

MODEL 4200

The Geotechnical Systems Australia Pty Ltd **Displacement Detector System** answers the call from civil and mining engineers and consultants for an economical yet rugged, reliable and easily installed system for continuous monitoring of slopes, embankments and other earthen structures.

SPECIAL FEATURES

- IP65 rated metal weather-proof enclosure
- Failed or Active LED indication of sensor condition
- High amperage solar recharge system eliminates the need for mains power supply
- System integrity test facility
- Battery condition indicator
- Broken wire or electrical cable activates alarm condition
- Inexpensive sensors
- Easily installed by site personnel
- Optional remote alarm

APPLICATIONS

- Open cut mining
- Deep excavations
- Landfill subsidence
- Embankments
- Cliff stability
- Structure stability



SYSTEM COMPONENTS

Alarm Controller Model 4200-1

The alarm controller will handle up to six sensor inputs and is best located at a convenient point between the sensors, yet outside of the movement zone. Enclosed in a rugged weatherproof enclosure the alarm controller provides the necessary power and switching facilities required to activate the alarm signals in the event of an alarm condition occurring.

Sensors Model 4200-2

The sensors consist of a central spring-loaded piston enclosed in a sturdy PVC housing. The piston displacement limit switch can be user set between 1 - 90 mm.

Sensor Anchors Model 4200-3

The surface sensor anchors are steel posts to which both the sensor and dead anchor are attached. These can be installed close together as in a crack monitor or at larger distances for slope monitoring.

Alarm Signal Model 4200-5

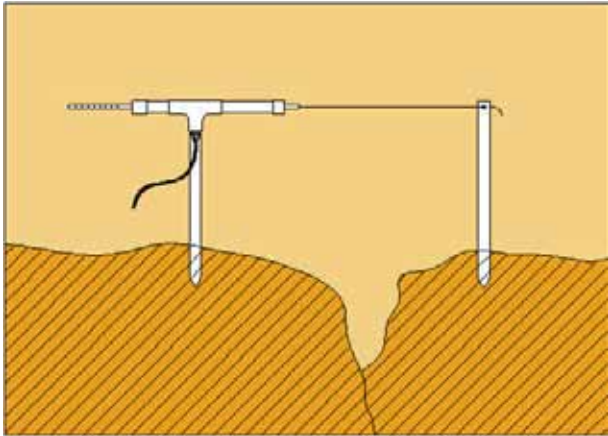
The alarm signal is a post mounted audible and visual alarm signal, which can be mounted up to 500 metres from the alarm controller. It comprises a 12-volt double strike xenon beacon and a 120dB(A) pulsed tone audible siren.

Power Supply Model 4200-6

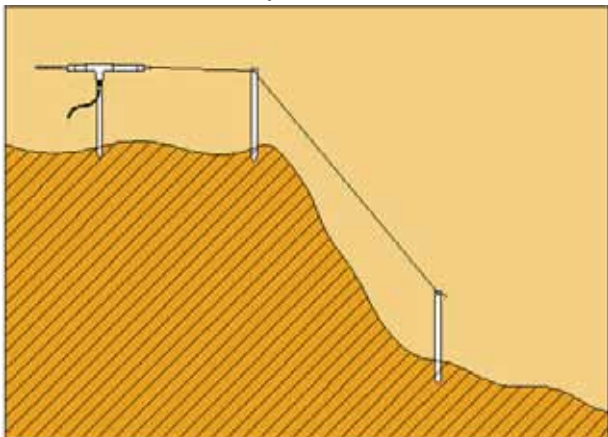
The power supply consists of a 12 volt, standby sealed lead acid battery that is continually recharged by a 12-volt, 1.2 amp solar cell.

Displacement Detector System

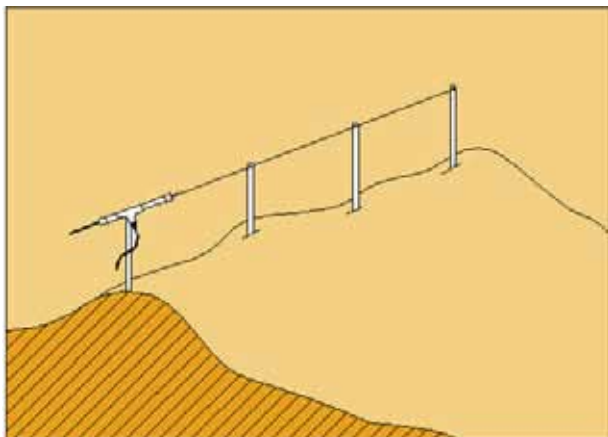
Typical Applications



1. Across a discontinuity

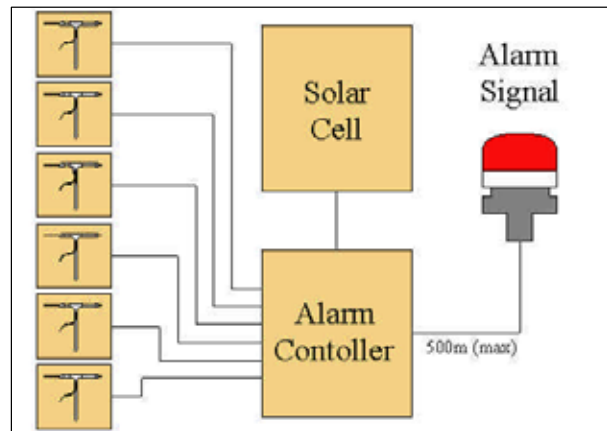


2. Down a face



3. Along a crest

System Diagram



Ordering Information

Displacement Detector System comprises:

4200-1	Alarm Controller
4200-2	Sensors (max 6 No. per Controller)
4200-5	Alarm Signal
4200-6	Power Supply (Battery and Solar Cell)

Recommended Accessories:

4200-3	Surface Sensor Anchor
4200-8	Cable Clamps, Single Screw Brass
4200-9	316 S/S Wire Rope (3.2mm Dia)
4200-12	Electrical Cable (Figure Eight)
4200-13	Anchor Eyebolt Adapter

WARNING

Whilst the system is designed for specific applications, its successful operation depends on correct installation. If installed correctly the system will initiate an alarm signal indicating a displacement exceeding the preset value has occurred. The placement of the equipment and assessment of risk requires the services of suitably qualified personnel. Geotechnical Systems Australia Pty Ltd will in no event be liable for any loss or damage, installation adjustment, or other expenses, which may arise in connection with the purchase, transportation, or use of its products. All information supplied in this brochure was correct at the time of printing. Geotechnical Systems retains the right to change specifications without notice in accordance with the policy of continued product development. As Geotechnical Systems has borne the cost of development of this product and tool, it is to be understood that all intellectual property rights, including patents, registered designs, copyrights and trade secrets are the property of the company.