

# Professional Depth - Locating - Systems

DEEPMAX – X 5 ® and DEEPMAX – X 6 ®



## DETECTOR - SCOUT / Detecting - Systems - Röher

Habsburgerstr. 27 / 53859 Niederkassel Rheidt - near Bonn / Germany

fon : + 49 (0) 22 08 - 91 41 75 / fax : + 49 (0) 22 08 - 91 41 74

internet : [www.detector - scout.de](http://www.detector - scout.de)

e-mail : [info@detector - scout.de](mailto:info@detector - scout.de)



# Professional Depth - Locating - Systems

## DEEPMAX – X 5 ® and DEEPMAX – X 6 ®



The **LORENZ - DEEPMAX - X5** and **DEEPMAX - X6** series detectors are some of the newest developments in the field of Pulse GBS metal detectors. It is probably one of the most sensitive and stable metal detecting devices of its kind presently available.

The **DEEPMAX - X5 / X6** is the result of many years of research and development. A lot of efforts have been put into making this new product and especially in the new improved metal classifications and automatic ground balancing facilities offered with the **DEEPMAX - X5** and **DEEPMAX - X6** series.





The **LORENZ – DEEPMAX – X5 und X6** works to the latest :

**PULS – GBS – System 2 ( GBS = Ground – Balancing – System )**

The Pulse GBS ( Pulse Ground Balancing System ) is specially suitable for searching at depth. The performance of this electronic device is almost unaffected by salt water, most types of mineralised grounds or temperature changes. Specially designed electronics cancel out signals from the ground. The **DEEPMAX – X5 / DEEPMAX – X6** is therefore a reliable tool to locate metal objects at great depths even under the worst environmental conditions. A new improved circuit design suppresses interference from power lines and a power pulse technique produces very accurate signals to obtain very high detection depths.

- The **DEEPMAX – X5 / DEEPMAX – X6** is a high quality specialist Detector and it is designed to be used with both, small or large coils. Large coils offer extreme depth capabilities for big metal objects because of the strong and deep going magnetic field produced. Small coils are preferably used while searching for small objects like single coins or gold nuggets. Therefore search frames with up to 3 m square are available.



- This model offers a great range on non - ferrous metal objects in general. A very simple operation is guaranteed by a specially developed LC - Display and a minimum amount of controls. At the same time this detector model offers a number of features which are new for a pulse metal detector. Quality electronics and very special designed electronic - circuitry produce benefits in terms of easy of use as well as sensitivity.

- The **DEEPMAX – X5 / DEEPMAX – X6** gives a visual indication on the LC Display for every metal being located. This time delay reading producing a number between 000 and 099 helps to classify metal objects. The target classification circuitry is only in some cases affected by the size of a metal object and therefore identifies small coins as well as large pieces of metal. The **DEEPMAX – X5 / X6** also offers a sophisticated and refined ferrous / non - ferrous target analysis which works more stable on difficult soils in conjunction with the 26 cm or 35 cm double D search coil. The Detector also emits an audible sound by way of either a speaker or headphones.

- Detection depths achieved ( in air tests ) are almost the same in many types of soils and therefore considerably higher than those possible with standard pulse induction or sinewave VLF - TR Detectors.

- The DEEPMAX metal detectors are often recognised as representing some of the highest quality and newest developments in professional metal detecting equipment.

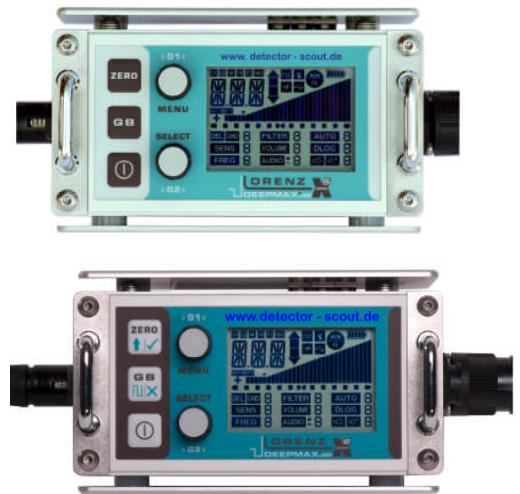


## NEWS :

- New search system with new LC Display and all new functions.
- Signal strength bar graph, time delay reading, ferrous / non - ferrous icons, battery condition and all the mode settings are displayed simultaneously on a large LC Display.
- New improved searchcoils available. More stable ground balancing functions for less interference in urban areas.
- Improved AUTO - function which gives with most targets only one indication instead of two when ground balancing system is selected. In addition different self tuning and Filter settings will help to make the unit even more stable.
- Completely New GROUND balancing systems with double D coils gives additional depth to small and large non - ferrous metal objects. Automatic false finding target identification.

### LORENZ – DEEPMAX – X5 / X6 ® Pulse – GB – System

- ▶ The Pulse GBS - 2 ( Pulse Ground Balancing System 2 ) Is suitable for searching at depth and specially designed electronics cancel out signals from the ground.
- ▶ The **DEEPMAX – X5 / X6** is therefore a reliable tool to locate metal objects even with extreme soil and environmental conditions.
- ▶ A new improved circuit design suppresses a range of interference from power lines or radio transmitters and a power pulse technique produces very accurate signals to obtain considerable detection depths.
- ▶ The **DEEPMAX – X5 / X6** works with three different ground cancel filters. It has an extended depth capability for non ferrous metal objects and it is capable of identifying metal objects employing the two different target identifications.



[www. detector - scout.de](http://www.detector-scout.de)

**LORENZ – DEEPMAX – X 5 / X6 ®**

- The Pulse Ground Balancing System - 2 : GBS performs well because of the time delay between the transmitting and receiving phase.
- The high transmitting power is a fundamental advantage and makes operation with very large search coils possible.
- Because of its active working principle a high sensitivity range for both ferrous - and non - ferrous metal objects is achieved.
- The **DEEPMAX – X5 / X6** was developed to provide a number of features including high sensitivity and stability along with easy operation. Simple operation with a minimum of controls and a large display make the **DEEPMAX – X5 / X6** a user friendly electronics device.
- It only takes a few moments to set the electronics to the prevailing ground conditions. Basalt soil and bricks present no problems. The selection of the ground filters one, two or three, in conjunction with the adjustment of the corresponding controls Ground one, two and Ground three, virtually cancels out unwanted signals.







- Even though the ground signal could be a few hundred or thousand times stronger than the signal of a small metal object, the LORENZ DEEPMAX - X5 / X6 in - built technic accommodates this and only produces a signal when metal is present. This is a considerable plus over many other systems and the small reduction in sensitivity is of little practical significance.



- The time delay function gives additional information on the probable kind of metal located.
- The time delay of the eddy currents, produced in conducting metal objects, is measured and indicated with a number between zero and ninety nine.

Three different ranges of metal objects can be indicated namely :

1. small non ferrous
2. ferrous
3. and large non ferrous metal objects.

**LORENZ – DEEPMAX – X5 / X6 ®**

**Made in Germany**

[www.detector-scout.de](http://www.detector-scout.de)



- When an induction balanced double D coil is fitted, the **DEEPMAX – X5 / X6** offers a sophisticated and refined ferrous / non - ferrous target analysis on difficult soils and the results are displayed using two different icons. Both the intensity bar graph and the audio signal increase as the search coil comes nearer to a metal object.





- The **DEEPMAX – X5 / X6** is made for use worldwide and a wide range of accessories are available to meet customer detection needs.
- To suit different search and location purposes a variety of search coils can be connected to the **DEEPMAX – X5 or X6**. Small search coils ranging from 26, 35 to 45 cm are held by a single person with a telescopic pole.
- Frame coils range from 1m square to 3 m square and can be made of cable coils and plastic pipes or are readily available from the manufacturer of the **DEEPMAX – X5 / X6**. Very simple search frames can be made of inexpensive plastic water pipes for example. The frame must be metal free and the cable coil should be mounted on the surface of the frame.

#### **DEEPMAX – X5 and DEEPMAX – X6 standard equipment :**



- LORENZ **DEEPMAX – X5 / X6** electronics control box  
( only Version X6 has a built - in data logger function, X6 also comes with a built - in data logger and additional GPS module with USB storage media )
- 35 cm double - D - coil ( to approx. 3.5 m of search depth )
- 1 m x 1 m frame coil ( to approx. 5.80 m of search depth )
- adjustable shoulder and belt strap with built - in 12 V battery pack  
Charger with wide range AC - input ( 100 - 240 V ) One detach  
able AC - plug for rapid charger ( Euro, UK, USA, Australia available )
- Plastic carrying case with foam padding
- Stereo headphones with 6,35 mm plug
- telescopic S - pole with armrest for 35 cm - DD - coil
- Operating manual  
( English or German version available )
- USB Stick for firmware - updates and data - handling
- ( only X6 ) Data Logger software - single user license ( Golden Software )
- CE & FCC certificated
- Absolute top quality
- Made in Germany

The LORENZ **DEEPMAX – X5 / X6** has a good range of functions and can therefore be used for many search and location purposes.

The DVD along with the booklet and the suggested practical exercises help the operator make the most of the detector in the field. Any organization that requires accurate detection and location information will benefit from the performance of the **LORENZ – DEEPMAX – X5 / X6** when combined with optional GPS and data collection systems. ( *only DEEPMAX – X6* )

Extensive multi channel data collection can be made with data collection techniques readily available from various manufacturers. A multi sensor detection with GPS and software is possible with several **DEEPMAX – X6** detectors working at the same time like a scanner.



**DEEPMAX – X5**



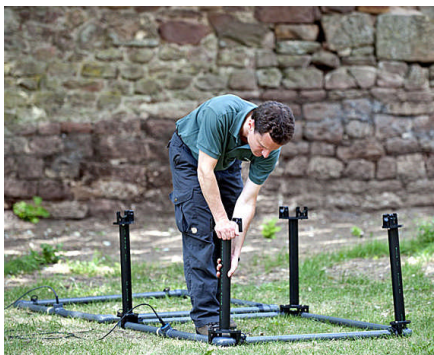
**DEEPMAX – X6**

The multi sensor trigger unit makes sure that every detector and search coil works the same way with no interference generated by nearby search coils. With suitable soft - and hardware colour maps can be generated for example.

Lorenz Detecting Systems provide tailor - made detection equipment and various accessories to meet customer needs e.g. detection of unexploded ordnance, meteorites, lost aircraft, underwater or underground search applications.

The **DEEPMAX – X6** metal detectors combine modern technological developments with a high quality product for professional metal detecting equipment.

**LORENZ - DEEPMAX**, as a design and manufacturing company, strive to maintain the highest standards for our products and, therefore, alterations of the design, specifications as well as the availability are subject to change without notice.



#### **1 x 1 m double frame coil kit.**

This specially designed double frame coil kit consists of two 1 x 1 m frame coils mounted on each other at a distance of approx. 60 cm. Because of its ability to cancel out interferences from powerlines or radio transmitters it can be used in urban areas where single loop coils will suffer from false signals.





**DEEPMAX – X6 with DATA – LOGGER**

**Locate to better - simply find more !**



1. The USB embroider from the GPS - take module with the data. 2. Feeding the data into the computer.
2. Holding the position data tight. (gained by GPS.)
3. Evaluating the data with the special software contained in the extent of supply. ( surfer 9 from Golden Software )

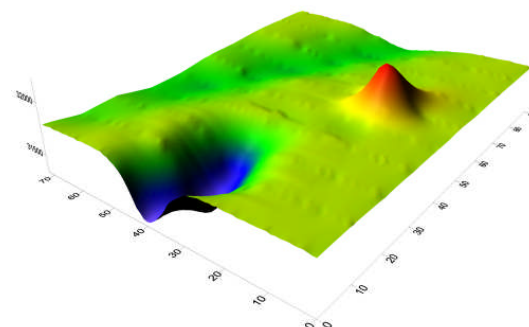
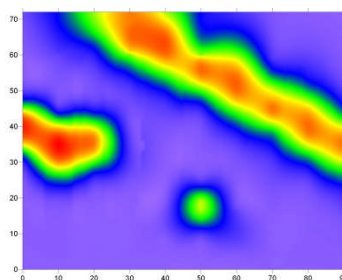
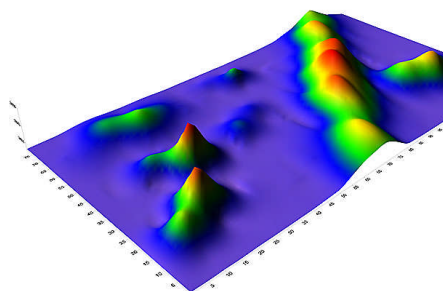
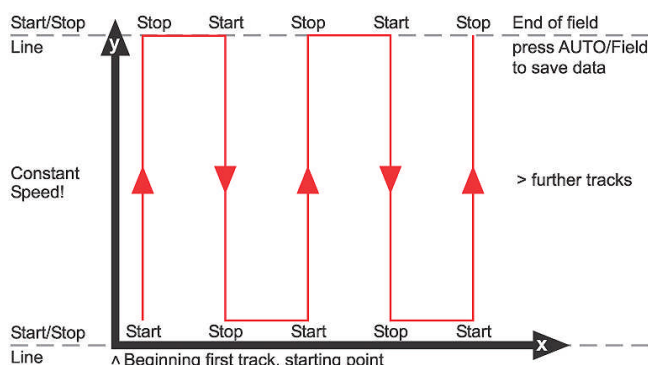
**Contain data - logger, software ( surfer 9 ) and GPS position module DEEPMAX - X6 in series !**

## Data Logger

To generate colour, image, surface or contour maps with the Deepmax - X6, additional Hard – and Software is necessary ( incl. ). A very sophisticated data logger function of the Deepmax - X6 metal detector together with an USB - Memory - Stick 6 channel data logger will take simultaneously six channels of data when you go over the ground and stores the information into memory when this function is selected.

After collecting field data the Surfer 9 Software easily and accurately transforms the data stored on the USB - Memory stick into colour, contour, surface, image or vector maps on a computer in minutes.

### Recording field data





## Data Logger

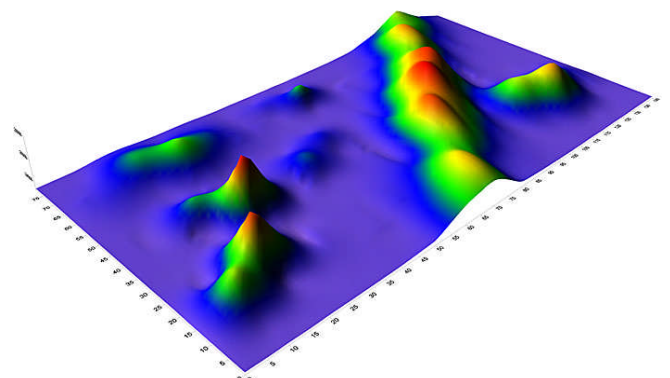
- Easy to use data logger function ( built - in the Deepmax X6 only ) works with additional Hard - and Software to generate six 2 D image and six 3 D surface maps from the scans being taken.
- Each map is different depending on the electronic analysis method and therefore can be the key to the probable kind of metal buried in the ground.
- There is clearly a difference in the signature different metal objects and ground conditions will give.
- The same are displayed on a two or three dimensional surface or image map according to the available GPS module and USB storage media.
- This Hard - and Software kit is only available with the DEEPMAX - X6.
- New GPS based meter, Track, Field and compass Heading information displayed, makes it easy to work with the new data logger.



## The Lorenz USB - Memory Stick 6 channel data logger standard equipment :

### Specifications :

- six channel data acquisition, supported by GPS :
- storage media USB - stick ( 2.0 )
- number of fields : 99
- sampling rate : 16 per second
- Resolution : 24 bit
- GPS electronics unit
- Surfer 9 software single user license
- Lorenz Scripser Software
- Instruction manual Lorenz Deepmax - X6
- Instruction manual Surfer 9
- GPS module with USB storage media :
- High Sensitivity : -160 dBm
- DGPS, WAAS, EGNOS and MSAS Support
- very short TTFF Time To First Fix
- position accuracy 2,5 m CEP,
- 5,0 m SEP / SBAS, 2,0 m CEP, 3,0 m SEP



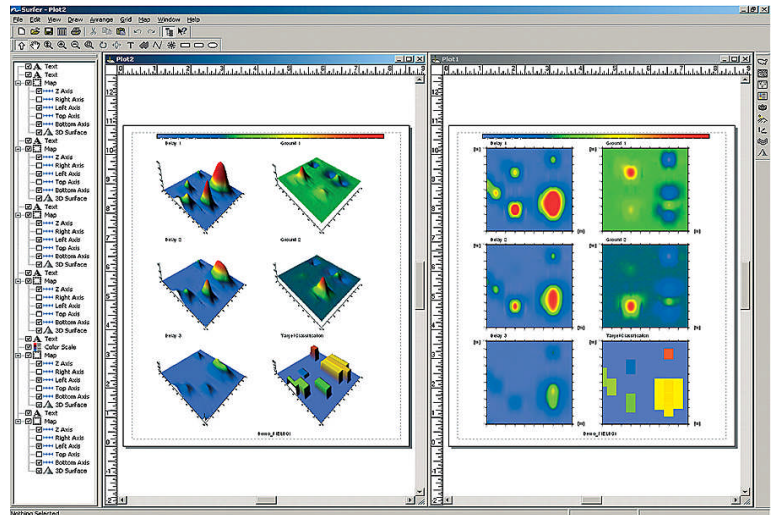
## Data logger, Surfer and Scripser Software

To generate colour, image, surface or contour maps with the Lorenz Deepmax X6, additional Hard- and Software is necessary. A very sophisticated data logger function of the Deepmax X6 metal detector together with an USB 6 channel data logger will take simultaneously six channels of data when you go over the ground and stores the information into memory when this function is selected.



After recording or collecting field data the Surfer Software easily and accurately transforms the data stored on the USB-Stick into colour, contour, surface, image or vector maps on a computer in minutes. An additional Scripter Software will therefore automatically generate twelve maps with each field. Six are twodimensional and six three-dimensional. The operator can therefore choose between different gridding and mapping methods.

The new Datalogger Hard- and Software developed by Lorenz Detecting Systems is first of all easy- to use, very accurately working and affordable. Only four controls of the Deepmax X6 will make data acquisition a pleasure for both beginners and professionals like engineers, geologists, archaeologists, scientists and many more. The users will investigate mainly for waste disposal, meteorites, unexploded ordnance, or lost aircrafts. No non- sense functions will confuse the operator. Six different maps will be generated simultaneously when covering the ground with multiple tracks. Each scan/ map is different depending on the electronic analysis method and therefore will not only give different sensitivity ranges but can be the key to the probable kind of metal buried in the ground. There is clearly a difference in the signature metal objects and ground conditions will give for example.



Areas of disturbances in the scans will directly lead to the different metals or ground signals and therefore can be classified in some ways. The operator therefore can use the different scans to his advantage in order to choose between the targets of most interest only by comparing the different scans/ maps. Three delay channels will produce maps with different sensitivity to small and largemetal objects.



Two ground channels will enable the operator to generate maps with no ground response but Z dimensions and directions for different decay curves of the eddy currents produced in a metal object. In addition the target classification channel will display the delay of the eddy currents of each signal with a certain intensity to give further information on the probable kind of metal in the ground. No matter how strong the ground is mineralised or how many different metals are located in close proximity, this new device will ensure very good results even with difficult surrounding conditions. Faults produced by the operator or the environmental conditions

like overload signals from nearby metal objects for example will be immediately seen when comparing the six channels. In addition GPS data is also recorded from a supplied GPS module to support the user with a compass function or to find the different fields after recording again. For the professional users additional Hard- and Software will be available for storing positioning data from GPS and several Deepmax - X6 detectors.

Although the detector can be used with smaller search heads the data logger function is mainly developed for larger metal objects being at least 6 cm x 6 cm in size. Therefore frames of 1 m x 1 m or even bigger should be in use to achieve best results.



Detection depths : **LORENZ – DEEPMAX – X5 / X6**

max. Detections depths :

26 cm - DD - searchcoil . . . . . max. 280 cm

Usefull for the location of small objects like coins for example.  
( A telescopic pole with armrest is necessary )



Usefull for the location of small objects like coins for example.  
Separate transmitting and receiving windings offer more stayable  
operation on soils with high contents of iron oxides ( minerals ).  
This coil is required for ferrous / non - ferrous indications. . . . . >>  
( A telescopic pole with armrest is necessary )



35 cm - DD - searchcoil . . . . . max. 360 cm

\*\*\* Separate transmitting and receiving windings offer more stayable operation  
on soils with high contents of ironoxides ( minerals ). Pinpointing small metal  
pieces is very easy with the double D - searchcoil, which can be used for most  
search applications. This coil is required for ferrous / non - ferrous indications. . . . . >>  
( A telescopic pole with armrest is necessary )



\*\*\* Is contained in the standard extent of supply. ✓ . . . . .

45 cm - searchcoil . . . . . max. 400 cm

This searchcoil can be operated by a single person ( weighs only 600 g ). It offers  
extreme depth rages on single coins or bigger objects buried deep in the ground.  
Depth ranges of more than 1 meter for a metal object of the size of a soft drink can ( 0,33 l )  
make this coil interesting for a lot of different search and locating purposes.  
( A telescopic pole with armrest is necessary )



1m x 1m frame coil . . . . . max. 580 cm

\*\*\* Frame coil for the fast location of medium sized or larger metal objects at great depth.  
Can be operated by two persons carrying the coil with the supplied straps. The coil cable  
is protected inside the tubes. This square frame is very easy to use and can be simply  
assembled or disassembled for transport. Small nails and single coins will be ignored  
automatically with this coil.

\*\*\* Is contained in the standard extent of supply. ✓ . . .



1m x 1m double frame coil kit . . . . . max. 580 cm

This specially designed double frame coil kit consits of two 1 x 1 m frame coils mounted  
on each other at a distance of approx. 60cm. Because of its ability to cancel out interferences  
from powerlines or radio transmitters it can be used in urban areas where single  
loop coils will suffer from false signals.



Universal cable coil . . . . . up to 12 meters

Can be wound to different coils :  
8m cable coil : 0,67 x 0,67m - 1 x 1m - 1 x 2m - 2 x 2m  
12m cable coil : 1 x 1m - 1,5 x 1,5m - 3 x 3m.

This cable coils can be arranged to three or four different frame coils by simply  
fastening one, two or three windings on a metal free frame with tape for example.  
With those frame mounted coils large areas can be covered in a short time.  
This is especially usefull when looking for bigger deeply burried metal objects  
while ignoring those smaller metal pieces at the surface of the ground.







The following components are available for the individual configuration of your new **DEEPMAX – X5 / X6** :

**Prices for individual component / individual configuration or spare parts supply :**

<b>DEEPMAX – X5</b> . . . . .	Electronics control box <b>DEEPMAX – X5</b> . . . . .	2.814, - €
	( Same as a kit but without searchcoils / without telescopic S - pole )	
	( At least one coil will be necessary for operation )	
<b>DEEPMAX – X6</b> . . . . .	Electronics control box <b>DEEPMAX – X6</b> . . . . .	4.285, - €
	( Same as a kit but without coils / without telescopic S - pole )	
	( At least one coil will be necessary for operation )	
<b>DEEPMAX – X5 / X6</b> . .	Telescopic pole with armrest ( in the length adjustable ) . . . . .	125, - €
<b>DEEPMAX – X5 / X6</b> . .	26 cm coil ( open style ) - black . . . . .	215, - €
<b>DEEPMAX – X5 / X6</b> . .	26 cm - <b>Double D</b> - coil ( ground compensating ) open style , white . . . . .	301, - €
<b>DEEPMAX – X5 / X6</b> . .	35 cm coil ( open style ) - black . . . . .	241, - €
<b>DEEPMAX – X5 / X6</b> . .	35 cm - <b>Double D</b> - coil ( ground compensating ) open style, grey . . . . .	310, - €
<b>DEEPMAX – X5 / X6</b> . .	45 cm coil ( open style ) - black . . . . .	274, - €
<b>DEEPMAX – X5 / X6</b> . .	1 m x 1 m frame coil, with cable inside tubes, can be disassembled . . . . .	332, - €
	( and comes with two carrying straps )	
<b>DEEPMAX – X5 / X6</b> . .	1 m x 1 m double frame coil kit ; comes with two 1 m x 1 m frame coils . . . . .	1.050, - €
	( four mounting devices 0,6 m length; one adapter cable with three connectors; two carrying straps )	
<b>DEEPMAX – X5 / X6</b> . .	Y - adapter cable with 3 connectors for double frames . . . . .	138, - €
<b>DEEPMAX – X5 / X6</b> . .	Extension cable for frame or cable coils, length 5 m . . . . .	113, - €
<b>DEEPMAX – X5 / X6</b> . .	Universal cable coil - 8 m - perimeter . . . . .	178, - €
<b>DEEPMAX – X5 / X6</b> . .	Universal cable coil - 12 m - perimeter . . . . .	259, - €
<b>DEEPMAX – X5 / X6</b> . .	Rechargeable battery spare part - 12 V / 7,2 Ah - X5 / X6 . . . . .	147, - €
<b>DEEPMAX – X5 / X6</b> . .	Lower fibreglass rod for telescopic - S - pole with screw . . . . .	62, - €

**Attention please ! The export price applies exclusively to deliveries outside the European Union !**

All search coils are delivered in a waterproof execution.



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internet : [www.detector-scout.de](http://www.detector-scout.de)

e-mail : [info@detector-scout.de](mailto:info@detector-scout.de)