# Kongsberg cNODE Micro

Quick Reference Guide



# Charging the battery (on-deck)

Charging a battery is a process with an inherent risk so check applicable procedure(s) prior to charging in order to first assess the level of the inherent risk; and then, if necessary, apply suitable controls to mitigate the inherent risk before charging. Follow the charging procedure carefully.

#### **Context**

The battery must be fully charged before long term storage and it is recommended to recharge the battery every 6 months to make sure the battery does not discharge completely over time. A completely discharged battery will not charge, as all lithium ion batteries. When battery and transponder are shipped separately, the battery "must be shipped at a state of charge (SoC) not exceeding 30% of their rated capacity" in order to be in compliance with IATA regulations.

The cNODE MiniS battery charger is for charging cNODE MiniS batteries and cNODE Micro batteries only. Never use it for other purposes. The battery charger will only charge when a battery's state of charge is less than 96% of its rated capacity.



Important \_

Equalize the temperature of the cNODE Micro to between 10 °C and 40 °C before charging it.

Always use the cNODE MiniS battery charger for on-deck charging of cNODE MiniS batteries and cNODE Micro batteries.

Never charge batteries unattended.

#### **Procedure**

- 1 Disconnect the on/off plug from the cNODE transponder.
- 2 Let the unit warm up or cool down to an ambient temperature of 10 °C to 40 °C before charging.
- 3 Connect the battery charger plug to the connector on the transponder marked CHARGE.

4 Connect the battery charger to mains (110 or 220 VAC).

#### Result

The LED indicator on the charger flashes green when charging. It normally takes about 30 seconds before the charging starts and the LED indicator starts flashing green after connecting the cNODE battery charger to the mains. The battery will be charged within 1 hour. The LED indicator will stay green when fully charged.

# **Turning on the transponder**

The transponder is designed for operation in water only. The transponder may be operated in air for test purposes over a short period of time.

## **Prerequisites**

The transponder must be charged before use.

#### **Procedure**

- 1 Grease the connector with Molykote 44 Medium or equivalent grease.
- 2 Connect the on/off plug to the end cap connector.
- 3 Tighten the locking sleeve to the end cap connector.

#### Result

A buzz can be heard within 25 seconds as a confirmation that the transponder is activated.

### **Further requirements**

It is recommended to test the transponder with the Test and Configuration unit (TTC) to make sure it is working properly before operation.

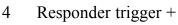
# Connecting the transponder to external power and responder signals

## **Prerequisites**

The transponder must be charged before use. This is the pin configuration for a male connector, as seen towards the connector (face view).



1 2 3



- 5 Responder trigger -
- 6 On/Off
- 7 External power (24 VDC)
- 8 Ground

#### **Procedure**

- 1 Use the cable with part number 402462 from Kongsberg.
- 2 Connect wire 6 and 8 in the pigtail (the ON/OFF function).

When 6-8 are linked, the transponder is ON.

With no connection between 6-8, the transponder is OFF.

- 3 Make sure that the external power supply 24 VDC is between 20 and 28 VDC.
- 4 Check the responder trigger signal.
- 5 Switch ON the unit by inserting the external power/responder cable.

## **Support information**

Should you need technical support for your cNODE Micro transponder you must contact a Kongsberg Maritime office. A list of all our offices is available on our website. You can also contact our main support office in Norway.

Manuals and technical information can be downloaded from our support website.

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