Changes in Atrex Multi Frequency 3.4 software

Atrex now works on new algorithms, thanks to which the detection properties have been improved:
* better quality of discrimination
* better readability of deep signals from small objects made of non-ferrous metals
* better detection properties for low conductors in highly mineralized soil
* the ID graph for iron objects is more readable
* Pitch sound has been introduced for motion work

Changes in the detector menu:
* the Masking feature is no longer available.
* instead of the Multifilter function, the Small Target Boost function has been implemented (the Multifilter algorithm itself is present in the detector and has been refined).
* added Operation quick lock.

NOTE: Disconnect the coil before reprogramming the detector.

Below are most important fragments of the manual in which changes have been made.

Reaction

NOTE: In most cases, filter number 5 is the most effective when searching for coins.

Small Target Boost

This unique feature of the detector significantly improves the detection of coins in soils with high mineralization, in situations of masking with iron, old ceramics, bricks, etc. In areas with less ground clutter, you can maximize this function (up to a setting of 30) for better results. However, if you find yourself unearthing too many small iron objects that are ball-shaped or lump-like, it's advisable to lower this setting.

NOTE: This is a very important setting that strongly affects the detection properties. In general, settings lower than 15 should not be used.

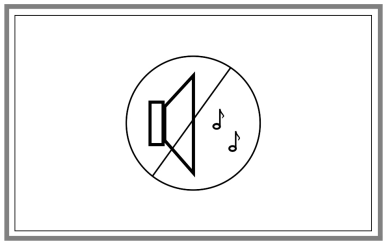
Tones

In the motion channel, the user has 9 sound profiles and a Pitch sound (variable tone depending on the signal strength) available. Sound profiles are divided into three groups: Coins: (1, 2, 3); Relics: (1, 2, 3); User: (1, 2, 3).

NOTE: Pitch sound should not be used in Dual mode - it reduces the sound clarity of the detector.

OPERATION QUICK LOCK

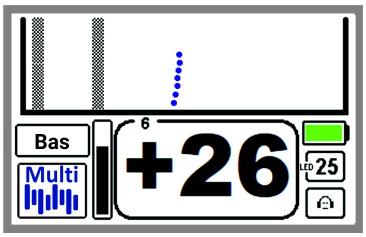
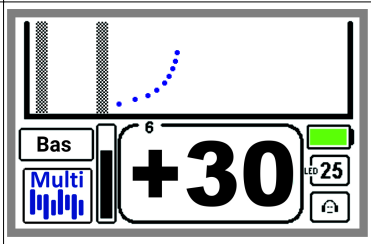
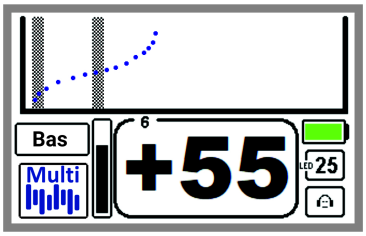
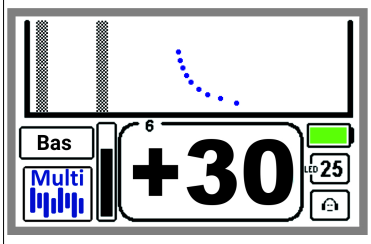
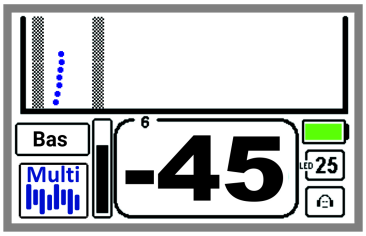
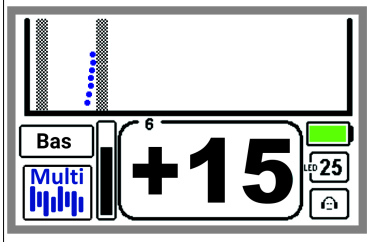
In the Operation screen, it is possible to quickly lock the detector's operation (sound and digital identification indications) - useful when putting the detector down, using the pinpointer to retrieve the find - and when you want to listen to the sounds of nature without turning off the detector. The − button is used to lock the operation, the + button is used to unlock.



IDENTIFICATION GRAPH

The identification graph is a graphical representation of the data collected by the identification circuit while moving the search coil over an object and is stored in the device's memory. This feature allows for quicker identification of ferrous objects than any other method. Please be aware that using the ID graph requires extensive experience. It is particularly important to become familiar with the detector so that the user can recognize the depth of the object. For deep objects, the graph will never be perfectly straight.

NOTE: When using the detector, the most important information is always the sound, then the ID number, and the graph is only supporting information.

Basic cases of graph interpretation	Cases requiring extensive user experience
 If the object is shallow and the graph is straight or only slightly bent, the object is made of non-ferrous metal.	 For deep non-ferrous objects, the origin of the graph will bend towards the iron.
 If the object is located shallow and the graph clearly starts with iron and goes into the color range and the ID number is positive, we are dealing with a large iron object cheating discrimination.	 Depending on the type of soil, the situation may be the opposite - a deeply located non-ferrous object may form a graph with the lower part bent towards high conductors.
 If the graph is in the iron range and the ID number is negative, we are dealing with a iron object.	 There is a possible case when the graph is in the iron range and the ID number is low and indicates a low-conducting object. It is a low-conductive object masked with soil, ceramics or bricks.