



Strainrite[®]
FENCING SYSTEMS

MB32 ENERGIZER QUICK START GUIDE

ELECTRIC FENCE ENERGIZER

WIFI REMOTE APP ENABLED

POWERFUL YET SAFE*

PLUG N PLAY - EASY SETUP



Mains or Battery (MB32) Energizers

Congratulations on your choice of a Strainrite energizer. This device has been built on over 25 years of experience in electric fencing by JVA for Strainrite Fencing Systems. Including many connectivity features such as:

IP Energizer® Controller (IPEC) is a simple mobile app for control and monitor of agricultural energizers, monitors and GPIO devices. Aimed at farmers, it offers the main features of Cloud Router, such as notifications, without the advanced features such as logging, user roles and permissions, and site administration.

Virtual Keypad (VKP) is the user interface embedded in this energizer, accessible by a phone or PC web browser. Use it to control, monitor or configure the unit locally, via the Wi-Fi network provided by the unit, or a local network if the device is connected to one. You must use VKP to configure advanced features of the energizer and to connect the unit to a local Wi-Fi network for IPEC functionality.

Fence Line Communications (FLC) allows control of the energizer via the electric fence wire itself. Turn the energizer on or off by touching a JVA Directional Fault Finder Remote or other compatible product to the fence wire, anywhere in the paddock.

Installation Instructions

1. The complete manual is available at:
<https://www.strainrite.co.nz/product/mb32-mains-battery-ip-energizer/>
2. Design and build your electric fence. (Beyond the scope of this guide).
3. Decide where the MB32 energizer will be mounted. If on an external wall it should be housed within an equipment cabinet and not in direct sunlight.
4. Remove the lid of the MB32 enclosure by undoing the four large plastic bolts on the outer corners of the lid.

MB32 ENERGIZER QUICK START GUIDE

5. Use the provided screws and wall plugs (if needed) to mount the enclosure through the holes under the four lid bolts.
6. Wire any low voltage cables (24V power, 12V battery, Control inputs etc) to the PCB terminals after passing through the small cable glands.
7. Wire the fence and earth high voltage cables to the fence terminals after passing through the large cable glands.
8. The **unused black glands** should be sealed with a short length of round cable, to prevent insects from making their way inside.
9. If you are using a back up battery, connect it now. Note: While the Energizer is designed not to start when first powered up irrespective of the state of the Control Inputs, you should take care in case it starts.
10. The Battery, 12V Aux, 3V3 LEDs will be ON.
11. Re-attach the Lid using the four plastic bolts.
12. Turn AC power onto the 24Vdc power pack.
13. Arm (start pulsing) the MB32 using the switch on the right side of the enclosure or by using the Virtual Keypad (refer to the Virtual Keypad section of this guide).
14. The Virtual Keypad will now show the fence voltage(s) and current(s).
15. Find and remove any faults on the fence using a SR Fault Finder.

Connect to Virtual Keypad (VKP)

To connect to the VKP, scan for Wi-Fi networks within 15 meters of the MB32 energizer. Connect to the "Jumbo_xxxxxx" where "xxxxxx" is the serial number (found on the back of the device). For example "Jumbo_500123". The password to connect is **jumbo1234**.

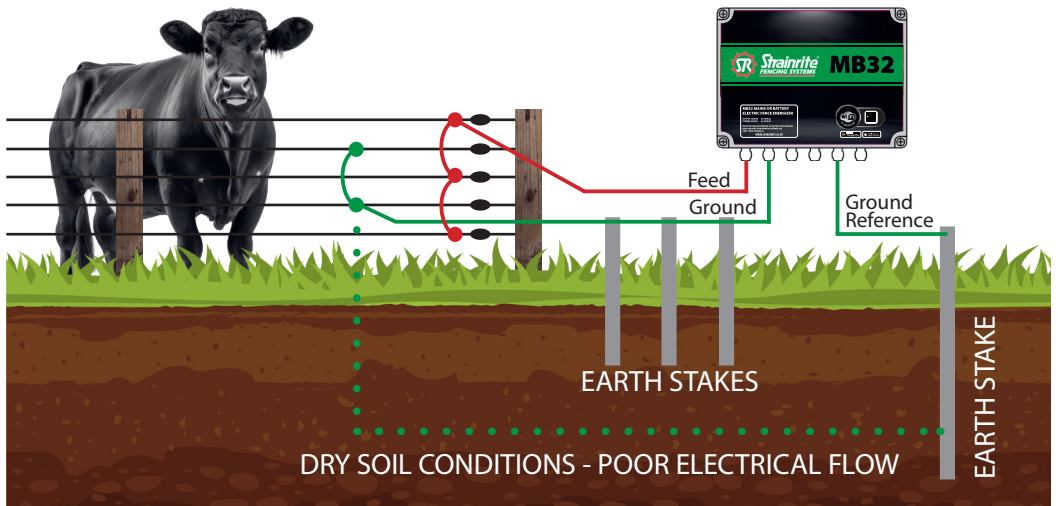
Hint: Some smartphones require the mobile data to be disabled to use this Wi-Fi network without an internet connection.

If you are not automatically redirected to the VKP, use a browser to go to <http://192.168.4.1>

Typical Fence Setup

The MB32 powers and monitors a fence using the Feed 1 and Return 1 terminals. Refer to the following pages for diagrams of the typical fence setups.

Note: It is very important that the MB32 energizer has enough earth stakes to operate correctly. Depending on soil conditions it will need at least three and up to ten may be required. Keep adding earth stakes until the ground voltage reads less than 0.4kV.



Note: For start and end monitoring wiring please see manual.

MB32 ENERGIZER QUICK START GUIDE

Virtual Keypad (VKP) - Home Screen

The screenshot shows the MB32 Virtual Keypad Home Screen. At the top, the Strainrite Fencing Systems logo is displayed. Below the logo, the model number 'MB32' is shown next to a Wi-Fi icon. The main display area is divided into two sections. The top section, titled 'Zone 1', shows fence voltage readings: Feed (8.8 kV), Return (0.3 kV), Feed I (0 Amps), and Ground (0.4 kV). It also displays Energy (20 J) and a list of status indicators: Alarm, Trouble, and Error. To the right of these readings are four buttons: Arm, Disarm, Clear, and Mute. The bottom section displays system status: CPU Temp (25 deg C), Supply (0.1 Volts), Battery (13.4 Volts), Device Serial (560407), Device (1.34), Version, Iso Version (1.21), Wifi Version (1.65), and Run Time (1y 34d 19h). Below this section are three buttons: Device Setup, IPEC Setup, and Virtual Keypad Setup. Callouts on the left side explain the status indicators: 'Displays the fence voltage in kV' points to the Zone 1 data; 'Displays the stored energy in joules' points to Energy; 'Displays triggered alarms' points to Alarm; 'Displays warnings' points to Trouble; and 'Displays hardware faults' points to Error. Callouts on the right side explain the buttons: 'Turn on the energizer' points to Arm; 'Turn off the energizer' points to Disarm; 'Clear alarms/warnings' points to Clear; 'Mute buzzer' points to Mute; 'Voltage of battery/power source' points to the Battery reading; and 'VKP Security (optional)' points to the Virtual Keypad Setup button.

Strainrite FENCING SYSTEMS

MB32

Zone 1

Feed	8.8 kV
Return	0.3 kV
Feed I	0 Amps
Ground	0.4 kV
Energy	20 J

Alarm
Trouble
Error

Arm
Disarm
Clear
Mute

CPU Temp	25 deg C
Supply	0.1 Volts
Battery	13.4 Volts
Device Serial	560407
Device	1.34
Version	
Iso Version	1.21
Wifi Version	1.65
Run Time	1y 34d 19h

Device Setup
IPEC Setup
Virtual Keypad Setup

Displays the fence voltage in kV

Displays the stored energy in joules

Displays triggered alarms

Displays warnings

Displays hardware faults

Turn on the energizer

Turn off the energizer

Clear alarms/warnings

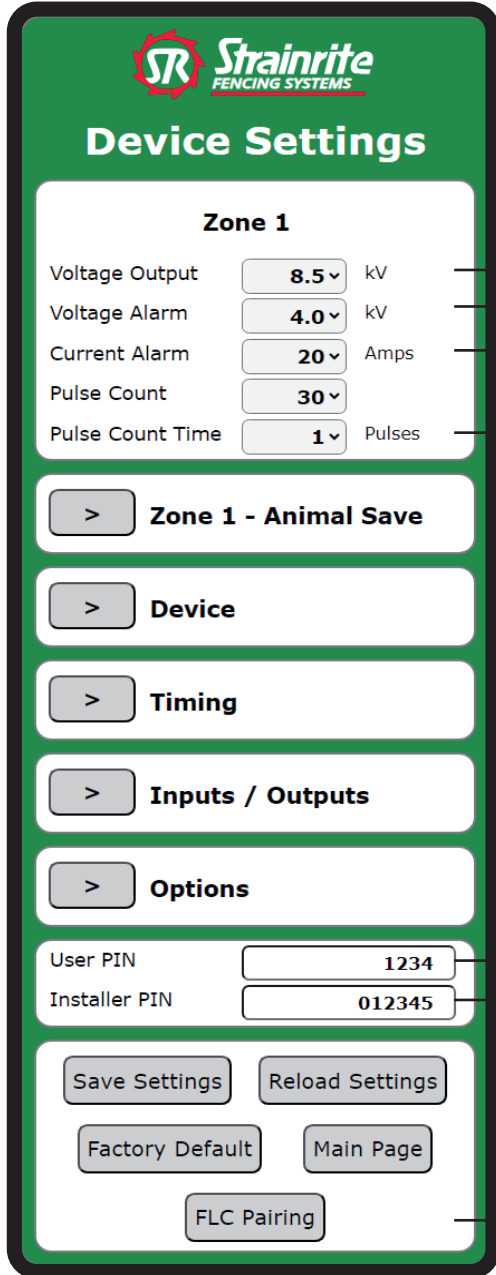
Mute buzzer

Voltage of battery/power source

VKP Security (optional)

This page is the main interface. It allows control and diagnosis of fence faults, this is available without any internet connection. This page is available within 15m of the unit (Wi-Fi range) or via the configured IPV4 address on an existing Wi-Fi network. (See page 6 for Wi-Fi setup)

Virtual Keypad (VKP) - Device Settings



Password **012345** (Installer PIN) is required to access this page.

- Target voltage for energizer output
- Trigger a 'Low voltage' alarm when the output falls below the set value
- Trigger a 'High energy' alarm when the output energy rises above the set value
- Time between fence pulses

All advanced features 'hidden' by the > button are described in the user manual.

- For use with a 4-line keypad (not included).
- Required to access the Device Settings page.

— Configure FLC Remotes.



IPEC Settings

To link this Energizer with the IP Energizer App - 'Scan' for a Wi-Fi Access Point and enter its Password.

It is recommended that the IPEC Password is changed.

Serial

560407

IPEC Password

371742

Access Point (AP) SSID

Access Point Password

IP Address

Scan

Connect

Wi-Fi LED Status:

3 fast flashes: connected to AP
Slow flash: connected to IPEC

Disconnect

This Wi-Fi module will reset to complete changes.

Main Menu

MB32 ENERGIZER QUICK START GUIDE

Virtual Keypad (VKP) - Wi-Fi Settings

2.4GHz NETWORK ONLY.

This Wi-Fi module is only compatible with 2.4GHz networks.
Hint: If you have a dual band Wi-Fi network, please disable 5GHz or create a 2.4GHz only separate network.

Displays the serial number allocated to the energizer

Drop down box for selecting the Wi-Fi Network

Selected Access point / Wi-Fi Network display name

Enter the password to your Wi-Fi Network

Scans for available Wi-Fi Networks

How to connect the device to a Wi-Fi network. This allows connection to a cloud service, or access to the VKP from that network.

1. Press the [scan] button for available Wi-Fi Networks
2. Select your network to join
3. Enter your Wi-Fi Password
4. Press the [Connect] button to connect the energizer to your Wi-Fi Network



Strainrite[®]
FENCING SYSTEMS

ELECTRIC FENCE ENERGIZER

WIFI REMOTE APP ENABLED

POWERFUL YET SAFE*

PLUG N PLAY - EASY SETUP

SPK00287