

wavetec

# wavetec Traffic Light (WTL)

**Traffic Light Control for intelligent traffic light switching as reaction to driving speed. e.g.: Speeding gets punished by a red phase and penalty-time, while slower, responsible-minded drivers get permission to pass by green light.**

The detector version described in the following is just one of many. There are several ways to combine our huge range of possibilities to serve any individual cause. So usually individual adjustments for our customer solution are possible!

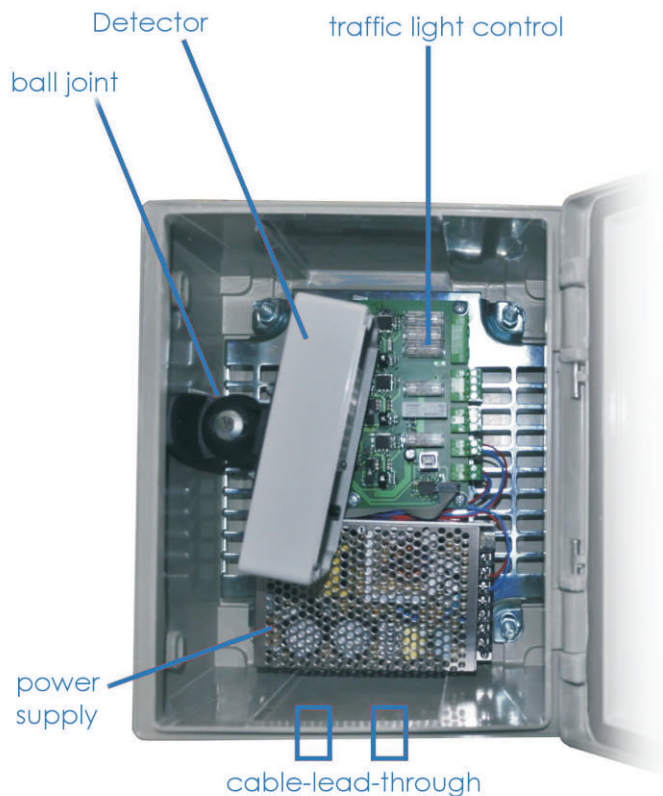
## Operation

The wavetec Traffic Light Detector System controls a Traffic Light depending on the driving speed of captured vehicles.

One typical location for use of WTL is the entrance of a town or a village. The configuration can be set for your individual cause. For example: If a vehicle with low speed is detected the permanently red traffic light turns immediately green to allow the responsible driver to pass. If a speeding vehicle gets detected it has to reduce its speed to the allowed range and wait a certain "penalty time" until the green phase is initiated.

Any threshold, light-phase-length and operating time can be adjusted through the integrated USB interface. The filament of the connected traffic light is constantly monitored. Depending on the possibly defect light either the yellow light starts flashing or the traffic light turns off completely to maintain security. In such an unfortunate fail incident the integrated relay comes off and details of the defect can be read out through the interface.

WTL can be connected to either 230VAC or 12VDC traffic lights.



wavetec TrafficLight (opened)



wavetec TrafficLight (closed)

## details

### power supply:

- o supply voltage: 12VDC
- o exhaustive discharge protection (battery): 12V
- o overvoltage protection: Yes
- o polarity protection: Yes
- o overcurrent protection: Yes (fuse)
- o supply current (without traffic light): 50mA
- o power consumption (without traffic light): 0,6W

### power supply 230VAC version:

- o supply voltage: 100-230VAC
- o power consumption (without traffic light): 0,6W

### 230VAC traffic light version:

- o switching capacity per light color: bis 300W
- o filament monitoring: Yes

### 12VDC traffic light version:

- o switching capacity per light color: bis 40W
- o filament monitoring: Yes

### measurement unit:

- o radar: 24,125 GHz, K-Band
- o output power: 5 mW
- o modulation: none
- o kind of detection: CW, bidirectional
- o radar beam angle: 12°x25° (Spear)
- o speed range: 3... 255 km/h
- o accuracy: ± 2 % ± 1 digit
- o measuring range: >200m (Spear)
- o object measurement: arriving objects only

### interfaces / displays:

- o 1x Relay: 250VAC, 8A

### configuration / data interface:

- o USB 1.0 (USB2.0 kompatibel)

### options / accessories:

- o compatible traffic light
- o 24V exhaustive discharge protection (battery)
- o battery supply

### housing:

- o w x h x d: 255mm x 305mm x 190mm
- o weight: 5,0 kg
- o material: glass fiber reinforced synthetic
- o protection class: IP65

### operating conditions:

- o temperature range: -20° ... +70° Celsius
- o humidity: max. 90%, not condensing