

Scope of Supply (Photos available on request)

1) Vehicle VXV4 2902200053

- 1 Non-magnetic frame
from aluminium and glassfibre compound components for holding 3 sensor tubes mounted at a distance of 0.5 m, or 4 sensor tubes, mounted at a distance of 0.33 m, VFC2, VCU2, power supply set, cables and GPS-Receiver.
- 2 wheels 8402200002
with axle and sliding bearings. Wheel diameter 80 cm, material glassfibre compound
- 15 Velcro tapes
- 1 GPS-antenna mast 2909990768
- 1 Holder GPS-receiver 2909990623
- 1 Holder VFC2 2902200059
- 1 Holder VCU2 2902540107

2) Central unit VCU2 2002540110

- 1 Central unit for 1-4 sensors
- Bluetooth and RS232 output for VFC2
- On / Off switch with lin x 1 / x 10
- Button for Comp and Test including accumulator 7.2 V 2902540004
- 1 Mounting set VCU2 2902540002
- 1 Charger VCU2 5900002007
- 1 Carrying case VCU2 2802540101

3) Field Computer VFC2 2002170200

- 1 PDA with firmware for data recording with navigation aid, in-built rechargeable battery 3Ah, data data input via RS232 and Bluetooth, stylus pen 2909990643
- 1 Data cable VFC2-VCU2/EL130xx 2502540003
- 1 Clamp for fixing to Vallon Ferrous Locator 2809990061
- 1 Belt for fixing to the operator's wrist 2809990063
- 1 USB Memory stick with cable 2902170023
- 1 Charging cable 12 V (car battery) 9190006015
- 1 Charger 100-240 V AC (mains) 9190006016
- 1 Connection cable VFC2-PC 9190006018
- 1 Connection cable VFC2-USB Stick 9190006027
- 1 Carrying case 8902170201

4) Sensor set 4x 2909990674

- 4 digital sensor tubes "VSM" with cable
Outside diameter = 32 mm,
sensor base = 500 mm,
total length = approx. 700 mm

5) Set Power Supply 2902200220

- 1 Rechargeable battery pack (12 V/10 Ah) with fixing clamp 2902200219
- 1 Charger 230 V (50 Hz/12 V DC) with mains cable 2909990472
- 1 Power cable 2502170074

6) GPS NovAtel FlexPak6™ kplt. 2909990778 (Option)

- 1 OEM628-D2L-00G-0PG + FlexPak6-Housing, Glonass Correct PPP 9150006268
- 1 GPS-702-GGL PINWHEEL-antenna 9150006150
- 1 Antenna cable 1 m 9150006130
- 1 Antenna cable 3 m 9150006287
- 1 Transportation case 2909990900
- 1 Terrastar C-Subscription - worldwide for the first year - 9150006277
- 1 installation

7) Accessories

- 1 Converter 12 V for VCU2 2902200060
- 1 Data bus to connect 4 sensors to VCU2 2909990683
- 1 Bluetooth® RS232 mini-adapter, waterproof, for GPS System NovAtel FlexPak6™ 2809990079
- 1 Protective cover for GPS-receiver 8809990005
- 1 Metal case to store the sensor set (item 4) 2802500002

Optional Accessories:

- Evaluation Software Vallon EVA2000® 2.X S
Module Data Exchange 2009030101
Module Surface 2009030102
Module GPS 2009030104

Sensor Vehicle VXV4



- Time-saving ground survey
- Rigid and lightweight
- 4 Ferrous sensors
- PDA Data logger
- Navigation aid
- Georeferenced data acquisition

All technical data are subject to change without prior notice, issue 08/2016

SENSOR VEHICLE VXV4

The non-magnetic sensor vehicle **VXV4** is the appropriate sensor platform for ground survey of large areas to detect ferrous objects like non-exploded bombs and grenades.

Between two large glassfibre reinforced plastic wheels (80 cm diameter), four sensor tubes (fluxgate) are mounted to a non-magnetic support frame. Depending on their size, the ferrous objects lying on the ground are detected even beyond the sensor vehicle.

For data acquisition the 4 sensor tubes are connected via data bus to the Central Unit **VCU2**. The survey data are transmitted to the Field Computer **VFC2** (ruggedized, weatherproof PDA* with Vallon-firmware).

The display of the field computer **VFC2** shows the nT-values of the tracks covered in real time, or, if a navigation system is used, it serves also as control whether all points of the surface in question have been covered.



Navigation

For georeferenced data recordings, the data logger **VFC2** requires information about the exact position of the sensors.

The most comfortable way of navigation is the use of a Satellite-Navigation-System (GPS). The GPS antenna is attached to the centre of the vehicle, and supplies the exact coordinates to the Field Computer **VFC2** via bluetooth® transmission. GPS-coordinates and nT-values are stored together.



Vallon GmbH offers the system NovAtel FlexPak6™. This is a wide area GPS augmentation system that provides high performance positioning for the land based user. Outstanding features of the NovAtel FlexPak6™ receiver:

- Capable of tracking all present and upcoming GNSS constellations and satellite signals including GPS L1/L2/L2C/L5, GLONASS L1/L2, Galileo E1/E5a/E5b/Alt-BOC and Compass signals, the NovAtel FlexPak6™ ensures high performance GNSS positioning now and in the future.
- Compact, lightweight and easy to integrate
- Shock resistant
- accuracy in HP-mode: standard deviations horizontal < 10 cm, vertical < 15cm

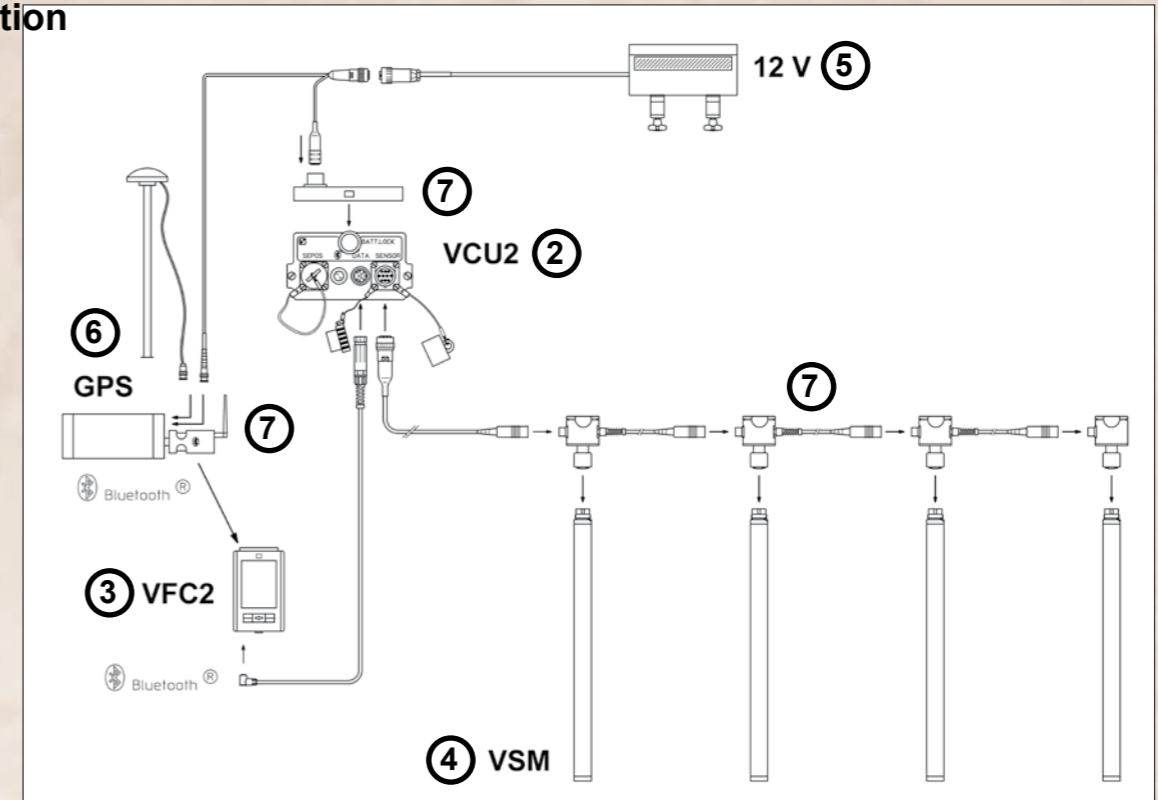
For more details please refer to the data sheet of NovAtel FlexPak6™.



Bluetooth® - registered trademark of Bluetooth SIG, licensed to Vallon GmbH for use FlexPak6™ - eingetragenes Warenzeichen von NovAtel Inc.

*] PDA = personal digital assistant

Installation



Data Acquisition



Preparation

Simple menus for setting the parameters with a stylus.



Data Acquisition

During data acquisition, the screen can be switched over to a navigation aid which visualizes the scanned tracks.



Result

The typical functions required for data acquisition are entered via the rigid push buttons of the VFC2.

Evaluation

The evaluation of the recorded data is done with a PC using the software Vallon EVA2000® 2.X. The automatic object evaluation is very useful, allowing time-saving survey of large areas.

