

PPB-02

Acoustic pedestrian push-button



- Preference of pedestrians at the crossings
- Acoustic and vibration signalization providing information about “stop” or “go” signal at the crossing for the blind, partially sighted people and the disabled with combined defects (blindness, deafness)
- Remote management and monitoring
- Recorded digital report – up to 2,5 minute long
- Automated regulation of records volume depending on the surrounding noise
- Possibility to disconnect a competitive acoustic signalling
- Possibility of acoustic output intensity time setting
- Tactile elements describing the crossing
- Possibility to use inner and additional outer loudspeaker at the same time



A push button serves for pedestrians requesting green light at the crossings equipped with light signalization. The push button includes acoustic signalling, which warns the blind or disabled pedestrians about the current signal at the crossing and serves for better orientation of such pedestrians.

The push button includes the blind’s radio transmitter receiver, tactile elements and haptic sensor.

All-plastic cover of the push button is made of mechanically resistant polycarbonate which is resistant to high temperature ranges and has colour stability.





On the front reflective yellow cover there is a hand symbol (or another symbol according to national customs) with a touch sensor serving as a push-button for its use.

Touching the front cover activates sending the request to the controller. Confirmation of received request is displayed on the upper part of the push button by lighting of "WAIT, PLEASE". The blind pedestrians can use the voice records. When a button is pressed, or when a blind transmitter request is recorded, the button responds with clicking or playing a record of up to 30 seconds. When there is "stop" signal at the traffic lights, it clicks slowly, which means that there is red light at the traffic lights. As soon as the pedestrian gets green (signal "go"), the "WAIT, PLEASE" sign turns off and the built-in loudspeaker starts clicking at a fast pace. This invites the blind to cross

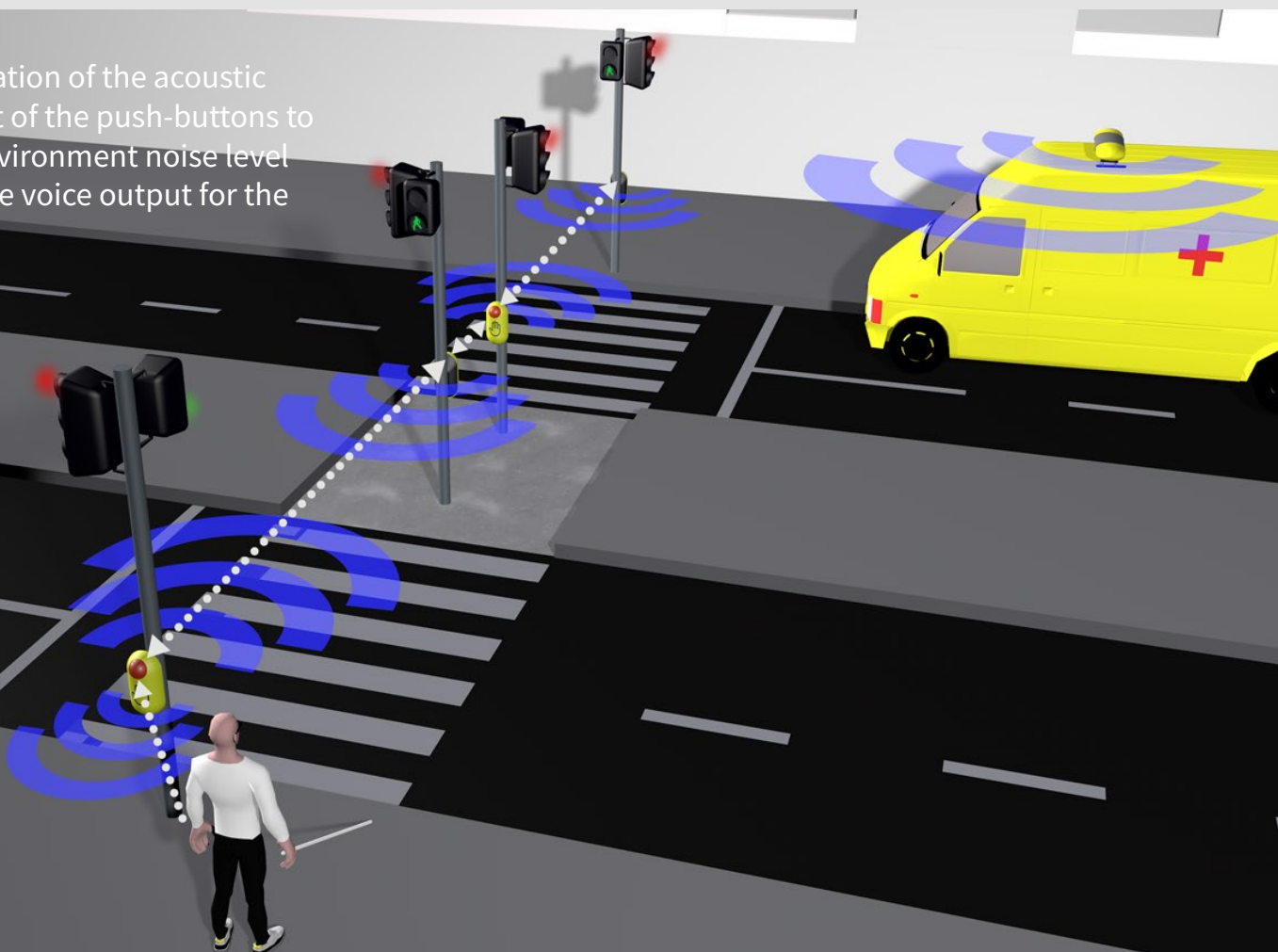
the road. Before the time for crossing finishes, the record informs the pedestrian about the approaching end of the green signal.

In locations where there is a crossing with a splitter island and push-buttons are located for two directions on one column, or there where the acoustic signalling devices are less than 4 m away from each other, it tends to be difficult for the blind to identify the respective sound signal. In these cases there are buttons which are equipped with a function which disconnects the competitive signalling sound. The blind person, disconnects the acoustic signal of the closest push-button by pressing a small button which is located underneath the push-button. While pressed, they hear the signal only in the walking direction related to the corresponding push-button.

The great advantage of the PPB-02 acoustic push-button is the automatic control of volume at the whole intersection according to the level of surrounding noise (the loudest junction point). It is possible to limit the maximum volume or shut down the sound from the traffic light controller or integrated clock for night-time hours. When the blind transmitter request is recorded, the transition switches into day mode for one traffic cycle with a higher volume level.

The device is equipped with a vibrating arrow shaped relief button located underneath at the bottom of the whole device showing the direction of the crossing to the handicapped people with combined defects (blindness, deafness). When pressed, it pulses twice, and also sends a request for crossing to the controller. Upon confirmation by the traffic light controller,

Adaptation of the acoustic output of the push-buttons to the environment noise level and the voice output for the blind





Arrow shaped relief button



the underneath arrow shaped relief button vibrates in the rhythm of the acoustic signalling, slowly at the “stop” signal and quickly at the “go” signal.

To provide the handicapped and partially sighted people with maximum information, there is also a tactile relief on the side of the push-button with symbols in accordance with ÖNORM V 2100 norm. Such relief describes the intersection according to a particular traffic engineering situation, such as the number of road lanes, tram tracks, cycling trails, or other additional information.

The push-buttons at an intersection are interconnected which allows their remote management (supervision, diagnosis and remote setting by the operator). They share information about for example the level of noise in the surrounding or activation of the blind’s request.

As an additional source of acoustic signal, an external loudspeaker can be located at the top of the post can be connected to the PPB-02 simultaneously and is points at the direction of the crossing.

The push-button is supplied with a stainless steel locking pad for optimum sound spread which allows the push-button to be installed on any kind of post.

Advantages

- The push-button increases pedestrians’ safety at crossings, especially those who are blind or otherwise handicapped.
- The push-button makes the orientation of the handicapped easier.
- The device enables the remote management and monitoring
- The device tailors the sound intensity in accordance with the surrounding noise, which prevents the residents from being disturbed.

Use

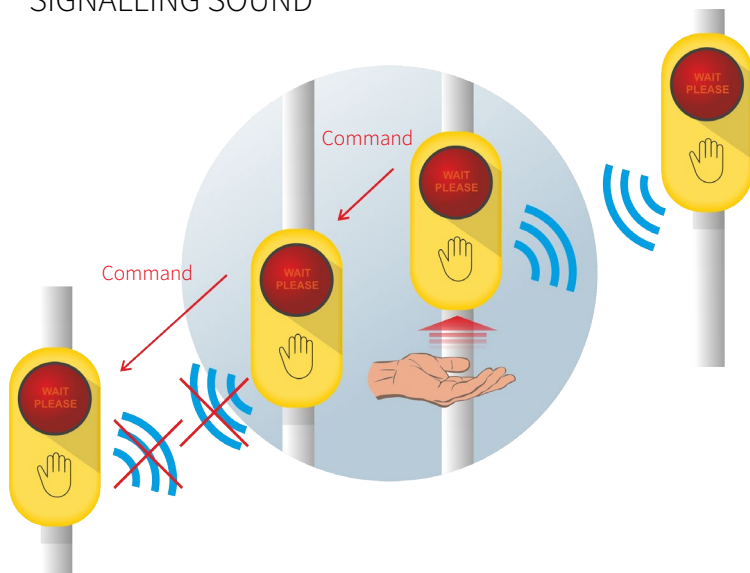
- Busy crossings
- Complex intersections
- Traffic lights near schools, playgrounds or sport centers
- Traffic lights near bus or train stations and important traffic junctions
- Traffic lights near clinics, hospitals, senior houses, city or other state offices



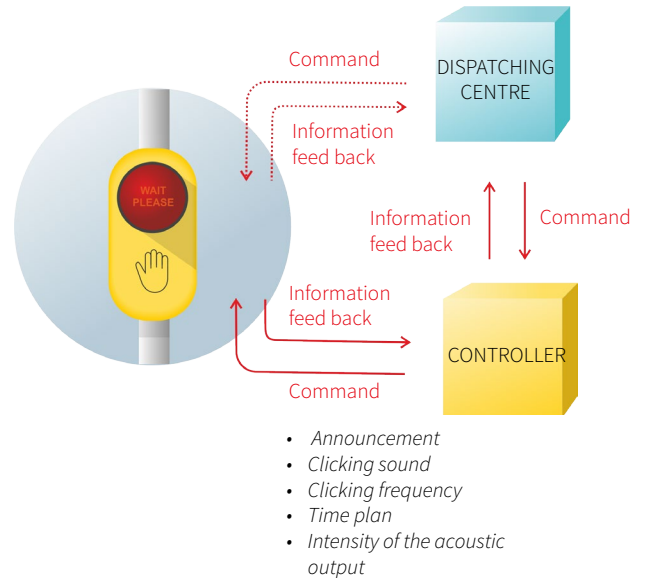
Tactile relief



DISCONNECTING OF THE COMPETITIVE SIGNALLING SOUND



REMOTE MANAGEMENT AND COMMUNICATION



TECHNICAL PARAMETERS

| | |
|-----------------------|---|
| Power supply | 24V DC -20/+40% |
| Input | up to 10W (no audio for outer loudspeaker) |
| Connection | Helukabel 20×0,35mm ² |
| Degree of protection | IP54, IK9 |
| Size | 90 × 226 × 75 mm |
| Cover colour | reflective yellow + black |
| Operation temperature | -40° C up to +70° C |
| Fixation | M6 screws with hexagon socket |
| Sound | digital sound or recorded reports (minimum of 5 reports of 30 seconds each) |
| Audio output | min. 30 up to 95 dBA in 1m (inner loudspeaker) min. 40 up to 110 dBA in 1m (outer loudspeaker) |
| Volume reduction | Automated /manual |

AŽD Praha s.r.o.

Žirovnická 2/3146
106 17 Praha 10, The Czech Republic

e-mail: stm.info@azd.cz
tel.: +420 267 287 403
www.azd.cz

