Leaky Feeder Perimeter Intruder Detection System

DATA SHEET

The Leaky Feeder Perimeter Fence Movement Detection system was designed and manufactured by Radiocontact Ltd, Belfast. Its primary function is to detect movement of an intruder approaching and attacking a perimeter fence. A typical perimeter fence may consist of between 300 and 400 zones, all linked together by computer with outputs displayed on a screen as programmed by the customer. Other applications of this system include volumetric detection both portable and permanent, were a centrally mounted antenna is used to generate the electromagnetic (EM) field along with a "ring" of Radiating Cable laid on the surface of the ground around the perimeter of the protected area.



Each zone of the Radiocontact Leaky Feeder Perimeter Fence Movement Detection System covers 100m with a resolution of 50m to accommodate for suitable depth of field coverage support with CCTV surveillance. A typical zone installation is shown bellow.

Therefore the system can provide several states of alarm events, which the operator can use and configure as required.

These are:

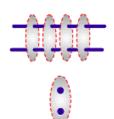
Rx 1A Pre-Alarm

Rx 1B Pre-Alarm

Rx 1A Full-Alarm

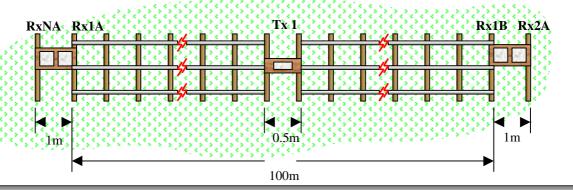
Rx 1B Full-Alarm

Zone Full Alarm





When an intruder enters the detection area the disturbance of the EM field generates a pseudo Doppler signal at the output of the two coherent detectors. This signal is then analyzed processed and provided the parameters of the signal are within the pre-programmed limits, a final alarm is generated. Any Doppler signals generated on either the upper or lower Rx cables but not both, i.e. rabbits or birds etc. do not generate a final alarm but generate an output that can be used as a "pre-alarm".



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