VD 500

SEISMIC DETECTOR

Alarmtech has more than 30 years experience of developing Seismic detectors for the Global security industry. Used wherever highly valuable assets are concentrated or stored.

◼ VD 500 FEATURES

- Miniature, low-profile detector for applications with limited space
- Advanced DSP system based on a microcontroller
- Noise filtering system providing high immunity to environmental noise
- Quick sensitivity adjustment in 4 ranges using a DIP switch
- Built-in settings for protection of walls, ATMs and depository safes
- User programmable mode for customized settings
- Built-in self-test generator
- Tamper-lid and removal detection
- Wide range of supply voltage – from 8 to 30 V
- Low-voltage indication - detection
- Built-in events log ("black-box")
- Built-in PC interface for monitoring software support package
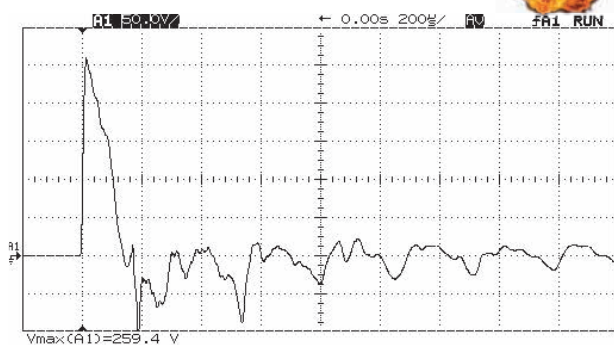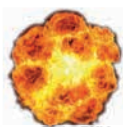- Temperature alarm at 75°C or rate of rise 6°C/min

The new VD 500 is a result of our vast experience in developing our own high-quality product for the seismic market. VD 500 provides a solution to all applications.

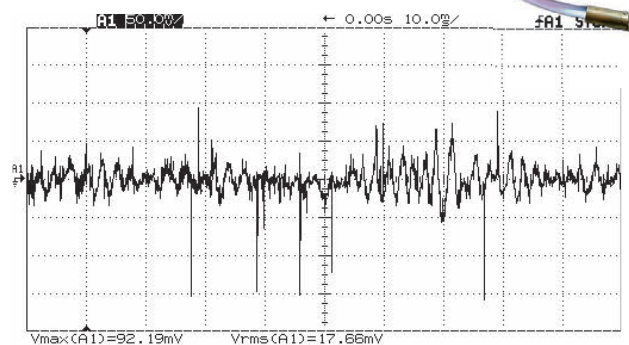## ◼ EXCELLENT DETECTION ABILITY

The new VD 500 incorporates inventive algorithms and the latest electronics. With these new features it is possible to offer one reliable detector covering multiple applications.

Standard applications protect a wide range of objects such as safes, strong rooms, ATM machines. However, seismic detectors are today used in banking, museums, military services, weapon cabinets, ticket- and vending machines etc.

Sensor indication of an EXPLOSION
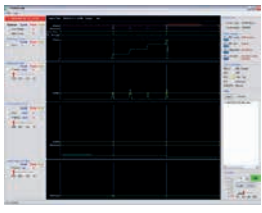
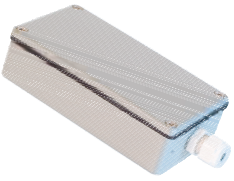*Sensor indication of using a THERMAL ATTACK TOOL*

ATTACK TOOLS

VD 500 detects all known types of attack tools used today. Each type of attack has its own unique signature such as; explosives, cutting tools, diamond drills, hydraulic pressing tools, oxygen lances and other thermal tools.

In addition to the above forms of attack, the VD 500 also detects a fixed temperature as well as rate of rise temperatures.

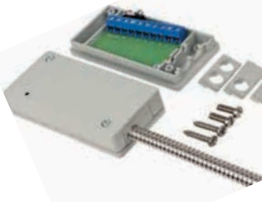| **Explosion** Dynamite Hydraulic tool	**Hammer** Chisel Concrete grinder	**Drill** Diamond drill Water-jet cutting tool	**Thermal cutter** Cutting torch Oxygen lance

ACCESSORIES

CVD Link
Visualization of detector state, signal/event recording and access to internal detector log is possible using CVD Link software.

USB Link module
USB interface module providing connection between detector and USB port in PC.
Also contains +12 V power supply for detector.

WH 400
Weather protection housing with internal heater for VD 500. This housing will give possibility to mount the VD 500 in a harsh environment. The expander bolt allows a wider detection range and works likes an antenna for the seismic signals.

MP 500
Mounting plate. For best performance it is essential to mount the VD 500 on MP 500 whenever used on concrete or brick walls.

MP 500W
Mounting plate. For best performance it is essential to mount the VD 500 on MP 500W whenever used in welding applications.

MP 500M
rear

Mounting plate with 4 strong magnets on its back. Recommended to use the MP 500M to mount VD 500 on metal surfaces where drilling or welding is impossible.

JB 50
Metal junction box used in connection with VD 500. It has 10 screw terminals including tamper protection.

JB 24WH
Junction box in metal with heater. Can be used to connect VD 500 to other equipment.

GVT 5000
Test unit for external testing of VD 500.

MC T
Stainless steel armored cable in three different lengths. Protects the cable between VD 500 and the wall. Available in 0,5, 1.0 and 2.0 m.

■ Software support package

CVD Link

USB Link

VD 500

The VD 500 detector is equipped with an interface to PC. Communication is established using the additional USB Link interface, which also feeds the VD 500 with power from the USB port.

Visualization of detector state, signal/event recording and access to internal detector log is possible using CVD Link software.

■ VD 500 TECHNICAL OVERVIEW

Supply voltage	8 – 30 V, DC
Stabilization time	5 s after power on
Max ripple	2 Vpp (@ 12 V)
Current draw (standby)	7.5 mA @ 12 V / 4.6 mA @ 24 V
Current draw (alarm)	8,4 mA @ 12 V / 5.1 mA @ 24 V
TEST Low/High input	0 – 1 V (default state) / 3 – 30 V
Alarm output	relay, NC, res. < 30 Ω
Alarm response time	2.5 s in automatic reset mode
Relay contact rating	35 V/100 mA
Low voltage alarm	< 7.5 V
Temperature alarm	75 ^{o}C and rate of rise at 6 ^{o}C/min
Tamper protection	micro-switch, NC, 50mA @ 12Vdc
Switch contact rating	35 V/50 mA
Detected events	case removal, detector removal (pry-off)
Dimensions [HxDxW]	22.5 x 40.5 x 85.5 mm
Operating temperature	-40 ^{o}C to +70 ^{o}C
Storing temperature	-50 ^{o}C to +70 ^{o}C
Humidity max.	95 % RH
Housing protection cat.	IP 43, IK07
Conformity:	CE, RoHS, WEEE, EN 50130-4, EN 50130-5 class IIIA
Approval:	VdS Class C, Environmental Class IIIA

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