

Din forhandler



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**USER GUIDE**  
**Concens C3 NiMH Battery Charger**  
**C3-CHG-01-xx-00**  
**Battery charger for**  
**Nickel-MetalHydrid (NiMH) batteries**

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## 2. Introduction

The Concens C3 series is a range of battery-based actuator controllers developed especially for mobile applications. The C3 battery charger is used to charge the battery for the C3 system.

Symbols used:



Attention: Consult accompanying documents

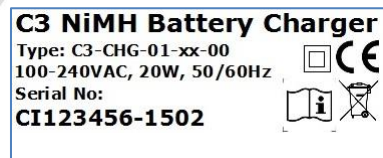
## 3. Technical data and model designation

Input voltage: 100-240VAC  
Input frequency: 50/60Hz  
Power rating: Maximum 20W

Output voltage: 24VDC  
Output current: Maximum 400mA

Other conditions  
Temperature: 5°C to 40°C  
Relative humidity: 20% to 70%  
Atmospheric pressure: 1atm

Model designation and label:  
C3-CHG-01-00-00: Universal charger unit w/o cable  
C3-CHG-01-EU-00: Charger unit including cable for Europe  
C3-CHG-01-UK-00: Charger unit including cable for United Kingdom  
C3-CHG-01-US-00: Charger unit including cable for United States  
C3-CHG-01-AU-00: Charger unit including cable for Australia



## 4. Using the battery charger

Before the C3 system can be used, the battery must be charged using the C3 battery charger. It takes 5-8 hours to fully charge a battery.



Battery mounted in charger

The yellow LED lights up when the charger is connected to power. Place the battery in the charger by sliding it in and rotating it until it is pulled into place by the magnets. The green LED will flash at approx. 1 second intervals while the battery is being charged. Once charging is complete the green LED remains permanently lit. Remove the battery by rotating it 90 degrees. It will then be ejected and be ready for use in the C3 controller.



Battery mounted in the controller – ready for use

When the battery requires recharging, transfer it to the charger as described above. It is recommended that you keep an extra battery on hand to avoid disruption to operation.

## 5. Tips

It is recommended that you follow the tips below to achieve the best results and avoid problems in daily operation.

### General:

- If the battery's safety thermostat is activated due to overload, the battery must be allowed to cool for at least half an hour before being charged or used again. A new battery may be inserted into the controller after one minute.
- Always wait at least two seconds after the last actuator has stopped before removing the battery from the controller. Otherwise controllers using position feedback may not have time to store the position, and the controller will have to be 0-point calibrated again.

### Batteries:

- Always use batteries which are in good condition and fully charged when inserted into the controller.
- You can extend the lifetime of the battery by occasionally recharging it even though it is not fully discharged.
- If the battery level drops below the critical level and the system shuts down, you must wait at least one minute before inserting a different battery and using the system again.
- If the system is not to be used for an extended period (several days or weeks), the battery should be removed from the controller to avoid deep discharge, which can cause lasting damage to it.

### Handling:

- Avoid getting metal shavings or other magnetic objects on the battery poles or in the charger.