



# DETECT LINE POMPIER (Detection of overhead high Voltage lines > 20 000V)



### 1- Overview:

This system is installed permanently on the vehicle.  
 It is calibrated to detect overhead High voltage power lines **20,000 V alternating current, at a distance of approximately 40 meters**. Note that a voltage higher than 20 000 V will set off a warning at a greater distance than 10 meters.  
 Important : The system does not detect direct current overhead lines (eg : Rail or Tramway Catenary)



The detection of high voltage overhead lines does not relieve the obligation of drivers and equipment operators to be vigilant and to carefully observe the precautionary rules relating to the operation of overhead equipment, particularly with regard to the provision of ample space to maneuver in 3 dimensions, and the resistance of the soil to subsidence.

### 2. System elements :

- 1 Central Control Module (placed behind the seat of the nacelle operator )
- 1 Remote Control Box (placed close to the the nacelle operator's position )
- 2 Sensors (placed on each side of the cab roof)



### 3. Start-up :

The system starts automatically as soon as the vehicle is powered up. After having carried out an « Autotest » taking about 5 s, during which time the « VIGILANCE » and « DANGER » lamps are lit, the system gives 2 audible "bips". The lamp « En service » flashes continuously during use. Note: If the system cannot communicate with the sensors, the lamp remains lit and the audible « bip » continues.

### 4. Operation :

At the approach to the 40 m zone around a 20 000 V line, the yellow « VIGILANCE » lamp lights. If the « vigilance » zone is penetrated, the red lamp lights in turn and flashes, and the audible alarm begins.

### 5. In transit:

The system is ready to operate but the audible and visual alarms are off.  
 The use as desired by the equipment operator of the switch 6 (manual alarm negation) enables the **activation / negation** of the alarm in transit mode.

### 6. During intervention:

whatever the position of the switch (6), the audible alarm sounds in the "danger" zone according to the mode chosen at installation, as soon as the parking brake or the power take-off are activated.  
 Push-Button « Acquittement » (5) : Pressing this button stops the audible alarm (with a reminder each 30 seconds). The alarm is reactivated if the parking brake lever or the power take-off command are moved.

### 7. Maintenance :

The system requires no specific maintenance. Nevertheless, it is up to the users to report all failures or anomalies that are observed.



- 1: Audible Alarm Buzzer
- 2 Lamp « En service » ( flashing when all is OK, continuous if there is a problem of communication with the sensors)
- 3 Lamp « VIGILANCE »
- 4 Lamp « DANGER »
- 5 Button « Acquittement » for the audible alarm alone
- 6 Switches for activating the alarm manually.



In the presence of HV overhead lines: the system warns for a 20 000V line in a 40 meter zone.  
 If the voltage is higher, for example 63 000V, the vigilance zone will be approximately 60 meters .  
 Conversely, for a line of 15 000V, the vigilance zone will only be 30 meters.



The detection of a power line does not stop the movement of the high-lift equipment, but merely informs the operator(s) of the presence of the HV line.