do not keep the batteries in locations exposed to direct sunlight rain, dust, storm, etc...
- Do not attempt to dismantle the battery.
- Do not mix the batteries of different capacities, makes, or models.
- Do not allow any metal on the battery to fall across battery terminals.

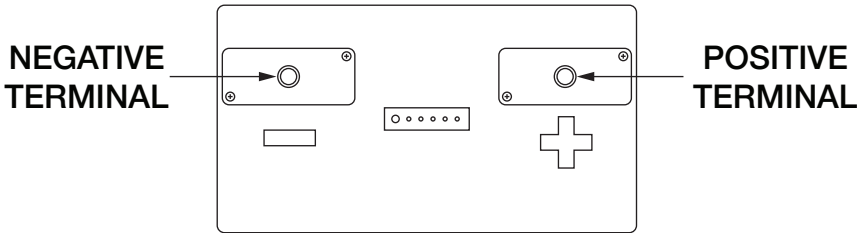
ATTENTION! It is recommended that the battery case be stored in a clean, cool and dry location.

3. BATTERY SPECIFICATIONS

| | |
|-----------------------|-----------------------------|
| Voltage | 48.1V- 54.6V |
| Capacity | 208Ah |
| Round Trip Efficiency | 98% |
| Storage | 10,000Wh |
| Compatibility | Single-phase / 3-Phase |
| Operating Temperature | -4° F to 122° F |
| Enclosure | Indoor & Outdoor |
| Installation | Floor or Wall Mounted |
| Life Cycle | 4,000 |
| Charging | 54.6 V @ 10Ah / 30Ah / 50Ah |
| Charge Rate | up to 2C |
| Charging Time | 2 Hours |
| Dimensions | 6.25" x 10.5" x 23.25" |
| Weight | 118 lbs. |
| Warranty | 10 Years |
| Discharge | Up to 5C |

4. PROTECTIVE TERMINAL INSULATOR

The protective terminal insulator is the appropriate combination of a provision for basic protection during battery transport / manipulation and previous to installation.



5. BATTERY WARRANTY

Humless 10 kWh battery Limited Warranty (USA)
Effective April, 3 2018

Ten Year Limited Warranty

Humless warrants that your “Humless Battery” will be free from defects for ten (10) years following the date it was installed at the intended location or put into service, whichever is later. If you only use your “Humless Battery” for self-consumption of energy generated by an electric grid or an on site array of solar panels and for storing that energy for use as backup power.

Note that this Limited Warranty is subject to a number of important exclusions and limitations, which are set out in detail below. It also includes a mandatory arbitration provision and waiver of your right to request a jury trial or make a claim through a class action, which you should read carefully.

Remedies

If your “Humless Battery” fails to comply with the above Limited Warranty, Humless will, in its sole discretion, either repair your “Humless Battery” (using new or refurbished parts), replace your “Humless

Battery” with an equivalent product (new or refurbished), or refund you the market price of an equivalent product at the time of the warranty claim. If your “Humless Battery” is repaired or replaced under this Limited Warranty, the remainder of the original warranty period will apply to the repaired or replacement product. Under no circumstances will the original warranty period be extended as a result of your “Humless Battery” being repaired or replaced.

What Products Are Covered?

This Limited Warranty applies to any Humless “Humless Battery” that (1) was purchased from Humless or a Humless Authorized Reseller in the United States of America; (2) has one of the part numbers referenced above; and (3) is installed in the United States of America. Please contact Humless directly if you have any concerns regarding whether you purchased your “Humless Battery” from a Humless Authorized Reseller.

Who Can Make a Claim?

Limited Warranty claims, pursuant to this warranty, can be made by or on behalf of the end user who acquired and put the “Humless Battery” into use for the first time. A subsequent owner of the “Humless Battery” who provides proof of ownership is also entitled to make Limited Warranty claims, within the original warranty period.

Limitations and Disclaimer

THIS LIMITED WARRANTY IS THE ONLY EXPRESS WARRANTY MADE IN CONNECTION WITH YOUR “Humless Battery”. Any other warranties, remedies and conditions, whether oral, written, statutory, express or implied (including any warranties of merchantability and fitness for purpose, and any warranties against latent or hidden defects) are expressly disclaimed. If such warranties cannot be disclaimed, Humless limits the duration of and remedies for such warranties to the durations and remedies described in this Limited Warranty.

Relationship with Applicable Law

This Limited Warranty gives you specific legal rights. You may also have other legal rights, which vary from state to state. For example, some states do not allow limitations on how long an implied warranty lasts, meaning the limitations in the “Limitations and Disclaimer” section above may not apply to you. The terms of this Limited Warranty will

apply to the extent permitted by applicable law. For a full description of your legal rights you should refer to the laws applicable in your jurisdiction.

General Exclusions

This Limited Warranty does not apply to any defect resulting from any of the following, each of which may result in your Limited Warranty being voided: (i) abuse, misuse or negligence, on the part of product user (ii) accidents or force majeure events, including but not limited to lightning, flood, earthquake, fire, extreme cold weather, or such other events outside the reasonable control of Humless; (iii) storage, installation, commissioning, modification or repair of your “Humless Battery”, or opening of the external casing of your “Humless Battery”, that is performed by anyone other than Humless or a Humless-certified installer; (iv) failure to operate or maintain your “Humless Battery” in accordance with the Installation and User Manual; (v) any attempt to modify your “Humless Battery”, whether by physical means, programming or otherwise, without the express written consent of Humless; or (vi) removal and reinstallation of your “Humless Battery” at a location other than the original installation location, without the express written consent of Humless.

Humless Confidential 2017.06 3 of 6

In addition, this Limited Warranty does not cover (a) normal degradation of your battery energy capacity over time; (b) normal wear and tear or deterioration, or superficial defects, dents or marks that do not impact the performance of your “Humless Battery”; (c) noise or vibration that is not excessive or uncharacteristic and does not impact your battery’s performance; (d) damage or deterioration that occurs after the expiration or voiding of the warranty period; or (e) theft of your “Humless Battery” or any of its components.

Exclusion for Failure to Connect to the Internet or Failure to Register your “Humless Battery”

In order to provide this Limited Warranty, Humless requires the ability to update your “Humless Battery” through remote firmware upgrades. Installation of these remote upgrades may interrupt the operation of your “Humless Battery” for a short period. By installing your “Humless Battery” and connecting it to the internet, you consent to Humless updating your “Humless Battery” through these remote upgrades from time to time, without further notice to you. If your “Humless Battery” is

not connected to the internet for an extended period, or has not been registered with Humless, we may not be able to provide important remote firmware upgrades. In these circumstances, we may not be able to honor your full ten-year Limited Warranty. We would prefer to avoid this, so will try to notify you if your battery internet connection is interrupted for an extended period. It is difficult for us to contact you if you have not registered your “Humless Battery” with us, so please register your “Humless Battery” with Humless at the following website: www.tritonsolar.com. Even if we can’t honor your full ten-year Limited Warranty for the above reasons, we will always honor your Limited Warranty for at least four years following the date your “Humless Battery” was installed or commenced operation for the first time, whichever is earlier.

California Proposition 65 Warning

We are required to advise you that lithium-ion batteries may contain chemicals known to the State of California to cause cancer, birth defects and reproductive harm. We don’t expect you to come into contact with any part of your “Humless Battery” other than the external casing. If you do, please wash your hands afterwards.

Modifications and Waivers

No person or entity, including a Humless employee or authorized representative, can modify or waive any part of this Limited Warranty. Humless may occasionally offer to pay some or all of the cost of certain repairs that are not covered by this Limited Warranty, either for specific “Humless Battery” models or on an ad hoc, case-by-case basis. Humless reserves the right to do the above at any time without incurring any obligation to make a similar payment to other “Humless Battery” owners.

Limitation of Liability

Humless SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES ARISING OUT OF OR RELATED TO THIS LIMITED WARRANTY, REGARDLESS OF THE FORM OF ACTION AND REGARDLESS OF WHETHER Humless HAS BEEN INFORMED OF, OR OTHERWISE MIGHT HAVE ANTICIPATED, THE POSSIBILITY OF SUCH DAMAGES. Humless’s LIABILITY ARISING OUT OF A CLAIM UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE AMOUNT YOU PAID FOR YOUR “Humless Battery”.

SOME STATES DO NOT ALLOW, OR RESTRICT, THE EXCLUSION OR LIMITATION OF DAMAGES, INCLUDING INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU, OR MAY ONLY APPLY TO A LIMITED EXTENT.

Limitation on Use

YOUR “Humless Battery” IS NOT INTENDED FOR USE AS A PRIMARY OR BACK-UP POWER SOURCE FOR LIFE-SUPPORT SYSTEMS, OTHER MEDICAL EQUIPMENT, OR ANY OTHER USE WHERE PRODUCT FAILURE COULD LEAD TO INJURY TO PERSONS OR LOSS OF LIFE OR CATASTROPHIC PROPERTY DAMAGE. Humless DISCLAIMS ANY AND ALL LIABILITY ARISING OUT OF ANY SUCH USE OF YOUR “Humless Battery”. FURTHER, Humless RESERVES THE RIGHT TO REFUSE TO SERVICE ANY “Humless Battery” USED FOR THESE PURPOSES AND DISCLAIMS ANY AND ALL LIABILITY ARISING OUT OF Humless’S SERVICE OR REFUSAL TO SERVICE YOUR “Humless Battery” IN SUCH CIRCUMSTANCES.

Governing Law

This Limited Warranty shall be governed by the internal substantive laws of the State of New Jersey, without respect to its conflict of laws principles. The parties acknowledge that this Limited Warranty may evidence a transaction involving interstate commerce. Notwithstanding the preceding sentences with respect to the substantive law, any arbitration conducted pursuant to the terms of this Limited Warranty shall be governed by the Federal Arbitration Act (9 U.S.C. §§ 1-16). The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. You agree to submit to the personal jurisdiction of the federal and state courts located in Camden County, New Jersey for any actions for which we retain the right to seek injunctive or other equitable relief in a court of competent jurisdiction to prevent the actual or threatened infringement, misappropriation or violation of our copyrights, trademarks, trade secrets, patents, or other intellectual property or proprietary rights, as set forth in the Arbitration provision below, including any provisional relief required to prevent irreparable harm. You agree that Camden County, New Jersey is the proper forum for any appeals of an arbitration award or for trial court proceedings in the event that the arbitration provision below is found to be unenforceable.

Arbitration

READ THIS SECTION CAREFULLY BECAUSE IT REQUIRES THE PARTIES TO ARBITRATE THEIR DISPUTES AND LIMITS THE MANNER IN WHICH YOU CAN SEEK RELIEF FROM Humless.

For any dispute with Humless in connection with this Limited Warranty, you agree to first contact us at the email address identified below and attempt to resolve the dispute with us informally. If the dispute has not been resolved after 60 days, we each agree to resolve such dispute through binding arbitration under the Optional Expedited Arbitration Procedures then in effect for the Judicial Arbitration and Mediation Services (“JAMS”). JAMS may be contacted at www.jamsadr.com. The existence, content and result of the arbitration shall be held in confidence by all participants. The arbitration will be conducted by a single arbitrator selected by agreement of the Parties or, failing such agreement, appointed in accordance with the JAMS rules. The arbitration shall be conducted in English and in Philadelphia, Pennsylvania. If you are using your “Humless Battery” for commercial purposes, each Party will bear its own expenses in the arbitration and will share equally the costs of the arbitration; provided, however, that the arbitrator may, in their discretion, award reasonable costs and fees to the prevailing Party. If you are an individual using your “Humless Battery” for non-commercial purposes: (i) JAMS may require you to pay a fee for the initiation of your case, unless you apply for and successfully obtain a fee waiver from JAMS; (ii) the award rendered by the arbitrator may include your costs of arbitration, your reasonable attorney’s fees, and your reasonable costs for expert and other witnesses; and (iii) you may sue in a small claims court of competent jurisdiction without first engaging in arbitration, but this does not absolve you of your commitment to engage in the informal dispute resolution process. Any judgment on the award rendered by the arbitrator may be entered in any court of competent jurisdiction. Nothing in this Section shall be deemed as preventing Humless from seeking injunctive or other equitable relief from the courts as necessary to prevent the actual or threatened infringement, misappropriation, or violation of our data security, intellectual property rights or other proprietary rights.

Class Action/Jury Trial Waiver

WITH RESPECT TO ALL PERSONS AND ENTITIES, REGARDLESS OF WHETHER THEY HAVE OBTAINED OR USED THE PRODUCT FOR

PERSONAL, COMMERCIAL OR OTHER PURPOSES, ALL CLAIMS MUST BE BROUGHT IN THE PARTIES' INDIVIDUAL CAPACITY, AND NOT AS A PLAINTIFF OR CLASS MEMBER IN ANY PURPORTED CLASS ACTION, COLLECTIVE ACTION, PRIVATE ATTORNEY GENERAL ACTION OR OTHER REPRESENTATIVE PROCEEDING. THIS WAIVER APPLIES TO CLASS ARBITRATION, AND, UNLESS WE AGREE OTHERWISE, THE ARBITRATOR MAY NOT CONSOLIDATE MORE THAN ONE PERSON'S CLAIMS. YOU AGREE THAT YOU AND Humless ARE EACH WAIVING THE RIGHT TO A TRIAL BY JURY OR TO PARTICIPATE IN A CLASS ACTION, COLLECTIVE ACTION, PRIVATE ATTORNEY GENERAL ACTION, OR OTHER REPRESENTATIVE PROCEEDING OF ANY KIND.

Claims Process

In order to make a claim under this Limited Warranty, please contact the Humless Authorized Reseller who sold you your "Humless Battery". If you are unable to contact the Humless Authorized Reseller who sold you your "Humless Battery", or if you purchased your "Humless Battery" directly from Humless, you should contact Humless at the address, email address or telephone numbers identified below. For a warranty claim to be processed, it must include (i) proof of the original purchase of your "Humless Battery" and any subsequent transfers of ownership, (ii) a description of the alleged defect(s), and (iii) your Humless Battery serial number and original installation date. Prior to returning any Product to Humless, an RMA (Return Merchandise Authorization) number is required.

Notes:

Notes:
