



# WIZORD 4 – Electric Fence Energizer

## USER MANUAL



E-WIZ

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## **I N T R O D U C T I O N**

Thank you for choosing our product! NEMTEK Electric Fence Energizers are designed and manufactured to provide many years of reliable use, if installed and maintained correctly. The guidelines provided in this manual will assist you with the basic operation and maintenance of your WIZORD 4.

The WIZORD 4 is designed and manufactured in South Africa for the international market. More information on our products, SABS test reports and general information is available on our web site at: <http://www.nemtek.com>.

## **C O M P A N Y   P R O F I L E**

The NEMTEK Group of Companies manufacture and distribute intelligent electronic security and perimeter control systems and have been involved in the security industry since 1990.

We have our own research and development team, designing and manufacturing a full range of globally competitive electric fence energizers and related products.

NEMTEK is continually updating its products according to international standards in order to ensure the highest quality products and continuous customer satisfaction.

## **G U A R A N T E E**

The WIZORD 4 energizer, manufactured by IO Tech Manufacturing (Pty) Ltd, is guaranteed for a period of one year from date of sale against defects due to faulty workmanship or materials.

IO Tech Manufacturing (Pty) Ltd will, at its discretion, either repair or replace a product that proves to be defective.

IO Tech Manufacturing (Pty) Ltd guarantees that the product, when properly installed and used in line with the specification as determined by IO Tech Manufacturing (Pty) Ltd from time to time, will execute its function of generating a suitable potential. IO Tech Manufacturing (Pty) Ltd does not guarantee that the operation of the product will be uninterrupted and totally error free. Faulty units must be returned to Nemtek, Units 4 & 5, 64 Vervoer Street, Kya Sand, Randburg, Gauteng, South Africa OR Nemtek Security Warehouse, Unit 4, Meadowdale Park, Cnr. Herman & Dick Kemp Roads, Meadowdale, Edenvale, Gauteng, South Africa. The buyer shall pay all shipping and other charges for the return of the product to Nemtek or Nemtek Security Warehouse.

## **L I M I T A T I O N   O F   G U A R A N T E E**

The guarantee does NOT apply to defects resulting from acts of GOD, modifications made by the buyer or any third party, misuse, neglect, abuse, accident and mishandling.

## **E X C L U S I V E   R E M E D I E S**

The remedies provided herein are IO Tech Manufacturing (Pty) Ltd's sole liability and the buyer's sole and exclusive remedies for breach of guarantee. IO Tech Manufacturing (Pty) Ltd shall not be liable for any special, incidental, consequential, direct or indirect damages, whether based on contract, tort, or any other legal theory. The foregoing guarantee is in lieu of any and all other guarantees, whether expressed, implied, or statutory, including but not limited to warranties of merchantability and suitability for a particular purpose.

## **S T A N D A R D   O P E R A T I O N**

### **TURNING YOUR UNIT ON / OFF:**

In the default state, the energizer can be turned on or off by holding the plastic tab over the corresponding logo on the fascia of the unit. The unit will beep once when turned on and twice when turned off.

### **FENCE STATUS INDICATION:**

The unit will indicate that a condition is currently active (fence fault, gate open, or service condition) if the corresponding LED is flashing; eg. if the fence LED is flashing, the fence voltage is currently not satisfactory. If the fence alarm indication LED is lit continuously, there was a fence alarm condition previously but the fence voltage is now satisfactory. Similarly, if the gate alarm indication LED is lit permanently, the gate opening time exceeded the entry delay period but is now closed. If the gate indication LED is flashing, the gate is still open.

### **ALARM INDICATION:**

The fence and gate inputs are configured to trigger external alarms and the internal buzzer. The service condition will activate the buzzer only. Be aware that, should there be a prolonged power failure, the battery may run low and cause the service light to flash. If the mains interruption is sufficiently long, the unit will shut down and there will be no indication of mains failure.

### **TOGGLE FUNCTION:**

In the event of the unit being switched off by the plastic tab while a fault is active, the unit will silence all alarms. On turning the unit on again the corresponding LED's will indicate the fault, but no alarm outputs will be triggered. This provides the user with the facility to leave the unit on if no service personnel are available. Should the unit be turned off and on again, the alarm outputs will activate after the default periods. On turning the unit off again, the outputs will again be disabled. Users must be wary of this toggle function. The user does not need to concern them self with the toggle function if the unit is switched off and on again under normal conditions, as per table 1 (i.e. No alarm condition active).

### **BUZZER:**

The buzzer has a different cadence for the fence alarm and gate alarm.

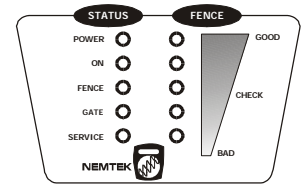
### **SERVICE INDICATION:**

The service indicator should remain off during normal operation. If it is lit due to an obvious condition, such as prolonged mains failure, simply turn the unit off and on again. Should the condition persist, refer to your installer. The unit has built-in diagnostics to assist the installer.

**NOTES:**

1. The energizer will, under normal conditions, provide the fence with a pulse at the rated energy level. Should a mains failure occur, the energizer will automatically switch to a reduced energy level. This enables the unit to operate without mains for extended periods of time (i.e. with a good battery the unit should be able to operate for approximately twenty hours). Batteries should be checked on a bi-annual basis.
2. A functional energizer will only turn itself off under two conditions, namely: prolonged mains failure where battery damage has occurred, or abnormal heat being generated within the energizer.
3. There are no "user-serviceable" parts within the energizer. Please refer all problems to qualified service personnel.
4. It is possible that, under mains failure conditions, the energizer will operate at reduced energy levels and the fence status display will not be fully lit. The mains should be restored first before checking the physical fence condition.
5. Keep the fence clear of vegetation and do a periodical check for any slack fence strands, etc.

The status of the energizer and the fence is displayed on the front panel of the energizer, as follows:



Under **normal operating conditions**:

**T  
A  
B  
L  
E  
1**

STATUS	
POWER	● (Mains present, battery charging)
ON	● (Fence energized)
FENCE	○ (No fence alarm)
GATE	○ (No gate alarm)
SERVICE	○ (No service condition)

**T  
A  
B  
L  
E  
2**

FENCE	
	If all are flashing, fence is operating correctly

Conditions that if ignored, will **sound the alarm**:

**T  
A  
B  
L  
E  
3**

STATUS	
POWER	○ (Restore mains - see Note 1)
ON	○ (Turn energizer on - see Note 2)
FENCE	⊗ (Alarm condition)
GATE	⊗ (Alarm condition)
SERVICE	⊗ (Possible installer intervention required - see Note 3)

**T  
A  
B  
L  
E  
4**

FENCE	
	(Check later - see Note 4)
	(Concern - see Note 4)
	(Service fence - see Note 4)
	(Service fence)
	(Alarm / Fence faulty)



LED OFF



LED PERMANENTLY LIT – Fault occurred but is now gone



LED FLASHING – Fault still present

## **F E A T U R E S   &   F U N C T I O N S**

### **INTEGRATED UNIT:**

For energizers designed from a security perspective, the fence monitoring is an integral part of the product. The energizer is an integrated energizer, battery charger and fence monitor with a siren and strobe light output.

### **LIGHTNING PROTECTION:**

The mains and high voltage outputs are protected against lightning and power surges. It also protects the unit against abnormally high potential differences between the high voltage and mains ground.

### **INTERFERENCE SUPPRESSION / LOW EMI RADIATION:**

The unit has been tested to comply with the latest international requirements CISPR14-2/1997.

### **REMOTE KEY-SWITCH:**

The energizer can be wired to a remote on/off switch. There is only one external input and the selection of gate or remote on/off is exclusive.

### **EARTH LOOP MONITORING:**

For additional security, the facility to use earth loop monitoring is provided for.

### **EXTENDED OPERATION DURING MAINS FAILURE:**

The unit detects the mains failure and reduces the fence output energy.

### **AUXILIARY 12VDC OUTPUT:**

A 12 Volts DC fused output is available to supply any auxiliary equipment like a radio remote receiver. The current must not exceed 0.5 amps.



**GATE INPUT:**

Gate delay entry of four minutes or immediate entry alarm.

**SIREN OUTPUT:**

12VDC output for siren available.

**STROBE LIGHT OUTPUT:**

12VDC output for strobe light available.

**WEATHER PROOF HOUSING:**

The unit enclosure is made of high quality weather resistant material.

**ARMED RESPONSE RADIO CONNECTABLE:**

The system has the facility to be connected to an armed response radio.

**BATTERY BACKUP:**

The unit is supplied standard with a 12V 7AH rechargeable battery.

**UNIT UPGRADEABLE:**

The unit can be upgraded to allow:

- High & low voltage fence monitoring
- Multiple keypad & pin numbers
- Energizer synchronization
- Programmable fence voltage
- Programmable gate delay
- Programmable fence delay