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### **Travelling with the Nippy 3+** **Important information**

All models in the Nippy 3+ range are equipped with a universal input power supply. This means that you can travel anywhere in the world and plug into the local electrical supply, provided you use the correct mains lead or an adaptor.

The voltage must be between 100 and 240 volts ac. Check before travelling. Some countries have very unreliable supplies. You should consider this before travelling.

Your Nippy may be powered from internal and/or external batteries. These are of the rechargeable Lithium ion type. Do check the health (run times) of your batteries before travelling.

The transport of Lithium ion is regulated by various bodies (IATA, IMO, ADR, US-DOT) that follow the United Nations "Recommendations for the transport of dangerous goods."

If flying certain restrictions apply to the carriage of lithium ion batteries even when carried by passengers as hand luggage. Only batteries that have successfully passed the tests outlined in Part III, subsection 38.3 of the UN Manual of test and criteria may be carried on board an aircraft.

These restrictions are set out in the ICAO Technical Instruction for the Safe Transport of Dangerous Goods by Air and the IATA Dangerous Goods Regulations (DGR)

The following subsections of the International Air Transport Association (IATA) Regulations must be adhered to & your Nippy ventilator and batteries do comply with all the requirements.

#### **2.3.4.7 Lithium Battery-Powered Electronic Devices**

Lithium battery-powered electronic devices are permitted in checked and carry-on baggage with the approval of the operator as follows:

(a) portable medical electronic devices (Automated External Defibrillators (AED), Nebulizer, Continuous Positive Airway Pressure (CPAP), etc.) containing lithium metal or lithium ion cells or batteries may be carried by passengers for medical use as follows:

1. for lithium metal or lithium alloy batteries, a lithium content exceeding 2 g, but not exceeding 8 g; or
2. for lithium ion batteries, a watt-hour rating exceeding 100 Wh, but not exceeding 160 Wh;
3. batteries must be of a type that meets the requirements of the UN Manual of Tests and Criteria, Part III, subsection 38.3.

### 2.3.5.9 Portable Electronic Devices (including medical devices) containing Batteries

2.3.5.9.1 Portable electronic devices (including medical devices) (such as watches, calculating machines, cameras, cellular phones, lap-top computers, camcorders, etc.) containing batteries when carried by passengers or crew for personal use,

which should be carried in carry-on baggage. Spare batteries must be individually protected to prevent short circuits by placement in the original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch, and carried in carry-on baggage only. In addition, lithium batteries are subject to the following conditions:

- (a) each installed or spare battery must not exceed:
  - 1. for lithium metal or lithium alloy batteries, a lithium content of not more than 2 g; or
  - 2. for lithium ion batteries, a watt-hour rating of not more than 100 Wh.
- (b) batteries and cells must be of a type that meets the requirements of the UN *Manual of Tests and Criteria*, Part III, subsection 38.3;

#### 2.3.3.2 Spare Lithium Batteries

Spare lithium batteries are permitted in carry-on baggage as follows:

- (a) for portable medical electronic devices (Automated External Defibrillators (AED), Nebulizer, Continuous Positive Airway Pressure (CPAP), etc.):
  - 1. no more than 2 lithium ion batteries with a watt-hour rating exceeding 100 Wh but not exceeding 160 Wh or lithium metal batteries, with a lithium content exceeding 2 g but not exceeding 8 g may be carried;
  - 2. spare batteries must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch);
  - 3. batteries must be of a type that meet the requirements of the UN Manual of Tests and Criteria, Part III, subsection 38.3. No more than two individually protected spare batteries per person may be carried.

The batteries used for the nippy have passed the UN tests and they are rated at 127.5 Watt hours, so they are permitted on board.

You may take up to 2 external batteries with you as spares. Please pack them carefully.

**If you are travelling by air, it is best to tell the airline that you are travelling with a ventilator and batteries at the time of booking the flight.** This gives them plenty of time to gather information about your equipment. They will not allow this type of equipment on board unless they are satisfied that it is completely safe.

There are no safety issues regarding air travel with these ventilators, but the airline need to be able to show that they checked.

Your airline may want to know about the type of batteries you plan to take on board.  
The internal batteries are Lithium ion  
The nominal voltage is 18.75 volts  
The capacity is 127.5 Watt hours  
Each battery contains the equivalent of 10 grams of lithium  
They are sealed  
They cannot leak or spill.  
Copies of the manufacturer's safety data sheet are available to the airline from B & D Electromedical.

- **Always carry your Nippy onto a plane as cabin baggage.**
- **If you have a spare Nippy, take it with you.**
- **Always check your battery run times before travelling**

If you require further assistance please contact us by phone 01789 293460  
or e-mail: [quality@nippyventilator.com](mailto:quality@nippyventilator.com)

If you need to use your ventilator during the flight again this should not be a problem.  
The + range of ventilators are all FAA compliant (a label stating FAA compliance on the underside of the ventilator confirms this compliance but the airline may require copy of the FAA compliance declaration.)



## FAA Compliance for B & D Electromedical Devices

To Whom it may concern,

In line with the requirements of US Dept. of Transportation (DOT) final rule 73 FR 27614, May 13, 2008, as modified by Corrective Notice of 74 FR 11469, March 18, 2009, respiratory assistive devices may be used onboard aircraft, without further testing by the carrier, provided they have been tested for electromagnetic compatibility (EMC) in accordance with RTCA/DO-160, Section 21, Category M.

A sample of the following devices manufactured by B & D Electromedical has been tested and found to comply with RTCA/DO-160, Section 21, conducted emissions 150kHz – 152MHz and radiated emissions 100Mhz – 6GHz to category M limits.

Test results available from [quality@nippyventilator.com](mailto:quality@nippyventilator.com).

These devices are therefore considered to be FAA compliant.

Nippy 3+ ventilator  
Nippy Junior+ ventilator  
Nippy ST+ ventilator  
Nippy S+ ventilator

Signed



Quality & Compliance Manager  
B & D Electromedical

15<sup>th</sup> January 2016