

Benutzerhandbuch

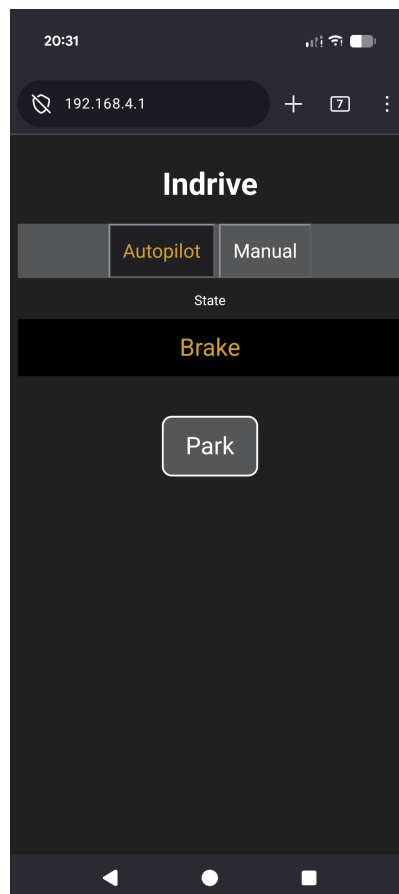


INDRIVE allows you to illuminate car models realistically.

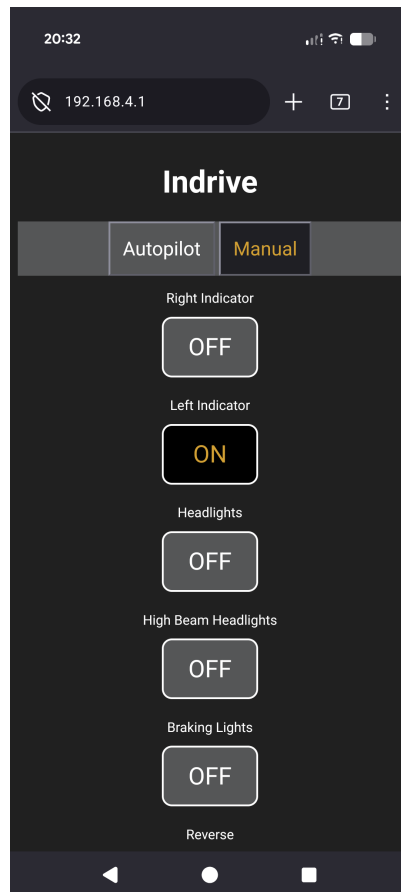
Below is an overview of how to power, connect, and configure INDRIVE.

Autopilot

INDRIVE features a built-in autopilot that simulates a drive to an incident site, sequentially activating the lights as needed.

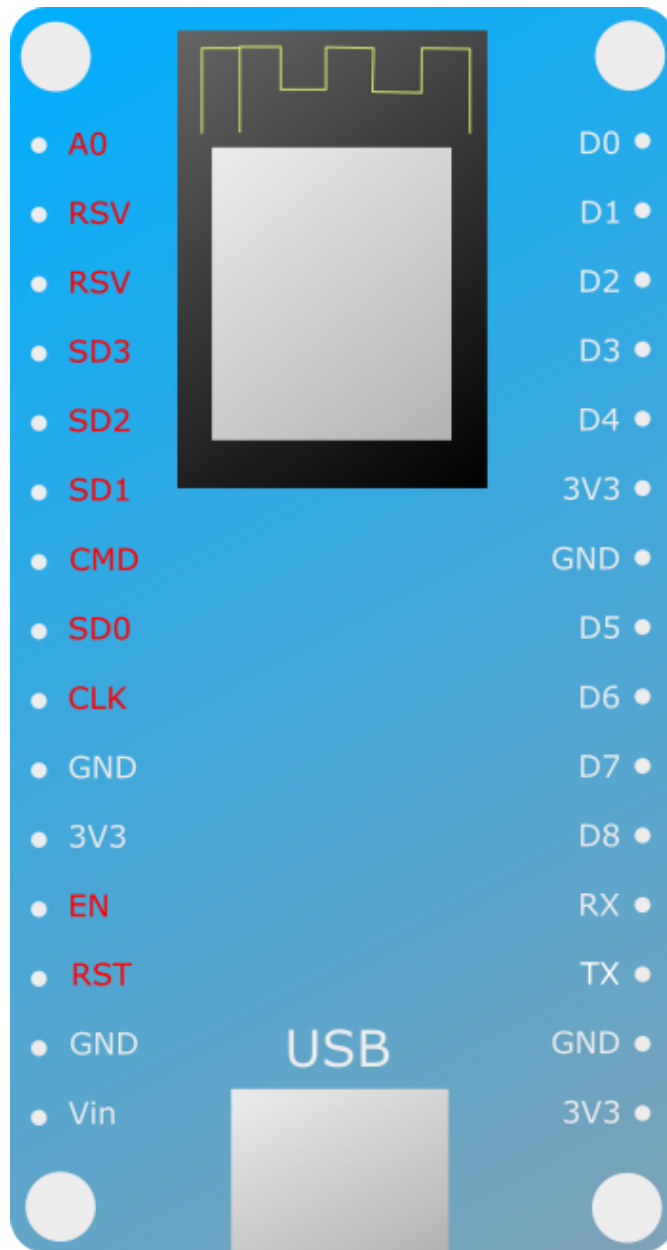


Alternatively, the lights can also be turned on or off manually via the main page. In this case, the autopilot will be deactivated until it is reactivated either via the main page or the settings.



Connection

Chip overview



The image above shows where the individual connections are located.

Power supply

- Via the micro USB port on a PC or a standard USB power supply/power bank
- To two pins **3V3** (red) and the adjacent **GND** (black) with max. 3.3 volts DC
- To the two pins **Vin** (yellow) and **GND** with 5 volts, preferably 7-10V DC

Connecting the LEDs

The output voltage is 3.3 volts.

Name	Function	PIN
Turn signal right	On/Off	D0 - GPIO 16
Turn signal left	On/Off	D1 - GPIO 5
Headlight	On/Off	D2 - GPIO 4
High beam headlight	On/Off	D3 - GPIO 0

Name	Function	PIN
Brake	On/Off	D4 - GPIO 2
Reverse light	On/Off	D5 - GPIO 14
Flashlight 1	On/Off	D6 - GPIO 12
Flashlight 2	On/Off	D7 - GPIO 13
Interior lighting	On/Off	D8 - GPIO 15
Navigation device	On/Off	RX - GPIO 3
Function light	On/Off	TX - GPIO 1

The LED is always connected to the output + one of the GND connections; multiple LEDs can share one GND.

Demo Mode

Since version 2.1.0

INDRIVE has a static demo mode that saves a lighting state and automatically restores it when the chip is started. This can be useful for demonstrating the same lighting effects as soon as the power is turned on.

NOTE

The INDRIVE memory can be written to approximately 10,000 times. Frequent saving to the demo mode can shorten the memory's service life.

Demo Mode vs. Autopilot

Demo mode overrides the autopilot.

Demo Mode Activation

To activate demo mode, go to [http://\[chip address\]/demo](http://[chip address]/demo). There you will find the same settings as on the main page, i.e. you can switch on/off the same lights but with the additional option to save the status via a button. Once you click on save, the current lighting state is stored in the chip's memory.

When demo mode is activated, [http://\[chip address\]/](http://[chip address]/) also returns the demo page.

Demo Mode Deactivation

To deactivate demo mode, click on "Reset demo mode". This will return INDRIVE to normal mode (autopilot/manual).

WLAN

INDRIVE supports two connection modes: as a separate network or as a normal device in an existing network.

NOTE

INDRIVE supports the WiFi standard 5 at 2.4 GHz. With mesh networks, the device may not be able to connect to the WLAN.

Separate network.

1. Use your smartphone/PC to select the Wi-Fi network "INDRIVE"^[1].
2. Enter <http://192.168.4.1> in your browser

Connection to existing network

NOTE

To connect to an existing network, first connect as Your own network, then change the Wi-Fi mode to “Single network” under [Settings](#). Then restart the chip.

1. Connect to the “INDRIVE” Wi-Fi network and
2. Click on “Log in to network” (displayed on your smartphone) or open 192.168.4.1 in your browser.
3. Select “Configure Wi-Fi”.
4. Select your own Wi-Fi network, enter your password^[2] and click on “Save.”
5. INDRIVE will attempt to establish a connection.
6. If the connection is successful, INDRIVE will be accessible on your network. Depending on your router, it will be listed under [set address](#), as ESP-xxxxx or with an IP address. If the connection is unsuccessful (e.g., because the password was entered incorrectly or the connection was rejected by the router), the INDRIVE Wi-Fi will reopen after approx. 1 minute.

Settings

You can adjust the settings at [http://\[address of the chip\]/settings](http://[address of the chip]/settings). Some settings require a restart afterwards, which can be achieved either by powering off and on again or via [http://\[address of the chip\]/restart](http://[address of the chip]/restart)

General settings

1. FLashlight Classical flashlight or modern strobe flashlight
2. Autopilot active at startup: When enabled (default), INDRIVE automatically starts the [Autopilot](#).
3. Heading: Change the labels on the main page.

Wifi network standalone

1. Name: Name of the network. Password: Password for the network (leave blank for no password); minimum 8, maximum 16 characters

Wifi network client

1. DNS name: The name under which INDRIVE should be accessible on the network (recommended: only standard letters, numbers, and “-”). Example: If you enter my-chip here, you can later enter “<http://my-chip>” in your browser to access INDRIVE. This may not work with some routers.

[1] Name can be configured in [Settings](#)

[2] The password is only stored locally. INDRIVE does not transfer any information outside the network