



HV Test Equipment

Live Wire Alarm



Description:

The Live Wire Alarm (LWA) is an electronic device, designed to prevent wire strike and arc-over to high clearance machinery from HV overhead power lines. The LWA warns a machine operator and site workers of the proximity of live high voltage wires to a boom or high reach arm.

Suitable Applications:

- Concrete placement booms
- Elevated work platforms
- Drilling rigs
- Mobile cranes
- Excavators

The LWA can be customised to suit specific operational requirements for specialised equipment.

NOTE: The LWA should be used within a risk management system on the worksite. It is NOT a substitute for risk management systems.

Operational Features:

- Easy to install
- No "On – Off" switch
- Minimal operator controls
- Two alarm siren levels
- Pre-set detection zone
- System self-test button
- 12 V or 24V compatible
- LWA can only be activated by a HV power line; other electric fields are rejected.

Codes:

LWA1	Control Module
LWA2	Control Module - wireless version
LWASENSOR	Sense Module

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Principle of Operation:

The LWA is designed as an early warning device to detect high voltage wires, and to prevent wire strike and arc-over to a boom or arm.

Sense Modules are attached to the boom or other parts of a machine which may approach an overhead line. The Sense Modules are mounted at typically 6.5 metres apart, and are linked to a Control Module. Each Sense Module has a pre-set Radial Detection Distance.

When the Radial Detection Distance enters the field of a live electric wire, alarms are activated alerting the operator to take immediate remedial action. The alarm is deactivated when the machine is removed from the detection zone.

If the job must continue within the detection zone, control measures must be in place to maintain minimum safe clearance. In this case a lower level SECONDARY ALARM can be selected. The visual and audible alarms continue at a reduced intensity while the work continues within the RDD.

Detection Distances:

Radial Detection Distances (RDD) are preset in the factory typically for the following ranges:

- 11,000V – 15,000V nominally 6.5 – 9 metres
- 15,000V – 132,000V nominally 9 – 19 metres

The RDD may vary slightly, subject to environmental conditions and actual mounting positions of the Sense module. The LWA will activate at closer distances for lower voltage lines e.g 4.7m for 8000V. RDDs for specific applications can be specified at time of order.

