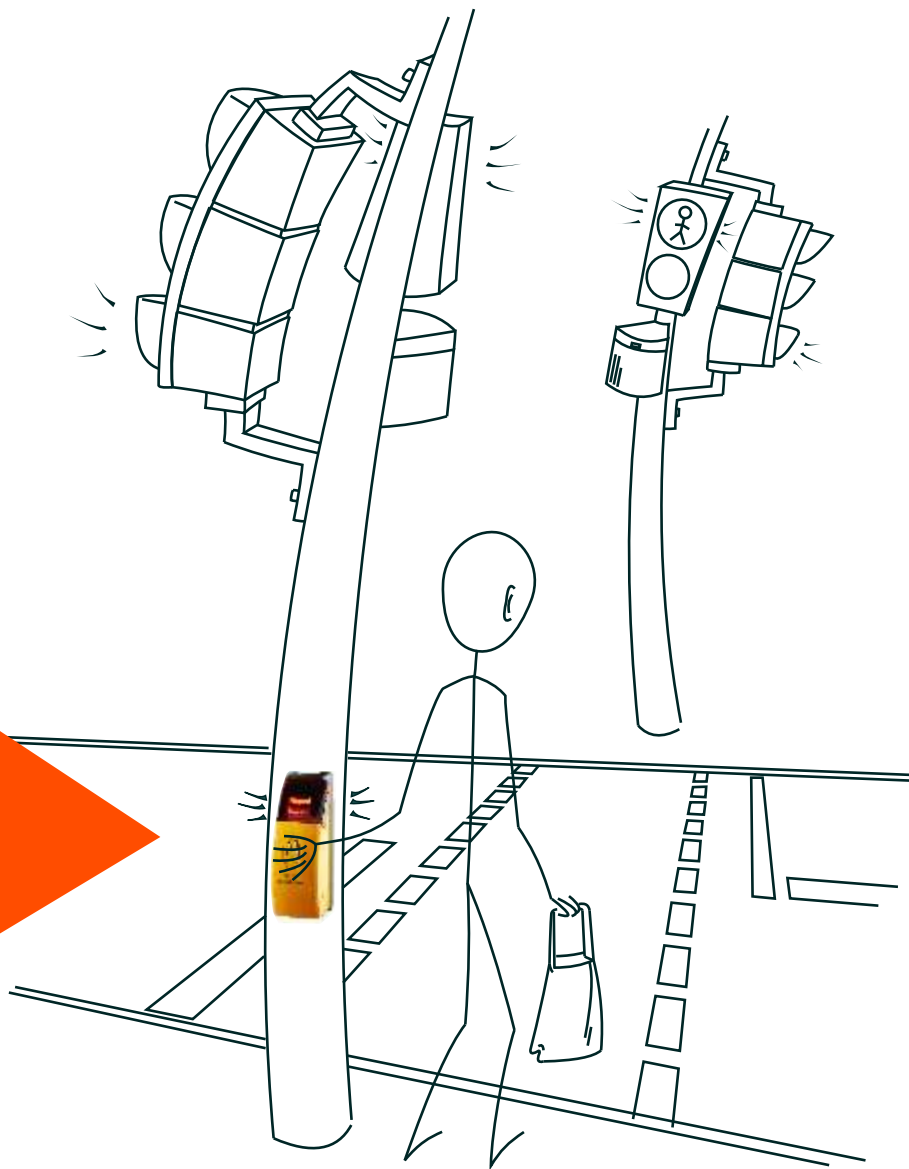


Push Button





More Safety for Everyone

User-friendly Signals

Unquestionably, the pedestrian is the weakest participant in street traffic. Therefore, local authorities and all other responsible instances must develop solutions which pay special attention to the situations and needs of pedestrians. First and foremost, this means creating a genuine feeling of security for pedestrians in spite of the frequently stressful situations in our streets.

A large number of research projects have shown that this goal, particularly at traffic lights, can best be achieved if clear information is presented. Pedestrians feel well-protected with simple operation, reliable information and clear signals. In addition, they show the necessary patience when waiting for the green light. This reduces the number of pedestrians crossing on a red light.

Excellent!

The resounding marketing success of RTB's push button has been a sensation not just among experts.

From our point of view, the success of the push button has been confirmed with the reception of two well-known awards for its design:

- red dot design award
- iF product design award.

Waiting for Green with STOPPI

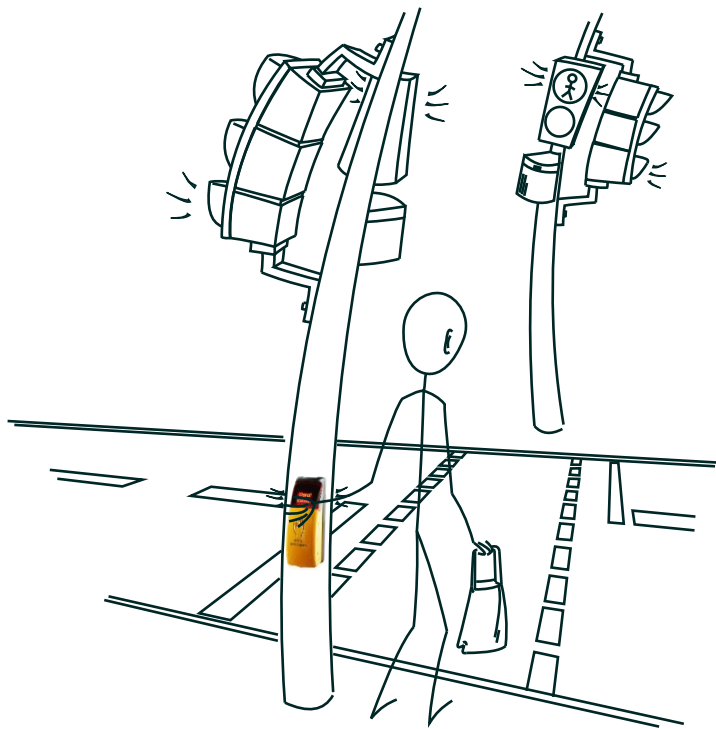
Of course, special attention must be paid to our youngest participants in street traffic when we design traffic light facilities.

RTB uses a very special concept for the safety of children. STOPPI, a cute and likeable dog which, at first sight, wins over the hearts of children, is at the forefront of our activities for making traffic safe for children. STOPPI accompanies children and offers them optimal orientation!

And STOPPI has important messages for children in street traffic:

- Concentrate fully on dangers!
- Don't let yourself be distracted; always pay attention!
- Never simply cross the street, but always wait for green to cross!





Technology & Application

Norms and Guidelines

The following norms and guidelines are among those met by RTB:

- DIN VDE 0832-100 and accordingly Hd638 S1
- Din VDE 0832-200 and accordingly EN50293:2000
- DIN 32981 and accordingly ISO 23600:2007
- ÖNORM V 2100 and V 2101.

Internationally and Individually Applicable

RTB's push buttons are being used world wide. Technical solutions of this kind must meet a great variety of demands, since structures and traffic problems are quite individual. Therefore, RTB relies on a modular construction of the push buttons.

The inclusion of auxiliary equipment is not a problem. Safe technical operation, protection from vandalism, award-winning design and easy installation are additional central advantages of RTB's products.

Technical Information

Housing

- Polycarbonate Makrolon®
- Colour yellow (RAL 1007) with a red cap, other colours are available
- Protective class II under DIN EN 61140
- Protective type IP 55 under DIN EN 60529.

Voltage Options

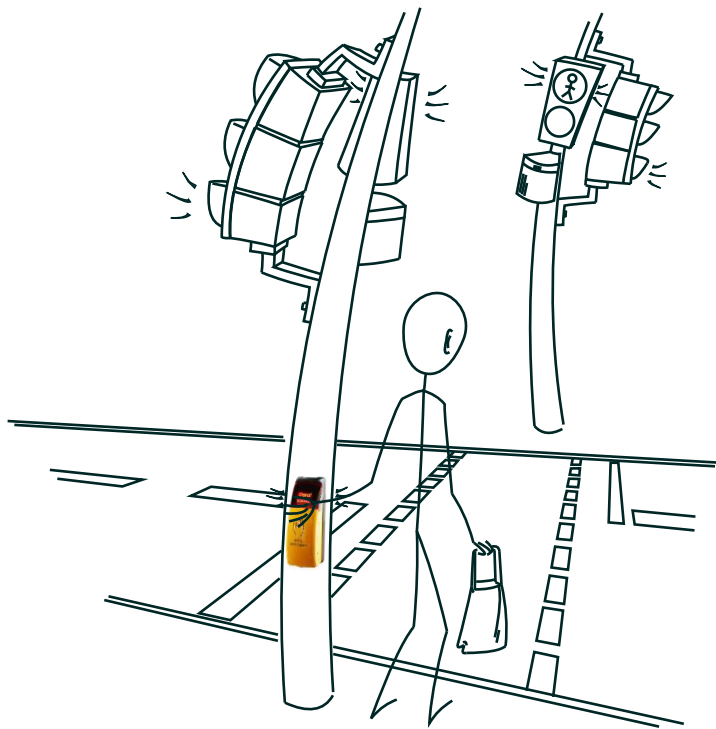
- 230 V AC and accordingly 160V dim function
- 110 V AC
- 40 V AC or DC and accordingly 27V dim function
- 24 V AC or DC
- 10 V DC.

No Chance for Vandalism

The protective bar prevents crude vandalism and ensures that fewer auxiliary devices will be damaged in the future.

Any color can be chosen for the powder-coated stainless steel protective bar which means it can be visually matched to the push button. An individual motif can be applied on both sides of the protective bar. Tactile information for blind and low vision persons can be applied here as well.





Variants

Two Device Groups

Sensor Push Button

The capacitor Sensor Push Button has proven itself time and again. It is fitted with a call-up screen with a large surface. The self-explanatory design makes the traffic light easy to use for all pedestrians. As an option, the Sensor Push Button, which is currently being used in more than 30 countries and meets all the general norms, has a contact without potential. The device adjusts itself automatically to external conditions (e. g. rain, snow or ice); thus its operation remains guaranteed.

Mechanical Push Button

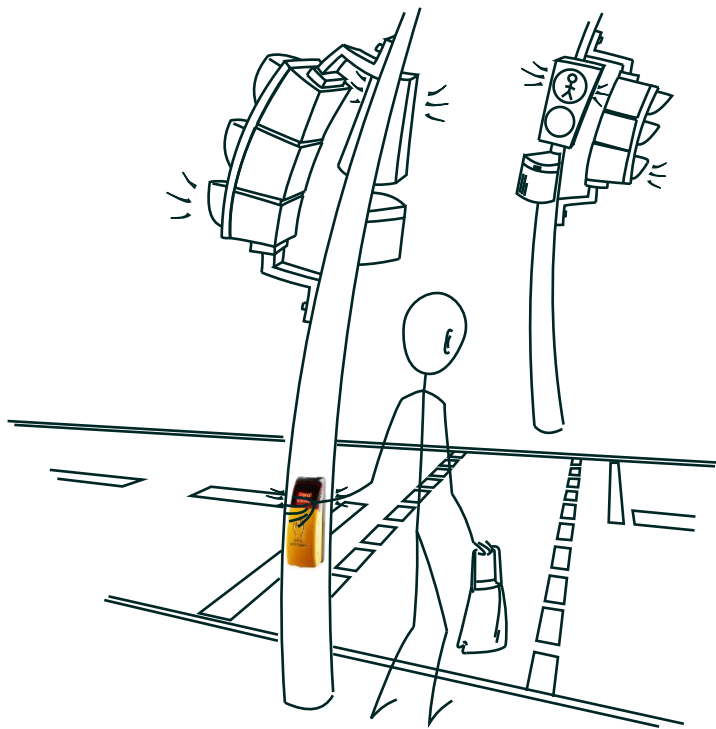
This model is a Mechanical Push Button with a large surface which was developed using the basic design of the Sensor Push Button. This push button is also available with or without a verification screen. It is available in a wide variety of voltage possibilities.



SAFETY
TECHNOLOGY & APPLICATION
VARIANTS
EXTENSIONS

Function variants	Cover symbol	Signal call-up	LED-verification	Tactile Signal	Hidden push button	Guide signal in the push button*
Push Button Type A		✓	✓			✓
Push Button Type B		✓				✓
Push Button Type C				✓	✓	✓
Push Button Type D				✓		✓
Push Button Type E		✓	✓	✓	✓	✓
Push Button Type F		✓	✓		✓	✓
Push Button Type G					✓	✓
Push Button Type H		✓			✓	✓
Push Button Type I		✓		✓	✓	✓

Requires additional device (Acoustic Unit)



Variants

Intelligent Combination

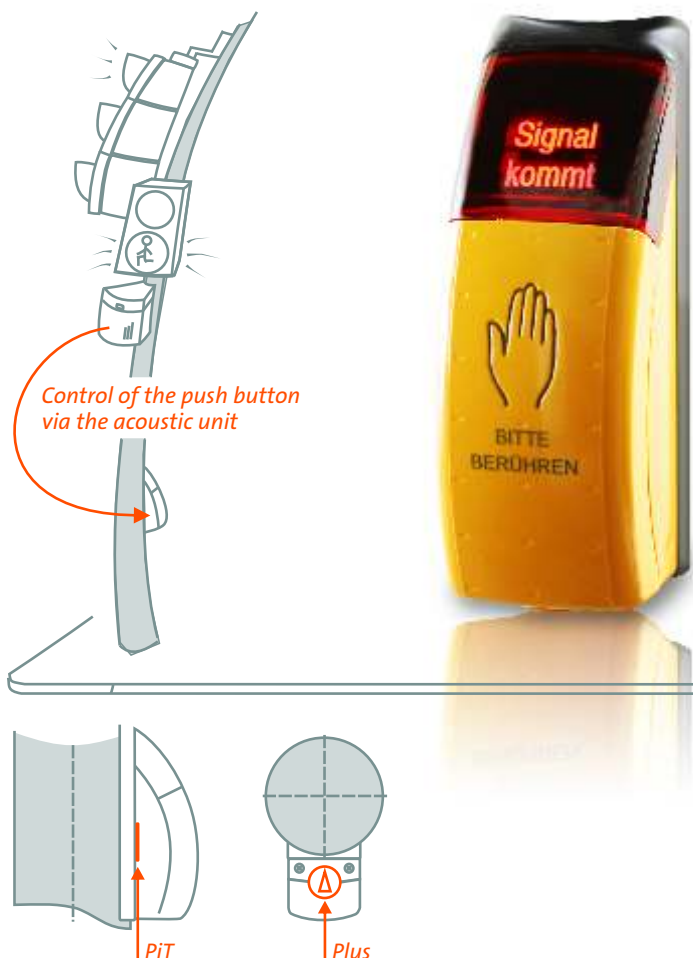
A wide variety of advantages are available, particularly with the combination of the acoustic unit and the call-up push button.

Push Button Model PiT

The guide signal of the Push Button Model PiT is controlled by the central electronics of the acoustic unit. The users hear the guide signal simultaneously from the loudspeaker of the acoustic unit and from the push button. Thus, it is much easier to locate the traffic light mast.

Push Button Model Plus

The vibration element of the Push Button Model Plus is activated by the electronics of the acoustic unit. This innovation makes it possible to once again lower the costs for equipping the traffic light with auxiliary systems.



The Sensor Push Button Model Geneva sets itself apart with particularly bright LEDs in the verification screen. A further great advantage is that the device can be operated with every voltage between 20 V and 230 V. Thus, the logistics become much more comfortable. Regardless of the individual traffic light, the technicians always have a suitable push button in stock if replacement is necessary.

Model Geneva



For better information and to make orientation easier, the Push Button Model X has a monochrome LCD display. This is quite convincing due to high resolution and very good contrast at night or in direct sunlight. A total of 30 different motifs can be shown. The sequence of the motifs can be divided into three phases. Within each phase several pictures can be shown in a predefined sequence.

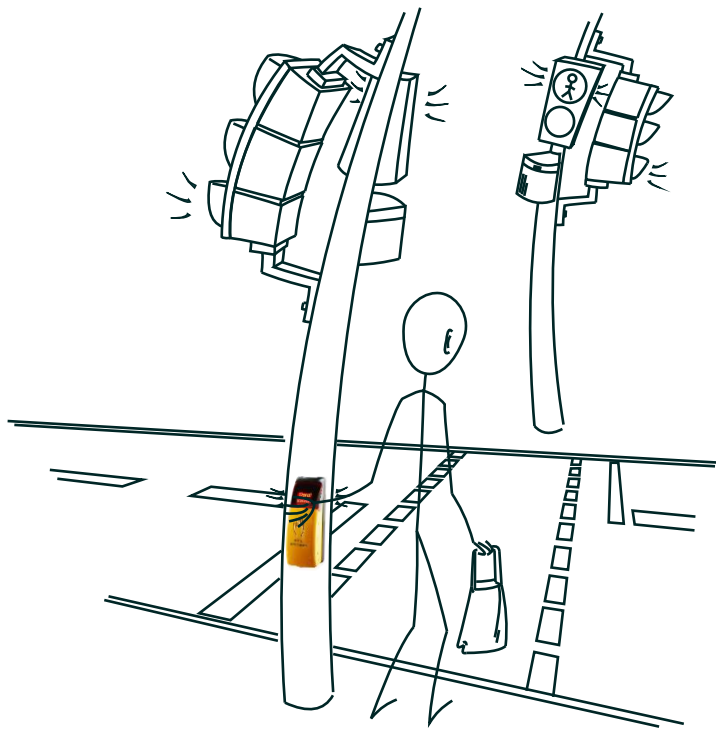
Model X



The main application of the key push button is in public transportation. Here the Push Button Model S can be an element of the fallback level in the control system for street traffic signals. Modern transponder technology replaces the mechanical lock. Thus, one achieves meaningful advantages in regard to longevity and comfort.

Model S





Extensions

net.1: Cost Effective Retrofitting

Previously, several cables were always necessary to provide for the wide variety of signals from the acoustic unit at traffic lights (among others, walk signal, guide signal and tactile signal). This complexity often created a negative cost effectiveness at previously existing traffic light facilities.

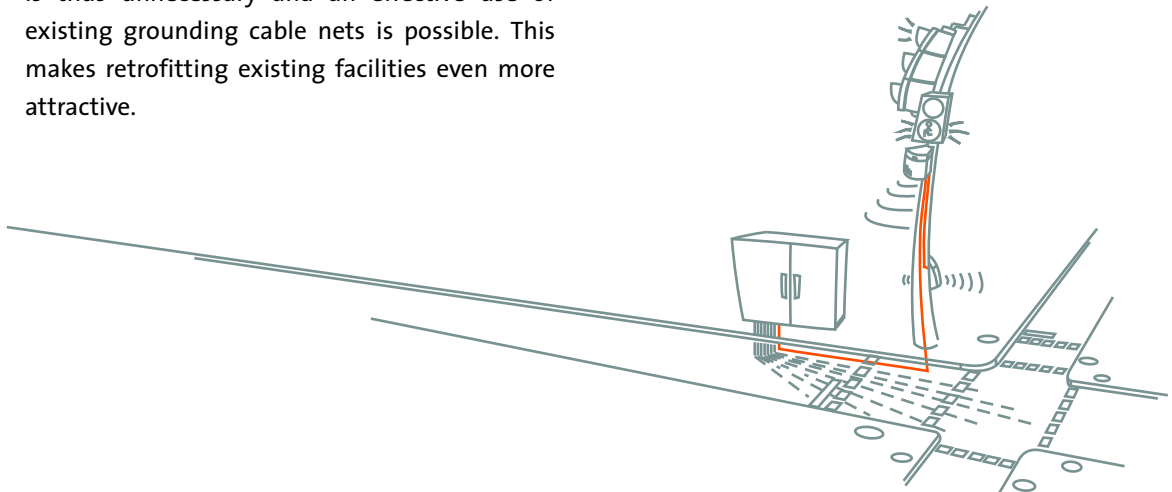
This problem is solved by net.1 which uses an intelligent field bus. The power supply for the push button and the acoustic units as well as the transmission of selected control signals flow through a separate single signal transmission cable between the external facility and the control device. This cable can even be wired in a line topology. Expensive earth excavation work is thus unnecessary and an effective use of existing grounding cable nets is possible. This makes retrofitting existing facilities even more attractive.

net.1 Central Module

The central module is built into the signal control device. It consists of at least two separate boards in European card format:

- The communication card is the communication center of the net.1 bus in the external facility.
- Up to two interface cards can make six connection groups each available for the push button and the acoustic unit.

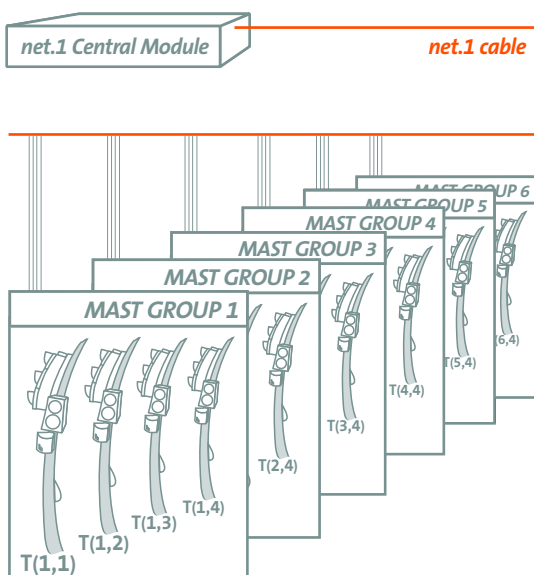
Both cards must be integrated in unoccupied 3HE-slots in the control device. Pluggable multi-point connectors with crimp technique in accordance with DIN 41612 provide maintenance-friendly contacts and thus adhere to established technical standards.



net.1 Mast Module

The mast module is the bus sharing unit on the mast for the conversion of net.1 signals in the input/output for push buttons and acoustic units.

It consists of an add-on card, which can be ordered as an option for the signal transmitter for blind pedestrians. It is then installed in the factory. The net.1 mast module has connectors for the compatible push button, which is no longer connected to the grounding cable.



Traffic Light Auxiliary Equipment.....	PUSH BUTTON ACOUSTIC UNIT
Radar Systems.....	DIALOGUE-DISPLAY TOPO
Orientation Aids.....	ULTRA-BODY-GUARD



On the basis of many years of experience RTB develops and distributes innovative solutions for street traffic (auxiliary equipment for traffic lights, radar systems to gather traffic data and to reduce speed).

RTB places the greatest value on user-friendliness, quality and design of its products. A friendly, accommodating and customer-oriented service is combined with this. In continuing dialogue with the traffic light industry and the communities, new solutions of high practical value are constantly emerging.