

CS 1500 Energizer Manual

The CS 1500 Energizer has been designed to electrify security electric fences. Any other application is the user's responsibility.

The energizer must be installed in a fresh and dry place, away from direct sunlight or rain. If required, ask for the equipment in the special presentation box for exposure to the elements.

Be cautious. Do not expose yourself to discharges. If you aren't sure about what you are doing, ask for professional help. Notify your neighbors and underage about the electric fence.

DESCRIPTION:

It feeds with 120 V AC, and must have a backup battery (12V 4Ah or 12V 5Ah). The equipment contains its intermittent high voltage source that outputs 9500 Volts at 1, 5 Joules. The floating mode source of feeding – free of maintenance – keeps the backup battery charged, which allows the energizer to operate for up to 48 hours if there is an electric energy deficiency.

The monitoring function detects the fence's rupture, its placement on the ground, or any other flaw that may prevent the system from maintaining the high voltage; it activates the output relay in this cases.

CONTROL PANEL

The energizer has four lights that indicate the system's status. Whenever the blue top light to the left (110 V) is on it means that the energizer is functioning correctly fed by the main 110 volts source.

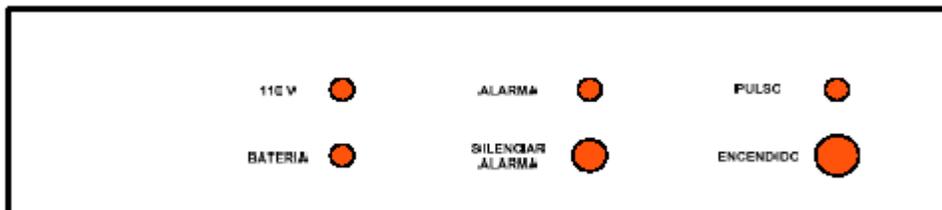
Whenever the red bottom light to the left (BATTERY) is on, it means that the energizer is working using the battery.

If the energizer is on, the orange top light to the right (PULSE) turns on each time a high voltage pulse returns to the electric fence (approximately once every second). This means that the energizer is operating in adequate voltage levels.

When the green central light on the top (ALARM) turns on, it means that one of the following events occurred:

- An alarm zone opened, if the equipment has opening or movement sensors.
- The alarm of the electric fence has set off by rupture or short-circuits.

Additionally, the system has two push buttons. The one in the center (alarm silence) allows you to silence the siren in case it is activated. The one in the inferior right side (ON/OFF button) allows you to activate or deactivate the equipment.



CONNECTION

The connections to be made by the installer are the following:

1. Feeding 110-120V 60Hz
2. High voltage and ground outputs
3. High voltage return
4. Additional alarm devices
5. Backup battery
6. Siren connection or to the alarm panel zone

FUSES AND BATTERY

The equipment is protected by two fuses, one European-like power supply, 0.5A 250V, and the other for the siren feeding, alarm sensors and accessories, American-like, 1.5A 250V.

Additionally, it is recommended to install a high voltage peak suppressant in order to protect the equipment against energy feeding problems.

The equipment uses a backup 12V 4Ah battery. It is important for it to be in good conditions, because if it is not, it demands greater amounts of energy and does not retain the charge, which will not allow the proper functioning in case of electric supply deficiencies.

SIREN CONNECTION

Output power of 30 or 15 watts sirene

The siren positive must be connected to the 9th Terminal (NO), and the negative to the 13th Terminal (GND). The siren output activates when a decrease or lack of voltage in the fence produces (less than 3500 volts), or due to the signal of any alarm device connected to the non-delay zone. Once activated, the output remains like that for 5 minutes \pm 20 % (autoreset function), even if the voltage is reestablished in the return. You can silence the alarm by pressing the respective push button.

If you wish to connect to equipment's siren signal to an alarm central, instead of a siren, you must remove the grey bridge (11th and 12th terminals), and connect the zone of the alarm central to the 10th and 11th terminals (NC and C).

CALIBRATION

The alarm is calibrated to activate under 3500 V at 5-8 pulses. If you wish to adjust it due to excessive or not enough sensitivity, or because of the size of the fence, the trimpot on the top right part must be adjusted. It is recommended not to modify it unless necessary. Turn to the right to decrease sensitivity, or to the left to increase it.

CONNECTION IN THE ZONE

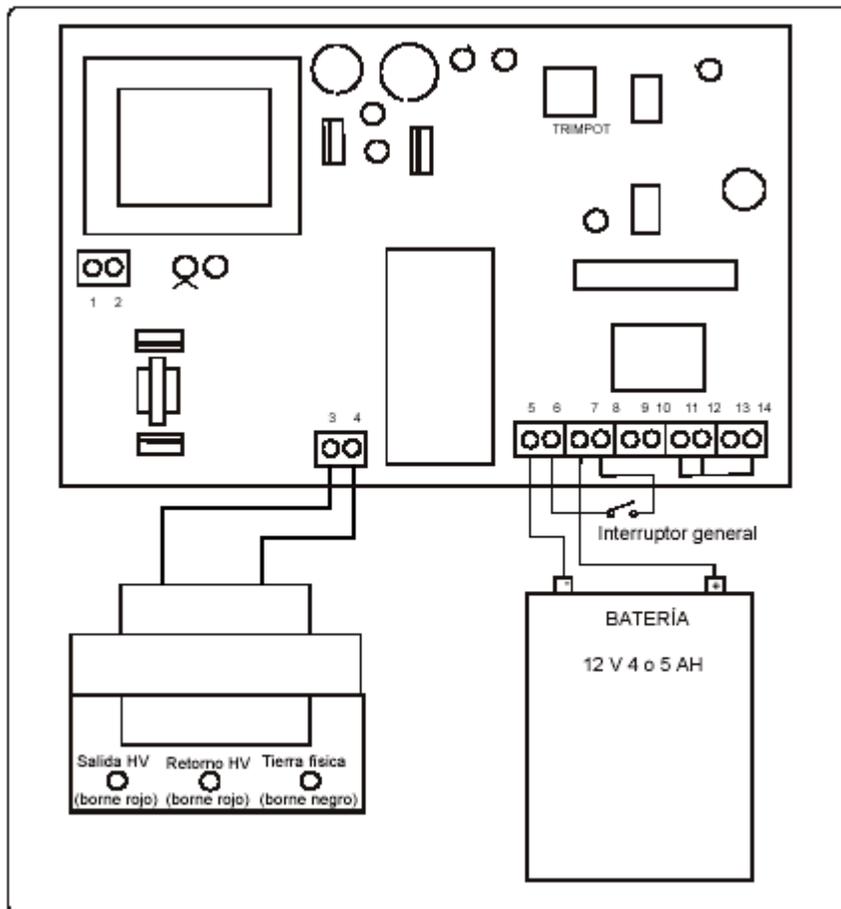
The equipment comes with the zone non-fitted by a (green) bridge that is set between the terminals 12 and 14. In order to make it work, unplug the bridge between 12 and 14 and connect a magnetic signal, or a

passive between those contacts. You can feed the passive between the 12th (+12V) contact and the 13th (siren negative).

GUARANTEE

The equipment has a 2 year guarantee against manufacture flaws. This guarantee does not cover shipping costs to our shop or back to the client. It also does not cover defects due to misuse, bad installing (voltage peaks damages, or lack of independent ground installing), or damages because of misuse or poor treatment.

CONNECTIONS AND ADJUSTMENT DIAGRAM



TERMINALS IDENTIFICATION

- 1 120 VAC (fase)
- 2 120 VAC (neutral)
- 3 High voltage transformer Terminal.
- 4 High voltage transformer Terminal.
- 5 Battery negative.

6 ON/OFF switch.

7 Battery positive

8 ON/OFF switch.

9 Siren relay NO contact (Siren positive)

10 Siren relay NC contact (normally closed)

11 Siren relay C contact (common)

12 + 12 VDC through SW.

13 Siren negative

14 Zone entrance.