



COUNTDOWN

CD200 /CD300

The countdown device is used to inform road users about the remaining time of the traffic light phases—red, yellow, and green.

Constructed with high-intensity RGB LEDs, it is managed by a microcontroller and can be powered and controlled directly from the traffic signal head it is paired with.

The device features a two- or three-digit countdown display capable of showing numbers in different colors consistent with the traffic light signals. It is designed to be mounted in its own module of either 200 mm or 300 mm, thus serving as a modular element of the traffic signal head itself.

It can operate in two modes:

- Stand Alone: without communication with the traffic signal controller.
- Dynamic: communication with the traffic signal controller via an RS485 serial line.

The countdown is powered by a dedicated phase wire; where this is not feasible, it can be powered in parallel with the associated traffic signal head.

Light Intensity

Ambient light is measured by a built-in photodiode to automatically adjust the display brightness. At night, when ambient light is below 1000 Lux, the brightness is reduced by 50%.

Configuration

The device can be configured via internal dip-switches for basic settings and through an RS485 communication port for advanced configurations using dedicated SCAE software. Configurable parameters include:

- Operating modes
- Display settings
- Serial addressing

Operating Modes

- Stand Alone: Operates without communication with the traffic signal controller. The countdown measures the illumination times of the traffic light colors by learning the cycle, suitable for fixed-time systems.
- Dynamic: Communicates with the traffic signal controller via RS485 serial line. The controller commands the times to be displayed on the countdown. This mode suits systems with call phases and frequent plan changes.
- Advanced safety feature: in dynamic mode, the device must remain connected to the associated traffic light signals to verify consistency between received commands and actual signal status. In case of inconsistency, the display switches off immediately.

Additional Configurations:

- Power-on delay: (default 1 second) ensures the traffic signal has priority in signaling over the countdown.
- Count overflow: If the value to display exceeds 99 (or 199 for the CD300 model), the following behaviors can be configured:
 - Countdown off
 - 99 (or 199) blinking at 1Hz
 - Central segments (--) blinking at 1Hz in the corresponding color
 - Displaying blinking minutes at 1Hz
- Flashing yellow management: For traffic lights in flashing yellow mode, it can be configured as:
 - Countdown off
 - Central segments (--) blinking yellow at 1Hz
- Flashing green management:
 - Number displayed with steady green
 - Number blinking green at 2Hz

Display

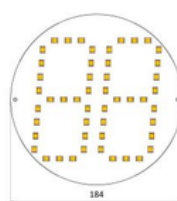
- Models: CD200 / CD300
- Size: 200 mm / 300 mm
- Number of LEDs: 50 RGB / 80 RGB
- Digits: 2 / 2.5
- Colors: Red / Yellow / Green compliant with EN12368

Signal Head Module Housing

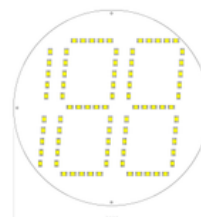
- Diameter: 210 mm / 300 mm
- Material: UV-resistant polycarbonate
- Quick-fit, snap closure
- Visor: Quick-fit
- Molded colors: Black, Green, or Yellow
- Protection rating: IP55

Environmental and Electrical Characteristics

- Operating temperature: -40°C to +80°C
- Power consumption: >3W and <11W
- Operating voltage: 100-260 Vac 50Hz / 42 Vac 50Hz



Modulo CD200



Modulo CD300



CD200



CD300