VIACONTROL

Smart traffic light control made simple

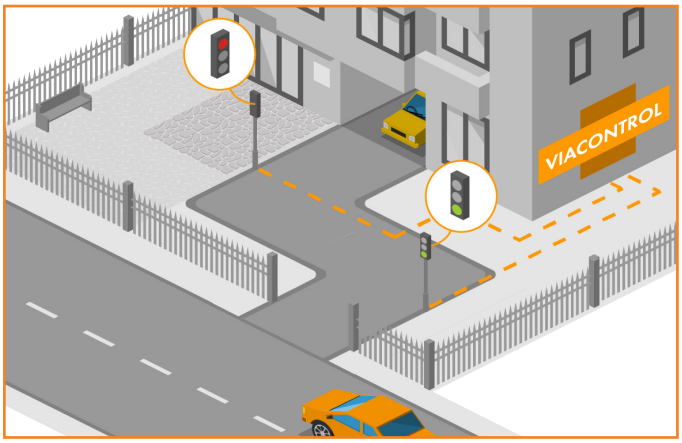
USER MANUAL
for technical specifications

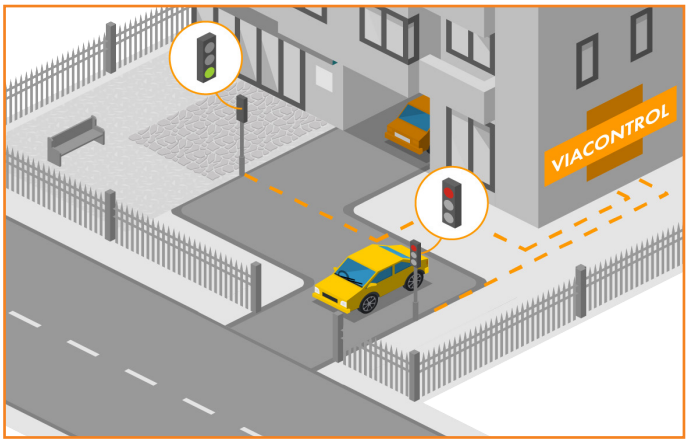


- Easy installation in any electrical panel
- Intuitive & fast programming
- Automation-ready with AUX outputs
- Reliable logic control
- Universal voltage: 24V – 230V
- Ready for remote expansion
- 6-Module DIN enclosure

How it works:

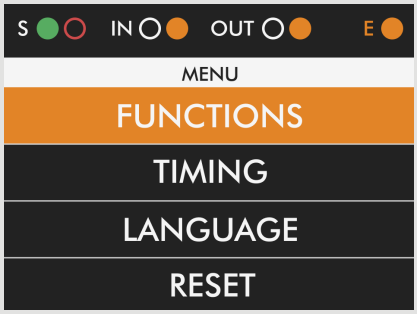
VIACONTROL thinks in states, defining what each light does and when. Perfect for gates, crossings, or private roads, it handles logic like timed reds or gate-triggered greens. It controls ***two traffic lights***. Just connect your lights and set the behavior. ***Simple*** and ***reliable***.





Our sensor-based system keeps main road traffic moving while automatically triggering timed light changes for safe, hands-free residential exits.





Display and UI

The *2.2" color display* features a clear, easy-to-use menu for quick setup. It shows real-time status of timers, logic states, and outputs at a glance.

Operating modes

RESERVATION MODE

The cycle is initiated only *when a vehicle is detected by sensors* (e.g., loops, radars) or *a user activates a control device* (e.g., button).

- ***Logic:*** activation-based and timed cycle
- ***Key Feature:*** requires external detection sensors to start the green light sequence
- **NEW!** ***Queue Clearing Function:*** Instantly dispose of vehicle queues to swiftly reset traffic flow and regain system control
- ***Setup:*** uses preset *Green Time* and *Area Clearance Time* before returning to standby
- ***Ideal Use Case:*** low-to-medium traffic condominium access where the system should remain in standby (main road green) until an exit is requested

TIMING MODE

The system runs *continuously and cyclically based purely on predefined time settings*, requiring no external sensors or triggers.

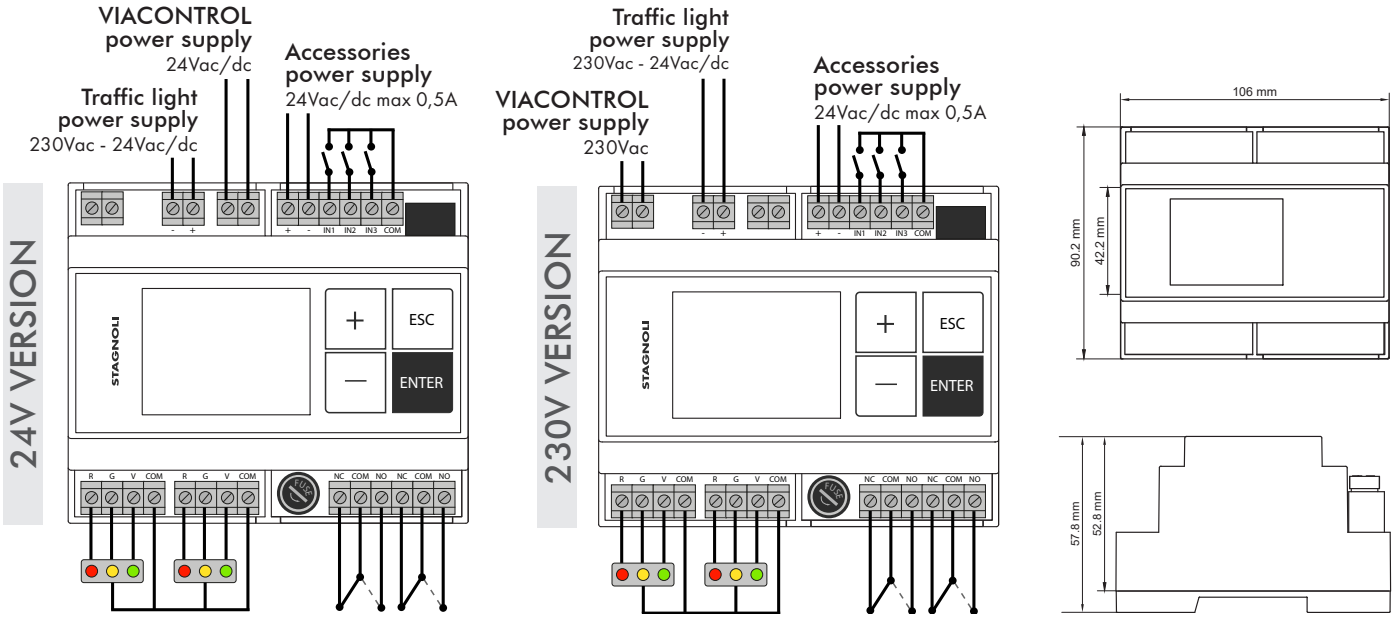
- ***Logic:*** purely time-based and cyclical
- ***Key Feature:*** no external detection devices required. Traffic alternates automatically
- ***Setup:*** simply set the *Green Time* and *Area Clearance Time*
- ***Ideal Use Case:*** fixed-schedule or high-volume alternating routes (e.g., industrial driveways) where continuous, reliable alternation is necessary

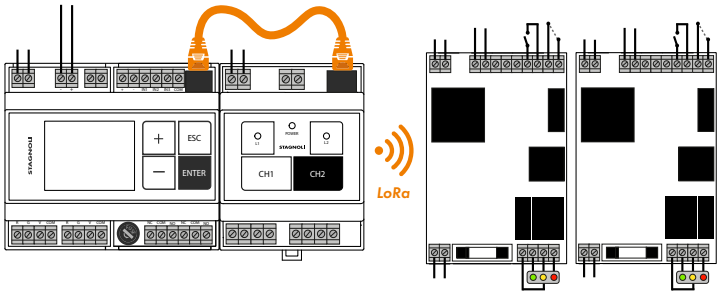
NEW! STATE MODE

The green light remains *active for as long as its designated input is ON*, providing permanent, non-timed control.

- ***Logic:*** input-activated permanent green
- ***Key Feature:*** the light remains green while the external input signal is held active
- ***Setup:*** wire your external control device (e.g., switch) to the corresponding input
- ***Ideal Use Case:*** a system that needs to manually hold the green light for an extended period (e.g., emergency, large delivery)

Wiring and dimensions





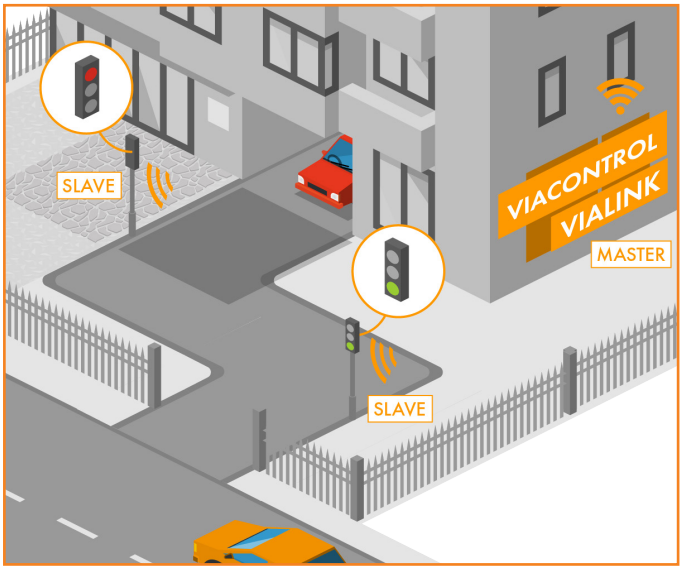
VIACONTROL VIALINK VIALINK SLAVE 1 VIALINK SLAVE 2

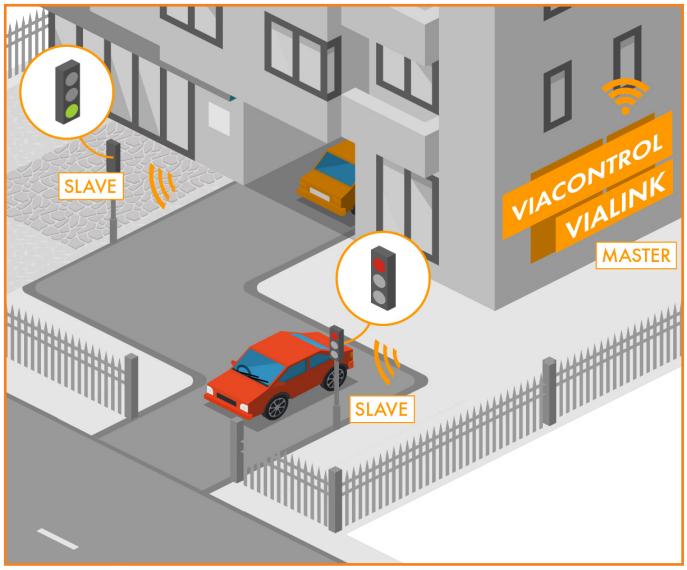
Make it wireless!

Step into wireless control by pairing *VIACONTROL* with *VIALINK*. This wireless module uses LoRa technology to enable cable-free remote control and synchronization for your traffic light system. VIALINK further allows you to remotely manage auxiliary devices and sensors, cutting down on wiring and installation time.

CONNECT *VIACONTROL* AND *VIALINK* THROUGH RJ45 CABLE

CASE STUDY: One-way access control at the parking entrance (*VIACONTROL + VIALINK*)

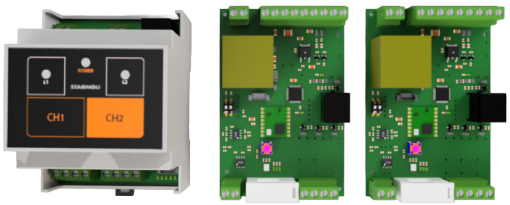




Ensure safe, guaranteed flow for residential complex parking facilities using *VIACONTROL* logic transmitted wirelessly via *VIALINK*. In this scenario, the main road light is *green* by default. When sensors detect an exit, the system wirelessly turns the main road light *red* and the parking light green for a timed, safe maneuver. The *VIACONTROL* unit sends commands to the *VIALINK* *Master*, which relays them instantly to *Slave* boards connected to each traffic light, eliminating cabling.

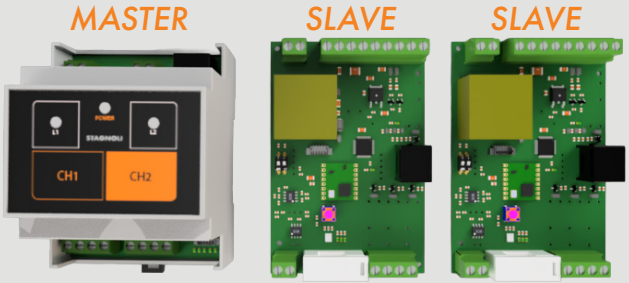
VIALINK

- ***Wireless LoRa:*** long-range communication (up to 8 km open field)
- ***Industrial Strength:*** penetrates reinforced concrete (tested up to 4th floor)
- ***Simple Activation:*** input-driven logic via buttons or switches. This setup allows you to manage the individual traffic light colors directly via input, communicating wirelessly with the Slave units.
- ***Dual Management:*** controls up to two traffic lights via Master/Slave architecture for a total of 6 contacts
- ***Versatile Power:*** compatible with 24V or 230V infrastructure
- ***Flexible Setup:*** works stand-alone or paired with VIACONTROL (via serial link)

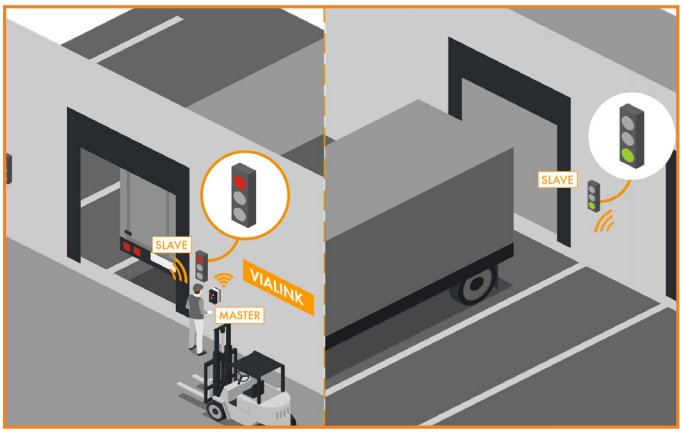


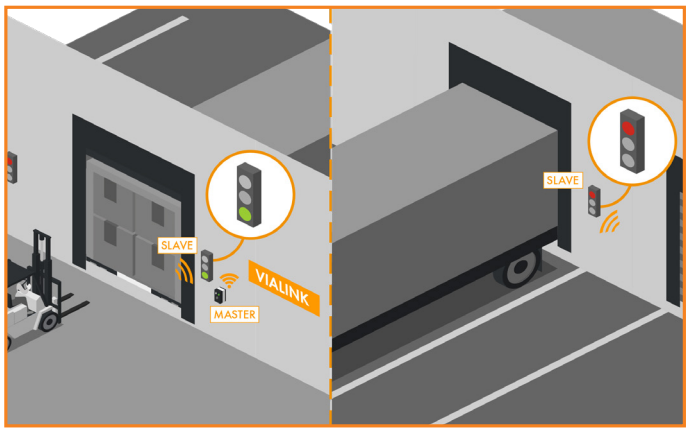
VIALINK can also be used as a STANDALONE

Ready-to-Use kit:
VIALINK comes with two Slave boards, giving you a complete, ready-to-use system for managing ***two traffic lights*** immediately.



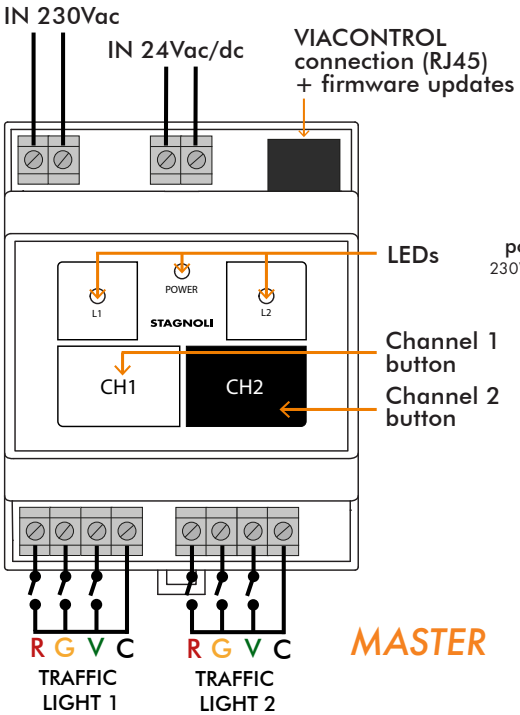
CASE STUDY: Traffic light control at the loading dock





VIALINK ensures safe dock operations using LoRa technology for entirely cable-free control, operating completely as a STANDALONE system. By default, the exterior is *green* (available) and the interior *red*. An operator presses a button upon truck arrival, and *VIALINK* instantly swaps the lights, ensuring safety between trucks and forklifts.

Master and slave wiring



USER MANUAL
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