

# INSTALLATION MANUAL

## 0.12 J Battery Energizer with Solar Panel

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### Before you start

These instructions are for installing the 0.12 J battery energizer with solar panel. A user manual for the energizer is included in the energizer packaging or it may be downloaded from the Tru-Test website [www.tru-test.com](http://www.tru-test.com).

### How does the 0.12 J battery energizer with solar panel work?

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During the day time when there is sufficient sunlight, the 1 W solar panel supplies power to the energizer. The solar panel has been engineered to provide enough power to the energizer even on a cloudy day.

The energizer can be used in two different ways:

#### Using the energizer with internal batteries

The energizer may be fitted with internal batteries (see battery details below). While the energizer is being powered by the solar panel, the batteries are not used. During the night or when there is insufficient sunlight, the energizer's internal batteries will be used to power the energizer. Using a solar panel with the energizer can extend battery life, making them last up to twice as long.

*Note:* The solar panel supplied in this kit does NOT recharge the energizer's internal batteries, it acts as an alternative source of power.

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#### Using the energizer without batteries

When connected to a 1 W solar panel, the energizer may be used without being fitted with internal batteries. While the energizer is being powered by the solar panel, the energizer functions normally. During the night or when there is insufficient sunlight, the energizer will cease to function. This may not be a problem as many animals are inactive at night. As soon as there is sufficient sunlight again, the energizer will resume functioning.

### Components included in the kit

The 0.12 J battery energizer with solar panel kit includes:

- A 0.12 J battery energizer (AN90 or 101B)
  - A 1 W solar panel
  - A tread-in mounting post
  - An energizer user manual
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*Note:* When using this kit, 4 x D size 1.5 V alkaline batteries may be installed into the energizer. Internal batteries are not supplied. External batteries may not be used with this configuration.

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# Installing the 0.12 J battery energizer with solar panel

## Select a location for the installation

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It is critically important that the 0.12 J battery energizer with solar panel is installed in a suitable place. NO object must be able to cast a shadow on the solar panel. In winter, the sun sits very low on the horizon and shadows cast by distant objects can become an issue. Even partial shading from tree branches etc will produce a significant reduction in the performance of the solar panel.

## Set up the energizer

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- 1 Remove the energizer from its packaging.
- 2 Un-clip the energizer from the mounting post.
- 3 If you are using the energizer with batteries, install the four internal batteries into the energizer, following the instructions provided in the energizer's user manual.
- 4 Clip the energizer back onto the mounting post.

## Set up the solar panel

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- 1 Remove the solar panel from its packaging.
- 2 Secure the solar panel to the middle position on the mounting post using the clips. See the picture of the assembled kit on the previous page.

*Note:* Do not secure the solar panel to the top position on the mounting post as the solar panel wires will not be long enough to reach the energizer.

- 3 Connect the solar panel to the energizer by connecting the solar panel wires to the terminals underneath the energizer.



- 4 Ensure that the solar panel is facing the midday sun (true north in the southern hemisphere and true south in the northern hemisphere).
- 5 Tread in the mounting post.

## Connect the energizer to the fence and select a pulse speed setting

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- 1 Connect the clip on the green earth lead to the metal shaft on the tread-in mounting post.
- 2 Connect the energizer's Fence output terminal to the fence using the yellow lead supplied.
- 3 Select the fast or slow pulse speed setting using the Selector switch (see the energizer's user manual for details).