VEONIC
Imagine the Future

VX-2028 ENERGIZER
USER MANUAL

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Introduction:

Welcome to the VEONIC VX Series Smart Wifi/GSM Energizer Electric fencing and thank you for placing your support in our product range. Our brand has been installed and tested in numerous satisfied VEONIC users globally.

This user manual is intended to assist you to install your unit. For more information on the system, please visit our **www.veonic.com.** Or email to us **veonicgroup@gmail.com.**

Before your installation, please take note that an electric fence is an effective psychological fear barrier that works on the principle of giving an intruder a very short duration, powerful, yet safe shock that will discourage the intruder from making contact with the fence again.

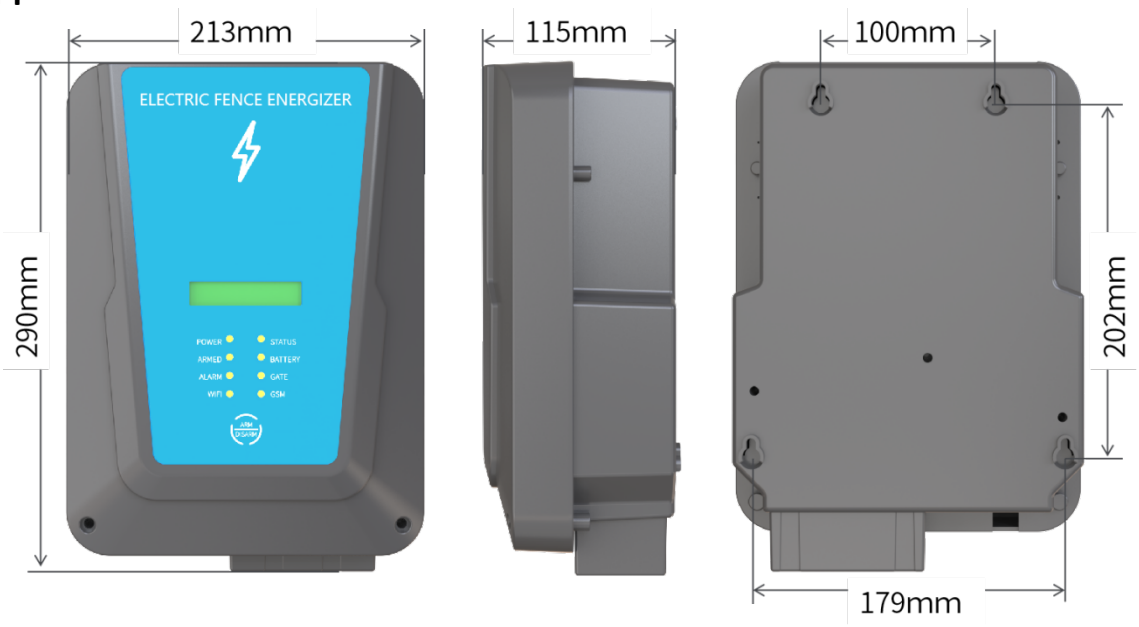
It's important to understand the basic circuits applicable to electric fencing. An electric fencing comprises three components: the energizer, the earthing system and the fence itself, Connect the three together and you have your basic circuit. A intruder touching the fence closes this circuit which allows the electricity to flow through the circuit and thus shock the intruder.

The smart Vx series energizer pulse electric fence alarm system has the advantages of low false alarm rate, no restriction by physical fence and environment, and high security. It has been widely used in various application such as military premises, prisons, factories, warehouses, residential areas, etc.

Energizer Features:

Standard functions	**LED indicator lights:** power supply, armed status, alarm status, energizer status, battery status, gate status
	433MHz remote control: high-voltage arming, low-voltage arming, disarming, SOS
	Magnetic tag: arm, disarm, clear alarms
Optional functions	**LCD screen:** alarm and energizer status display
	WIFI&APP: APP remote arm/disarm, receiving alarm prompts and remote parameter settings
	GSM: make a phone call or send a text message when an alarm occurs (Note: GSM function will only be enabled when WIFI network connection fails)

Appearance



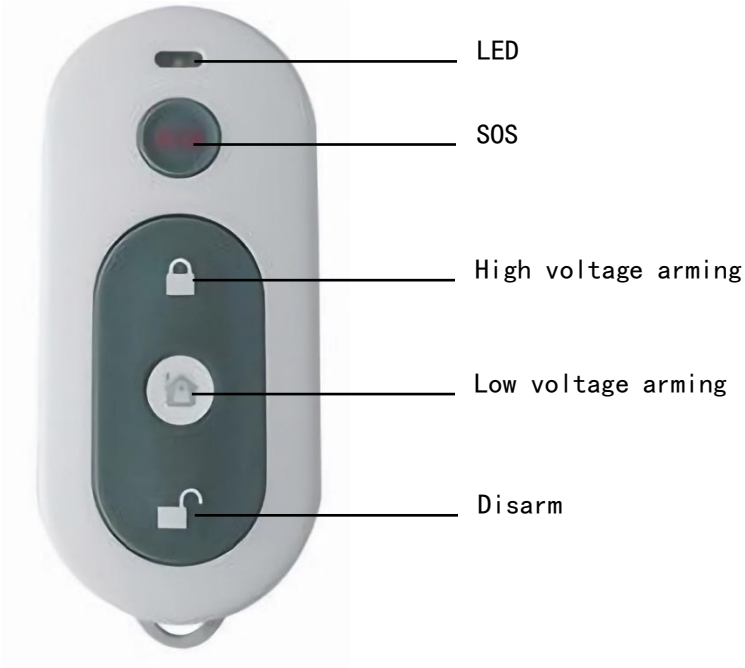
Size:290*213*115mm(L*W*D)(excluding antenna).

Specification

AC input	230V
Average power consumption during normal high-voltage operation	<30W
Voltage output	8KV/4KV
Output energy	0.5-3 joules
Pulse frequency	Once per second
Relay output	10-14VDC 500mA
Operating temperature	-10℃~50℃
Operating humidity	<80%RH
IP rating	IPX4
Shell material	ABS
Weight (excluding packaging and batteries)	3KG
Size	290*213*115mm(L*W*D)
Backup battery specifications	12V 7AH lead-acid battery, 152*66*95mm

Accessories:

Remote control (433MHz)

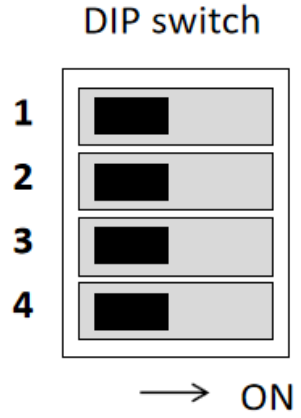


Remote control self-learning(up to 10) (Jumper P6)

Jumper	Function	Default state	Operation
P6	Remote control self-learning	Disconnect	1. First select the code of the remote control through the DIP switch. 2. Short circuit P6. 3. Trigger the remote control, and the LCD display will prompt learning success. 4. Disconnect P6, and restore the DIP switch

Remote control encoding (DIP switch S5)

Function: Remote control encoding selection (binary)



Code list

1	●		●		●		●		●		ON
2		●	●			●	●			●	
3				●	●	●	●				
4								●	●	●	
	1	2	3	4	5	6	7	8	9	10	Code

Clear remote control code (Button S2)

Function	Operation
Clear individual remote control codes	1. Use DIP switch S5 to select the code of the remote control to be cleared. 2. Press and hold S2 for more than 3 seconds. 3. LCD display prompts clearing successfully. 4. Restore the DIP switch
Clear all remote control codes at once	1. Turn all DIP switches to ON. 2. Press and hold button S2 for more than 3 seconds. 3. LCD display prompts clearing successfully. 4. Restore the DIP switch

Magnetic tag:

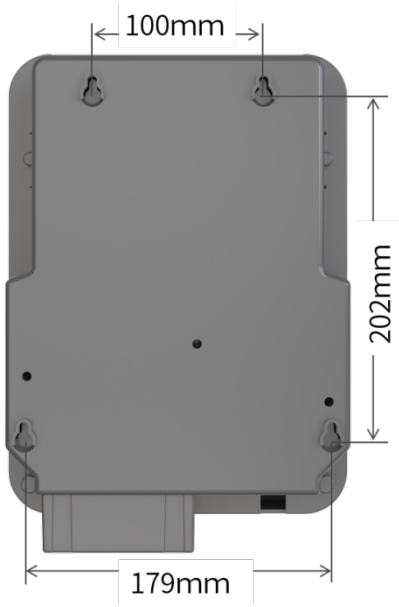
Magnetic tag operation

Function	Operation
Arm or disarm	Touch once
Clear LCD display alarm information	Touch and hold for more than 5 seconds

Installation

Energizer installation

Step 1: Please read this manual carefully before installation.
Step 2: Install rivets on the wall according to the installation holes on the back of the energizer.
Installation hole diagram:



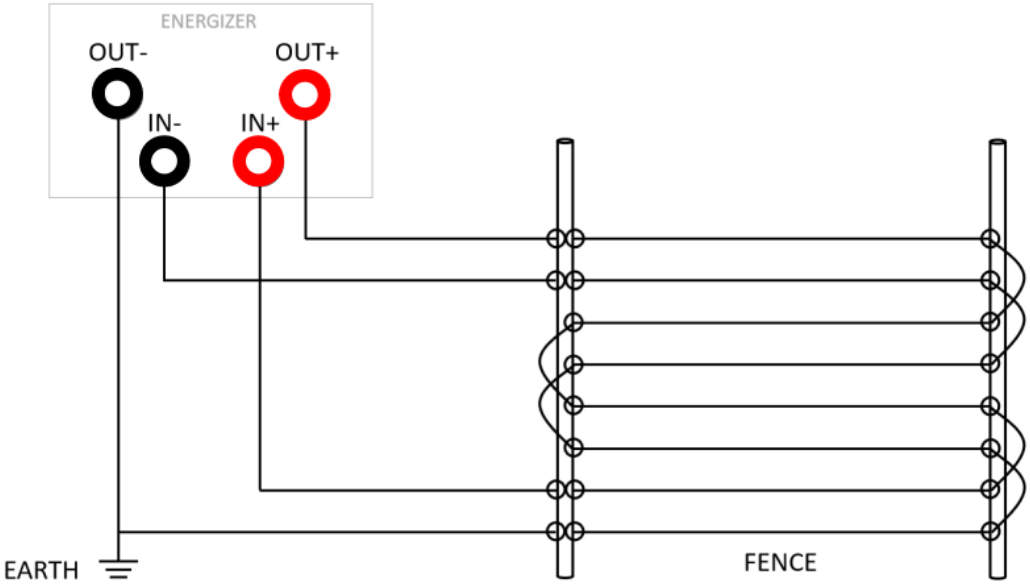
Step 3: Remove the cover.
Step 4: Install the battery (if any).
Step 5: Connect the main power supply.
Step 6: Set up the functions of the energizer.
Step 7: Replace the cover.
Step 8: Connect to the fence.
Step 9: Conduct a test to ensure that a short circuit in every part of the fence can trigger an alarm.

Note: The installation surface of the Energizer must be flat and must be protected from direct sunlight.

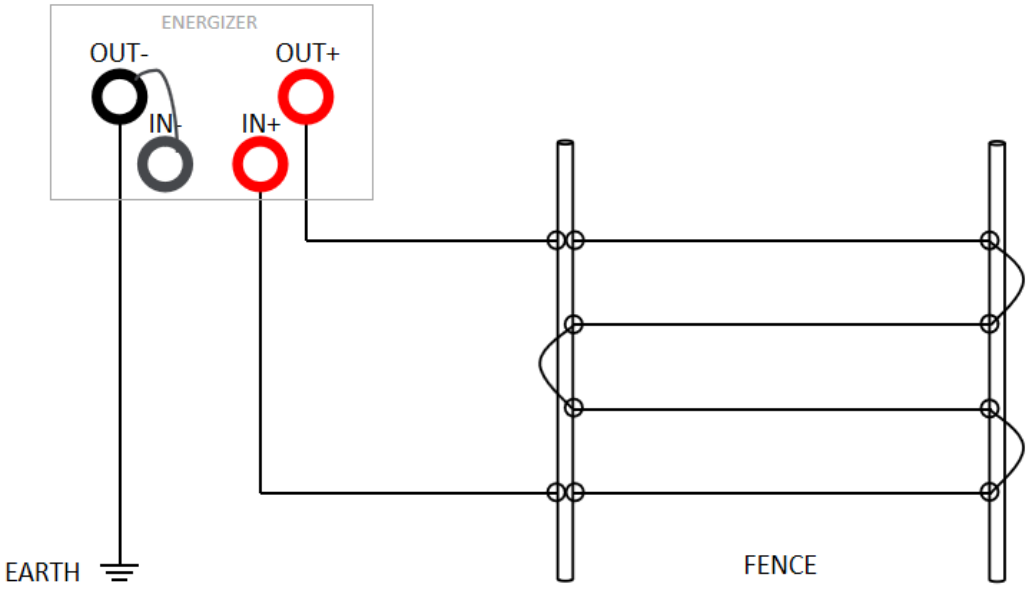
Connect to fence

The two red terminals are high-voltage positive electrodes. It is required to form a circuit. The two black terminals are high-voltage negative electrodes, which are required to form a circuit and be connected to the ground.

Example fence wiring diagrams:



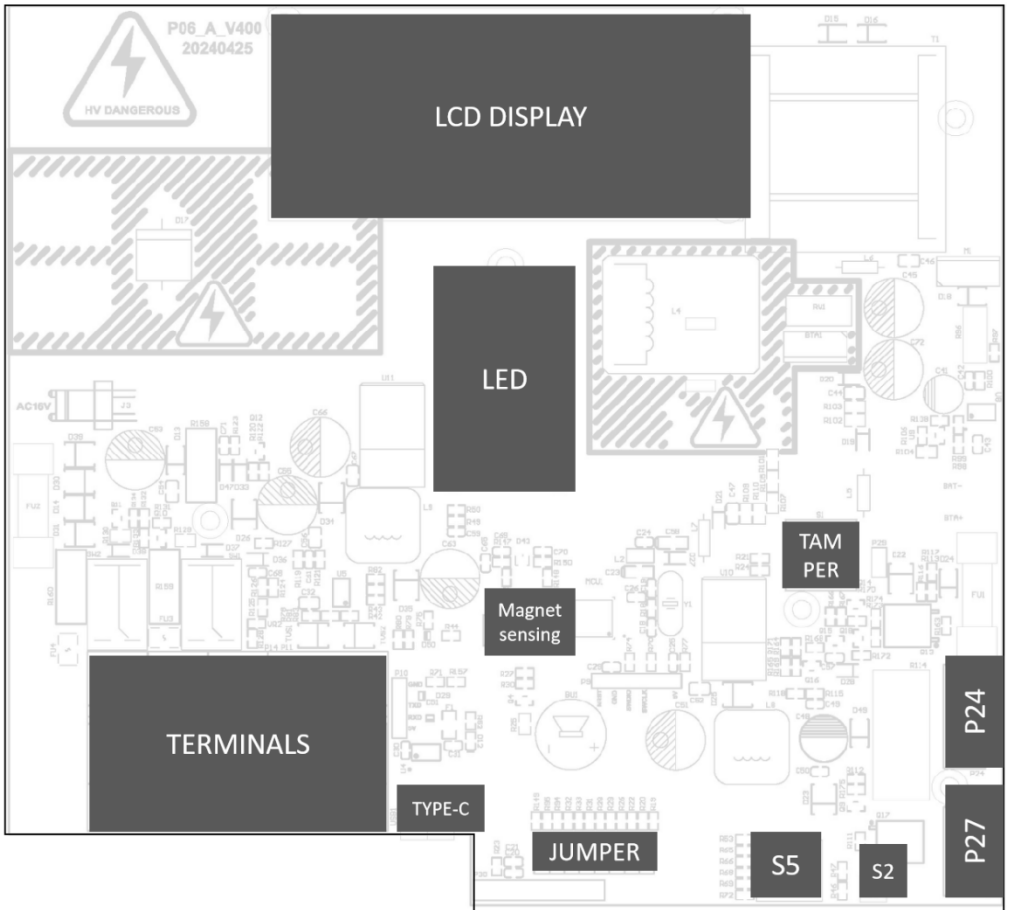
Type 1



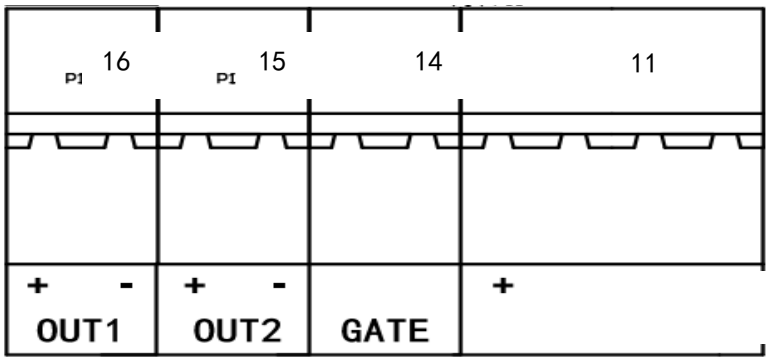
Type 2

Configuration and operation

PCB schematic



Connecting terminals



Terminals	Description
OUT 1	Alarm output（10~14VDC 500mA）
OUT 2	Alarm output or arming output optional by P7（10~14VDC 500mA）
GATE	Gate signal input, enabling disarming when opening the gate and arming when closing the gate

Jumper

High and low voltage arming default settings (P1)

Jumper	Function	Default state	Operation
P1	High and low voltage arming default settings	Disconnect	Disconnect: Sets high voltage arming as default. Short circuit: Set low voltage arming as default.

Upgrade mode (P2)

Jumper	Function	Default state	Operation
P2	Upgrade mode	Disconnect	1. Powered off the Energizer completely. 2. Short circuit: P2. 3. Power the Energizer on to enter upgrade mode. 4. Disconnect P2 after the upgrade is complete.

WIFI fast configuration mode (P3)

Jumper	Function	Default state	Operation
P3	WIFI fast configuration mode	Disconnect	Disconnect: Exit WIFI fast configuration mode. Short circuit: Enter WIFI fast configuration mode. Then the device can be searched on the APP

			*Note：Enable **WiFi**, **location**, and **Bluetooth** on the phone before add the device to the APP.*

Gate alarm delay time (P4)

Jumper	Function	Default state	Operation
P4	Gate alarm delay time	Disconnect	Disconnect: Alarm triggered after 1 minutes of gate opening. Short circuit: Alarm triggered after 4 minutes of gate opening.

Restore factory settings (P5)

Jumper	Function	Default state	Operation
P5	Reset	Disconnect	1. Power off the Energizer completely. 2. Short circuit P5. 3. Power the Energizer on, reset. 4. Disconnect P5.

Introduction to factory default settings

Return to disarmed state
The recovery admin password is 1234
The recovery operation password is 1001
The recovery alarm duration is 180 seconds
Dial-up: Enable
Texting: Enable
Number of phone redials: 3 times
Sensitivity: Middle(Trigger 3 pulses to activate the alarm)
Battery power: 25%
Mute: Off
Clear all SMS numbers and phone numbers
Energizer name restored to default

Remote control self-learning (P6)

Please refer to remote control operation.

Out 2 output mode (P7)

Jumper	Function	Default state	Operation
P7	Set the out 2 output mode	Disconnect	Disconnect: Linkage to alarm. Short circuit: Linkage to arming.

High voltage mode energy output control (P8)

Jumper	Function	Default state	Operation

P8	High voltage mode energy control	Disconnect	Disconnect: In high voltage mode, maintain a high energy output (2-3J) each time. Short circuit: In high voltage mode, the output energy (0.5-3J) is automatically adjusted according to the fence load. The smaller the load, the lower the power consumption of the energizer.

Switch

Tamper switch

Function	Operation
No tamper alarm	Closed
Issue a tamper alarm	Open after closing
	When powered on, it has already been opened (cover removed) and has not closed for more than 30 seconds

DIP switch

Please refer to remote control operation

Button

Button S2

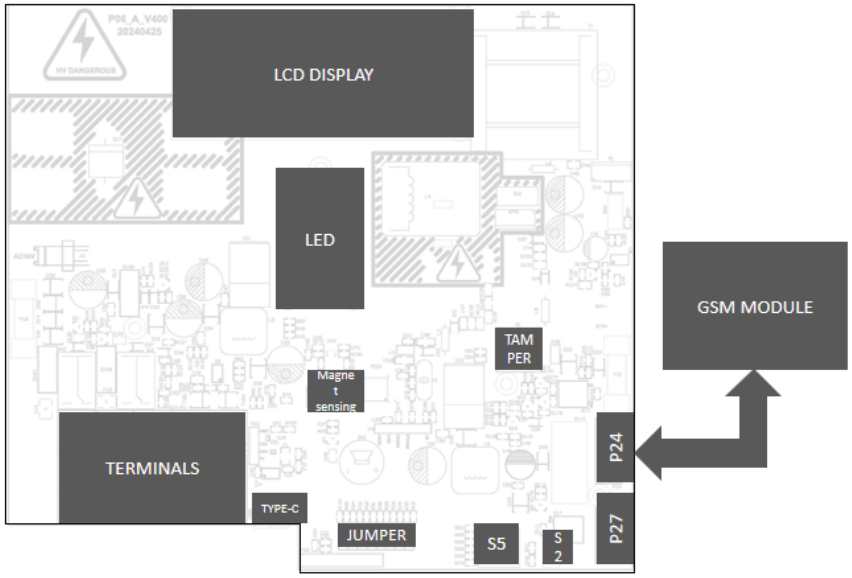
Please refer to remote control operation

Interface

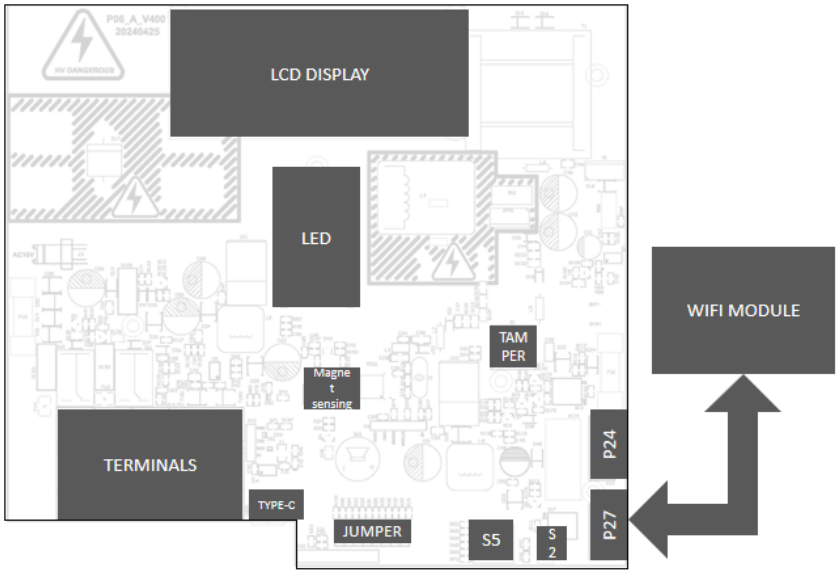
Debug mode and upgrade mode (TYPE-C interface)

Function	Operation
Debug mode (default)	Use debugging software to view device information
Upgrade mode	1. Powered off the Energizer completely. 2. Short jumper pin P2. 3. Power on the Energizer and enter upgrade mode. 4. Upgrade using TYPE-C interface. 5. Disconnect P2 after the upgrade is complete.

Connect to GSM module (P24 interface)



Connect to WIFI module (P27 interface)



WIFI configuration

Step 1: Enable **WiFi**, L**ocation**, and **Bluetooth** on the phone, and connect to the WIFI that the Energizer needs to connect to.

Step 2: Short-circuit the **P3** jumper pin, and the device will prompt to enter the WIFI configuration state.

Step 3: Use APP to search and add the device (please check the APP introduction for details).

GSM configuration

Step 1: Add the **phone number** and **SMS number** in the energizer setting menu.

Step 2: Enable the phone call and SMS function in the energizer setting menu.

Step 3: Insert the SIM card into the GSM module(Please disconnect the power before operation).

Step 4: Restart the energizer.

GSM SMS encoding control

You can control the energizer by send the message to the SIM card which installed in the energizer. Format: Operation recognition: Password, operation content (Note: There should be no spaces between operation recognition and password, all punctuation marks should be in English format)	
Functions	**Examples**
Name the corresponding phone card energizer	NAME:1234, The NO.1 Fence
Arm	ARM:1234, 0
Disarm	ARM:1234, 1
High voltage arming	ARM:1234, 2
Low voltage arming	ARM:1234, 3
Set the first alarm phone numbers (1, 2, 3 sets of phone numbers can be set)	PHONE:1234, 1, 3800138000
Set the first alarm SMS numbers (1, 2, 3 sets of SMS numbers can be set)	SMS:1234,1, 3800138000

GSM phone call

When the energizer triggers an alarm, it can automatically make a phone call to remind the user.

The number of times automatic dialing can be set through the APP. If the user hangs up the phone directly, the energizer will continue dialing according to the number of times, unless the user finishes by pressing the "**#**" key after connecting the phone.

*(**Note:** Ending the call does not mean stopping the alarm unless the user sends a disarming SMS to the energizer.)*

Arming and disarming

Method 1: Use the remote control to arm high voltage, arm low voltage or disarm.
Method 2: Use the magnetic tag to arm or disarm.
Method 3: Use APP to arm high voltage, arm low voltage or disarm.
Method 4: Disarm when the gate is opened and arm when the gate is closed.
Method 5: Use SMS to arm high voltage,to arm low voltage or disarm.

Clear alarm information

Method 1: Disarming can stop the current alarm sound, but the alarm information will still be displayed. The alarm display will not be cleared until the next arming or using the magnetic tag to clear it.

Method 2: Use the magnetic tag to touch and hold for more than 5 seconds to clear the alarm information on the screen.

Mute

Use the APP to mute the sound.

LCD display content description

System status

Display content	Description
V8000/V4000	Fence voltage: 8000V for high voltage arming and 4000V for low voltage arming
B100	The battery level is 100%
W_-xx	The smaller the value of -xx, the stronger the WIFI signal strength
G_xx	The higher the value of xx, the stronger the GSM signal strength
F_0	Fence normal
F_S	Fence short circuit
F_C	Fence cut
F_L	Fence voltage is low
T_0	Tamper is normal
T_1	Tamper triggered
D_0	gate normal
D_1	gate open
Fence short	Short circuit alarm
Fence cut	Cut alarm
Tamper	Tamper triggered
SOS	Emergency help
RF01 ARM BY HIGH VOL	Remote control 01 high voltage arming
RF01 ARM BY LOW VOL	Remote control 01 low voltage arming
RF01 DISARM	Remote control 01 disarm
RF01 SOS	Remote Control 01 Emergency Help
MAG ARM BY HIGH VOL	magnetic tag high voltage arming
MAG ARM BY LOW VOL	magnetic tag low voltage arming
MAG DISARM	magnetic tag disarm
APP ARM BY HIGH VOL	APP high voltage arming
APP ARM BY LOW VOL	APP low voltage arming
APP DISARM	APP disarm
DOOR ARM BY HIGH VOL	Gate high voltage arming
DOOR ARM BY LOW VOL	Gate low voltage arming

DOOR DISARM	Gate disarmed
GATE OPEN	Gate open
GSM ARM BY HIGH VOL	SMS high-voltage arming
GSM ARM BY LOW VOL	SMS low-voltage arming
GSM DISARM	SMS disarming

WIFI status

Display content	Description
WIFI CONFIG.	Waiting
WIFI CONFIG FAIL	WIFI configuration failed
WIFI CONFIG SUCC	WIFI configuration successful
WIFI WAIT...	Exit the WIFI configuration and wait for access to the Internet
WIFI IS OK	Exit the WIFI configuration and access the Internet successfully.
WIFI IS FAIL	Exit the WIFI configuration and fail to access the Internet.
W_C1	“Smartconfig” configuration status
W_C2	AP configuration status
W_C3	The WIFI device is in “Smartconfig”&AP configuration state
W_E1	WIFI is configured but not connected to the router
W_E2	WIFI is configured but not connected to the server
W_E3	WIFI device is in low power mode

GSM status

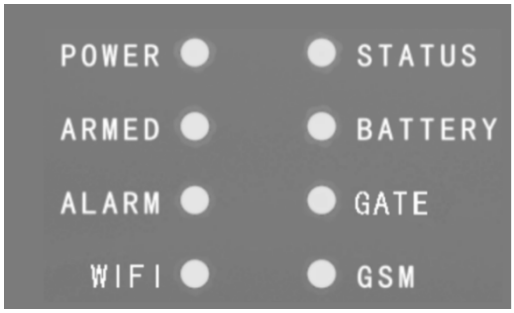
Display content	Description
G_xx	The higher the value of xx, the stronger the GSM signal strength
G_0_0	Indicates that the chip is initializing
G_2_x	x: represents the initialization step
G_E3	Card reading error
G_E4	Network error
G_E5	Texting error
G_E6	Call error
G_E7	Chip error
G_E8	Unknown error

System error

Display content	Description

S01	System power supply voltage failure
S02	Fence circuit failure
S03	Fence Low voltage fault
S04	Battery failure
S05	Battery charging failed

LED indicator light introduction



LED indicator light	State	Description
POWER	Always on	Mains power is normal
	Go out	Mains power disconnected
STATUS	Flashing	Failure
	Go out	Operating normally
ARMED	Always on	Armed by high voltage
	Flashing	Armed by low voltage
	Go out	Disarmed
BATTERY	Always on	Battery connected
	Go out	Battery disconnected
ALARM	Fast flashing	Alarming
	Slow flashing	There is an alarm message on the LCD screen
	Go out	No alarm
GATE	Always on	Gate open
	go out	Gate closed
WIFI	Fast flashing	Disconnected
	Slow flashing	Configuration status
	Always on	The connection is normal
GSM	Fast flashing	Disconnected
	Slow flashing	Configuration status

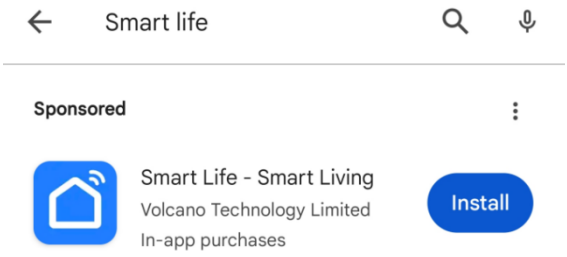
	Always on	The connection is normal

APP introduction

Smart Life is an APP that can connect the smart devices, such as the Energizer. The Energizer can be connected through WIFI, the data of the Energizer can be uploaded to the APP, and the APP can also be used to remotely control the Energizer.

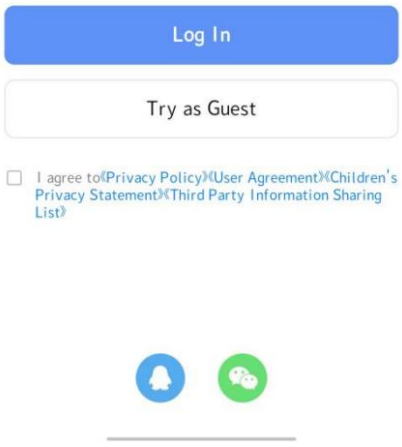
APP download and login

Search "Smart Life" on **Google Play** or **App Store**, as shown below:



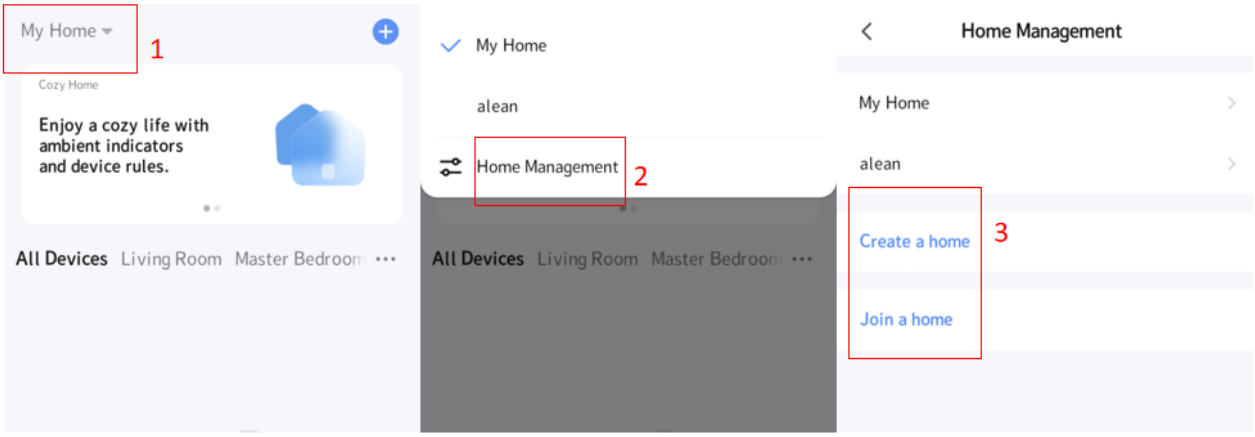
Just download and install;

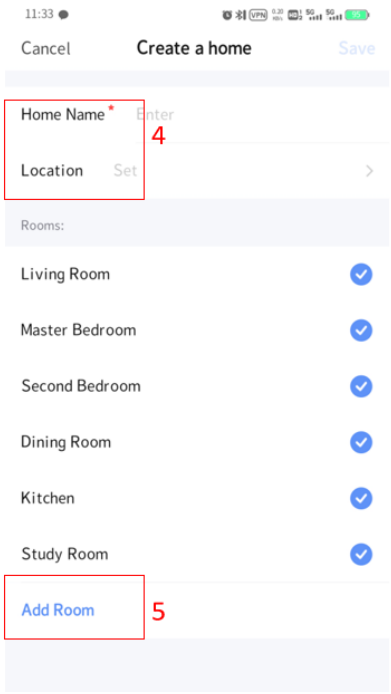
Register or log in:



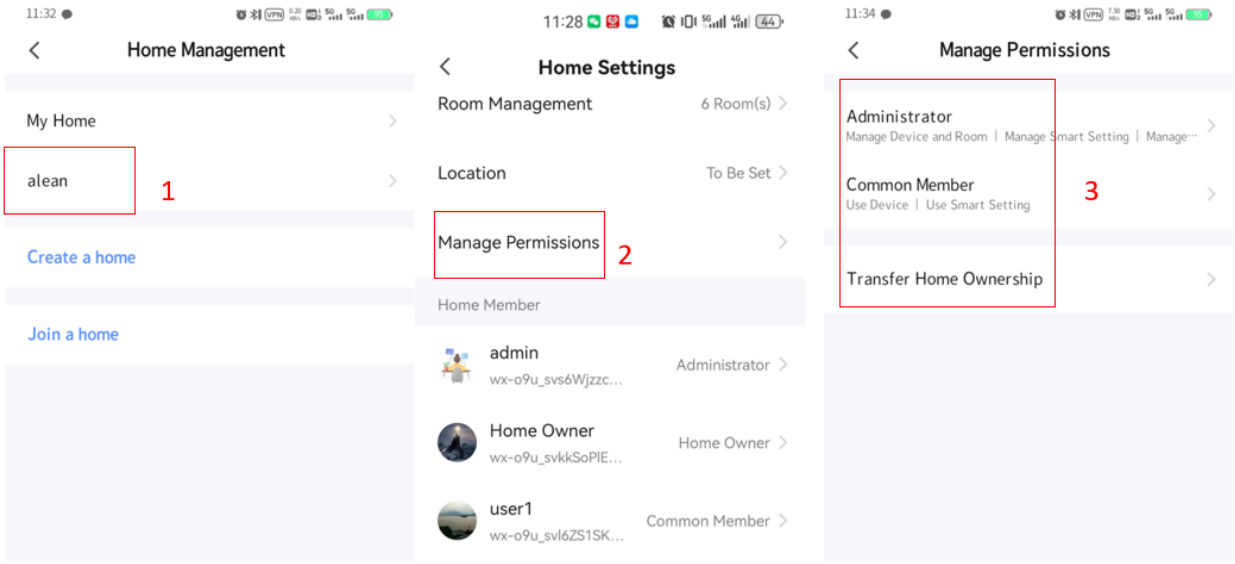
APP settings

Create homes and rooms





Add manager and home members



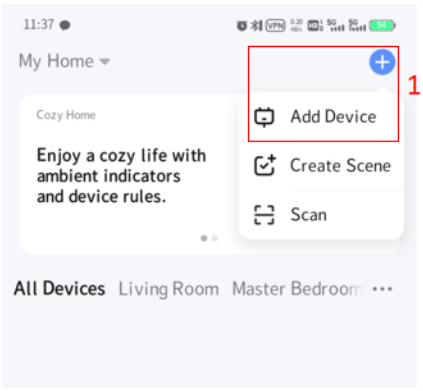
Add Energizer

Step 1: Enable **WiFi**, **location**, and **Bluetooth** on the phone, and connect to the WIFI that the Energizer needs to connect to.

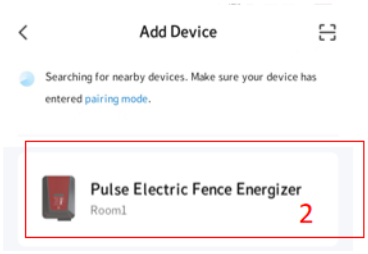
Step 2: The Energizer enters WIFI configuration mode(please check Jumper function for details).

Step 3: Use APP to search and add, as shown below:

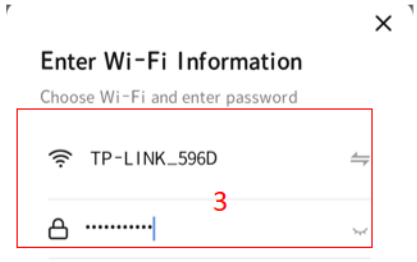
1. Add device



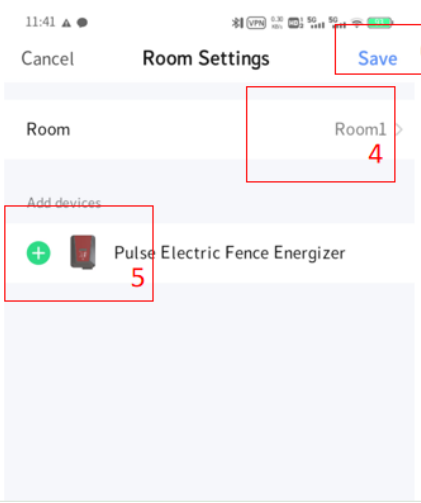
2. Select the device searched

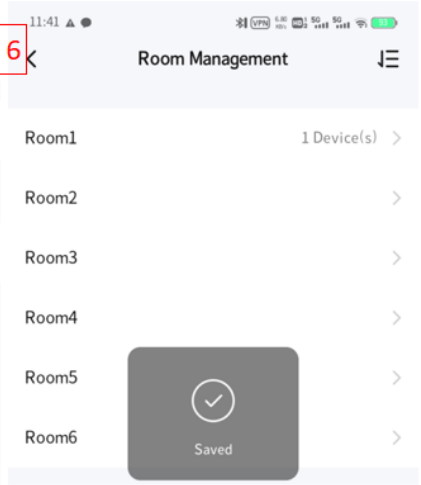


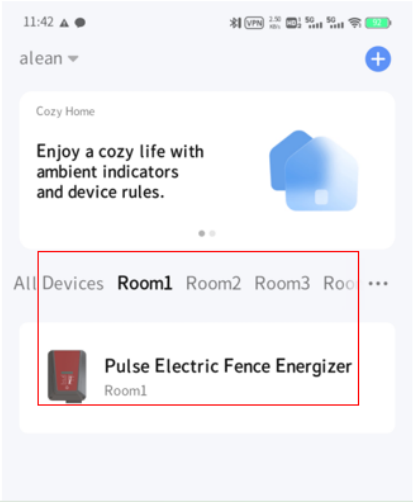
3. Input the password of the WIFI



4. Add a room
5. Add the device to the room
6. Save



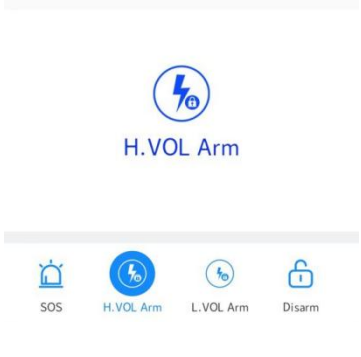
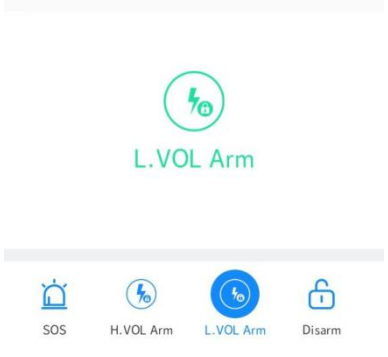
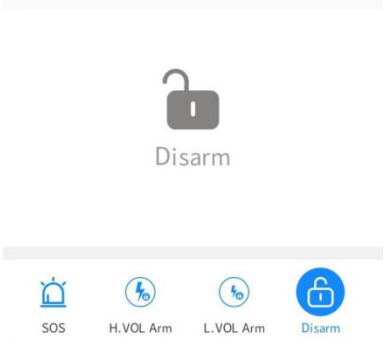




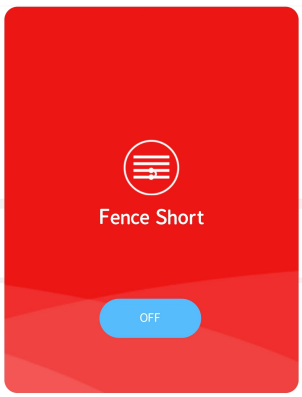
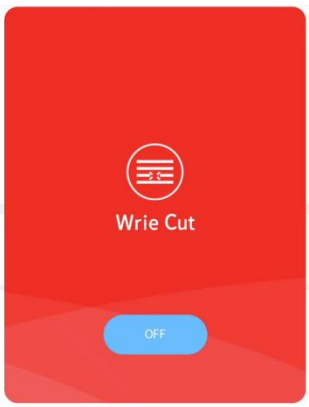
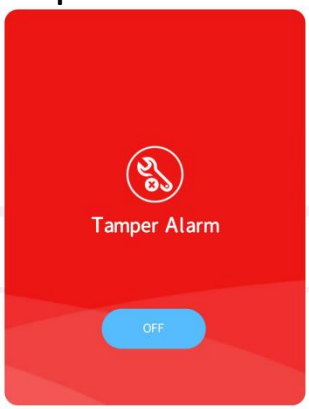
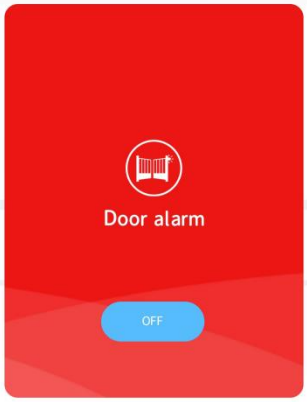
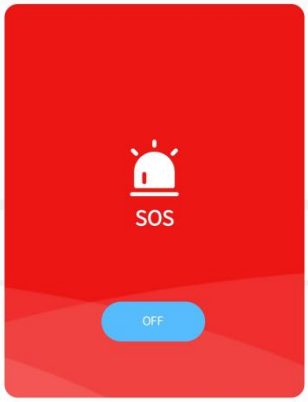
Modify Energizer name

Here you can modify the name of the Energizer displayed on the APP

Energizer control

High voltage arming	Low voltage arming	Disarm
		

Alarm prompt

Short circuit alarm 	**Wire cut alarm** 	**Tamper alarm** 
Gate alarm 	**SOS** 	

Mute
When enabled, the buzzer and siren are muted.

WIFI
Display WIFI signal strength.

GSM
Display GSM signal strength.

Battery
Display battery level.

Schedule
Can set time, repetition times, notifications, and scheduled task types

Settings

>Energizer Name

The name of the Energizer, click to modify.

>Admin Password

Administrator password, click to modify.

>Operation Password

Operation password, click to modify.

>Alarm Duration

Alarm duration, range 0~999 seconds, click to modify.

>Sensitivity

There are three levels of sensitivity, Low, Middle and High, which can be modified by clicking on them.

>Battery Low VOL

Battery low voltage alarm threshold, range 0%~100%, click to modify.

>Alarm Telephone

The phone number dialed when an alarm occurs, up to 3 groups of numbers, click to modify.

>SMS Telephone

When an alarm occurs, a text message will be sent to this number. Up to 3 groups of numbers can be modified by clicking on them.

>Alarm Call

Enable, and the Alarm Telephone takes effect.

>SMS

Enable, and the SMS Telephone takes effect.

>Auto redial times

The number of automatic redials after a failed call, up to 10 times, click to modify.

>Notification

Enable system notifications for the APP on your phone.

>Data Synchronisation

Click to synchronize the status of the Energizer to the APP.

Logs

System records can be queried, including Energizer operations and APP operation records.

Note: When modifying settings on the APP, you must click "Save" or "Confirm" to take effect.

<This manual is subject to modification without prior notice!>