



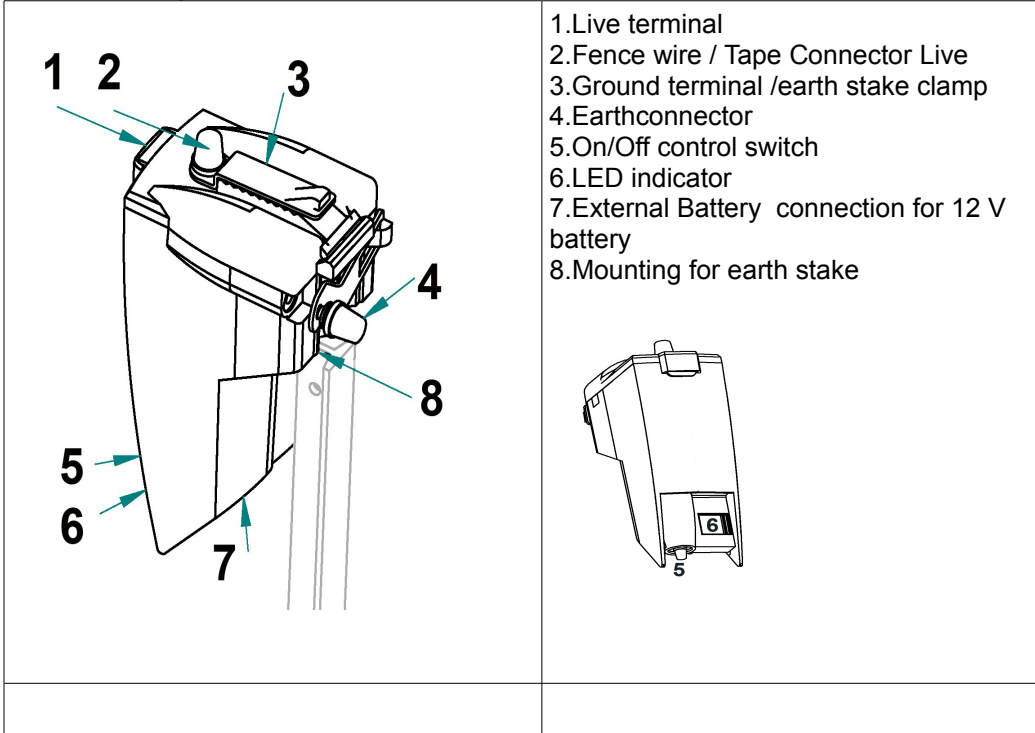
**SG 3**

## **ELECTRIC FENCE ENERGISER**



**GB      Operating instructions**

## 1. Olli SG 3 Explained



## 2. Olli SG 3 comes with the following:

- Olli fence energiser
- Cable set
- Fence connector with wire

## You will need additionally:

- Hot dipped galvanised Olli earth stake
- Accessories for setting up the fence

For further advice check the Olli Fencing Guide;

<http://www.farmcomp.fi/OlliBrochures>

### 3.Safety

Please read this manual carefully before connecting the electric fence.



***IMPORTANT: NEVER WORK ON THE FENCE WHEN ITS SWITCHED ON.***

All Olli fence energisers fulfill the safety regulations that are defined for fence energisers. However, an electric fence is never totally harmless. The electric shock given by the fence can be dangerous for small children or persons suffering from heart problems.

The safe usage of an electric fence requires that the safety instructions are always followed. The safety instructions are defined by the safety standards. Please read them carefully!

***IMPORTANT: IF THE ENERGIZER IS DAMAGED, DON'T USE IT, SEND IT TO BE REPAIRED. YOU WILL FIND THE SAFETY INSTRUCTIONS AT THE END OF THIS GUIDE. PLEASE READ THEM CAREFULLY AND FOLLOW THEM.***

### 4.Energizer Installation

Olli SG3 is compatible with Olli earth stake. If you are able to install the energiser under the fence or nearby you don't need any connection cables!

After you have installed the energizer, turn it on by using the knob (5). You can also adjust the pulse speed by turning the knob.

First choose a good location to install the energiser. The best location is near and outside the fence, in a moist area for e.g. clay soil. This is because you can easily hit the earth stake in to the ground and the earth stake gets a good connection to the ground because of the moisture. Avoid sandy soil because the grounding may not work so well in it.

Hit the earth stake (9) in to the ground so that about 50cm is above the ground level. Open the post clamp on the energiser by loosening the screw (4) and push the energiser all the way down on to the earth stake (see picture).

When its in place close the post clamp and tighten the screw (4).

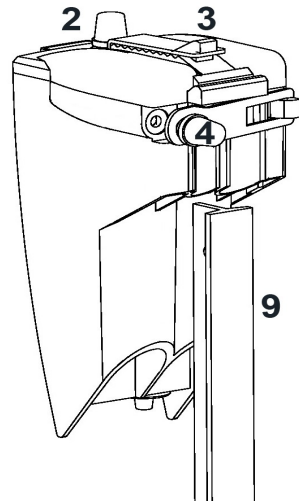
In good conditions this is enough to give you a good grounding.

If you need to make the grounding better put in a second earth stake.

Connect a wire from the 2nd earth stake to the energiser fitted under the screw (4).

If you want to use as a cable connecting the earth and the energiser, connect it to screw (4).

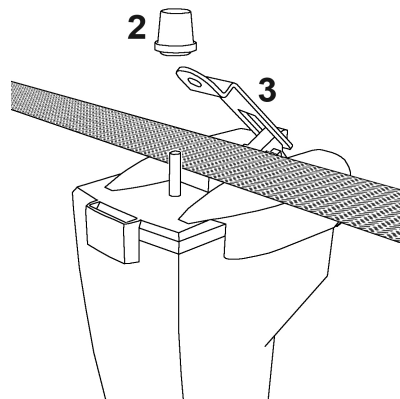
Warning – Cable should be rated to at least 20,000 volts.



Installing the energiser next to or under the fence means you can attach electric wire/tape to the Fence Wire/Tape Connector Live (3).

Alternatively use a cable connecting the energiser to the fence and to the earth:

Fence to energiser with wire to screw (2)



## Tape/Wire Connection

Earth stake to energiser with wire to connect on back of unit (4).

Loosen the live terminal knob (2). Put the wire under the clamp and tighten the screw.

Remember that you must always do the grounding properly, otherwise it will not work! - Insufficient grounding is the most common reason for the fence not to work.

Fence for use during winter or dry conditions, using a self earthing tape – See the Fencing Guide at; [www.oli.fi](http://www.oli.fi)

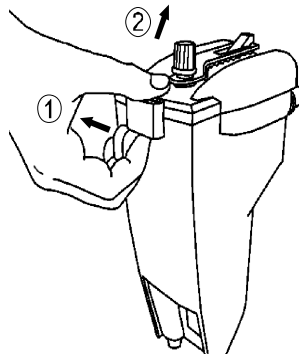
## 5.Internal Battery Installation

The Olli SG 3 operates with 4 D-cell batteries

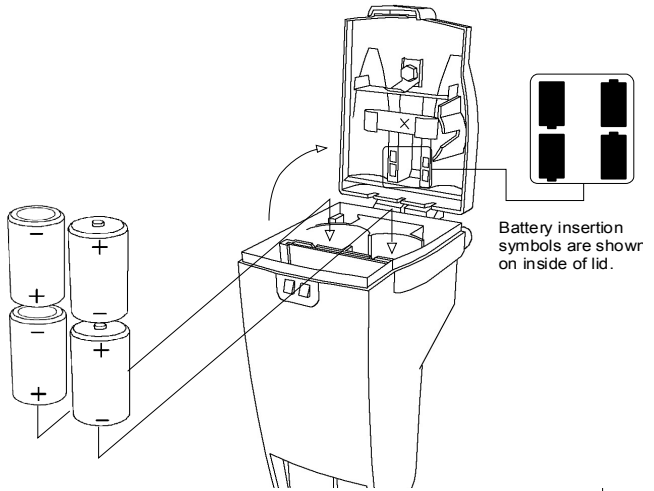
1.Lever open top cover catch

with a finger nail or flatscrewdriver.

2.Rotate cover upwards until free.



3. Insert the batteries as shown in the picture with the '+' facing down in the left side and the '+' facing up in the right side.



Remove batteries when energiser is not used for some time.

The Olli SG 3 can be operated with an external 6/12V battery. See the instructions for external battery connection on chapter 6. Internal batteries must be removed before external battery is connected.

## 6.External Battery connection

The Olli SG 3 can be operated with an external 6/12V battery.



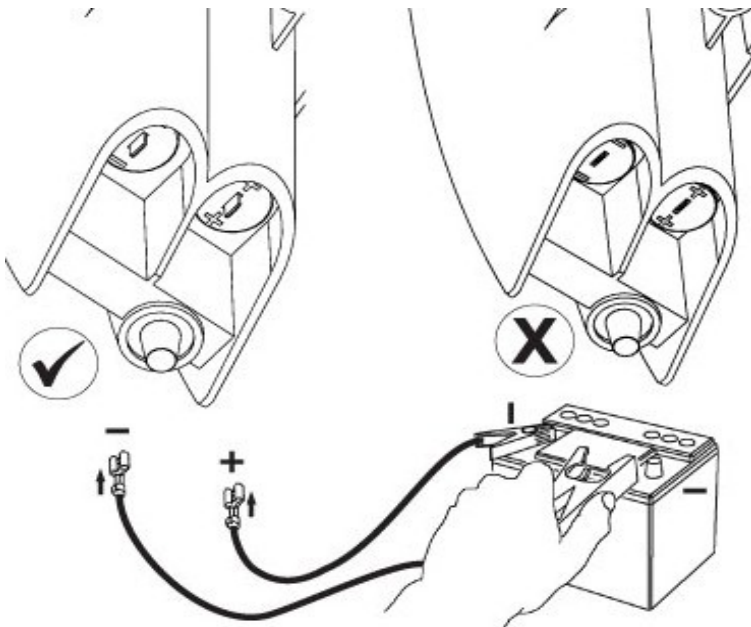
***IMPORTANT! BEFORE CONNECTING THE EXTERNAL BATTERY, FIRST REMOVE THE INTERNAL D-CELL (LR20) BATTERIES.***

Connect the wires provided to the underside of the unit using flat female connectors provided.

The '+' on the same side as the control switch and the '-' on the other.



**WARNING! INTERNAL BATTERIES MUST BE REMOVED BEFORE EXTERNAL BATTERY IS CONNECTED.**



## 7.Keys To Successful Energizer Installation

**IMPORTANT: ANIMALS MUST BE TAUGHT TO RESPECT THE ELECTRIC FENCE!**

If animals are not familiar with the electric fence, they will not respect it. This can be dangerous for example when young animals go to the paddock for the first time and it is surrounded with thin wire the animal may try to run through the fence and get tangled into it. You must check the fence regularly to make sure nothing is tangled up in the fence, this could be critical to an animal.

Always train the animal to the fence by insuring that the animal's first approach to the fence is slow and that an effective repelling shock is received. Turn the energiser to maximum pulse for the first few days to allow the animal to learn to respect the fence. Then turn down the power to a normal operating level.

Carefully install a complete earthing system. Most electric fencing failures are due to improper earthing.

Never use standard household insulated wire, which is generally rated at only 700 volts or less. Use double insulated underground cable, rated for at least 20 000 Volts.

Use an Electric Fence Volt Meter to periodically check the condition of your fence and to diagnose/repair shorts, poor connections and inadequate earthing.

Ensure vegetation along the fence is kept to a minimum.

### 8.Olli SG 3 Specification & Function

- The LED flashes once for every pulse.
- If the supply voltage drops below approximately 3.1V the LED starts to blink rapidly – The battery needs to be changed.
- Pulse rate is controlled by the on/off switch

#### Technical data

**Powersource:** Internal 4 x 1.5V D-cell (LR20) battery or external 6-12V battery.

**Current Consumption:** Approx. 20-40mA dependent on operating conditions.

**Puls rate:** 17 - 43 pulses per minute

**Output energy** 130 – 310 mJ @ 500 Ohm dependent on operating conditions .

**Toperaiting temperature:** 14 to 122°F (-10 to 50°C).

<b>Pulses per minute</b>	43	30	17
<b>No. of weeks</b>	2.5	3.5	5



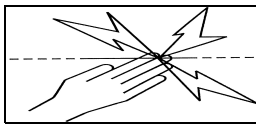
## 9. Safety instructions

- Electric animal fences and their ancillary equipment shall be installed, operated and maintained in a manner that minimizes danger to persons, animals or their surroundings.
- The installation of the energizer should be in accordance with local legislation.
- Electric animal fence constructions that are likely to lead to the entanglement of animals or persons shall be avoided.
- An electric animal fence shall not be supplied from two separate energizers or from independent fence circuits of the same energizer.
- Avoid contacting electric fence wires especially with the head, neck or torso. Do not climb over, through or under an electric fence. Use a gate or a specially designed crossing point.
- For any two separate electric animal fences, each supplied from a separate energizer independently timed, the distance between the wires of the two electric animal fences shall be at least 2,5 m. If this gap is to be closed, this shall be effected by means of electrically non-conductive material or an isolated metal barrier.
- Barbed wire or razor wire shall not be electrified by an energizer.
- A non-electrified fence incorporating barbed wire or razor wire may be used to support one or more off-set electrified wires of an electric animal fence. The supporting devices for the electrified wires shall be constructed so as to ensure that these wires are positioned at a minimum distance of 150 mm from the vertical plane of the non-electrified wires. The barbed wire and razor wire shall be earthed at regular intervals.
- Follow the energizer manufacturer's recommendations regarding earthing.
- A distance of at least 10 m shall be maintained between the energizer earth electrode and any other earthing system connected parts such as the power supply system protective earth or the telecommunication system earth.
- Connecting leads that are run inside buildings shall be effectively insulated from the earthed structural parts of the building. This may be achieved by using insulated high voltage cable.
- Connecting leads that are run underground shall be run in conduit of insulating material or else insulated high voltage cable shall be used. Care must be taken to avoid damage to the connecting leads due to the effects of animal hooves or tractor wheels sinking into the ground.
- Connecting leads shall not be installed in the same conduit as the mains supply wiring, communication cables or data cables.
- Connecting leads and electric animal fence wires shall not cross above overhead power or communication lines. Crossings with overhead power lines shall be avoided wherever possible. If such a crossing cannot be avoided it shall be made underneath the power line and as nearly as possible at right angles to it.
- If connecting leads and electric animal fence wires are installed near an overhead power line, the clearances shall not be less than those shown in Table 1 below.

Power line voltage, V	Clearance, m
$\leq 1\ 000$	3
$> 1\ 000$ and $\leq 33\ 000$	4
$> 33\ 000$	8

Table 1 – Minimum clearances from power lines for electric animal fences

- If connecting leads and electric animal fence wires are installed near an overhead power line, their height above the ground shall not exceed 3 m
- This height applies to either side of the orthogonal projection of the outermost conductors of the power line on the ground surface, for a distance of
  - – 2 m for power lines operating at a nominal voltage not exceeding 1 000 V;
  - – 15 m for power lines operating at a nominal voltage exceeding 1 000 V.
- Electric animal fences intended for deterring birds, household pet containment or training animals such as cows need only be supplied from low output energizers to obtain satisfactory and safe performance.
- In electric animal fences intended for deterring birds from roosting on buildings, no electric fence wire shall be connected to the energizer earth electrode. A warning sign shall be fitted to every point where persons may gain ready access to the conductors.
- Where an electric animal fence crosses a public pathway, a non-electrified gate shall be incorporated in the electric animal fence at that point or a crossing by means of stiles shall be provided. At any such crossing, the adjacent electrified wires shall carry warning signs.
- Any part of an electric animal fence that is installed along a public road or pathway shall be identified at frequent intervals by warning signs securely fastened to the fence posts or firmly clamped to the fence wires.
- The size of the warning sign shall be at least 100 mm × 200 mm.
- The background colour of both sides of the warning sign shall be yellow. The inscription on the sign shall be black and shall be either



- the symbol of or the substance of “CAUTION: Electric animal fence”.
- The inscription shall be indelible, inscribed on both sides of the warning sign and have a height of at least 25 mm.
- Ensure that all mains-operated, ancillary equipment connected to the electric animal fence circuit provides a degree of isolation between the fence circuit and the supply mains equivalent to that provided by the energizer.

- NOTE 1 Ancillary equipment that complies with the requirements relating to isolation between the fence circuit and the supply mains in IEC 60335-2-76 standard in Clauses 14, 16 and 29 of the standard for the electric fence energizer is considered to provide an adequate level of isolation.

- Protection from the weather shall be provided for the ancillary equipment unless this equipment is certified by the manufacturer as being suitable for use outdoors, and is of a type with a minimum degree of protection IPX4.

**The previous special requirement applies also to external battery charger. The energiser must not be connected to the fence when charging the external battery if it isn't stated otherwise on the manual of the energiser or the charger.**

## **10. Warranty Conditions – Olli Energisers**

This product carries a three (3) year manufacturer warranty for materials and workmanship. The warranty also covers possible overload situations caused by thunder. The warranty is valid for three (3) years from the date of purchase on the receipt.

To claim the warranty, the customer should return the defect product to the Manufacturer, reseller or the nearest Olli Service Partner at customer's own expense. The warranty claim must be accompanied by the description of the fault, copy of the sales receipt and customer's contact information. The manufacturer / Olli Service Partner will repair or replace the defect product and return it as soon as possible.

The warranty does not cover any damages that are caused by incorrect or careless use of the product, installation that does not correspond to the provided instructions and other damages which may arise due to causes beyond the control of the manufacture.

Farmcomp does not accept any responsibility for any direct, indirect or consequential damages that are caused by the use of the product or the fact that the product could not be used. The liability of Farmcomp is limited to the price of the product in maximum.

***IMPORTANT: DO NOT OPEN THE DEVICE! DO NOT TRY TO REPAIR THE DEVICE YOURSELF! THE ABOVE MENTIONED ACTIONS ARE STRICTLY FORBIDDEN!***

Only the manufacturer and authorized service partners have the right to repair the device. The manufacture does not accept any responsibility or liability for the outcome of not following the rules.

Declaration of Conformity  
according to ISO/IEC Guide 22 and EN 45014

**Manufacturer's name** Farmcomp Oy  
**and address:** Jusslansuora 8  
FIN-04360 TUUSULA, FINLAND

declares, that the product

**Product name:** Fence Energiser  
**Model numbers:** Olli SG 3

*conforms to the EMC directive 2004/108/EC by following the harmonised standards:*

EN 55014-1:2006

EN 55014-2:1997+A1:2001

and complies with **the electrical safety standard:**

EN 60335-2-76:2005+A1:2006 + A11:2008



Tuusula, Finland  
Director

Lasse Paakkola March 25, 2010

Managing

Original language: Finnish Signed Declaration of Conformity documents are filed at Farmcomp Oy, Tuusula

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