



## **Power Line Detection System**

**Use Protective indication** alarms and optional motion-stop technology near high voltage electricity sources to keep personnel and machines safe.

**Retrofit most aerial machines** with the Power Line Detection System motion-stop option to prevent moving into dangerous overhead powerlines, while allowing the operator to safely move the machine away from the high voltage electricity source.





**Detect Live Overhead Powerlines** 



**Reduce Risk Avoid Costly** of Electric **Shock** 

System



and Time -Consuming



**Optional Stop** Motion **Towards HV** 



**Allow Motion Away from Overhead Power Lines** 



**Retrofit to Most Aerial Machines** 



**Monitor Control Motions** 

**Power Source** Damage Aerial High Voltage Protection

Free from interference from radio and other devices

Military-grade wireless communications

Reduce risk and improve workflow efficiency Improved reliability in machine safety

Increased safety when used in addition to a spotter



**Construction Equipment & Engineering** 

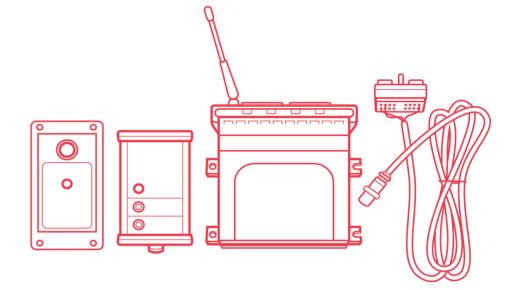
T: (08) 9459 6212

W: www.ronco.com.au E: ronco@ronco.com.au





# **Power Line Detection System**



The Power Line Detection System can be retrofitted to most machines that may have contact with aerial HV electrical sources. The small mounting footprint allows installation to almost anywhere along the boom.

The optional Control Interface Module monitors both machine control motions and the AC sensors. When a power line is detected, active machine motions become locked-out, preventing the machine from moving closer while allowing the operator to direct the machine away from the high voltage electricity source.

The Power Line Detection System uses capacitive sensing and active filtering technology to remove unwanted interference from radio frequency and other sources, minimising nuisance detections and unnecessary loss of production.

#### **Wireless Sensor**

The Power Line Detection System uses wireless sensors over a 900 MHz Military-Grade RF communications network from a BaseController, ensuring consistent protection of machines. As the system operates in the ISM band below the maximum power settings permitted, it does not require a permit or license to use in Australia and many other countries. The system is designed to comply with Part 15 of the FCC rules.

The Sensors and the BaseController are both factory programmable and the firmware is upgradeable, allowing the system to be configured to a variety of applications to meet your business needs

### **Proximity Sensor**

The sensors consistently detect distribution voltages commonly used in Australian Electricity networks:

11KV (11,000v) at 50 hertz and above.

The System is tested for operation at 5Kv, to ensure a margin for most machine and install applications. It will not detect low voltage under 1,000 volts with consistency or predictability for ensuring safe working distances

#### **Solar Powered**

The Power Line Detection System Wireless Sensors are self-sufficient, self-powered, AC Non-Contact Voltage Detectors. They feature a built-in, solar charging cell and battery pack, allowing the sensor to operate from a couple hours of sunlight per day.

## **Technical Specifications**

**Detection Type**: Microprocessor Filtered Capacitive Non-Contact Voltage Detection

**Detection Voltage**: 415 V to 500 kV 50 Hz / 60 Hz Alternating Current

**Detection Distance**: Firmware Adjustable from 200mm – 10 metres based on voltage

**Output**: LED indicator light and buzzer options

Frequency: 2.4Ghz ISM Band, Low Power

Communication: EQ Wireless®

**Battery Life** (without solar charge): 55 Days\*

**Charging time to full charge** (solar): 22 Hours\*

Communication Range: >30 Meters





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