LA SEMAFORICA

VIA

Visually Impaired Aid

GENERAL CHARACTERISTICS

With the new acoustic device for visually impaired VIA (Visually Impaired Aid), La Semaforica offers a product that combines reliability of operation, robust construction and a nice shape, thanks to the new unique design of its kind.

Simplicity of configuration, and a constantly updated tone library allow the use of this device in any context, at any country and urban scenario.

FUNCTIONAL DESCRIPTION

VIA is an electronic audioguide that guarantees a safe crossing, to blind people, within the pedestrians walkways thanks to a microcontroller technology based on Cortex-M4 architecture, in which high security features are implemented, matured during the long experience of La Semaforica within the design of vehicular and pedestrian traffic control systems.

The advanced electronic technology, used in the audio reproduction components, together with a high level of configurability, allows VIA to simultaneously reproduce TWO different sound indications, respectively from the front and rear speakers, in any traffic light phase of the associated signal heads.

In this way, VIA not only guarantees the safety of the users during the crossing (reproducing with the frontal speaker the classic sounds dedicated to the pedestrian phases of go-ahead, clearing and waiting), but can provide them a valuable help during the approach to pedestrians crossing to identify the location of the pedestrian reservation device..

In order to offer the best possible service, La Semaforica reserves the right to modify at any moment and without any warning the features of the products described in this document. This document has the only purpose of illustrating the products. If you need detailed technical data, please do not hesitate to contact us.

Thanks to the rear speaker, in fact, VIA can:

- provide a sound feedback on the receiving of the pedestrian request (usually carried out using the ZEBRA pedestrian button);
- provide a guide sound that indicates to the user who is approaching the crossing;
- report to the user who is near dangerous places (i.e. construction sites, etc ...).

The audio codecs, which it is equipped with, allow VIA to reproduce two basic types of sounds:

1. Tones appropriately modulated, with a certain frequency (bpm - beats per minute) and duty cycle;

2. Vocal signals and musical motifs.

Finally, thanks to a suitably sized non-volatile memory, VIA is able to play audio files in .wav format also recorded and loaded by the user, in addition to those belonging to the library of sounds pre-loaded in it..

As required by the various international regulations of the sector, finally, VIA is able to reproduce the sounds with volume adaptive to the background noise: the microntroller that manages the operation, indeed, implements algorithms of sound analysis that allow the device to maintain levels of sound pressure adapted to the correct audibility in any context, be it of high noise or quiet.

CONFIGURABILITY

As already partially anticipated, VIA was designed to be used in any type of application context.

It is therefore available in both single and double speaker versions, where for each speaker it is possible to:

- Activation and deactivation of the speaker;
- Enabling or disabling the adaptive volume function to background noise.

If this function is enabled, it is possible to set threshold levels for the maximum and minimum playback volume and for the signal to maintain noise ratio.

If this function is inhibited, a fixed value can be set for playback;

- the sound / voice message to be reproduced for each pedestrian traffic light phase;
- the sound / voice message to be played in the event of a pedestrian call.

Finally, it is possible to set a functioning calendar that indicates to the device in which time bands of the day it must start working.

CONNECTIVITY

VIA can be used as a stand-alone device, that is, functioning according to the configuration mode agreed with the customer, but without any possibility of remote monitoring or configuration.

However, by connecting the VIA device with the optional CDI (Control Device Interface) unit through the RS485 communication interface with which it is equipped, it is possible to perform various remote operations, including:

- modify the configuration of VIA even after installation;
- monitor the operation of the VIA device in order to facilitate any maintenance, repair and replacement operations.

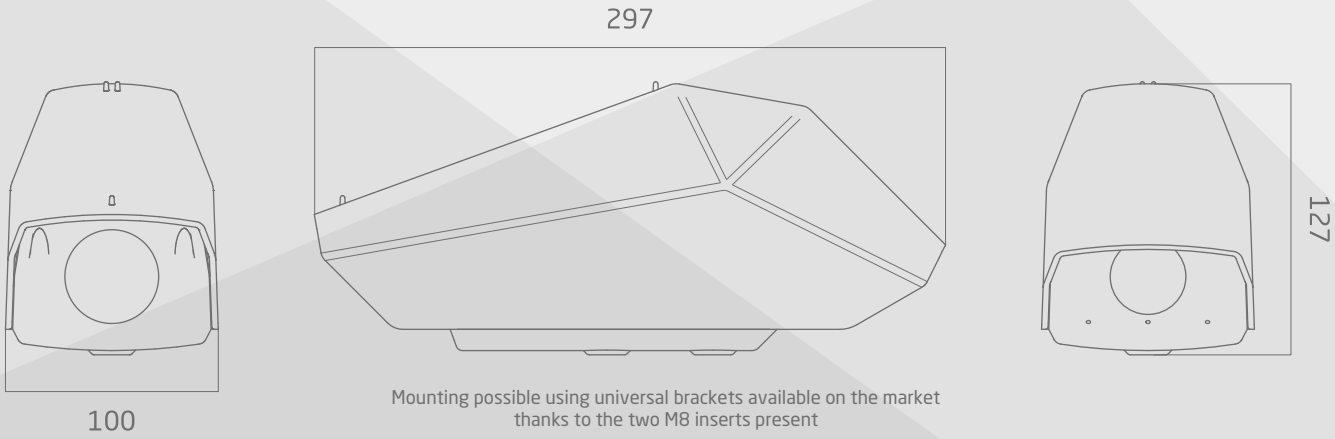
The CDI is in fact able to connect to any data network through different communication ports (Bluetooth, WiFi, Ethernet, 3G Modem, etc ...) and is therefore able to make the VIA device "reachable":

- from any PC through T-Macs Client or S-Macs;
- from any mobile device (tablet or smartphone) through the S-Macs Mobile app..

CARATTERISTICHE TECNICHE

TECHNICAL CHARACTERISTICS	
Material	Polycarbonate
Color	On request
Input voltage supply	110 VAC, 230 VAC, 12-24 VDC (40 VAC available on request)
Power Ratings	Max. 11,5 W (both speakers @ maximum Volume) Min. 1,7 W (rear and front speakers OFF)
Speakers	Rear, front or both
Sounds, frequency and tones	13 sounds library already stored in Flash memory Possibility to upload sounds recorded by user Possibility to upload sounds build on customers specs about frequency, tone and duty cycle
Volume	Fixed or adaptive
Remote control	PC and Mobile App (Smartphone e tablet)
Electrical Safety	EN50556
EMC	EN50293
Insulation Class	Class II
IP Rating	IP55 Ref. EN60529
Vibrations	IEC 60068-2-34

DIMENSIONAL DRAWINGS



Mounting possible using universal brackets available on the market thanks to the two M8 inserts present

All the dimensions are in mm.

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