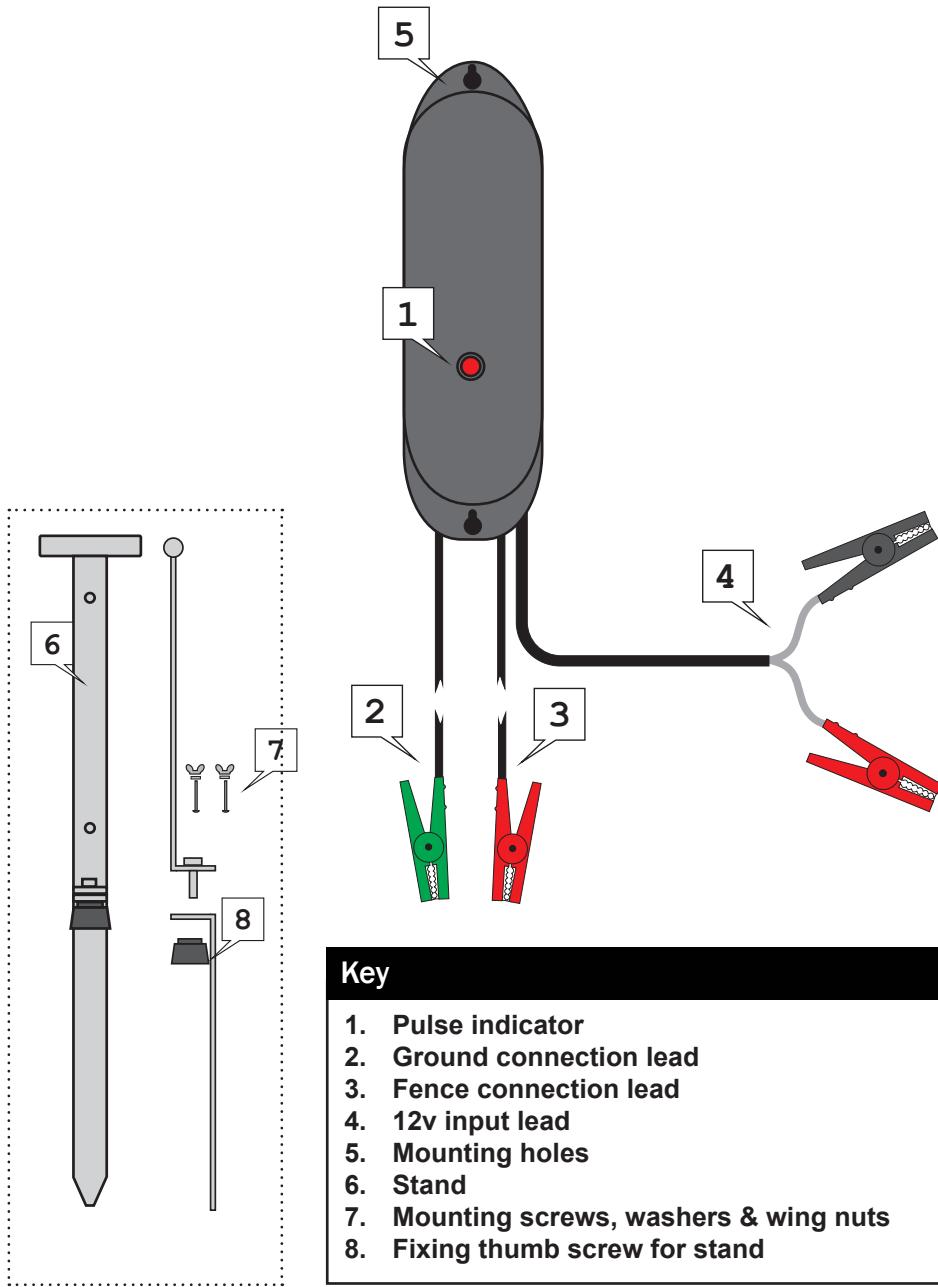




# Installation guide - 47MB60

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

What's in the box? Getting to know the MB60



## Key

1. Pulse indicator
2. Ground connection lead
3. Fence connection lead
4. 12v input lead
5. Mounting holes
6. Stand
7. Mounting screws, washers & wing nuts
8. Fixing thumb screw for stand

## Connecting it all together

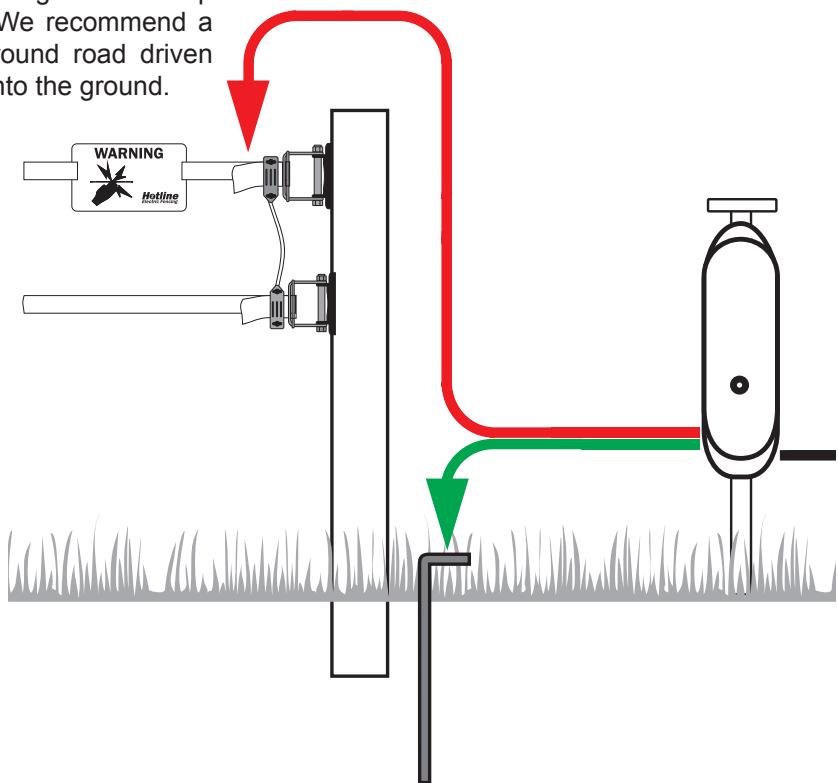
### Mount onto the stand

Place the mounting bolts through the mounting holes of the case and through the corresponding holes on the stand. Tighten the wing nuts.



### Fence connection

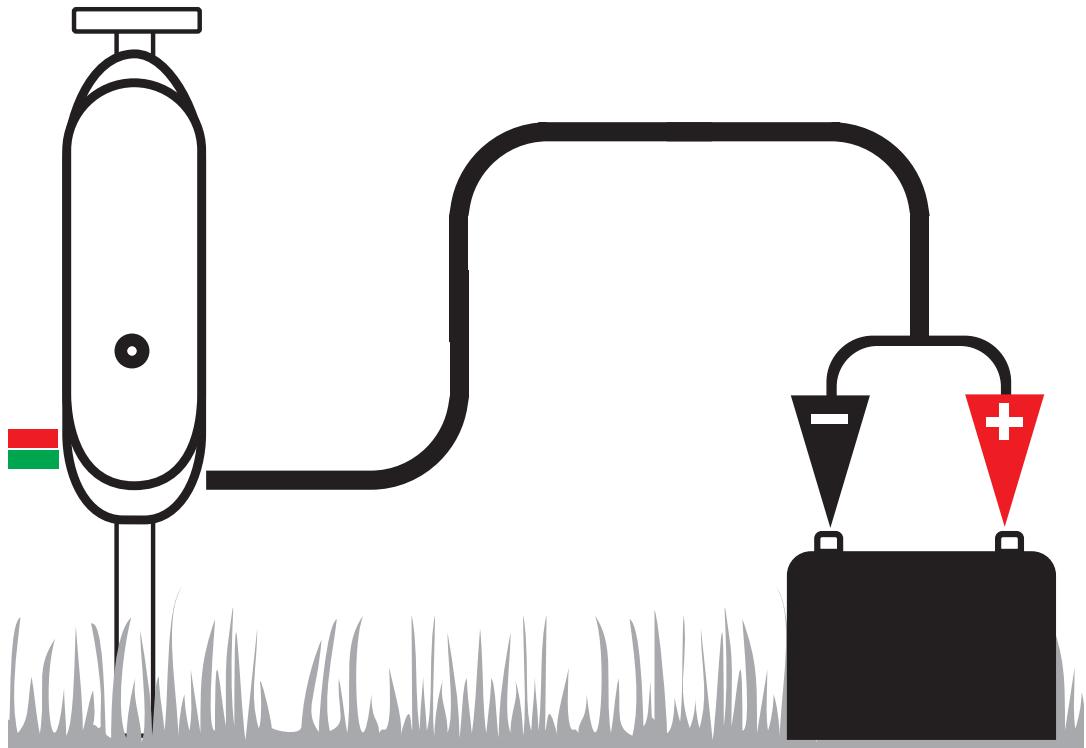
Connect the lead with the red croc clip to the fence & the green croc clip to the ground rod. We recommend a minimum of one ground road driven approx. one metre into the ground.



## Connection to the fence

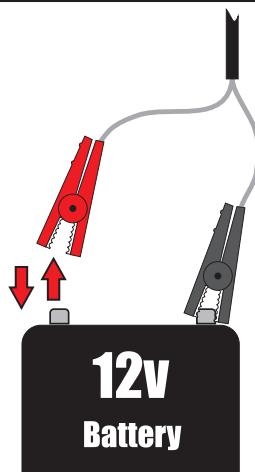
### Connecting to the battery

Connect the red croc clip to the positive terminal of the battery and black to the negative terminal of the battery.



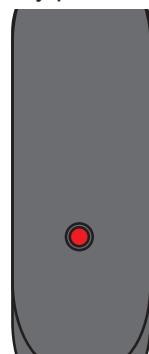
### Switching on and off

To turn the MB60, on and off, clip/unclip the red croc clip from the battery terminal.



### Pulse indicator

The light on the front of the MB60 will flash with every pulse.



## 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 energiser is working then there can only be two other places to look - your fence line or ground system.

### Checking the energiser

**Sound and sight** - Most energisers emit an audible tick caused by the firing of the output transformer. This is a good indication that the energiser working. The indicator light or fence monitor should be pulsing or flashing. The MB60 has a pulse indicator, and this should be operating at all times. If the light is flashing it usually means that the energiser is working correctly. This indicates that the problem is somewhere on the fence system. **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 energiser you should have a reading between 7 and 10kv.

### Checking the ground system

**Low voltage** - If there is 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 energiser and ground system is fine, the problem **will** be somewhere on your fence line!

If in doubt, **Call** - We are always happy to help. +44(0)1626 33 11 88