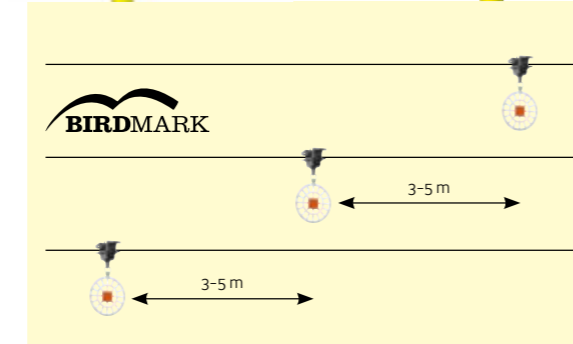
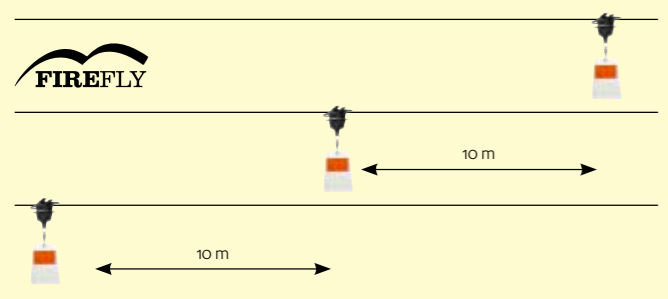


The FireFly and the Birdmark Protection Products are easy to assemble and remove:

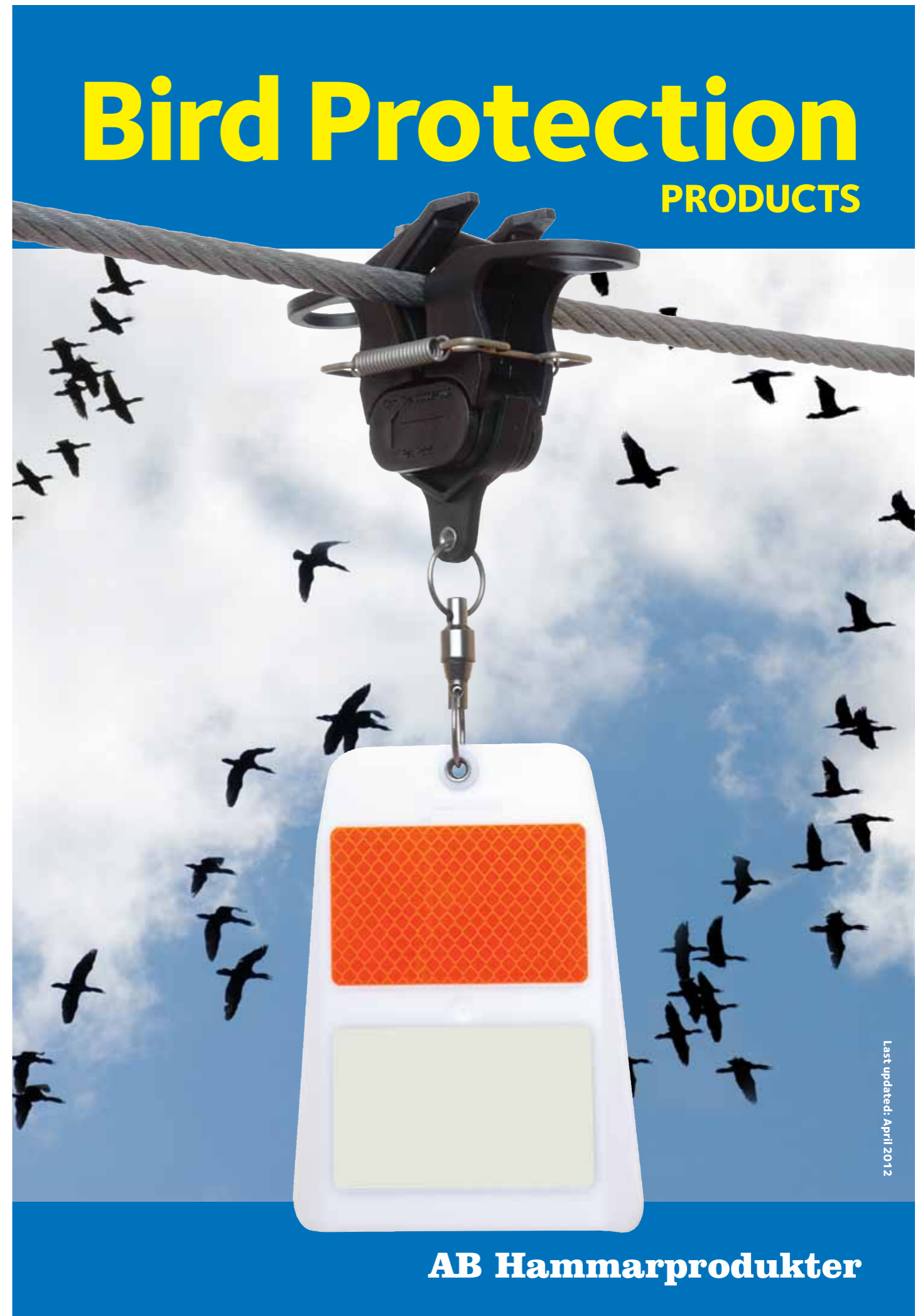


Recommended distance for installation:



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Last updated: April 2012

## Effectiveness of the FireFly Bird Diverter Product – Why it works so well...

The "FireFly" is a well-tried, effective product for power lines, communication towers, electrical substations etc. Our FireFly has hazing properties that prevent birds from roosting within a 10 meters radius of the installed swivel product.

The product acts as a scare crow when birds fly within the radius of the diverter. Research has shown that birds react to both motion and light.

The FireFly utilizes reflectance of sunlight during the daylight hours and luminescent light emission during dusk and night time hours. The diamond bar and luminescent material make up the main components of this product. The diamond bar material causes sunlight to become refracted during daylight hours, providing a "Sparkle Effect" which can be seen by birds and humans up to one quarter of a mile distance. This sparkling and refraction of light allows the birds to change their flight pattern to divert around the marked wires and avoid collisions. Luminescent material that will emit ultraviolet and visible light up to 12 hours has been added for birds to also see the product in low light and fog conditions.

Birds are most vulnerable to collisions with wires during sunset and sunrise hours, especially during bad weather.

Nocturnal bird migrants can see the glow material both in static and active wind conditions, which cause the FireFly to rotate and vibrate on wires throughout the night time hours.

One research on bird vision from Cornell University, Ithaca, New York, U.S.A., states that birds can see in two different ranges of both visible and ultraviolet light. The FireFly product is designed to use peak vision ranges of light visible to bird. Humans can see in the visible spectrum only.



The FireFly and the Birdmark Afterglow are used to prevent collisions with power lines (both transmission and distribution) and also to prevent roosting on towers and wires. Both products are identical in properties and effectiveness for prevention of bird collisions.

### FireFly – Utilizes Light and Motion Visual Focus for Birds

The FireFly - Rotates in the wind in both day and night to alert approaching birds to an obstruction in their flight path. It utilizes both reflective light and uv absorption in the high impact plastic plate. The plastic itself is translucent and allows light to pass through it in low light and fog conditions. The rotation flapper plate yields contrast to the approaching birds. As many bird species can see in the ultra violet spectrum of sunlight, the birds will avoid the product during migration over the power lines.

The product also has the ability to scare roosting birds.

**Wind:** The Firefly starts to rotate at approx. 3+ mph/5 kmh. The rotational speed of the FireFly increases its effectiveness.

**Sun:** The reflective properties of the FireFly require maximum sunlight for day and night time effectiveness. An UV index of 3 or greater is best.

The 'open-sky' configuration directly affects avian vision.

Observe the flight pattern of the birds and install FireFlies directly in flight path using tensioned wire and/or lightweight brackets etc.

Install FireFlies for example at primary roosting areas. The FireFly product refracts natural sunlight similar to the sunlight refracting from the bird's own feathers. This makes the product like a manmade feather

### Birdmark Afterglow Product - Collision Avoidance Product

Birdmark Afterglow - is a perforated disk, containing all of the reflective and luminescent properties for migrating birds in both daytime and night time flight. The disc absorb and emit purple ultraviolet light visible to the birds as violet but appears as white plastic to humans. You will see the product glow for 10-12 hours after sundown.

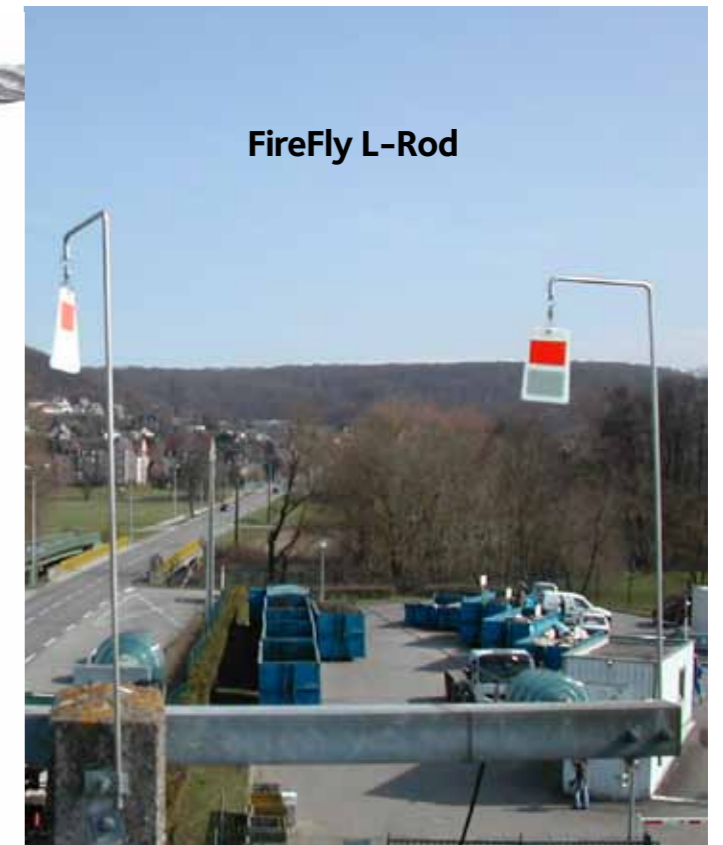
The Birdmark product is perfect for extreme wind conditions such as coast lines and mountain top terrain since 90 percent of the wind passes through the perforations in the disk.

**Motion:** The product wiggles in the wind back and forth to flash at approaching birds during windy days.



### Fixed FireFly

Same functions as with our ordinary FireFly but more suitable for sustained and higher winds.



### FireFly L-Rod



### Woodpecker protection

Well tested protection against damage caused by woodpeckers on poles and wooden buildings. Near likeness and to real life makes other woodpeckers avoid the occupied territory. Printed on both sides. Screenprinted on aluminium.



### Agricultural Pole

### Firefly for walls and wooden poles

