



OPTIONAL ACCESSORIES

60-CM SEARCH HEAD

The large diameter search head is available as special option. It provides for the detection of metallic mines and UXO to large depths below the surface or to speed up the time required for the detection of submunition close to the surface with reliable and consistent operation.

It is delivered completely with a soft carry bag.

VALLON FIELD COMPUTER VFC2

Lightweight data logger for computer-aided detection of UXOs.

Technical Data

General:

Power supply:	3 ea. 1.5 V standard batteries D-size or 3 ea. 1.24 V rechargeable battery KR35/62
Battery life:	up to 25 hours depending on battery type
Sweeping speed:	0.2 - 1.5 m/s — standard 0 - 0.2 m/s — pinpointing
Operation temperature:	-31° C to +63° C
Storage temperature:	-51° C to +71° C
Environmental conditions:	According to MIL STD 810F 501.4-II, 502.4-I, 502.4-II, 503.4, 506.4-III, 514.5 C1
Search programs:	2 programs (normal, metal discrimination)
Metal alarm:	acoustic via loudspeaker or earphone visual via LED vibration
Power line suppression:	automatic
Presswatertight:	up to 4 meters

Dimensions:

30-cm-Search head:	300 mm Ø ±5 mm
60-cm search head (Option):	615 mm Ø ±5 mm
Length of telescopic carrying bar	
with oval search head:	min. 920 mm ±5 mm max. 1260 mm ±5 mm
with 60-cm search head (Option):	min. 984 mm ±5 mm max. 1324 mm ±5 mm
Field backpack:	approx. 530 x 320 x 150 mm
Hard case (Option):	approx. 650 x 500 x 250 mm
Carry bag for 60-cm search head (Option):	approx. 660 x 700 x 110 mm

Weights:

Complete detector set during operation (with batteries)	
- with 30cm search head:	approx. 2.7 kg
- with 60cm search head (Option):	approx. 2.9 kg
Transport weight* in field backpack:	approx. 4.2 kg
Transport weight* in hard case: (incl. field backpack)	approx. 11.4 kg
*) including operation manual, field manual and one set of batteries	

All technical data are subject to change without prior notice.
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VMXC1 UXO Detector

TWO-PIECE METAL DETECTOR TYPE VMXC1-3

- Customized firmware for optimized searching features during detection of submunition, metal mines and other metallic explosive ordnance
- 30-cm-search head
- Operates also with 60-cm-search head
- Ultra high detection range
- Highly effective automatic ground balance
- Metal alarm: audio, visual and vibration
- Length continuously adjustable
- Input for firmware upgrade



VMXC1 UXO DETECTOR

The Vallon VMXC1 detector is designed to meet the very specific needs of the UXO clearance professionals in the humanitarian scenario in post conflict areas.

Its mechanical design ensures a comfortable use for hours. VMXC1 is also recommended in areas with severe laterite conditions or single mineralized stones.

The modern DMPI technology (Digital Magnetic Pulse Induction), and the cable free design is the logical result from close cooperation with humanitarian and commercial UXO clearance personnel.

The special UXO-firmware ignores small metal parts and can differentiate between ferrous and non-ferrous metals.

The operating length of the VMXC1 can be adjusted during operation in just a few seconds. Additionally, an extremely short length can be adjusted for proning position.

To optimize the clearance work according to the individual requirements of each country we offer two types of VMXC1:

- VMXC1-1 with slim search head and
- VMXC1-3 with 30-cm-search head

position for proning



position for kneeling



position for standing



Setting into Operation

The VMXC1 requires only minimal operator training.

- Remove the detector from the backpack
- Connect both parts of the detector and fix them tightly
- Adjust length of the telescopic bar
- Insert the batteries and select the program "normal" or "metal discrimination"
- SOS (Switch ON & Search)

Trained operators can start in less than 30 seconds.

For the function check two test pieces are delivered - a non-ferrous and a ferrous one.

Search Head with Telescopic Pole

The rugged search head contains the Digital Pulse Induction Sensor with integrated noise reduction features. The shape allows free view to the ground and ease of operation on land or in shallow waters. The inner and outer tube of the telescopic pole are protected against twisting. The length of the telescopic pole can be adjusted from 920 mm to 1260 mm in just a few seconds.

Modern Electronics Unit

The ultra modern digital electronics withstands all typical environmental and vibration requirements and meets the MIL STD 810F. It operates with 3 standard batteries (D-size), Alkaline or rechargeable type up to 25 hours.

A splash-waterproof non magnetic loudspeaker is built-in to the electronic compartment. A non magnetic headset can be connected.

An automatic continuous self check of six important functions including cable damage and battery level control is the life insurance for the operator. System failures are immediately indicated by a special audio and visual alarm.

The automatic detection level control guarantees a long-term constant sensitivity for hours of operation independent of the battery level, temperature and other environmental conditions.

The front panel contains all controls. The VMXC1 has one mode selector in order to set the main detection features:



- off: OFF
- normal: Detection of ferrous and non-ferrous metals
- metal discrimination: Detection of ferrous and non-ferrous metals but with different visual and audio indication between ferrous and non-ferrous metals
- volume control

Ergonomic Operation

The operation and indication elements are integrated in the hand grip and can easily be operated with the thumb.

The LED-display with 14 elements is clearly visible even in the sunlight. In program "normal" the length of the bargraph is proportional to the metal alarm.



In program "metal discrimination" the deflection to the right or to the left indicates ferrous or non-ferrous metals, for example:



submunition BLU
60 mm dia.
alarm tone: constant



aluminium cylinder
50 mm length
16 mm dia.
alarm tone: chopped

A vibration alarm is completing the acoustic and visual alarm.

Fine adjustment of the detector is done by means of the 4 rigid push buttons:

- : decrease (volume, sensitivity)
- +: increase (volume, sensitivity)
- C: compensation (ground balance)
- ⊕: pinpointing (Start/Stop data recording)

Transportation

The two parts of the VMXC1 with accessories are stored in a field backpack.



A watertight hard case can be delivered optionally.

