

Battery Usage, Charging and Storing Guidelines for Newland EMEA Mobile Computers with Lithium-Ion Batteries

This document is designed to provide you with essential information on how to safely and effectively use and maintain Newland EMEA batteries in conjunction with Newland EMEA mobile computers. By following these guidelines, you will not only ensure the longevity and performance of your equipment but also prioritize user safety.

Using and Charging Li-ion Batteries for Newland EMEA Mobile Computers

- 1. **Initial Charge**: When you first receive your mobile computer, it's a good practice to fully charge the battery before initial use.
- 2. **Use Genuine Chargers**: Use the charger provided by Newland EMEA for your mobile computer or a compatible charger. Avoid using third-party chargers unless they are certified for use with your Newland EMEA mobile computer. Charge the battery in a well-ventilated area, away from flammable materials.
- 3. **Optimal Charging Conditions:** For the best battery lifespan, charge Newland EMEA batteries in a well-ventilated room with a temperature below 30°C (86°F).
- 4. **Regular Use**: It's generally recommended to use your Newland EMEA mobile computer and Li-ion battery regularly. Even if you don't use the mobile computer often, charge the battery at least every few months to prevent it from deep-discharging. Avoid discharging them below 5% to prevent permanent capacity loss due to self-discharge.
- 5. **Battery Lifespan and Replacement**: A battery's lifespan is influenced by various factors, such as the number of charge/discharge cycles, usage and storage conditions, charge levels during storage, and operational demands. Expect to replace Li-lon batteries typically after 300 to 500 full charge-discharge cycles or when capacity drops to the range of 70% to 80%. The actual number of cycles varies depending on usage patterns, temperature, age, and other factors.
- 6. Monitoring Battery Life: Periodically check the stored batteries for any signs of damage. If you notice any issues, replace or properly dispose of the battery. If there is a significant reduction in the operating time of your Newland EMEA mobile computer, it may indicate that the battery has reached the end of its useful life and should be replaced.
- 7. **Battery Handling**: Handle the batteries with attention and care. Dropping, crushing, or mishandling a Newland EMEA battery or a Newland EMEA mobile computer containing a battery may pose a fire or chemical burn hazard.
- 8. **Handling Damaged Batteries**: Handle damaged or leaking Newland EMEA batteries with extreme caution, as mishandling can result in personal injury.



- 9. **Proper Disposal**: Properly dispose of used Newland EMEA batteries. Follow your local regulations for battery disposal and recycling. As a precaution, insulate the battery terminals with tape before disposal.
- 10. **Prevent Stacking Objects**: Do not stack objects or materials on top of Newland EMEA batteries, as this can damage them.
- 11. **Keep Away from Potential Hazards**: Store Newland EMEA batteries away from conductive or flammable materials to minimize potential risks.
- 12. **Child Safety**: Ensure that Newland EMEA batteries are kept out of the reach of children to prevent accidents and mishandling of the batteries or mobile computers.
- 13. **Prevent Short-Circuiting**: Exercise caution to avoid short-circuiting a Newland EMEA battery across the terminals or with other batteries. This includes carrying batteries in pockets containing conductive materials.
- 14. **Avoid Water Exposure**: Do not expose Newland EMEA batteries to water.
- 15. **Microwave Warning**: Do not attempt to place Newland EMEA mobile computers or batteries in a microwave, as it can lead to damage and safety hazards.
- 16. **Avoid Disassembling the Battery**: Refrain from attempting to disassemble or pierce a Newland EMEA battery with sharp objects.
- 17. **Removing the Battery**: When removing a Newland EMEA battery from a mobile computer, use appropriate tools and avoid sharp objects to prevent damage or injury.

Storing Li-ion Batteries for Newland EMEA Mobile Computers

- 1. **Optimal Storage State**: Avoid storing batteries in either a fully charged or fully depleted state. Maintain batteries within 30% to 50% charge level during storage. This helps to minimize self-discharge during storage.
- 2. **Store in Cool, Dry Places**: Store batteries for Newland EMEA mobile computers in cool, dry places at less than 70% humidity and non-condensing. Moisture can damage Li-ion batteries.
- 3. **Avoid Extreme Temperature**: Store batteries within the temperature range of 5°C to 30°C (41°F to 86°F). Do not expose the batteries to temperatures exceeding 60°C (140°F). Extreme hot and cold temperatures can adversely affect battery performance and safety.
- 4. **Avoid Direct Sunlight**: Keep batteries away from direct sunlight and heat sources.



By adhering to these comprehensive guidelines, you can ensure the safe and efficient use of Newland EMEA batteries with your Newland EMEA mobile computers, prioritizing both user safety and the longevity of your equipment.