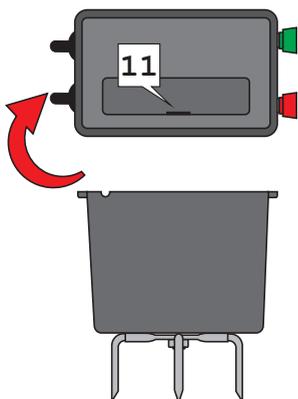
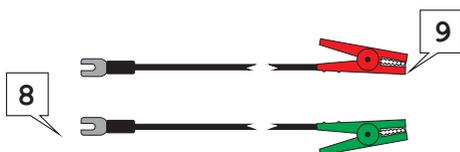
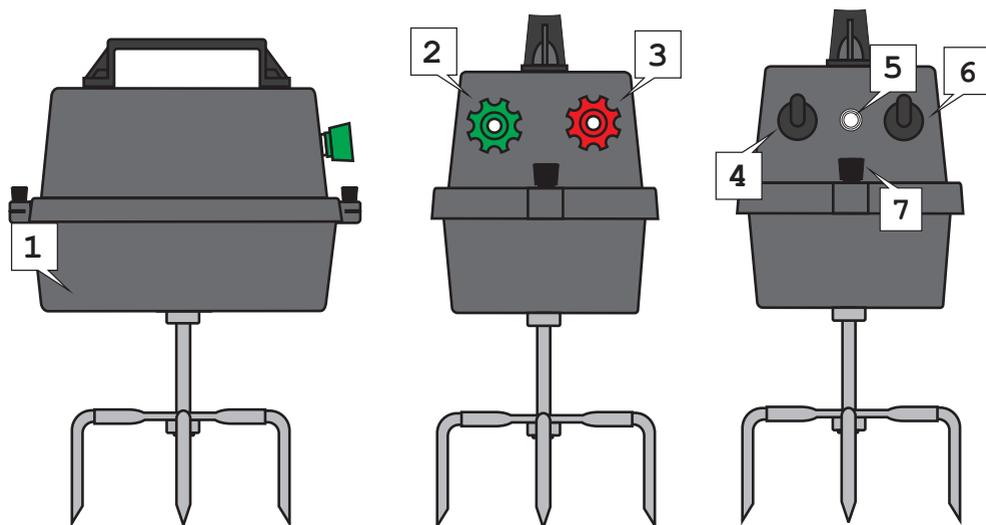


# Installation guide - TYPE: BX320



Please read through before installation. Please read safety guidelines leaflet.

## What's in the box?



### Key

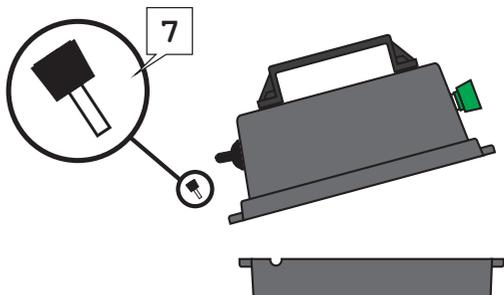
1. Base
2. Ground connection terminal
3. Fence connection terminal
4. On off switch
5. Low battery/pulse indicator
6. High/low switch
7. Thumbscrews for removing battery box
8. Ground connection leads
9. Fence connection lead
10. 12v connection leads
11. Battery input connection (battery box removed)

## Connecting it all together

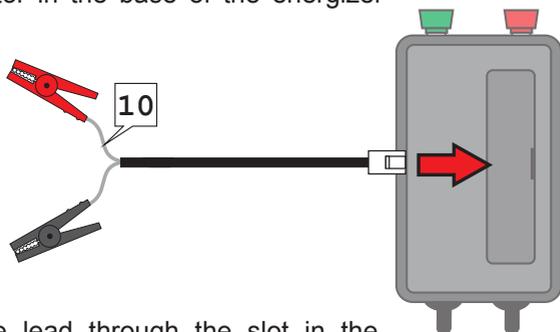
The energizer can be operated from a 6 or 12v battery. 6v (47P44)batteries fit into the battery box for easy portability. Standard size leisure batteries are run from outside of the battery box.

### 12v battery connection (external)

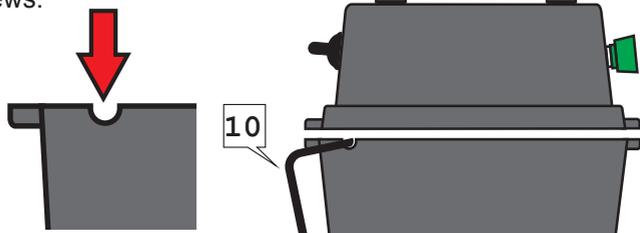
Unscrew the thumb screws and remove the energizer top from the battery box.



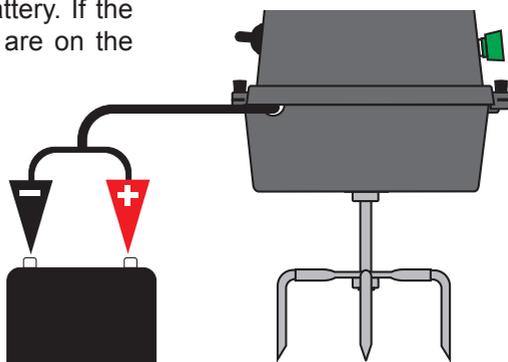
If not already inserted, clip the 12v lead into the connector in the base of the energizer top.



Position the lead through the slot in the battery box and replace the energizer top, securing with the thumb screws.

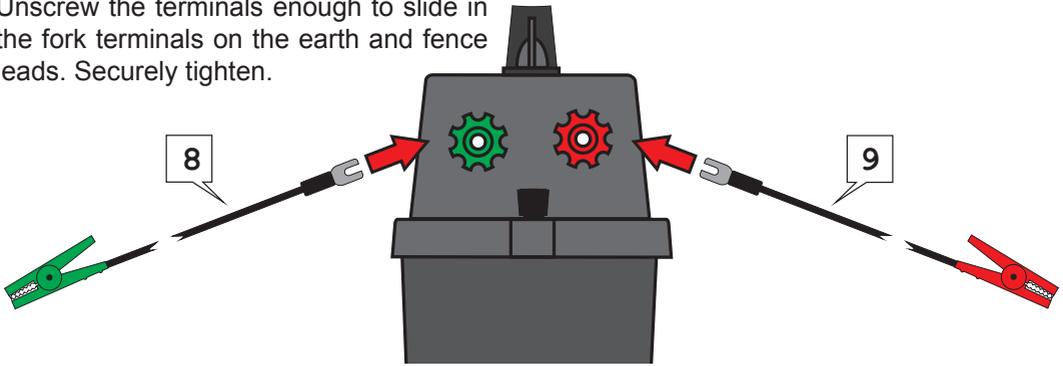


Connect the croc clips to the battery. If the energizer beeps, the croc clips are on the wrong terminals



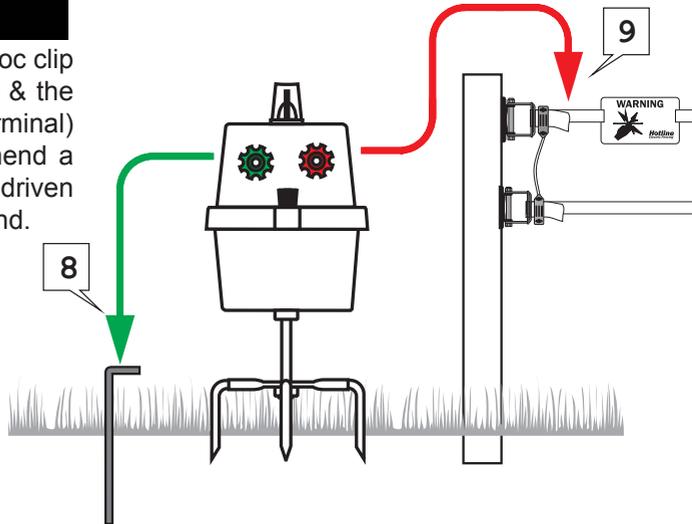
## Lead connection

Unscrew the terminals enough to slide in the fork terminals on the earth and fence leads. Securely tighten.

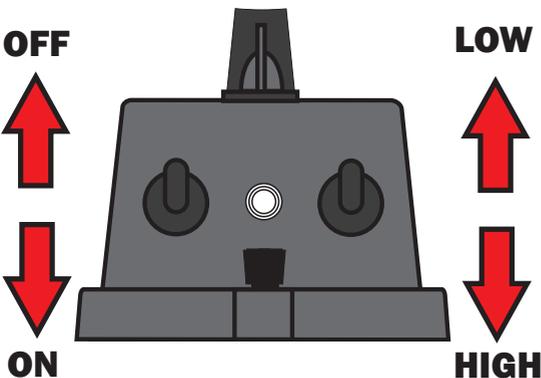


## Fence connection

Connect the lead with the red croc clip to the fence (from red terminal) & the green croc clip (from the green terminal) to the ground rod. We recommend a minimum of one ground rod driven approx. one metre into the ground.



## Turning on and off, switching high and low



## Pulse/low battery indicator

The light on the front of the energizer will flash green with every pulse. As your battery loses power, it will start to flash red indicating that you need to change the 9v battery or charge the 12v battery.



## Trouble shooting

You should have a minimum of 3kv on your fence line to be effective. In principle, electric fencing is a simple concept. If your energizer is working then there can only be two other places to look - your fence line or ground system.

### Checking the energizer

**Sound and sight** - Most energizers emit an audible tick caused by the firing of the output transformer. This is a good indication that the energizer is working. The indicator light or fence monitor should be pulsing or flashing. The energizer has a pulse indicator, and this should be operating at all times. If the light is flashing green it usually means that the energizer is working correctly. This indicates that the problem is somewhere on the fence system. If red then your battery needs charging. **Flash test** - disconnect the croc clips from the fence and ground stake. Clip the croc clips together making sure the metal jaws contact each other. Slowly draw them apart - you should get a short (1-2mm) spark jumping from one to the other. **Use a Tester** - disconnect completely from the ground stake and fence and take a reading across the terminals. Depending on the model of energizer you should have a reading between 7 and 10kv.

### Checking the ground system

**Low voltage** - If there is high voltage on your ground stake it is missing from your fence line. The greater the depth and surface area under the ground the more efficiently your ground stake will collect the pulse as it returns through the earth. If you get a shock from your ground stake, or your tester shows voltage when touched to the ground stake, you can improve your whole system by adding further ground stakes. Link additional ground stakes with wire, spacing them about a metre apart.

### Checking the fence line

**Clear lines** - An electric fence operates as an open circuit. The fence is positive and the ground itself is negative. By touching both fence and ground the animal completes the circuit and get the shock. If anything touches both ground and fence, other than the animal, it reduces the effective voltage on the fence line. The fence line must not touch anything that is not insulated from the ground. Check the fence line is clear from all vegetation and wooden posts, metal posts and gates are not touching the line. Check all insulators. The fence line can occasionally come unhooked from insulators and touch the posts and broken insulators can cause leaking of power into the post and ground. **Line problems** - If you are joining two sections of tape or wire, try to use correct connectors to ensure the conductors in both sections are connected. Check the condition of the line, if the metal conductors within the line are broken it will effect the efficiency of the fence. Greater metal content means greater efficiency. **Netting** - Netting is closer to the ground than other forms of fence so requires more maintenance to keep clear from vegetation. All horizontal lines, apart from the bottom, must be kept clear from the ground. If your net is sagging and touching the ground, add in extra posts. The net must also be clear of contact from other forms of fencing, arks and chicken wire runs. Check the metal spikes on the posts, occasionally wires can get caught up or slip down to the metal spike and take power to ground. **Remember-** if your energizer and ground system is fine, the problem **will** be somewhere on your fence line!