

## ECKMAN SOLAR SONIC & FLASH ANIMAL REPELLER

**Product code: EKSAR02 (AN-BO30)**

### USE AND MAINTENANCE

Please read this instruction manual carefully to understand all the possibilities of the device and prevent user errors. Keep these instructions for future reference.

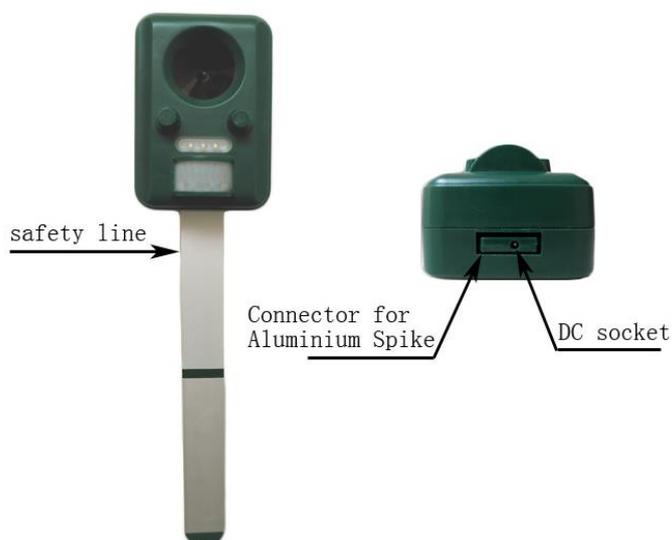
### OPERATION

**When motion is detected (up to 9m / 110° angle) by the PIR (passive infra-red) sensor:**

- A strong ultrasonic signal frightens animals. The animals avoid the area because of its unpleasant sound. The sound is activated only when an animal enters the range of PIR, thus, they cannot get used to the sound, and is always effective.
- A bright flash also frightens animals. The flash is activated when an animal enters the range of PIR, thus also always effective.

### WHERE TO PLACE THE DEVICE

1. Regarding the linear propagation characteristic of ultrasonic waves, please install the device in the general direction/location of where animals enter the protected area.
2. When installing this device, please choose a place where the solar panel on top will have best long-term exposure to daylight. If there is dust or debris on the solar panel, this may affect its capacity to absorb daylight and thus its capacity to work, so please monitor regularly and wipe clean as appropriate.
3. Fix the stake/spike to the bottom of the unit (as shown on image below) and plant into ground in appropriate place up to guide mark on stake. It may be slightly hard to connect the stake for the first time, this is normal, after using several times, it will be easy to install, so do resort to using external force/tools (e.g. hammer) on the top of product as this may permanently damage product. When selecting the installation place, please choose a suitable area to ensure water won't damage the the USB interface in bad weather conditions and thus working of the product.
4. The back of device has a hanging hole, you can hang the device to a fence/wall also.



## SETTINGS

- Button "SENS" (left): Is for adjusting sensitivity and distance. By turning the knob clockwise, you increase the range of sensitivity/protection. To repel small animals, turn the knob to the clockwise.
- Button "FREQ" (right): Frequency control. By turning the knob clockwise, you increase the frequency.

Button "FREQ" Position:

- 0: OFF
- 1: 13.5KHz-17.5 kHz – repels animals such as dogs, cats
- 2: 15.5KHz -19,5 KHz – repels animals such as foxes, deer
- 3: 19.5 KHz -23.5KHz – repels small rodents
- 4: Strong flashing – repels all animals but especially birds
- 5: All functions activated (mode 1 -- mode 2 -- mode 3, and strong flashing). This is the best function as it will cover all the functions of the device.

**Important:** to change a setting, you must always start from 'OFF' position and then go directly to the function you need (e.g. if you go from 5 to 3 directly, the frequency will be different from the real 3 position).

## BATTERY PROTECTION

1. Due to transportation, warehousing, and distribution time the power of the rechargeable batteries (3x AA batteries) may be low when using the device for the first time. When using the product for the first time, make sure the batteries are completely discharged (no matter if the ones that are included in the device or batteries you bought yourself). When the power is not sufficient, the red light indicator will start flashing. Then connect the device to a USB output interface (e.g. computer, mobile phone charger, MP3 etc.) via the USB lead (supplied with product). After fully charged, the red indicator will always be on. When the product is in low power again, please charge again. This charging process needs to be repeated 3 times or more.
2. If using a new rechargeable battery or the battery in the product hasn't been used for a long time (more than one month), it is normal that the rechargeable battery will be fully charged quickly. It needs to be repeatedly charged 3-5 times to activate and make it work normally. If the batteries which have been used for a long-time often need to be recharged, it means the batteries need replacing.
3. If the batteries have not been used for a long-time, then please replace 3x 1.2V AA rechargeable batteries (Ni-Cad or Ni-MH) in the battery case. The better the batteries are, the more efficient the product will work.
4. Batteries and storage batteries must not be disposed of in normal household waste. You (the end user) are legally responsible for returning or properly disposing of batteries.

**Please note:** In adverse weather conditions or if you need to place the solar repeller in an area which doesn't receive much daylight, then the product can be fully charged using the USB charger supplied. Disconnect the unit from the stake and insert USB lead with into DC charging point (shown on picture above) and USB end into a computer (or similar USB output). Note – when power is low a red flashing light will show.

## TECHNICAL DATA

Power supply: 3 rechargeable batteries (recharged by solar panel or USB line)

Infrared sensor angle: 110 degrees

Detection range: up to 9 metres depending on animal size (for larger animals, increase the range).

## ADDITIONAL INFORMATION RELATIVE TO ULTRASONICS

The ultrasonic is powerful to scare efficiently. It happens that human can hear part of its range (young adults and children). So place the device as far as possible from human life places to avoid annoyances.

Don't install this device in a child or baby playing area. Be aware of your neighbours also.



For technical help or any queries, contact our customer service team:

[sales@eckman.co.uk](mailto:sales@eckman.co.uk) / 0844 441 3011

For more great **Practical Solutions for the Garden** visit [www.eckman.co.uk](http://www.eckman.co.uk)