



modern traffic control systems

**Stührenberg**<sup>®</sup>

STvario signal heads for  
road traffic

# Traffic control systems by Stührenberg



For over 50 years, innovative traffic systems from Stührenberg have controlled the flow of traffic on our roads. Our medium-sized company operates throughout Europe. Based in Detmold, we develop state-of-the-art intersection control and traffic signal systems. The product range extends from innovative control units based on modular principles through a series of signal heads developed in-house to a modular traffic management system for highly complex traffic situations. Stührenberg supplies simply everything that is needed to keep the enormous volume of traffic on our roads flowing smoothly.

## Your partner for quality and reliability

In addition to the high product quality and professional advice, our customers also profit from an extensive range of services. These include professional installation, regular maintenance of products and systems, as well as project planning tailored to requirements and further development of customised solutions.

## STvario

### Effective signals

The right signal strength at all times: based on a modular system, signal heads for road traffic from Stührenberg guarantee flexible and intelligent solutions for every intersection.

### Variable, versatile and ideal for signal combinations

Our signal heads are designed for all special cases. All individual components of the **STvario** series are optimally matched to one another and can be combined as required. This makes the high-performance signalling technology ideal for use in controlling motor traffic, public transport, pedestrians and cyclists.

### STvario signal heads are

- uncomplicated
- reliable
- cost-efficient
- suitable for many cases
- and have proved their value in practice.

Individual solutions can be realised with the aid of numerous additional modules and extra equipment. The basic system can be adapted quickly and at any time. Signal heads made by Stührenberg have demonstrated their sustainable performance capability in long-term practical use.



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# STvario LED O

## Future-oriented light for road traffic



The new generation of powerful traffic signal save energy, help to protect the environment and are very easy to maintain.

### More efficiency

Due to the use of LEDs, the lifetime of the **STvario LED O** system is considerably longer than that of conventional signal lights. That saves energy and operation costs too. A long lifetime minimises the probability of signal failure and therefore ensures greater safety.

Undesirable phantom effects are excluded through the use of neutral coloured lenses. The **STvario LED O** signal head meets the highest standards while minimising power consumption.

The signal heads made by Stührenberg are designed for signal light sizes of 200 mm and 300 mm in diameter. All symbol masks defined in the German Directive on Traffic Signal Systems (RiLSA) (and more) are available for both sizes.

### Technology

- Lighting technology: in accordance with EN 12368 / DIN 67527-1
- Luminous intensity: Class 2/2 (200 mm) and 3/2 (300 mm)
- Luminous Intensity distribution: Type W (200 mm) and N (300 mm)
- Maximum phantom signal: class 5

### Electrical data

- Power supply: 40V AC (50 Hz)
- Tolerances: -25%/+15%
- Power Consumption: typically 5-9 watts
- Type of protection: IP 54
- emperature range: -25°C to +55°C

### Extra equipment

- Background Screens
- Height-adjustable signal head attachment for cantilevers
- Company logo



### LED signal head inserts

#### Technical description

- Central light source
- Switched-mode power supply
- Combined lens/diffuser system
- Easy to install

#### Signal light sizes

- 200 mm diameter
- 300 mm diameter

#### Signal colours

- red
- amber
- green
- white

### Symbols

To display symbols, Stührenberg uses masks which can be installed in the lens/diffuser system.



# Technical details

## Optical characteristics of the LED signal transmitters according to DIN EN 12368 / DIN 67527-1

<b>Diameter</b>	200 mm	300 mm
<b>Luminous Intensity - Class</b>	B2/2	B3/2
<b>Luminous Intensity distribution</b>	W (wide-angle signals)	N (narrow-angle signals)
<b>Signal lights with symbols - class</b>		S1
<b>Maximum phantom signal Class</b>		5

## Electrical and mechanical properties of LED signal heads

<b>Operating voltage</b>	40V/50 Hz
<b>Power consumption (different versions apply for 230V LED signal heads)</b>	5 bis 9 W for all colours
<b>Power Factor</b>	0,9
<b>EMC</b>	in accordance with DIN EN 50293
<b>Type of protection</b>	IP 54
<b>Impact resistance</b>	IR 1
<b>Working temperature</b>	- 25 °C to +55 °C (class B)
<b>Relative humidity</b>	20% to 95%
<b>Housing colours</b>	Fir green (RAL 6009) Agate grey (RAL 7038) Grey aluminium (RAL 9006)
<b>Diffuser lenses</b>	Colourless plastic lenses
<b>Symbol masks</b>	Standard versions (symbol lenses for small signal transmitters)

# Certification

## STvario signal transmitters are certified with regard to

- Optical characteristics
- Functional safety requirements, SIL 3
- Electrical safety
- Electromagnetic compatibility EMC
- Environmental properties
- Mechanical properties



EZÚ Electrotechnical Testing Insitute



TÜV Rheinland

# STvario TON

## Acoustic signal for road users with impaired vision

STvario TON safely guides people with impaired vision in road traffic.

### Acoustic signals ensure safety

The acoustic signal transmitter emits two clearly distinguishable acoustic signals: a continuous orientation signal guiding the visually impaired person to the pedestrian crossing, and a „walk“ signal informing them that the light has changed to green.

### Versatile and reliable

STvarioTON is part of a differentiated high-performance system which can be installed in all suitable housings. It is ideal for integration into signal heads made by Stührenberg. The plastic material used is extremely robust and resistant to impact and weather. This ensures excellent protection of the highly developed and proven technology.

### Technical features

- TÜV-tested safety technology in accordance with DIN EN 50556 / VDE 0832
- The orientation and „walk“ signals meet with the requirements of DIN 32981 as most recently amended.
- Suitable for configuration via an IR remote control



# STvario. Countdown

## Indication of the time remaining, for people in a hurry

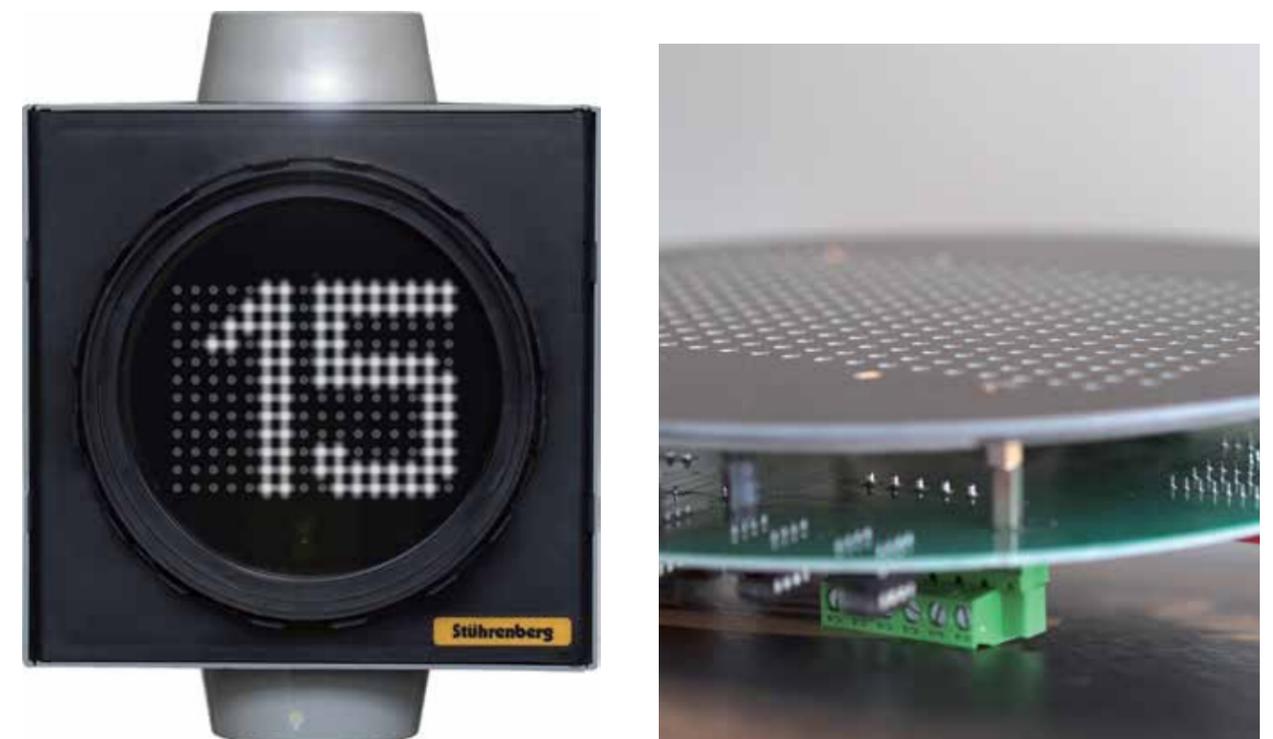
The Countdown signal head permits indication of the time remaining for various road users, also in public transport.

### Technical features

- Installation in 200 mm signal heads
- LED matrix
- 10 cm high digits
- Countdown time from 1 to 15 seconds
- Intensity of the LEDs controlled via brightness sensors

### Functions

- Indication „AF“: Request signal in public transport
- Countdown: Indication of the time remaining
- Indication „T“: Door contact in public transport
- Indication „AA“: Wait for connection in public transport



# Housing

## Robust and weatherproof



High-quality plastic housings characterised by simple and flexible installation options. They are extremely robust and weatherproof, resistant to sunlight and rain.

The housing components are equally suitable for conventional signal heads and STvario LED O.

### Properties

- Clip-on technology
- Modular system
- Easy to install

### Housing colours:



Fir green  
RAL 6009



Agate grey  
RAL 7038



Grey aluminium  
RAL 9006

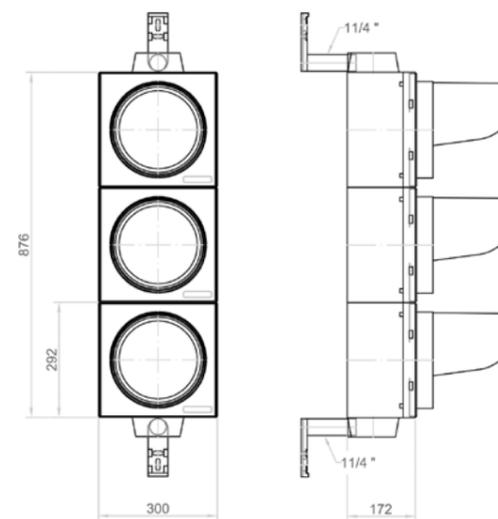
Also available in all other RAL colours on request.



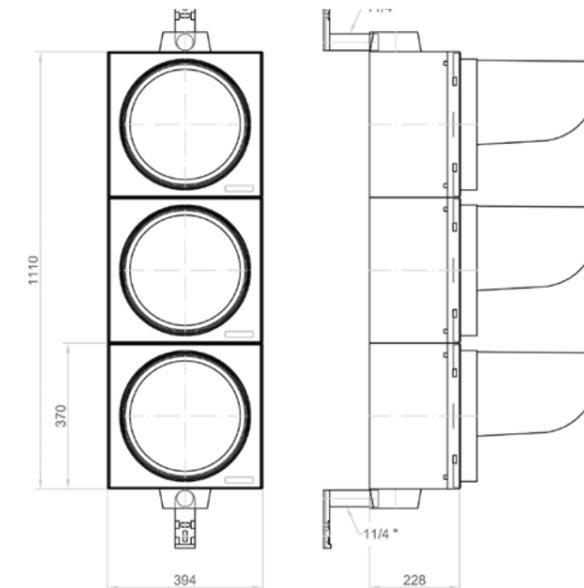
# Accessories and installation

## Suitable for combination and easy to install

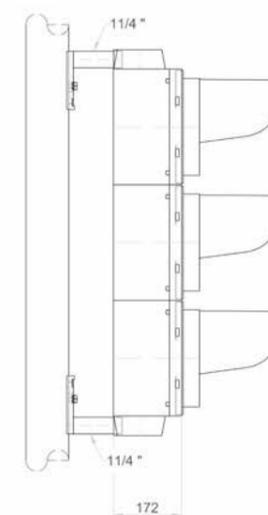
### Signal head 3/200 mm



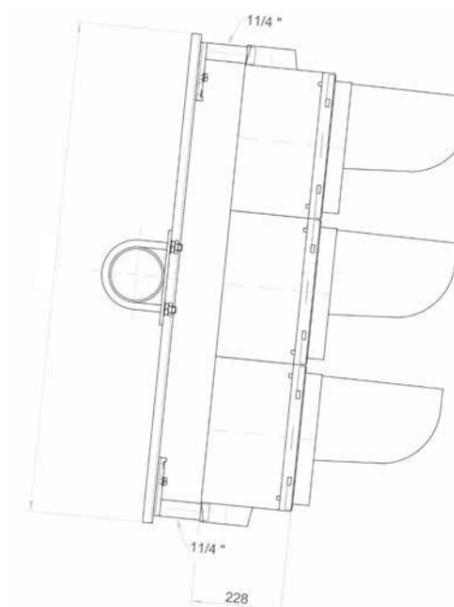
### Signal transmitter 3/300 mm



### Mast attachment



### Cantilever attachment



Two-point attachment, mainly using aluminium bracket arms (L-shaped) in various lengths (105 mm, 183 mm, 240 mm); also available in customised lengths on request.

# Locations



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