



CiViTAS
Cleaner and better transport in cities

ARCHIMEDES

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IASI

T48.1 Audio Warning Devices for the Visually Impaired in Iasi

Iasi

December 2009



THE CIVITAS INITIATIVE
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1. Introduction

1.1 Background CIVITAS

CIVITAS - cleaner and better transport in cities - stands for City-VITALity-Sustainability. With the CIVITAS Initiative, the EC aims to generate a decisive breakthrough by supporting and evaluating the implementation of ambitious integrated sustainable urban transport strategies that should make a real difference for the welfare of the European citizen.

CIVITAS I started in early 2002 (within the 5th Framework Research Programme);
CIVITAS II started in early 2005 (within the 6th Framework Research Programme) and
CIVITAS PLUS started in late 2008 (within the 7th Framework Research Programme).

The objective of CIVITAS-Plus is to test and increase the understanding of the frameworks, processes and packaging required to successfully introduce bold, integrated and innovative strategies for clean and sustainable urban transport that address concerns related to energy-efficiency, transport policy and road safety, alternative fuels and the environment.

Within CIVITAS I (2002-2006) there were 19 cities clustered in 4 demonstration projects, within CIVITAS II (2005-2009) 17 cities in 4 demonstration projects, whilst within CIVITAS PLUS (2008-2012) 25 cities in 5 demonstration projects are taking part. These demonstration cities all over Europe are funded by the European Commission.

Objectives:

- to promote and implement sustainable, clean and (energy) efficient urban transport measures
- to implement integrated packages of technology and policy measures in the field of energy and transport in 8 categories of measures
- to build up critical mass and markets for innovation

Horizontal projects support the CIVITAS demonstration projects & cities by :

- Cross-site evaluation and Europe wide dissemination in co-operation with the demonstration projects
- The organisation of the annual meeting of CIVITAS Forum members
- Providing the Secretariat for the Political Advisory Committee (PAC)
- Development of policy recommendations for a long-term multiplier effect of CIVITAS

Key elements of CIVITAS

- CIVITAS is co-ordinated by cities: it is a programme “of cities for cities”
- Cities are in the heart of local public private partnerships
- Political commitment is a basic requirement
- Cities are living ‘Laboratories’ for learning and evaluating

1.2 Background ARCHIMEDES

ARCHIMEDES is an integrating project, bringing together 6 European cities to address problems and opportunities for creating environmentally sustainable, safe and energy efficient transport systems in medium sized urban areas.

The objective of ARCHIMEDES is to introduce innovative, integrated and ambitious strategies for clean, energy-efficient, sustainable urban transport to achieve significant impacts in the policy fields of energy, transport, and environmental sustainability. An ambitious blend of policy tools and measures will increase energy-efficiency in transport, provide safer and more convenient travel for all, using a higher share of clean engine technology and fuels, resulting in an enhanced urban environment (including reduced noise and air pollution). Visible and measurable impacts will result from significantly sized measures in specific innovation areas. Demonstrations of innovative transport technologies, policy measures and partnership working, combined with targeted research, will verify the best frameworks, processes and packaging required to successfully transfer the strategies to other cities.

1.3 Participant Cities

The ARCHIMEDES project focuses on activities in specific innovation areas of each city, known as the ARCHIMEDES corridor or zone (depending on shape and geography). These innovation areas extend to the peri-urban fringe and the administrative boundaries of regional authorities and neighbouring administrations.

The two Learning cities, to which experience and best-practice will be transferred, are Monza (Italy) and Ústí nad Labem (Czech Republic). The strategy for the project is to ensure that the tools and measures developed have the widest application throughout Europe, tested via the Learning Cities' activities and interaction with the Lead City partners.

1.3.1 Leading City Innovation Areas

The four Leading cities in the ARCHIMEDES project are:

- Aalborg (Denmark);
- Brighton & Hove (UK);
- Donostia-San Sebastián (Spain); and
- Iasi (Romania).

Together the Lead Cities in ARCHIMEDES cover different geographic parts of Europe. They have the full support of the relevant political representatives for the project, and are well able to implement the innovative range of demonstration activities.

The Lead Cities are joined in their local projects by a small number of key partners that show a high level of commitment to the project objectives of energy-efficient urban transportation. In all cases the public transport company features as a partner in the proposed project.

2. Iasi

The City of Iasi is located in north-eastern Romania and is the second largest Romanian city, after Bucharest, with a population of 366,000 inhabitants. It is also the centre of a metropolitan area, which occupies a surface of 787.87 square kilometres, encompassing a total population of 398,000 inhabitants.

Iasi is the centre of a metropolitan area, which spans a surface of 787.87 km², with a total population of 398,000 inhabitants. The city seeks to develop possibilities for habitation, recreation and relaxation for all citizens in the region, business opportunities and provide opportunities for more consistent investments.

The city has five universities with approximately 50,000 students, the second largest in Romania. The universities and their campuses are located in the central and semi-central area of the city. In the same area, there are also a large number of kindergartens, schools and high schools with approximately 10,000 pupils. This creates a large number of routes along the main corridor, served by the public transport service number “8” (Complex Tudor Vladimirescu - Copou) with an approximate length of 10 km. The City of Iasi will implement its integrated measures in this area to be known as the “CIVITAS+Corridor”.

The city's objectives in CIVITAS - ARCHIMEDES are based on the existing plans related to transport, Local Agenda 21, approved in 2002, and the Sustainable Social-Economic Development Strategy for City of Iasi. The CIVITAS Plus objectives will be integrated in the Strategy for metropolitan development to be finalized in May 2009.

3. Background to the Deliverable

ARCHIMEDES measure number 48 comprises 2 tasks aimed at improving transport for disabled people, of which task 5.8 is aimed at helping visually impaired people to integrate in traffic in Iasi.

The high number of traffic accidents that involved visually impaired citizens has determined Iasi City Hall to propose the installation of special audio systems. In our current traffic management systems there are no helping devices to aid the visually impaired people in crossing streets or knowing what is the current status of traffic lights. ARCHIMEDES offers the opportunity to install Audio Warning Devices on the CIVITAS Corridor, as well as at the intersections in Iasi mostly often used by visually impaired persons (where their Associations or work places are located and within high density areas populated by visually impaired people). See Annex 1.

3.1 Summary Description of the Task

The objective of this task is to install and make operational for some of the pedestrian crossing the devices that can help the visually impaired people to integrate in traffic like all others.

4. Audio warning devices for visually impaired

4.1 Description of the work done

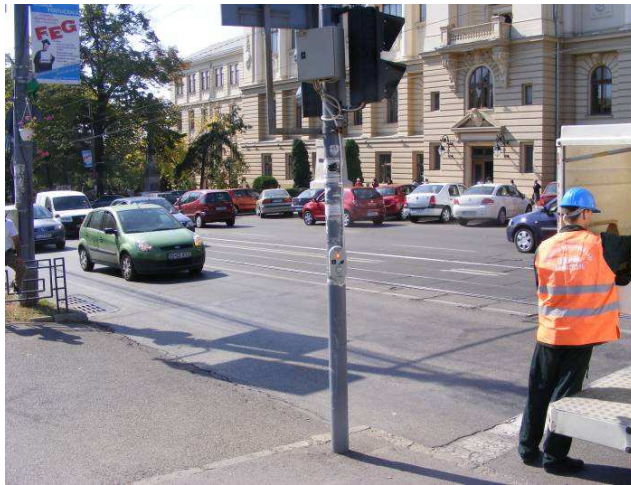
Iasi City Hall together with The Association of Visually Impaired Persons Iasi-Vaslui have decided upon the locations where the AWD systems should be installed on CIVITAS Corridor, as well on other locations, according the following criteria:

- the intersections mostly used by visually impaired citizens;
- location of their Association,
- location of their workplaces;
- high density areas used by visually impaired persons . See Annex1.

Iasi City Hall, working with a specialised company, have installed the audio warning devices for visually impaired people (total 40 units) at 16 main signalised intersections on the CIVITAS corridor. The devices are connected to the actual management traffic systems. The locations are :

1. Bariera Tigarete - **4 pcs** (1 crossing str. Strapungere Silvestru; 1 crossing Moara de Foc)
2. Gara mare – **6 pcs** (1 crossing str. Garii; 1 crossing str. Silvestru; 1 crossing str. Stapungerii Silvestru)
3. Moara de Foc (Canta) – **2 pcs** (1 crossing str. Moara de Foc; 1 crossing str. Canta)
4. Munca Invalizilor -**2 pcs** (1 crossing sos. Pacurari la aleea Cimitir Evreiesc)
5. Podu Ros -**2 pcs** (1 crossing str. Nicolina – posta)
6. Minerva - **2 pcs** (1 crossing bdul. Al. Cel Bun)
7. Recuperare – **2 pcs** (1 crossing str. Pantelimon Halipa)
8. Pacurari-Moara de Foc – **4 pcs** (1 crossing str. Pacurari; 1 crossing sos. Pacurari-la Moara 1 Mai)
9. Codrescu –**2 pcs** (1 crossing bdul. Carol I)
10. Spiridon – **2 pcs** (1 crossing bdul Independentei)
11. Mitropolie – **2 pcs** (1 crossing bdul St.Cel Mare – la intersectia str. Colonel Langa)
12. Tudor Vladimirescu– **2 pcs** (1 crossing bdul Tudor Vladimirescu= Iulius Mall – Facultatea de Chimie)
13. Univ Al. I. Cuza – **2 pcs** (1 crossing bdul Carol I)
14. Traversare N Iorga– **2 pcs** (Casa sindicatelor-Cotnari)
15. Str Palat– **2 pcs** (școala Gh Asachi-Palat)
16. Str Strapungerea Silvestru – **2pcs.**

The decision about the proper manner to install the devices was made on a case by case basis because every crossing is different and it was imperative to optimise the installation in order to maximise the chance of success. The devices must be protected from interference from other devices, panels ,mechanical obstructions etc. The connections were made with anti-vandal cables so no one can touch the wires that are under high voltages (230 V). The devices were connected to existing pedestrian traffic lights so the indications are simulataneous.



The private company was selected by a transparent public procurement tender, according to the applicable legal provisions, and this company offered and installed the Audio Warning Devices. Within the requirements of this procedure, Iasi wanted to procure the Audio Warning Devices following the international standards for traffic and noise safety (See annex2).

These devices have been installed according to the specifications offered by the Association of Visually Impaired Persons, but also according to the noise level registered during the day and night, so that the nearby inhabitants would not be disturbed.

4.2 Main Outcomes

The audio warning devices have been implemented successfully from an operational perspective.

The installation of Audio Warning Devices was very well received by the users, who consider it to be a measure that completely changes their access within public area, increasing their independence and walking safety. Outcomes in terms of the impact of the audio warning devices will be determined by the project evaluation tasks.

4.3 Communication Activities

Before installing the audio devices for visually impaired people, locations were established, meetings were held with the association for the visually impaired people. On these meetings, 3 Iasi City Hall representatives, 3 representatives of the Iasi ARCHIMEDES team and 5 representatives of the Visually Impaired Persons Association attended. After implementation, the people were informed by radio and TV about the devices, locations and function.

The reactions of media, written press, audio and TV and Visually Impaired Persons Association were positive, most of them considering that it is necessary to extend this activity over the entire city.

Media reaction examples include:

<http://www.iasiplus.ro/news/4/17357/Semafoare+cu+semnale+acustice+pentru+nevazatori.html>

Caldura pentru ieseni garantat ...
In cadrul sedintei extraordinare de astazi, Consiliul Local a aprobat garantarea de catre municipalitate a unui credit de 7,9 milioane euro, pe care CET Iasi urmeaza sa-l contracteze de la Benetton, pentru a putea achita o datorie de 32,464 milioane ...

IASI PLUS

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EDITIA VIHARI 20 NOIEMBRIE 2009

Semafoare cu semnale acustice pentru nevazatori
Cristian Matasa 19:46 (joi 03 Sep 2009)

Reprezentantii municipalitatii si cei ai Asociatiei Nevazatorilor din Romania Iasi – Vaslui au stabilit localitate a 20 de treceri de pietoni care, pana pe 7 septembrie, vor fi prevazute cu dispozitive acustice de acces semaforizat. Este vorba despre traseuri din mai multe zone – strada Strapungere Săvestru, strada Săvestru, Moara de Foc (Inclusiv baniera Tigareta), strada Iani, Băncuți, Munca Invalizilor (Pacurari), Posta Podu Ros, Minerva (Alexandru cel Bun), Spitalul de Recuperare, Moara 1 Mai (Pacurari), b-dul Carol I (intersecte cu strada Codrescu si in fata la Universitatea "Al. I. Cuza"), Spitalul "Sf. Spiridon" (b-dul Independentei), in fata Primariei, la Iulius Mall, la restaurantul si pe strada Palat (in apropierea scoli "Ghi Asachi). Sistemele audio emit semnale acustice in momentul in care apare culoarea verde a semaforului. Dispozitivele sunt prevazute cu buton de solictare trecere.

ULTIMELE STIRI LOCAL NATIONAL INTERNATIONAL

- 15:25 - O sectie din judet a fost inchisa z ...
Sectia de votare 734 din comuna Iesara Tătaru a fost inchisa pentru zece minute deoarece membri ...
- 15:22 - Incidente semnalate in sectiile de ...
Liberali semnaleaza ca la sectia de votare nr. 510 din Harmanesti Vechi, presedintele de filab a ...
- 15:00 - Ieseni au lesit la vot in numar ma ...
Pana la ora 10.00, 5,92 % dintre ieseni cu drept de vot s-au prezentat la urne pentru a alege prese ...
- 15:49 - Caldura pentru ieseni garantata de ...
In cadrul sedintei extraordinare de astazi, Consiliul Local a aprobat garantarea de catre municipali ...
- 19:00 - Proces amanat fiindca martorul a fo ...
Judecatori Tribunalului s-au vazut, ieri, nevoiti sa amane judecata in dosarul lui Liviu Zugrăv, ...

TOATE STIRILE

http://www.cuzanet.ro/index2.php?option=com_content&do_pdf=1&id=2917

http://www.flacarais.ro/cms/site/fl_is/news/primaria_pune_dispozitive_de_trecere_a_strazii_pentru_nevazatori_in_tot_orasul_18948.html

FLACARA IASULUI
ADMINISTRATIE

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Sambata, 21 Noiembrie 2009

12°C 15:30

CURSUL VALUTAR
1 USD = 2.8780 RON 1 GBP = 4.7585 RON
1 EUR = 4.2817 RON 1 XAU = 105.7319 RON
+ VEZI CURSUL COMPLET + SEE ALL EXCHANGE RATES

CAUTARE

Primaria pune dispozitive de trecere a strazii pentru nevazatori in tot orasul

AUTOR: ION MUSET
DATA PUBLICARII: 04/09/2009

Reprezentantii municipalitatii iesene vor monta dispozitive sonore pentru persoanele cu deficiente de vedere la cele mai importante treceri de pietoni din oras. Initial, cele 40 de dispozitive, achizitionate in cadrul proiectului Archimedes, trebuiau montate doar pe culoarul Civitas Tudor Vladimirescu - Rond Agromonie. Insa, la solicitarea Asociatiei Nevazatorilor din Romania Iasi-Vaslui, acestea vor fi amplasate si in alte zone. Montarea dispozitivelor a inceput deja si se va termina pana pe 7 septembrie.

Trecerile de pietoni care vor deveni sigure pentru nevazatori sunt urmatoarele: strada Strapungerii Săvestru - baniera Igarate (4 buc), strada Iani - strada Săvestru - Gara (8 buc), Moara de Foc (2 buc), strada Săvestru - strada Băncuți (magazin Kosarom) (2 buc), Soseaua Pacurari la intersecție cu aleea Cimintirii Evelesic (Munca Invalizilor) (2 buc), strada Nicolina (Oficiul Postal Podu Ros) (2 buc), bulevardul Alexandru cel Bun (Minerva) (2 buc), strada Pantelimon Halipa - Spitalul de Recuperare (2 buc), strada Pacurari - soseaua Pacurari (la Moara 1 Mai) (4 buc), bulevardul Carol (strada Codrescu) (2 buc), bulevardul Independentei (Spitalul "Sf. Spiridon") (2 buc), bulevardul Stefan cel Mare si Sfânt - strada Colonel Langa (2 buc), bulevardul Tudor Vladimirescu - Iulius Mall - Facultatea de Chimie (2 buc), bulevardul Carol I (Universitatea Alexandru Ioan Cuza) (2 buc), bulevardul Nicolae Iorga (Casa Sindicatilor) (2 buc), strada Palat (Scoala Gheorghe Asachi - Palat) (2 buc).

"Proiectul prevedea ca aceste dispozitive sa fie amplasate doar pe culoarul Civitas, dar cei de la Asociatia Nevazatorilor ne-au rugat sa le punem si in alte zone. Ei au venit cu lista de propuneri, iar noi li vom da curs. Proiectul este foarte flexibil in cazul acesta, mai ales ca este vorba de persoane cu deficiente de vedere. Situatia va fi raportata si parternelor nostri de proiect din cadrul Civitas-Archimedes", a declarat Beatrice Fotache, managerul proiectului.

Cele 40 de dispozitive acustice au costat 92 mil lei, fara TVA, si vor fi livrate de firma SC Canel SA Iasi.

afiseaza toate titlurile

Inteles doar la 0 milimetri.

scrie ne aneazea

http://telem.telem.ro/telem/arfiva_flv/arfiva.htm?flv=2008/2009/09/16/orb



http://telem.telem.ro/telem/index.php?option=com_content&task=view&id=19965&Itemid=100



<http://www.7est.ro/stiri/esential/8308-municipalitatea-a-inceput-montarea-semafoarelor-pentru-nevazatori-foto>



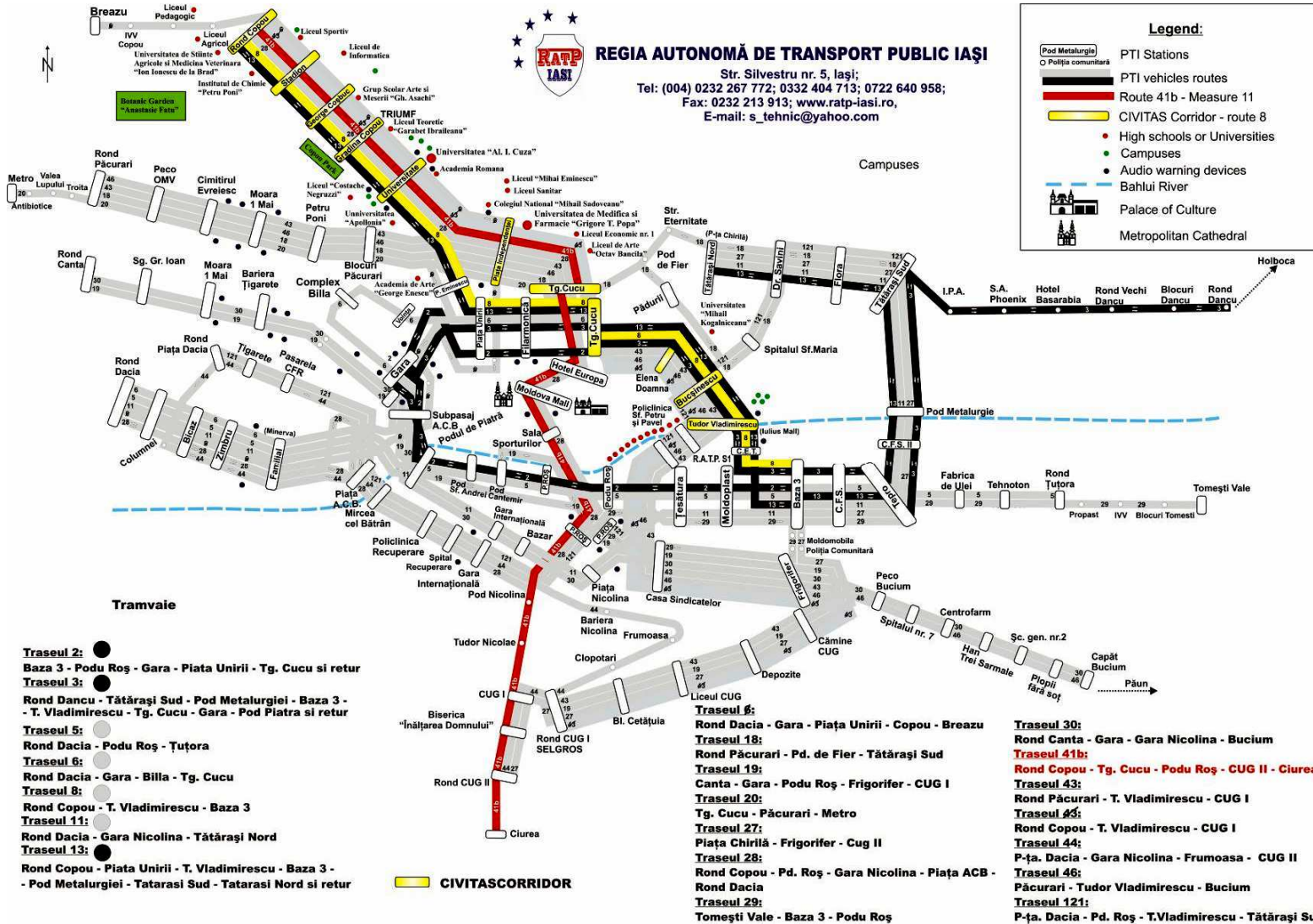
4.4 Problems Identified

No problems have been detected for the audio warning devices for visually impaired people.

4.5 Future Plans

Continuing study of what further crossings may be in need of more devices.

ANNEX 1



ANNEX 2

Description of Audio warning devices for visually impaired people (data sheet)

Access audio warning devices for visually impaired people CAN - DAANV consists of 2 parts:

1. The sound part itself containing:
 - Block broadcasting sound signals
 - Sensor to detect ambient noise
 - Microprocessor-level analysis of environmental noise
2. Command button to reserve street crossing containing:
 - Push button control for booking crossing street
 - Command beep to confirm your reservation crossing street
 - Color detection circuit traffic light (green, red, possibly yellow)
 - Memory circuit to automatically control lights request
 - Power source

Mechanical characteristics of the device:

- Polycarbonate outer case for the actual sound part and metal housing for command button
- Degree of protection: IP55
- Vandal Protection
- Mechanical protection of cable

Electrical characteristics of the device:

- Power 220VAC + / - 15%, frequency 50Hz..

Noise characteristics of the device:

- Minimum level of audible signal: 30dB
- Maximum level of signal noise: 60dB measured at 1m
- Acoustic signal for green:
 - 60 pulses / min, with 50% fill factor
 - frequency of 800Hz + / -10% modulated with a 20Hz signal
- Acoustic signal for red: not be imposed
- Optional audible signal for yellow (or the last seconds of counting for pedestrian traffic lights equipped with built-numerator):
 - 120 pulses / min, with 50% fill factor
 - frequency of 800Hz + / -10% modulated with a 20Hz signal
- Noise detection and noise power setting of the device depending on the level
 - o for the street noise of 5dB, sound power is 60dBA
 - o for the street noise of 5dB, sound power is 60dBA

Other features:

- Thermal regime of operation:-25C - +50 C
- Emission of a sound signal with a max length of 2 sec at a frequency of 2kHz modulated at a frequency of 20Hz when the application was accepted by crossing
- Optical signal confirming the acceptance of demand for crossing
- Ignore requests for crossing when pedestrian lights are on green

- Not sounds WHEN Traffic lights for pedestrians are Not Working

1. Installation

- Audio warning devices are mounted on the existing traffic light pillar at a minimum height of 2.5 m, using a proper clamping system, adaptable to varying sections of the pillar
- Command button is mounted on the pillar across the street from the traffic light at a height of 1m, using their own system, adaptable to varying sections of the pillar
- Command button is connected in the junction boxes of traffic lights, located on the same pillar with existing system.

