

This manual covers physical installation, wiring, and all SMS-based operation. Cloud features (remote configuration via the web interface) are covered separately.

WHAT'S IN THE BOX

- GATE ONE 4G device (in enclosure)
- 4G antenna
- Fixing screws

DEVICE OVERVIEW

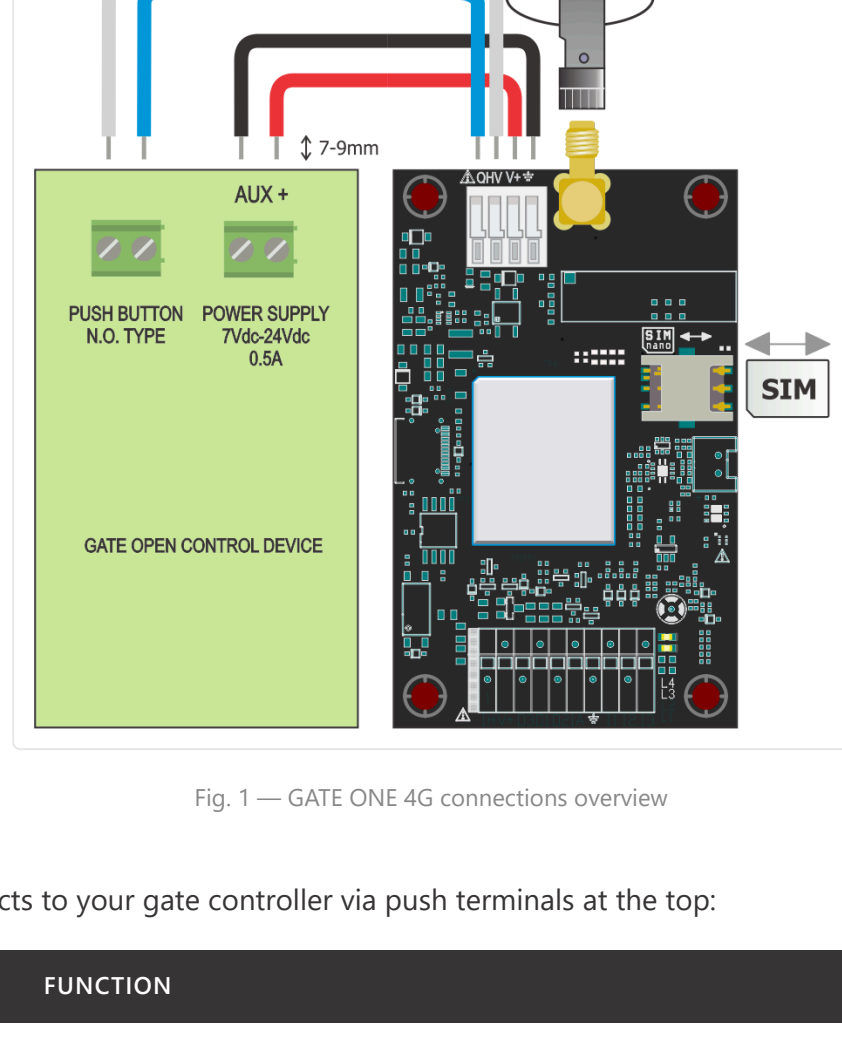


Fig. 1 — GATE ONE 4G connections overview

The device connects to your gate controller via push terminals at the top:

TERMINAL	FUNCTION
OHV	Solid-state relay output — connect to your gate controller's trigger input
V+ / \perp (GND)	External power supply — 7–24 Vdc, 0.5 A max

The SIM card slot is on the right side of the board. Push the card in to insert; pull it out to eject.

The 4G antenna screws onto the SMA connector at the top of the board.

SIM CARD

This device uses a Nano SIM card.

- 1 Orient the SIM with the gold contacts facing down and the notched corner pointing inward (toward the board).
- 2 Slide it into the slot until it is seated.
- 3 To remove, pull the card out.

What the SIM needs:

- Voice calls enabled (to receive calls that open the gate)
- SMS enabled (for all text commands)
- Mobile data is only needed for cloud features — gate operation by call and SMS works with no data plan at all

WIRING

Use cable with $4 \times 0.25\text{--}0.5\text{ mm}^2$ conductors. Strip each wire 7–9 mm before inserting into the connector.

POWER

Connect V+ and \perp (GND) to your gate controller's accessory power output (7–24 Vdc, 12 Vdc recommended). Maximum current draw is 500 mA (briefly, during a call); standby draw is 18–40 mA depending on signal conditions.

GATE TRIGGER (RELAY OUTPUT)

Connect OHV to your gate controller's push-button input. The device uses a solid-state relay — it switches the circuit electronically for a brief pulse when the gate is triggered, with no moving parts.

ANTENNA

Screw the included 4G antenna onto the SMA connector at the top of the board. Hand-tight is sufficient — do not over-tighten.

Do not power on the device without the antenna attached.

Mount the antenna vertically for best signal. If the device is inside a metal enclosure, route the antenna cable so the antenna sits outside or on the enclosure lid.

FIRST-TIME SETUP

- 1 **Insert SIM, attach antenna, wire up.**
See the sections above. Do not power on until the antenna is attached.
- 2 **Power on.**
The device will register on the cellular network automatically. No button press or on-device configuration is required.
- 3 **Claim the device as the owner.**
From the phone number that should permanently manage the device, send this text to the device's SIM number:

```
X.SetOwner
```

You will receive a reply confirming ownership, along with the current signal strength and connectivity status.

⚠ Choose this number carefully — it cannot be changed later by SMS. Once set, only this number has admin access to the device. If you ever need to transfer ownership, contact your installer.

- 4 **Add users who can open the gate.**

```
X.AddUser:+381641234567:John
```

Replace the number and name with the person's details. You will receive a confirmation back. Names can be up to 16 characters. Phone numbers must be in international format with the + prefix and country code (e.g. +381641234567).

- 5 **Test.**
Call the device from the owner's number. The call is answered and ended immediately — that is expected behavior, not an error. It means the relay fired and the gate should respond within a second.

OPENING THE GATE

Any approved user (and the owner) can open the gate in three ways:

METHOD	HOW
Call the device	Dial the device's SIM number — the call disconnects instantly and the gate opens
Text <code>X.Gate</code>	Opens the gate silently, no reply
Text <code>X.GateR</code>	Opens the gate and replies <code>Gate Opened</code> to confirm

MANAGING USERS

Owner only

TO...	SEND	EXAMPLE
Add or rename a user	<code>X.AddUser:<number>:<name></code>	<code>X.AddUser:+381641234567:John</code>
Remove a user	<code>X.RemUser:<number></code>	<code>X.RemUser:+381641234567</code>

Phone number format: numbers used here must be in full international format — + followed by country code and subscriber number (e.g. +381641234567). A number in any other format will be rejected with an error reply. This is different from `X.Forward`, which also accepts carrier short codes without a + (e.g. 1200).

GATE SETTINGS

Owner only

TO...	SEND
Set relay pulse duration (1–30 seconds)	<code>X.OnTime:<seconds></code>
Give the device a friendly name (up to 32 characters)	<code>X.SetDeviceName:<name></code>
Let anyone open the gate — no approved list needed	<code>X.EnableNoAuth</code>
Require an approved number again	<code>X.DisableNoAuth</code>
Block everyone except the owner	<code>X.EnableLockout</code>
Turn lockout off	<code>X.DisableLockout</code>

The device name appears in the startup/status message — useful if you manage more than one device. Clear it with `X.SetDeviceName:` (nothing after the colon).

"Open to everyone" mode and lockout are intended for temporary use — remember to turn them back off when no longer needed.

CHECKING ACTIVITY

Owner only

TO SEE...	SEND
Recent admin commands	<code>X.LastCommands</code>
Recent unrecognized or forwarded messages	<code>X.LastInfo</code>
Recent gate openings (who, when)	<code>X.LastGates</code>
Recent system events (reboots, cellular outages)	<code>X.LastSystem</code>
Current signal strength	<code>X.Signal</code>

FORWARDING A MESSAGE

Owner only

```
X.Forward:<number>:<message>
```

Sends a text from the device's own SIM number to any other number (up to 100 characters). No confirmation is sent back — assume it went through. Any reply to that message arrives at the device and is automatically relayed to you as `Message from <number>: ...`

The number can be a full international number (e.g. +381641234567) or a carrier short code without + (e.g. 1200).

Example: Check prepaid credit on A1 Srbija — send `X.Forward:1200:?`. A1 replies with the current balance, and the device forwards it to you.

TROUBLESHOOTING

GATE DOESN'T OPEN WHEN I CALL OR TEXT

- Is your number on the approved user list? Only the owner and added users can open the gate (unless "open to everyone" mode is on).
- Is lockout mode currently enabled? It blocks all users except the owner.
- Is the relay pulse long enough for your gate controller? Try `X.OnTime:5` and test again.
- Check `X.LastGates` — did the device log the attempt at all?

DEVICE DOESN'T RESPOND TO TEXTS

- Is the device powered? Check supply wiring and voltage.
- Does the SIM have SMS service and sufficient credit?
- Send `X.Signal` from the owner's number — if you get a reply, the device is alive; the number you texted from is likely not the owner or an approved user.

DEVICE IS POWERED BUT WON'T REGISTER ON THE NETWORK

- Is the antenna attached and screwed in firmly?
- Is the SIM seated correctly (gold contacts facing down)?
- Try moving the device somewhere with better signal for initial setup.

I NEED TO TRANSFER OWNERSHIP TO A DIFFERENT PHONE NUMBER

Ownership cannot be changed by SMS once set. Contact your installer.

TECHNICAL SPECIFICATIONS

Supply voltage	12 Vdc nominal (7–24 Vdc)
Current consumption — max.	500 mA (during call)
Current consumption — stand-by	18–40 mA (varies with signal quality)
Relay output	Solid-state, normally open (N.O.)
Cellular standard	4G LTE
Antenna	External 4G antenna, SMA connector
SIM type	Nano SIM
Push terminals	$4 \times 0.25\text{--}0.5\text{ mm}^2$, strip 7–9 mm
Dimensions (W × D × H)	54 × 100 × 32 mm