

Installation Manual: clickahoy Pro

A GUIDE TO SMART BOATING

V2.1

Interface

Supply Voltage Monitoring
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NMEA 2000 Connectivity

Included

Advanced LTE Modul
Internal Battery
International Simcard
IP65 Waterproof Case

Connection to the c.technology Cloud





1. Pinout

The following table shows an overview about the interfaces of the clickahoy Standard. **The colors in the most left column correspond to the color of the signal cables from the clickahoy system**

clickahoy Pro	Pin Name	Description	Sensor & Components
+10...30 V DC	VCC (10-30V) DC (+)	Power Supply (10-30 V DC)	Main Battery (+)
GND	GND (0V) (-)	Ground Pin DC (-)	Main Battery (-)
AIN1	AIN1	Analog Input 1. Input Range: 0-30V	Fuel Sensor / Battery / Landline / Watersensor
AIN2	AIN2	Analog Input 2. Input Range: 0-30V	Arbitrary Analog Sensors / Landline / Watersensor
AIN3	AIN3	Analog Input 2. Input Range: 0-30V	Contact Us!
DOUT4/AIN4	AIN4 / DOUT4	Digital output. Open collector output OR Analog input, channel 4. Input range: 0-30V/0-10V DC	Arbitrary Analog Sensors / Landline / Watersensor
DIN1	DIN1	Digital Input 1, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
DIN2	DIN2	Digital Input 2, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
DIN3	DIN3	Digital Input 3, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
DIN4	DIN4	Digital Input 4, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
DOUT1	DOUT 1	Digital output 1. Open collector output. Max. 0,5 A DC.	Contact Us!
DOUT2	DOUT 2	Digital output 2. Open collector output. Max. 0,5 A DC.	Contact Us!
DOUT3	DOUT 3	Digital output 3. Open collector output. Max. 0,5 A DC.	Contact Us!

Note: VCC and GND need to be connected directly to the main(starter) battery such that the system is powered by permanent supply. This ensures full security and 24/7 connectivity.

Power Characteristics

Input Voltage Range	VCC (10-30V) DC (+)
Internal Battery	550mAh 8,4V Ni-MH Battery
Power Consumption	<5 mA (sleep) <45mA (nominal)



Attention! Watch out for possible electric shocks. Never touch both poles of a battery at the same time.



1. NMEA 2000 Connection

The clickahoy Pro can be connected to the NMEA 2000 backbone of your boat. Required is a drop cable (contact support for order) and a T-connector. Connect the 5-pole NMEA connector from the clickahoy system via plug&play.

The clickahoy system can **not** be powered by the NMEA connection.



2. LTE und GNSS Antennas

The external antennas allow for **better signal strength**. Do not mount the antennas too far below deck or behind metal. The antennas can be hidden and do not have to be visible in the open air.



4. Sensor Delivery

Various sensors can be ordered directly via ctechnology. Contact us for more information.



5. Sensors and Components

The clickahoy system offers the ability to observe and control various analog and digital sensors, through connecting with the corresponding inputs. Keep note which sensor is connected to which input, since it will be configured in the clickahoy App or clickahoy WebApp later.



Main Battery - Required

Connect to: VCC, GND - Required

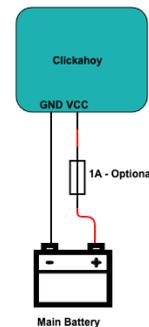
Connect Battery (+) with VCC and Battery (-) with GND. The clickahoy system needs permanent power supply to ensure full security and 24/7 connectivity.

Optional: Insert a 1A fuse between Battery (+) and VCC.



Additional Battery

Connect to: AIN1 or AIN 2 - Optional



Connect addition battery (+) to an analog input. Battery (-) is **not** connected. The potential is measured against Main Battery (-), which should be on the same potential as additional Battery (-) due to internal connection.



Fuel Sensor

Connect to: AIN1 or AIN 2 - Optional

Connect the signal from the fuel gauge or fuel sensor to an analog input. By default, the color of the fuel signal cable is purple. If no clear signal cable can be identified, look for markings or diagrams on the tank sensor that may help.

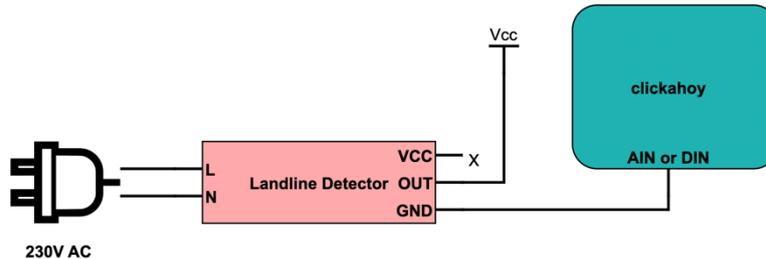
Additionally, the voltage of the signal can be measured. To do this, the tank sensor must be connected, and the ignition switched on. The voltage of the tank signal is in the range ~1V.-8V.



Landline Detection

Connect to: AIN1-2 or DIN1-4 - Optional

Connect the GND signal from the 3 pol socket of the landline detector module to either an analog or digital input. Connect VCC of the 3 pol socket to permanent supply voltage (12V or 24V). Refer to the landline manual for more information!



Water Sensor

Connect to: AIN1-2 or DIN1-4 - Optional

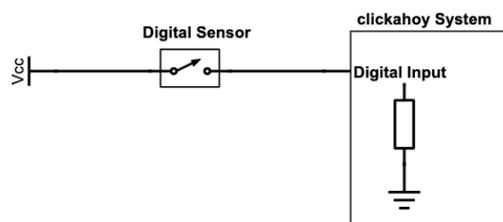
Connect the signal from the water sensor an analog or digital input.



Arbitrary Digital Sensor

Connect to: DIN1-4 - Optional

Any additional, digital sensor can be observed. The requirement is that the sensor has an observable, digital signal which determines the state of the sensor. The digital inputs have an internal pull down.



6. Function Check

A function check can be done via app.clickahoy.io. Therefore, enter the 6-digit code provided for that boat.

Note I: An account (mail & password) must be created in advance

Note II: The 6-digit code must be provided to the owner of the vehicle!



7. App



1. Download the clickahoy app from the App Store or Play Store and open it.



2. Sign in with your account (or create a new one if you don't have one).
3. If the app is launched for the first time, follow the steps in the installation wizard. It can take up to 30 minutes until your boat is connected for the first time.
4. Once the boat is connected, you can use the app normally.
5. To make settings go to *Menu* (top left) -> *Settings* and then to *Boats Settings* to configure your sensors.

Congratulations! Now you have a fully digitized vehicle and benefit from more safety, control, and comfort. Manufactured and developed with cutting-edge technology from Switzerland!

