

OPERATION MANUAL

impulse²
pulse induction metal detector

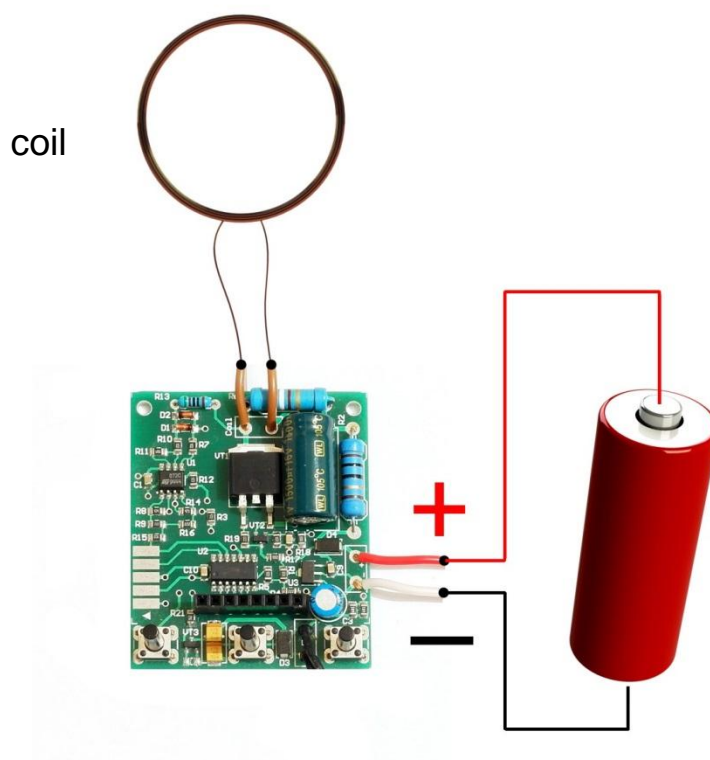
impulse² – is the pulse induction metal detector, which is able to detect metal objects in soil, water and other types of environment.

This metal detector makes no difference and able to detect all types of metals. With this metal detector one can connect search devices (coil) of different sizes depending on what you are going to search for.


In order to search for big metal objects located deep, please use the coil of big size, so called “deep search coil”.

Connection

1. Connect the coil and power battery and to the metal detector as shown on picture down below:




Do not close contacts of the coil; it may lead to the malfunction of the device

2. When connecting the device for the first time or when changing the settings you should go to the settings menu. To do so, hold menu button <B2>  (more than 2 seconds)

3. Selection is done using buttons

<B1>  and <B3> .

To go to the next menu entry push button

<B2> 

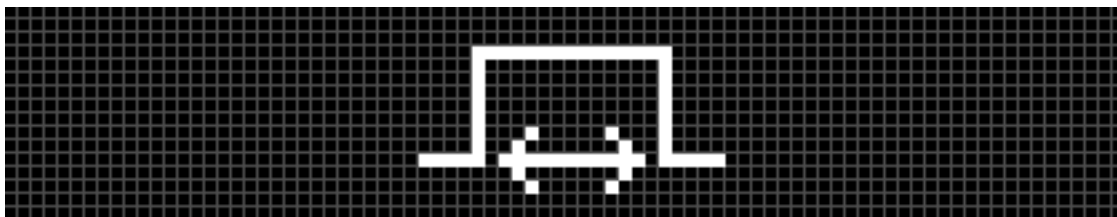
4. To exit the menu - hold button

<B2>  (more than 2 seconds)

SETTINGS MENU

Depending on the chosen mode the buttons have different functions, are shown on icon above the button.

Pulse induction width



Metal detector to do the search conveys “pulse” to the coil. Depending on the “width” of this impulse distance to the searched object also differs. Also, one can set up small and big coil in the optimum way.

But if the pulse induction width is big then power consumption increases and it could lead to unwanted effect i.e. the way the device reacts to the ground (false actuation).

Time delay



The optimum time delay is that when response value is within the range of 100-500 units.

Power consumption

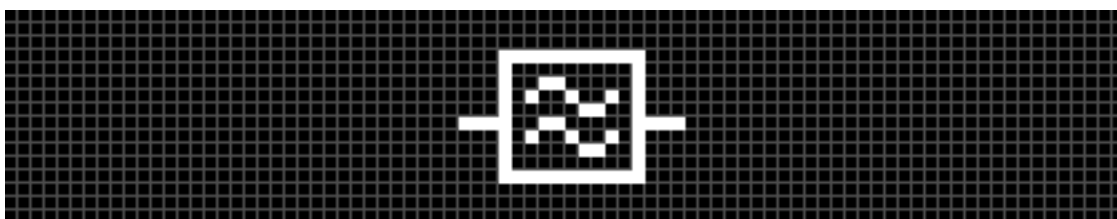


For correct display of battery icon please select the correct type of power source connection:

- 3 LiION – connected in series of three Li-ION batteries.
- Pb– lead battery 12 Volts.
- 10 NiMH– connected in series of ten batteries type AA 1.2 Volts each.

*Do not connect to the device to any power source with more than 16 Volts!
It may lead to the device malfunction.*

Filter

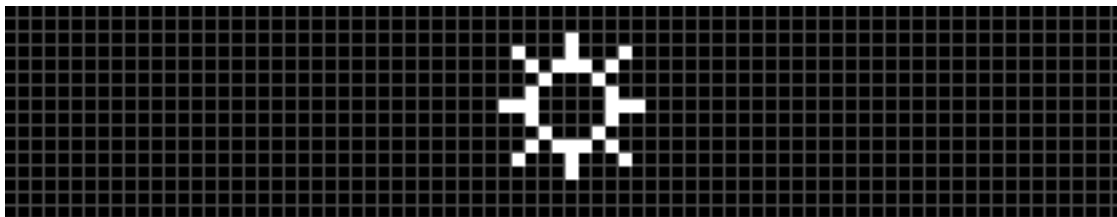


When device is working with maximum sensitivity false actuations may occur.

In order to decrease number of false actuations, please select one of four filters:

0. Filter is off – maximum sensitivity, but occurrence of false actuation is high.
1. Filter «1» - arithmetical average of the signal – sensitivity is good, possibility of false actuation is low.
2. Filter «2» - few responses values higher than threshold of subsequent ones – sensitivity excellent, possibility of false actuations is low.
3. Filter «3» - dynamic «reset» is useful in case of «drift» – sensitivity is average, possibility of false actuations is low.

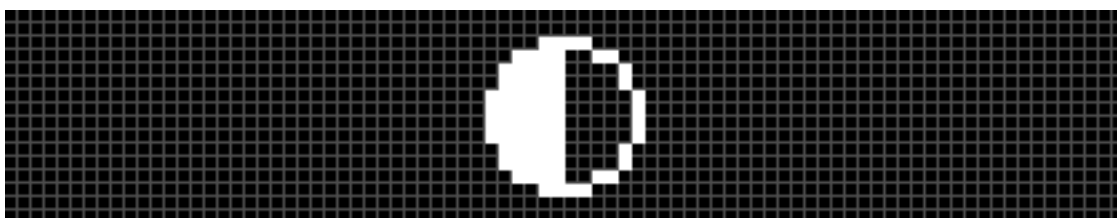
Display brightness



Select the desirable backlight brightness of the display for work in badly lit places or in the night time.

To turn on/off the backlight push “backlight” button on the main screen

Display contrast

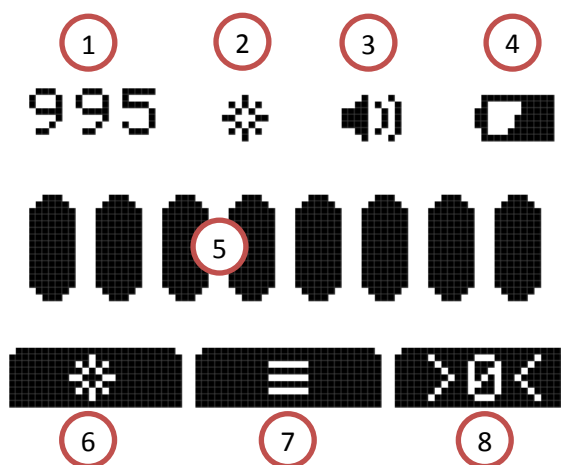


Select the desirable contrast of the display.

To exit settings menu - push and hold button <B2>



The following information is displayed on the screen during the device operation:



Main screen

1. Response value to the metal
2. Display backlight is on
3. Sound is on (off)
4. Battery charge condition
5. Response scale to the metal
6. Button B1 – Turn on/off display backlight
7. Button B2 – menu
8. Button B3 – reset

RESET

Raise the coil off the ground and put it off away from the metal objects -

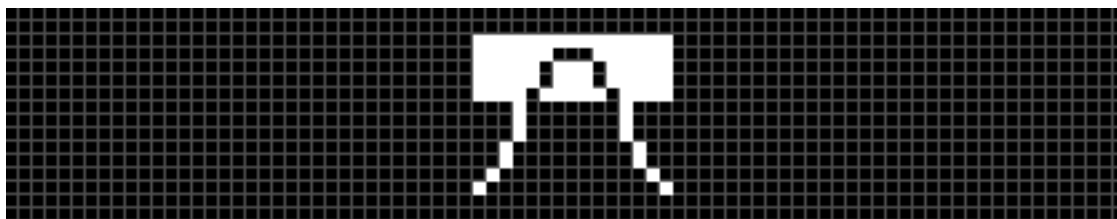
push button <B3>  «Reset» - response value should become «0», and on the response scale should not be any scale division.

If after the resetting false actuations occur, you should set up trigger threshold.

By pushing button once <B2>



Go to trigger threshold menu



and set up the required trigger threshold –

with buttons <B1>

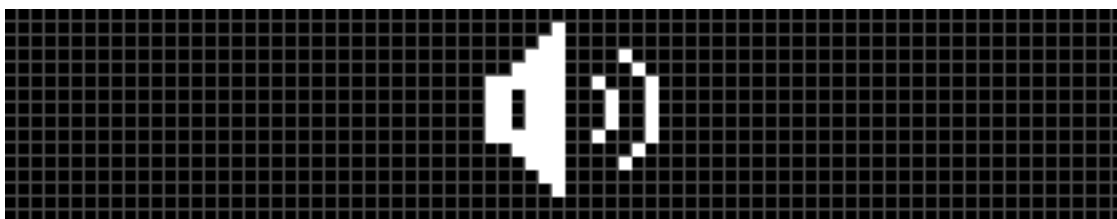


and <B3>



Now when putting the coil closer the metal object the response value will increase, on the response scale you will see divisions the number of which is proportionate to the size of metal object and distance to it.

To set up the required sound volume push button once <B2>



while in **Volume** menu select the optimum volume value –

by pushing buttons <B1>



and <B3>



Exit will automatically occur after 2 seconds.

To turn on/off the backlight– push button <B1>



When backlight is on, you will see display icon: 2