

Disposal & Recycling

Disposal & Recycling of a used or damaged Avon LFP battery must either be done at a certified recycling location. There are many of these nationwide or returned to your point of purchase or directly to Avon Batteries – please see www.avonbattery.co.uk for details.

Warranty

Avon LFP batteries are supplied with a 6-year (except Golf applications which is 3 years) warranty from the date of purchase (please keep your proof of purchase) or 2000 cycles @ it's maximum discharge current (refer to product specification sheet), whichever comes first and is dependent upon correct application.

Note: A full cycle is determined by your battery being fully discharged down to 10% of its designed capacity and then re-charged to 100% capacity. The warranty period assumes no more than one full cycle per 24hr period.

In the event of a valid warranty claim your supplier will, at its discretion & consultation with AVON Battery, supply a new or re-conditioned replacement battery dependent on how many years have passed since the date of purchase or how many cycles the battery has undertaken to ensure the original intended warranty period is achieved.

Whilst the AVON LFP has a warranty life of 6 years or 2000 cycles, its design life is far greater, i.e. 3000 cycles @ 80% DOD or up to 6000 cycles @ 50% DOD (Depth of Discharge)

Conditions

1. Any warranty claim will only be validated by a proof of purchase
2. The warranty is invalid if the battery has been subject to misuse, abuse or physical damage
3. Your AVON LFP battery must be of the correct size, design and capacity for the intended Application
4. The battery should be installed and operated at a temperature not exceeding the batteries design limits as noted on the full specification sheet
5. The warranty shall become null & void if the battery becomes unserviceable due to misuse or subjected to instances such as: fire, abuse, modification or it suffers from an attempt to be re-charge in a below zero °C temperature (unless fitted with heating) and \or an over discharged state. This includes the battery being subjected to instance outside of the Cells or BMS
6. Installation of the battery must be performed by a responsible and qualified person
7. Warranty is not transferable

In The Event Of A Warranty Claim

1. Contact or return to the original point of purchase
2. If returning via a courier service, the battery must only be returned in compliance with the transport and packaging regulations ruling at the date of return. Failure to do this may result in the carrier refusing to handle the battery
3. Warranty is on a 'Return To Base' basis to your place of purchase

Safety and Product Limitations

- Keep out of the reach of children
- Do not under any circumstances disassemble this battery
- Do not immerse the battery in liquid
- Do not use the battery with damaged cables or terminals
- This battery is not designed for high rate discharge applications
- Do not expose the battery to fire or crush or puncture its casing
- Do not mix an AVON LFP battery with any other brand of Lithium OR Lead Acid batteries, in any series or parallel configuration and do not mix new batteries with used batteries

Limited Liability

The manufacturer nor any of its employees, agents, distributors or resellers are liable for any third-party damage howsoever caused. The extent to which the manufacturer is liable to a customer is limited to the purchase price paid by the customer for their AVON LFP battery



Lithium Iron Phosphate Battery (LiFePO4)

AVON LFP User Guide

This guide should be read in conjunction with the appropriate battery's specification sheet for any specific requirements, this should be available from your point of purchase. Alternatively, it is downloadable from www.avonbattery.co.uk

1. All AVON LFP batteries are supplied partially charged. Therefore, please ensure your battery is fully charged BEFORE it goes into service
2. Your AVON LFP battery can be charged by 99% of all current Lead Acid battery chargers as the charge is controlled by the batteries internal BMS (Battery Management System), However, we advise to use a charger that has either an 'AGM' or 'GEL' setting. If in doubt, consult your AVON Battery distributor or the Avon Battery web Site
3. The Bluetooth App, where fitted, may give inaccurate information for the first 4 - 10 charge and discharge cycles. During these initial cycles the BMS is balancing and calibrating the multiple lithium cells and the App is learning each batteries parameters
4. If you intend to use multiple AVON LFP batteries in series, parallel or both please see page 1 of this manual for detailed instructions



More information can be found via the AVON Battery Website

www.avonbattery.co.uk

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IMPORTANT : PLEASE READ BEFORE USE

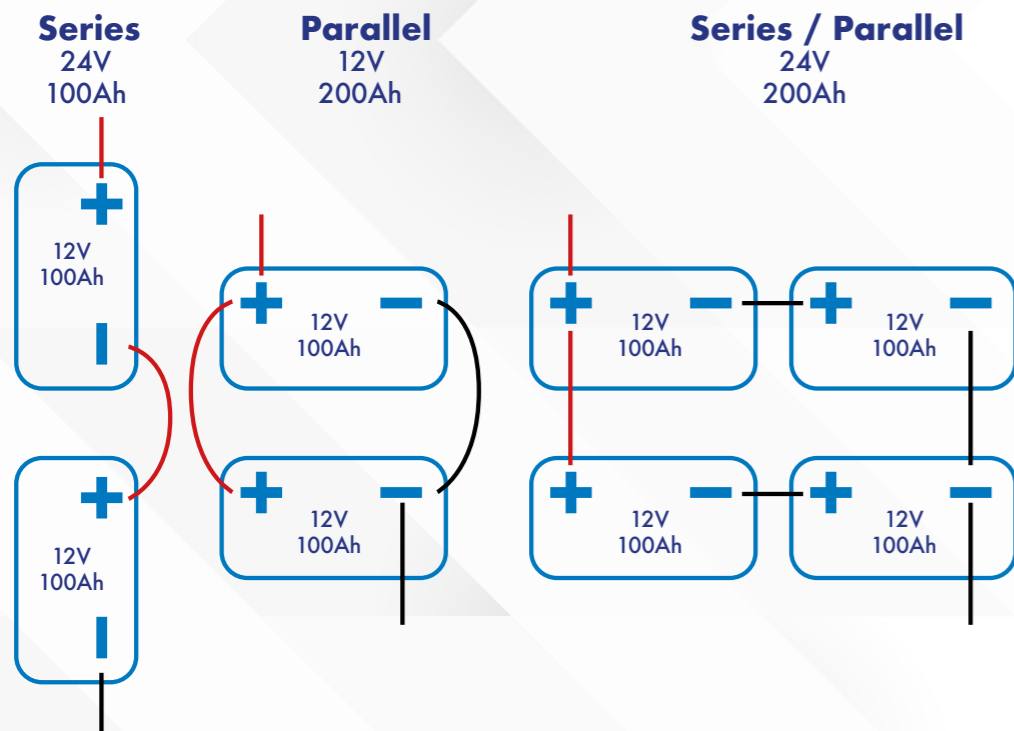
Thank you for purchase of an **AVON LFP** lithium iron phosphate (LiFePO4) battery

Below are important points on how to get the best from your **AVON LFP** battery

You **MUST** ensure your battery or batteries are fully charged before use

- Always ensure you take care to connect your battery or batteries in the right way, paying special attention to the Positive (+) & Negative (-) terminals and connections
- Don't short circuit your battery otherwise permanent damage could be caused
- Avoid placing your battery in direct sunlight although it will work well in a wide temperature range (-20 to +60 degrees C)
- Avoid using in damp or wet conditions unless using an all-weather enclosure such as a battery box
- AVON LFP batteries can be connected and used in Series or Parallel configurations, OR Series\Parallel combination configurations (Please see the appropriate Specification Sheet for more details)
- If you are using more than 1 AVON LFP battery in a bank, please ensure they are the same capacity and state of charge, and preferably balanced to within 0.05v of each other to achieve the best results
- Whilst your AVON LFP battery will work in any orientation except upside-down, for the best performance of your AVON LFP battery, it is best for it to be positioned with its terminals facing upward

Example layouts are as below:



In any fitment where charging is via a dynamo or alternator, it is strongly advised to fit a DC-DC charger to control voltage. In systems that use a 'Smart Alternator' or where the voltage is above 15v for a 12v system or multiple's thereafter for series banks, a DC-DC charger **MUST** be fitted to avoid the BMS shutting down to protect the battery.

Most Mains lead acid battery chargers will charge your AVON LFP battery but some chargers that are smart chargers or those that have multiple stages (more than 3) may only show a state of charge up to 90%. If this is the case, we recommend speaking to your supplier for advice on alternative chargers. However, you will not cause any damage to the battery if using your old charger.

Accessing the **AVON LFP** App

The App is available for all Apple and Android devices. Search the Apple or Android App stores for AVON LFP and download for free. You can also download the Android App directly from www.avonbattery.co.uk. The App will give you visibility of your AVON LFP battery and its performance. The App works via Bluetooth so you need to be within 10m of the battery to access it.



PART NUMBER	Volts	Ah	DIMENSIONS (MM)
ALFP1212	12.8	12	151 X 98 X 101 (LxWxH)
ALFP1224	12.8	24	181 X 77 X 167 (LxWxH)
✳ ALFP1236BT	12.8	36	195 X 133 X 171 (LxWxH)
✳ ALFP1284BT	12.8	84	260 X 169 X 218 (LxWxH)
✳ ALFP12100BT	12.8	100	328 X 172 X 220 (LxWxH)
✳ ALFP12120BT	12.8	120	355 X 175 X 190 (LxWxH)
✳ ALFP12150BT	12.8	150	483 X 170 X 240 (LxWxH)
✳ ALFP12200BT	12.8	200	522 X 238 X 218 (LxWxH)
✳ ALFP2440BT	25.6	40	260 X 168 X 209 (LxWxH)
GOLF SPECIFIC PART NUMBERS			
ALFP1218G	12.8	18	168 X 128 X 75.5 (LxWxH)
ALFP1225G	12.8	25	168 X 128 X 102 (LxWxH)

*12.8V for 12V nominal & 25.6V for 24V nominal



If you are using more than one AVON LFP battery, you are only able to identify each battery by the use of its serial number in the same way as if you are using a single battery

All batteries will appear in the search list if they are near to one another

This applies where you are using banks of batteries whether they be in Series, Parallel, or Series\Parallel configurations

Viewing of battery banks as a whole is planned in a later revision of the AVON LFP App

If you have any questions about this connectivity, please speak to your distributor or visit www.avonbattery.co.uk

NOTE – only one Apple/Android device at a time can be connected to each battery

NOTE – do not mix new AVON LFP batteries with old batteries, or batteries of different technologies including lead acid, whether in series or parallel

Storage of AVON LFP

Your AVON LFP battery has an extremely low rate of self-discharge but if you intend not to use the battery for an extended period of time please fully charge it prior to storage. It is recommended to re-charge it once every 6 months

NOTE – allowing the battery to over discharge (+6 months since its last charge) can lead to a shortened life. When connecting to the AVON LFP use the nuts and washers provided