

## Characteristics:

The button is adapted to work with any standard power source. In addition, all behavioral parameters can be modified on site by a service by using the configuration tool installed on PocketPC or standard PC having an infrared port.

Sensor button for pedestrians is designed to also serve people with vision disabilities, dedicated sensor with vibration signals gives necessary information about current state of pedestrian crossing.

The button is equipped with an audible pedestrian guidance and confirmation of request with different frequencies. Using LEDs as opposed to incandescent lamps allows for low power consumption and long life.

Modern shape of the casing is designed to increase resistance to vandalism, ie, change the resultant vector of impact and ribbed moldings directly to transfer the impact force on the pole, where the button is installed.

The detection of a pedestrian is based on capacitive sensor, allowing to get rid of mechanical components and extend the life of the device.

### Button functions :

- Sensor application of pedestrian
- LED confirmation of pedestrian continuous / pulse
- Graphical display of a sequence of advertising on the LCD screen
- Audible pedestrian guidance on the button (audibility to 4m)
- Wireless programming interface for system parameters
- Temperature measurement with the possibility of display
- Low resistance contact relay for request signal
- Supply voltage in the range 24DC 230AC
- Confirmation of alternating current voltage or constant in the range 24DC 240AC
- Power consumption of 1.5W max power connector independent of the input voltage



**We also offer contactless functionality.  
Now there is no need to press the  
button to turn on the green light, just  
raise your hand.**



## Description of input / output signals

<b>Power:</b>	Wires 1L and 2N should be connected according to the signs, where L is the phase (live) and N return (neutral). In the case of DC power adequately to connect the L and N + to . This rule also applies to all signal connections. Input voltage can be fed at nominal voltages 24VDC, 42VAC, 115VAC and 230VAC. Max current consumption is 100mA for the voltage of 24VDC 10mA for 230VAC.
<b>Notification:</b>	Wires 3, 4 and 5 are notification signals. Wire 3 is common terminal Normally Open with wire 4 and Normally Closed with wire 5. The contact is galvanically isolated from power and other inputs. The maximum voltage can not exceed 250VAC in open state and in closed state current cannot exceed 250mA. Line 3 is equipped with a 33R, 2W safety resistor which is to protect the internal circuit from overcurrent damage.
<b>Confirmation:</b>	Wires 6N and 7L are confirmation signals. Just as the power input, applied voltage must be within 24V230VAC. Current consumption is 10mA for DC and 5mA for AC regardless of voltage. Confirmation is used to generate a LED signal. Confirmation operates in two modes high and low voltage, dependant on input voltage. For input voltages 115VAC and 230VAC triggering voltage is set to 130VDC wherelse for 42VAC and 24VDC it is set to 18VDC.

## Operation modes:

### Basic mode:

In this mode, all signals should be connected, as described in point called: "Description of input / output signals".

### Mode without a confirmation signal:

This mode is used when the confirmation signal is not available on pedestrian crossing (from the controller). The button is configured with the option of its own confirmation set. This means that the notification signal is generated automatically after sensors' touch. This state is held until voltage drops on power supply lines. In this mode, the button should be supplied from the power supply line of red light for pedestrians, so it could be reset during green light for pedestrians.



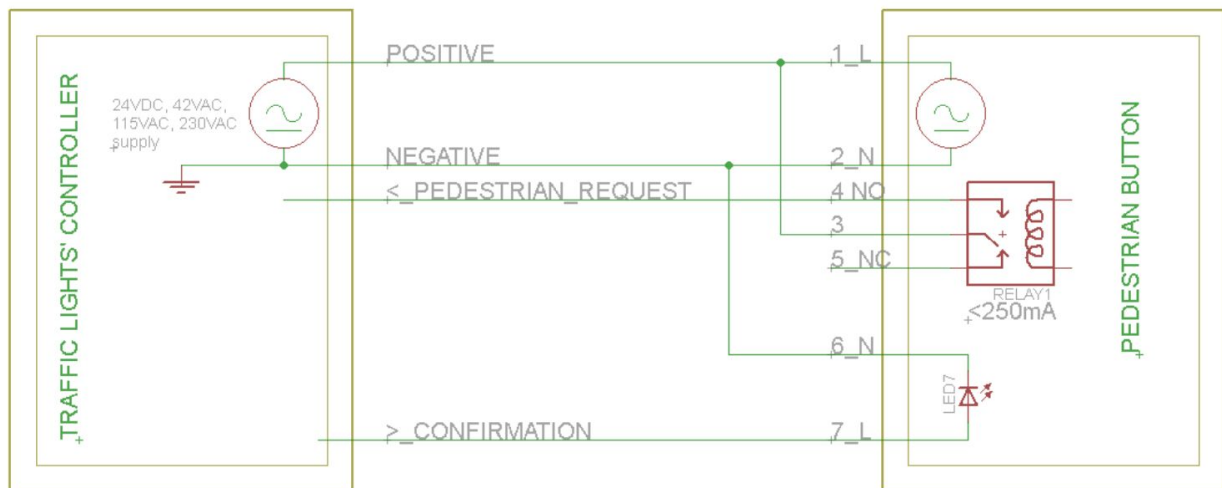
## Schematic examples:

### 24VDC or 42VAC systems

This example shows connection for 24VDC or 42VAC supply and signaling. Input voltage is measured at the supply lines 1 and 2. Voltage threshold for confirmation signal is set for 18VDC

### 115VAC and 230VAC systems

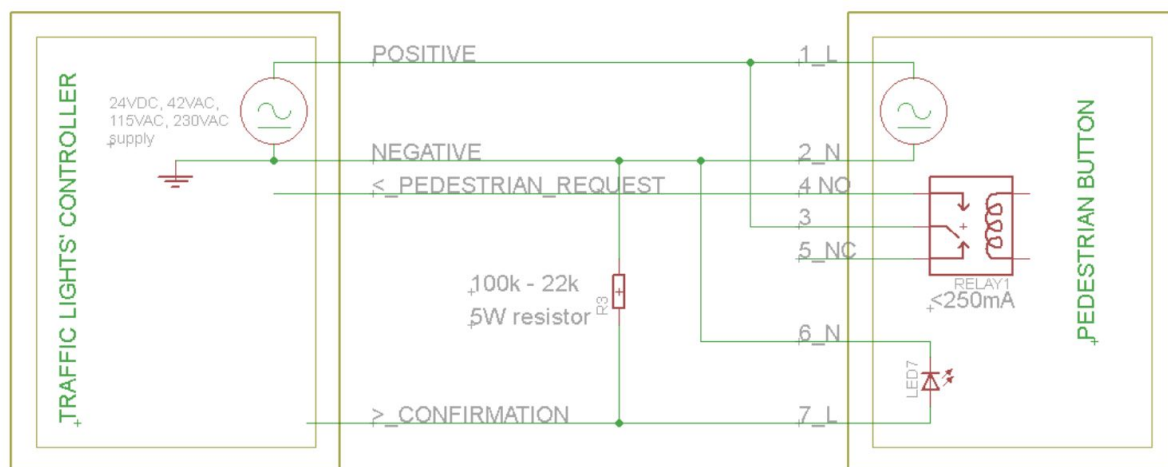
This example shows connection for 115VAC and 230VAC system. Input voltage is measured at the supply lines 1 and 2. Voltage threshold for confirmation signal is set for 130VDC.



## Problems and solutions:

### Electric induction

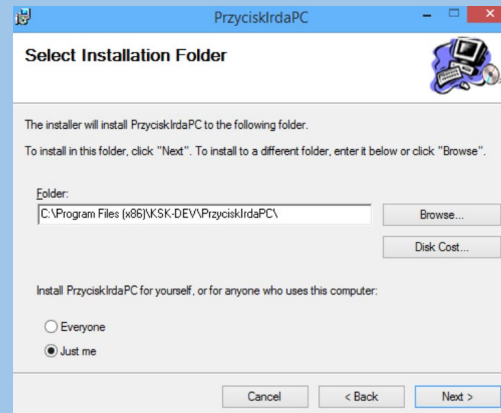
Sometimes, long transmission lines induce voltage in not powered confirmation signal lines. The induced voltage is so high that activates the state of confirmation. This effect occurs usually at voltages 230VAC, long transmission lines and when nontwisted wires are used. Once the induced voltage reaches 130VDC level for 115VAC and 230VAC or 18VDC level for 42VAC and 24VDC, the internal logic can no longer distinguish noise from proper signal. The method of dealing with this problem is to install pulldown resistors for confirmation line as close to the pedestrian button as possible. The second way to connect inline Zener diode with a value corresponding to the induced voltage. Finally, both these solutions can be combined together. Similar workaround can be used if high voltage is being induced on the request line, though the value of a pulldown resistor cannot be smaller than 1k for 230VAC system, so a maximum current drawn through that pin.



## Software “Pedestrian button configurator”

### Installation

You have to follow instructions on screen.



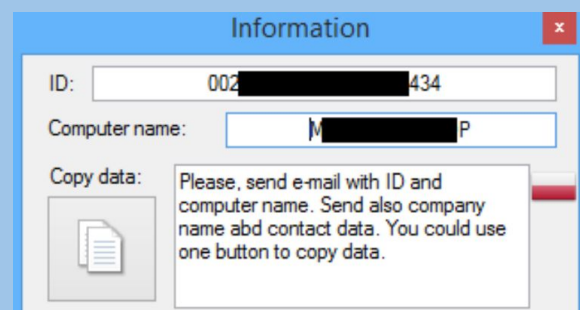
### IRDA connection

You have to connect pedestrian button to PC using IRDA protocol.

You need USB to IrDA dongle or internal IRDA adapter.



### First start serial number



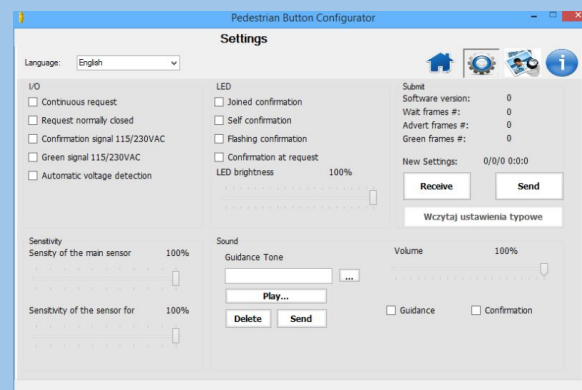


When you first start program (Pedestrian button configurator). You have to enter serial code. To get your unique code (it is assigned to one PC), you have to send email [ksk@kskdev.com](mailto:ksk@kskdev.com) with your ID and computer name which can be copied from configuration software. Send also company name and contact data. We send you back an email with unique code. After that you have to type the code into form.

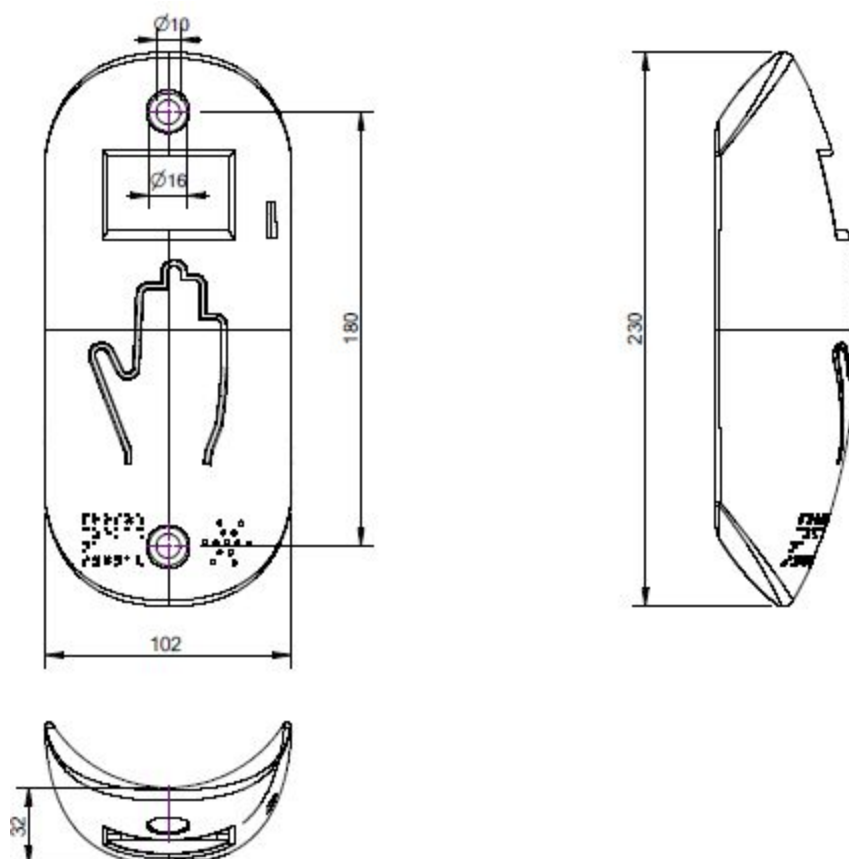


### Button settings:

1. Check IRDA connection
2. RECIEVE software version
3. Change settings manually or load LOCAL TYPICAL SETTINGS
4. Send new settings to the button.



Dimensions:





**Warnings:****Inappropriate use:**

KSK Developments allows you to use the machine only for intended purpose: detection of vehicles at intersections in traffic. KSK Developments does not allow to use the system for protecting against collisions.

KSK Development does not bear responsibility for all damages connected with using system inappropriate.

**Improper connection:**

The device is compatible with specified input voltage. If you connect other voltage, you can irreversible damage device.

KSK Development does not bear responsibility for all damages connected with improper connecting device.

**About:**

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