

## Energiser Unit & Antenna Mat.

- The Energiser Unit creates an Electromagnetic Field sensor (E.M.F). An electromagnetic field is generated when an alternating current is fed into an inductive loop; 125Khz.
- This is similar to a transformer which has a primary and secondary. The primary induces voltage into the secondary.
- The Passive / Active Tag works in the same way, i.e. the tuned inductive loop induces a voltage into the tuned receiving coil of the activation circuit. The resultant voltage is used to power the Tag on. The Tag then switches the main battery on, tests the battery, transmits its code and switches off. The applicable Tags are the T330 & T403.

## **Energiser Unit:**

- IP65 housing 200x120x75mm.
- Mains powered 230Vac.
- Battery backup by adding battery.



The following pictures describe a rubber mat measuring 2500 x 60 cm x 12mm thick. The low frequency (125Khz) & high frequency (433Mhz) antenna are moulded into the mat.

Top View  $\rightarrow$ 





Bottom -



Wires moulded into rubber mat.

 $\leftarrow$  The Tags can be fitted under a vehicle and will be energised as follows –

• T330 approx. >1.5 meters.

• T403 approx. 1 meter. Various Antenna configurations are possible, i.e. walk through.