# *HAMMER*

## CPS RANGE ELECTRIC FENCE ENERGIZER & ALARM MONITOR

1. THE CPS RANGE CONCEPT
2. FEATURES AND SPECIFICATIONS
3. OPERATION
4. INSTALLATION PROCEDURE

**READ FULL INSTRUCTIONS BEFORE INSTALLATION**

# 1. THE CPS RANGE CONCEPT

The CPS RANGE is a compact, integrated electric fence energizer and alarm monitor unit with remote LCD keypad control. The unit employs state of the art microprocessor and surface mount technology. A unique feature of the CPS Range is the innovative **SMARTLINK** concept. A security weakness of most of the energizers on the market at present s that the high voltage, output wire and return wire can be bridged across at the point they connect to the fence. The rest of the fence can then be disconnected, without triggering the alarm, since the return pulse will still be detected. The SMARTLINK prevents this from happening.

The CPS Range consists of three models, incorporating a single high voltage zone, dual high voltage zones and a 4 zone model. These zones are hard wired zones, each wired directly from the energizer. The dual zone and the 4 zone units have been designed with a separate high voltage transformer for each zone, so that if one zone is shorted then the other zones still have power. The LCD keypad is used to display system information and to control the energizer. The system is also programmable from the keypad and was designed for ease of installation and maximum security.

# 2. FEATURES AND SPECIFICATIONS

- Output voltage, fence not connected, nominal 6000 V
- Output voltage, fence connected, nominal 8000 V
- Stored Energy 14 J
- Output Energy
    - CPS 6000 – 8 J @ 500 Ohm
    - CPS 6002 and CPS 6004 – 4 J per zone @ 500 Ohm
- Battery charger unit
- 7 AH Battery Back up
- Auxiliary alarm monitor
- Remote On/Off connection
- Siren output 12 V, 15W
- Strobe output 12 V, 15 W
- Anti-tamper switch
- Fully enclosed high voltage terminals for safety
- LCD keypad operation (up to 6 Keypads)
- Panic button on the Keypad
- Three level PIN code operation
- Fully Programmable
- Fully accredited

# 3. OPERATION

### 3.1. FUNCTION

The function of the keypad is to display system information of the Energizer and the alarm monitor and to control the energizer operation. Via a PIN code unauthorised operation or access to the system is denied. Specific system information e.g. Mains power, Energizer on, Fence alarm, etc. is displayed on the LCD screen. All operations must be preceded by entering a valid PIN code. There are three different, 4-digits, PIN codes. When the correct code is entered the buzzer will emit two long beeps. If the code is incorrect it will emit four short beeps.

### 3.2. LCD DISPLAY

The following information is displayed in normal mode:

- System On
- Return voltage from the fence
- Fence + Aux armed

When an alarm is triggered:

- Triggered zone will be displayed
- Aux alarm will be displayed when triggered

Mains failure will be displayed every 10 sec and the buzzer will beep. The buzzer can be switched off if required through the programming mode

### 3.3. PIN code level 1 (Default – 1111)

- The system can only be switch on with this code and not turned off
- To turn the system on – enter the four digit code
- To reset an alarm – enter the four digit code

### 3.4. PIN code level 2 (Default – 2222)

- To turn the system off – Enter the four digit code
- To reset an alarm – enter the four digit code
- To turn the system on – Enter the four digit code followed by one of these digits:
    - "0" – no alarms bypassed (2222 0)
    - "1" – fence alarm bypassed (2222 1)
    - "2" – aux alarm bypassed (2222 2)
    - "3" – all alarms bypassed (2222 3)

### 3.5. PIN code level 3 (Default – 3333)

This code is used to enter the programming mode of the energizer. Any changes are updated in memory in case of power loss. Referring to the table below the general programming sequence is as follows:

| *SUB MENU* | *VALUE* | *DESCRIPTION* | *DEFAULT* |
|---|---|---|---|
| 01 | YES/NO | DEFAULT ENEGIZER SETTINGS | |
| 02 | 0-3 min | AUXILARY ALARM TRIGGER DELAY | 5 sec |
| 03 | 0-3 min | FENCE ALARM TRIGGER DELAY | 3 sec |
| 04 | 0 – 3 min | SIREN TIME OUT | 3 min |
| 05 | 600 V – 5600 V | FENCE ALARM VOLTAGE TRIGGER LEVEL | 2200 V |
| 06 | N/R | OUTPUT JOULES – NOT IMPLEMENTED | N/R |
| 07 | NEW PIN L1 | CHANGE PIN CODE LEVEL 1<br>ENTER THE NEW 4 DIGIT NUMBER TWICE | 1111 |
| 08 | NEW PIN L 2 | CHANGE PIN CODE LEVEL 1<br>ENTER THE NEW 4 DIGIT NUMBER TWICE | 2222 |
| 09 | NEW PIN L3 | CHANGE PIN CODE LEVEL 1<br>ENTER THE NEW 4 DIGIT NUMBER TWICE | 3333 |
| 10 | ON/OFF | TURNING THE CHIME ON OR OFF FOR MAINS FAIL | ON |

# 4. INSTALLATION PROCEDURE

### 4.1. Mount the energizer and keypad:

- Remove the front cover of the energizer. There are two mounting holes in the top corners of the plastic base. Secure the energizer to the wall at a suitable height for maintenance using 6 mm nail in anchor screws. At the bottom there is a third positioning whole to level and secure the energizer to the wall. Ensure there is at least 500 mm free space around the energizer.
- The keypad has two “keyhole” mounting holes at the back. The keypad can be mounted up to 100 m away from the energizer. The cable between the energizer and the keypad should be a shielded, twisted pair, 1 mm copper diameter wire.
- Wire as follows:
    - 0 V on the energizer (says keypad) to 0 V on the keypad
    - 12 V on the energizer (says keypad) to 12 V on the keypad
    - TX on the energizer (says keypad) to Data on the keypad
- Up to 6 keypads can be connected in parallel. One keypad must always be the master keypad by inserting the jumper on the two pins at the back of the keypad. The other keypads the jumper must be removed

**4.2. Mount the mains transformer:**

- The AC mains transformer must be mounted close to the power outlet.
- Run 1 mm twin flex from the transformer to the energizer, carrying the 12 VAC
- Connect to the energizer as per the diagram

**4.3. Connect the siren etc.**

- As per the diagram

**4.4. Connect the fence:**

- Connect the high voltage cables to the red terminals for the individual zones – feed and return
- Connect the fence earth wire to the black terminal
- The energizer earth wire must be grounded as close as possible to the energizer by means of three copper earth stakes 1.5 m long.

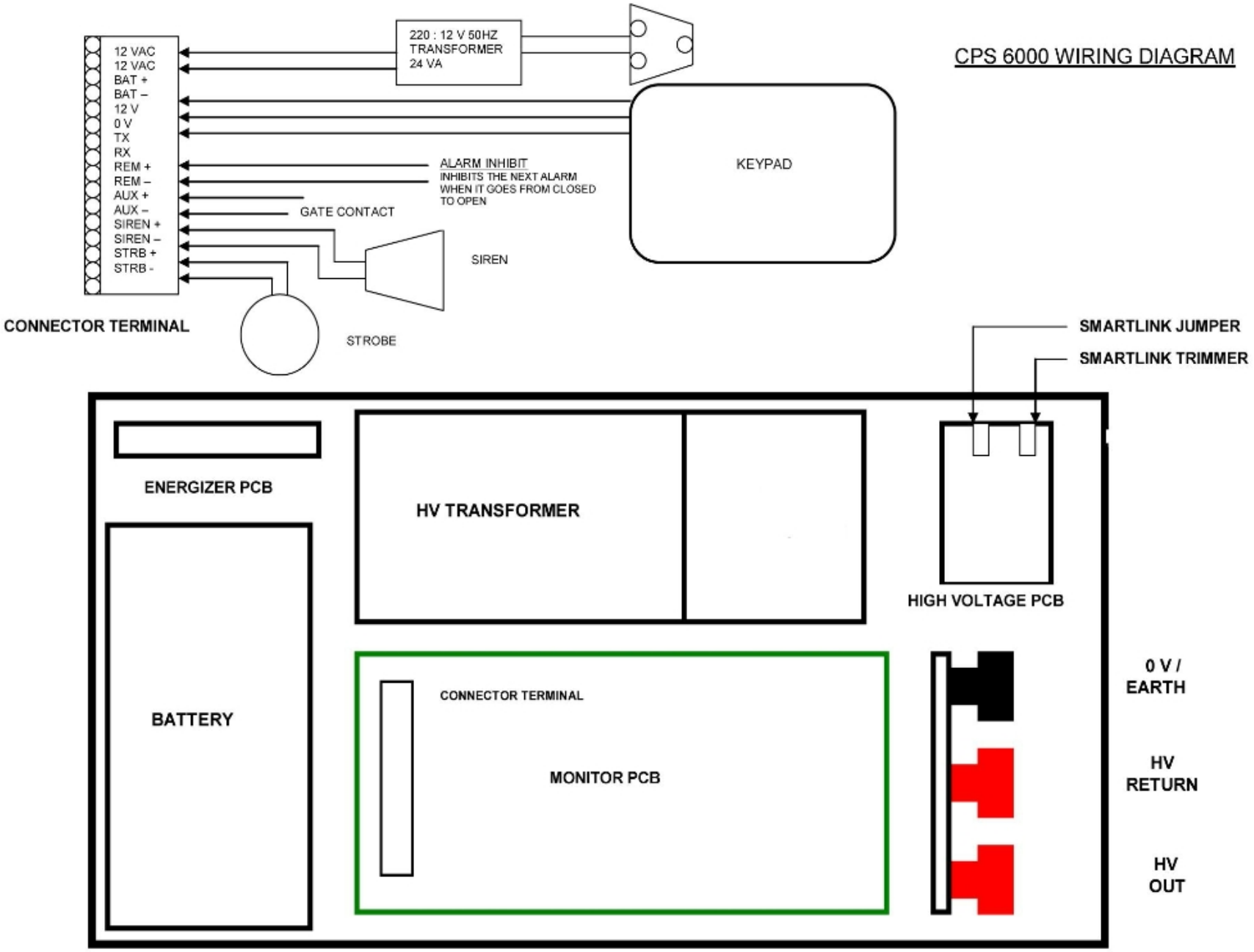
**4.5. Set up the SMARTLINK and testing the SMARTLINK:**

- Turn the energizer off. Remove the jumper on the HVI PCB. Turn the energizer on. Turn the trimmer potentiometer (shown in diagram) anti-clockwise until the return voltage is the same as before removing the jumper. Do this to each zone individually.
- Turn the energizer off. Disconnect the HV feed “out’ and "return” at the fence and join them together. Turn the energizer on. The return voltage should drop and the alarm should trigger

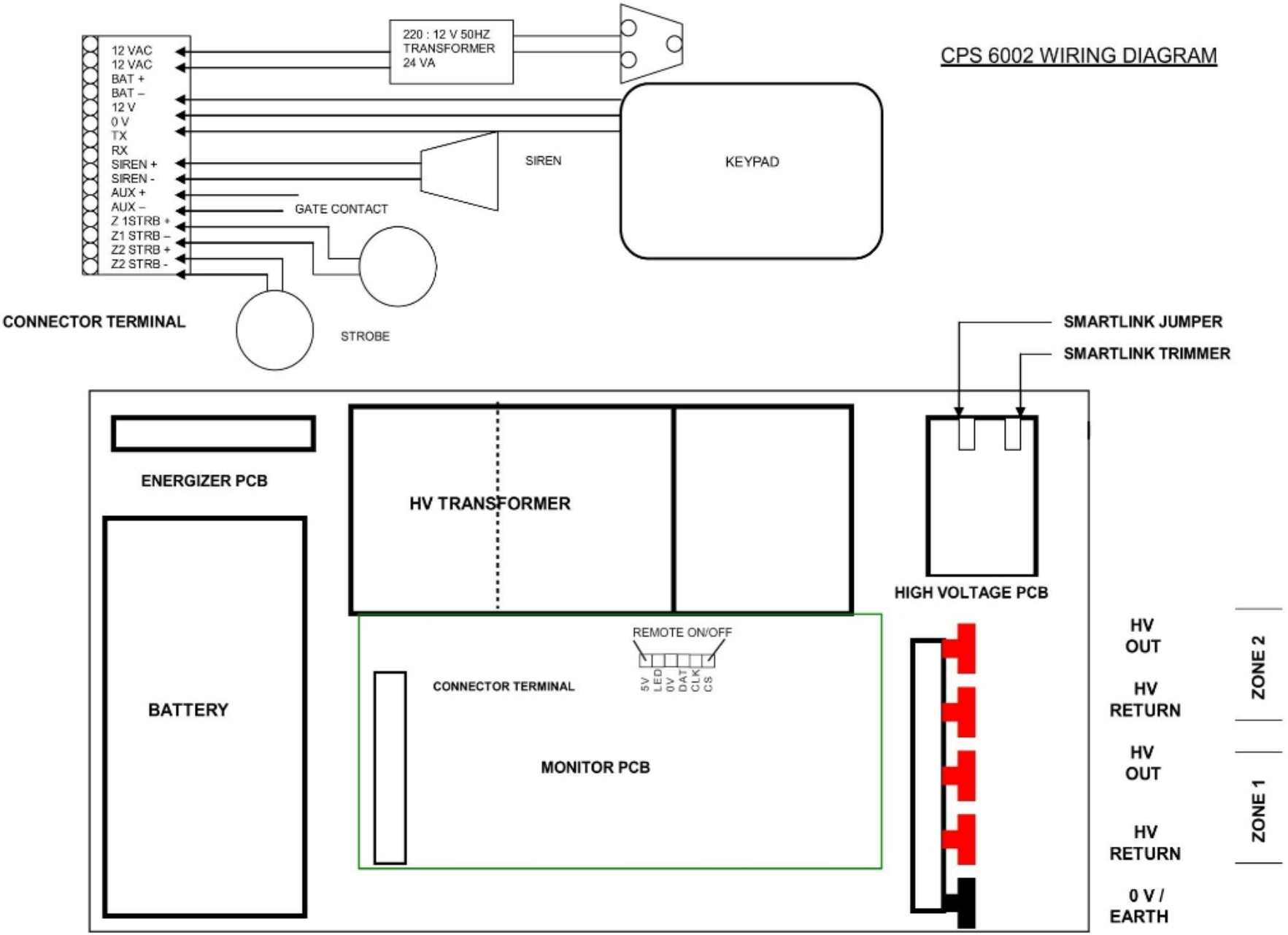
***PLEASE NOTE THAT THE POWER LEAD HAS A SPECIAL MOULDED GROMMET TO COMPLY WITH THE IPX 4 STANDARDS. SHOULD THE CABLE GET DAMAGED THE CABLE SHOULD BE REPLACED BY THE SAME, OBTAINED FROM ALL MEPS DEALERS.***

# CPS 6000 WIRING DIAGRAM



# CPS 6002 WIRING DIAGRAM



## CPS 6004 WIRING DIAGRAM