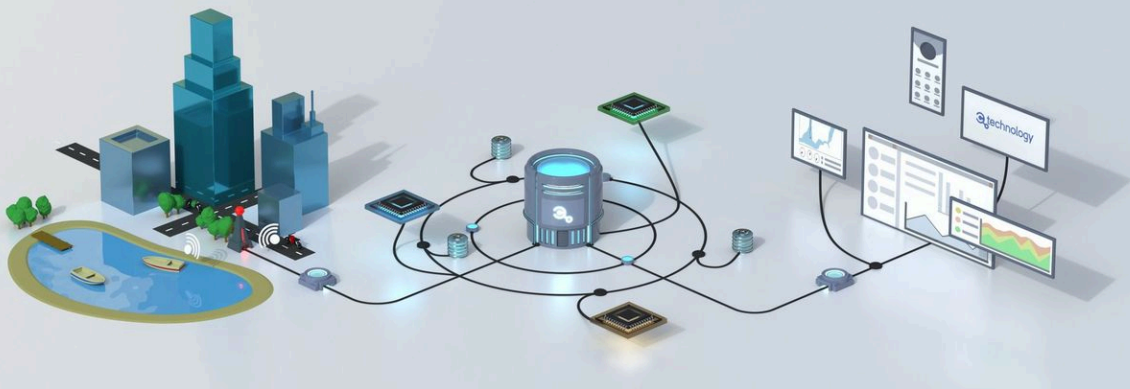


Configuration Manual: "clickahoy Pro"

A GUIDE TO CONNECT WITH THE C.TECHNOLOGY CLOUD & SOFTWARE

V2.1



Interface

Supply Voltage Monitoring
Analog Inputs 4
Digital Inputs 4
Bluetooth Temperature Sensor 6
Digital Output 4
NMEA 2000 Connectivity

Included:














Advanced LTE Modul
Internal Battery
International Simcard
IP65 Waterproof Case
Connection to the c.technology Cloud Infrastructure and Software





1. Pinout

The following table shows an overview about the interfaces of the modules. **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
	VCC (10-30V) DC (+)	Power Supply (10-30 V DC)	Main Battery (+)
	GND (0V) (-)	Ground Pin DC (-)	Main Battery (-)
	AIN1	Analog Input 1. Input Range: 0-30V	Fuel Sensor / Battery / Landline / Watersensor
	AIN2	Analog Input 2. Input Range: 0-30V	Arbitrary Analog Sensors / Landline / Watersensor
	AIN3	Analog Input 2. Input Range: 0-30V	Contact Us!
	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	Digital Input 1, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
	DIN2	Digital Input 2, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
	DIN3	Digital Input 3, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
	DIN4	Digital Input 4, Input Range 0-30V, Threshold 7.5V, 15k Pull Down	Landline / Watersensor / Arbitrary Digital Sensor
	DOUT 1	Digital output 1. Open collector output. Max. 0,5 A DC.	Contact Us!
	DOUT 2	Digital output 2. Open collector output. Max. 0,5 A DC.	Contact Us!
	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 (for maritime vehicles)

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 such as temperature, humidity, landline connection etc. 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 MobileApp or clickahoy WebApp later.



Main Battery - Required

Connect to: VCC, GND - Required

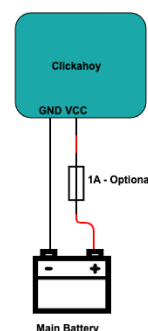
Connect Battery (+) with VCC and Battery (-) with GND. The clickahoy system needs permanent power supply to ensure full security and 24/7 connectivity.

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.

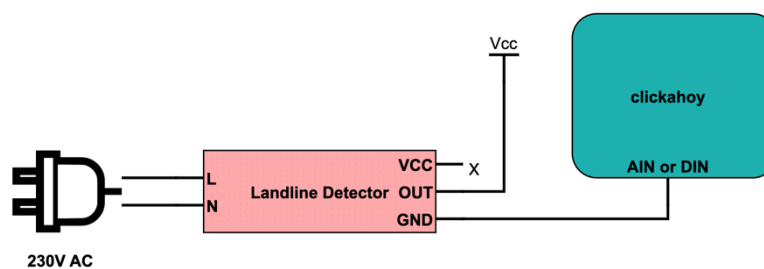
Additionally, the voltage of the signal can be measured. To do this, the tank sensor must be connected, and the ignition switched on. The voltage of the tank signal is in the range ~1V.~8V.



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 (if available)

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

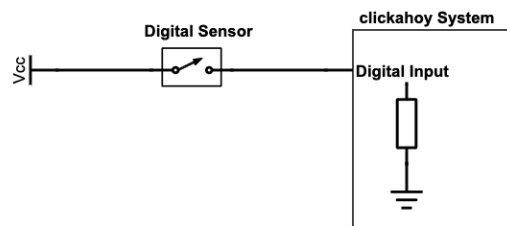
Connect the signal from the water sensor to an analog or digital input.



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.




IOIO
IOIO

6. Function Check

A function check can be done via app.clickahoy.io (maritime vehicles) or app.clickrider.io (on-road vehicles). Therefore, enter the 6-digit code provided for your vehicle.

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!

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

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