PAL ELECTRONIC SYSTEMS

VERSION 1

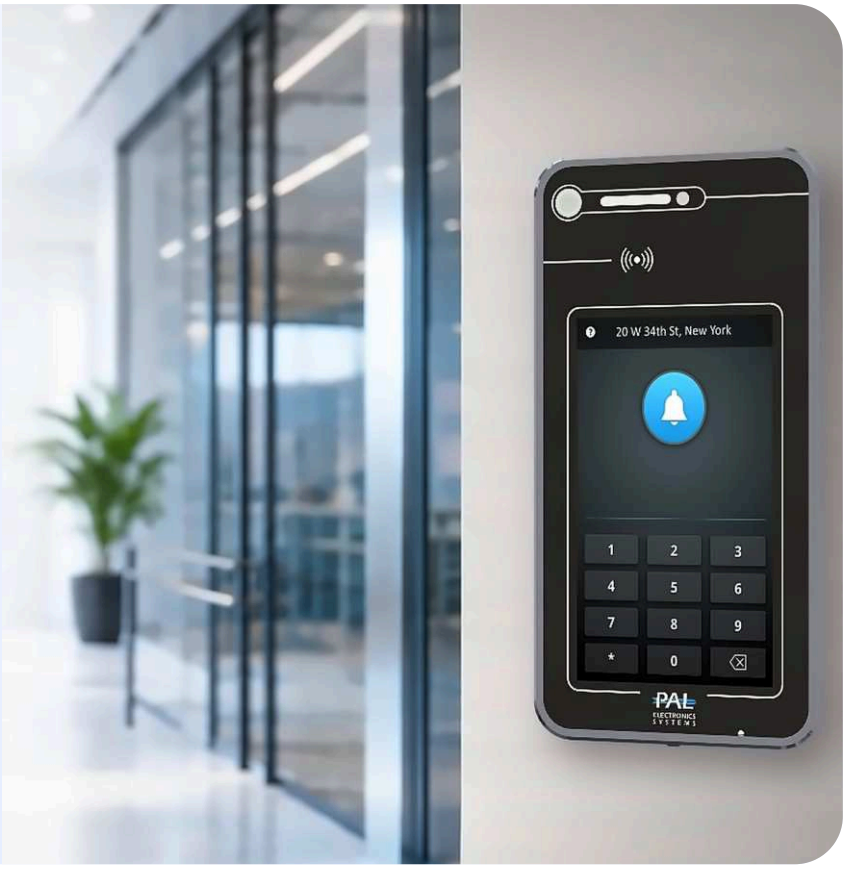
INSTALLATION & USER MANUAL

VPS

Wireless Video Intercom

Video Panel System with a 7-inch touch screen. Fast installation with no complex cabling.

- 7-inch touch screen
- 4G / Wi-Fi / Bluetooth / Ethernet
- PoE+



We make it smarter.

IN THIS MANUAL

Product overview | Specifications | Installation | Device setup | PalGate App | PAL Web Portal | Main screen | User management

INSIDE THIS MANUAL

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Important information

Installation
The VPS must be installed by a professional installer, with its gasket fitted (mandatory), on a solid, flat surface. Do not disassemble the VPS without professional guidance.

Cellular coverage
The system operates over a 4G cellular network, and its performance depends on network coverage. The customer is responsible for ensuring 4G reception at the installation site. PAL Electronic Systems Ltd. is not responsible for a lack of cellular coverage.

- Keep the VPS away from magnetic fields, high temperatures and damp environments.
- This manual is for reference only. If the manual and the product differ, the product takes precedence.

CHAPTER 1

Product overview

1.1 Introduction

The PAL VPS (Video Panel System) is a wireless video intercom with a 7-inch touch screen for residential and office buildings, with no complex cabling required. Residents and managers make video calls and manage all settings through the PalGate App and the PAL Web Portal.

1.2 Front panel



1. **Camera**
   8-megapixel camera, 120° viewing angle
2. **LED light**
3. **NFC/RFID reader**
   For cards and tags
4. **LCD touch screen**
   7-inch, 720 × 1280
5. **Microphone**

Figure 1 · VPS front panel

1.3 Specifications

FEATURE	SPECIFICATION
Display	7-inch touch screen, 720 × 1280
Glass	Anti-vandal glass
Camera	8 MP, 120° viewing angle
Face recognition	Supported
Cellular network	4G / 3G / 2G
Wi-Fi	802.11b/g/n; 2400–2482 MHz
Bluetooth	BT 4.2 LE
NFC	13.56 MHz
Ethernet	10/100 Mbps
Relays	2 relays (N.O./N.C.)
Inputs	2 inputs
PoE	Fully integrated IEEE 802.3-compliant PoE+ PD interface
Card reader	MIFARE, MIFARE Ultralight C
Audio	Speaker: concealed 15W / 4 Ω; microphone: −42dB ±3dB @ 94dB SPL
Installation	Wall-mounted or flush-mounted
Power supply	48 VDC and/or PoE+
Power consumption	4.3 W (standby); 7.7 W (operation)
Operating temperature	−20 °C to +65 °C (−4 °F to +149 °F)
Other interfaces	Wiegand 26-bit reader
Dimensions	251.6 × 129.6 mm (9.9 × 5.1 in)
Supported app	PalGate App for Android and iOS
Languages	English, Hebrew, Russian, Spanish, Dutch, French, Portuguese, Norwegian, Danish

1.4 Dimensions

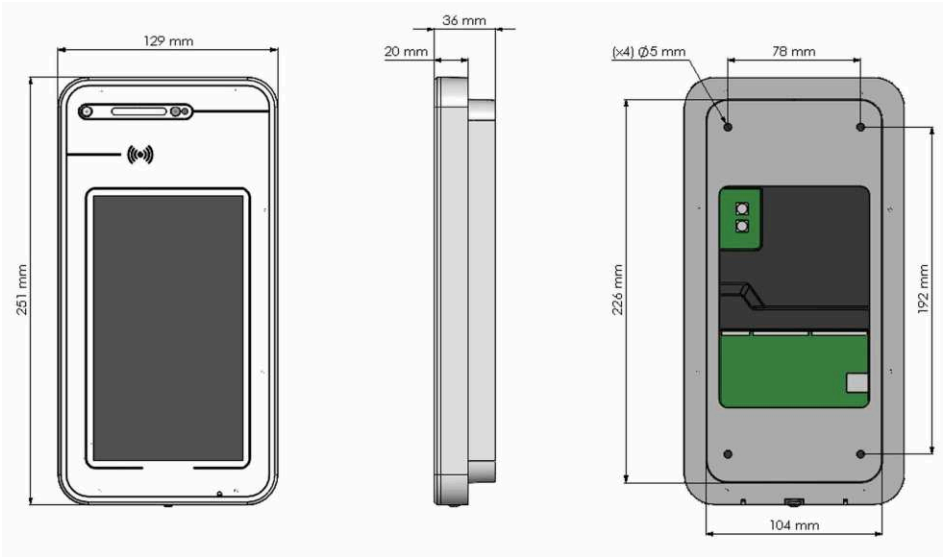


Figure 2 · VPS dimensions in mm (1 in = 25.4 mm)

1.5 Interfaces

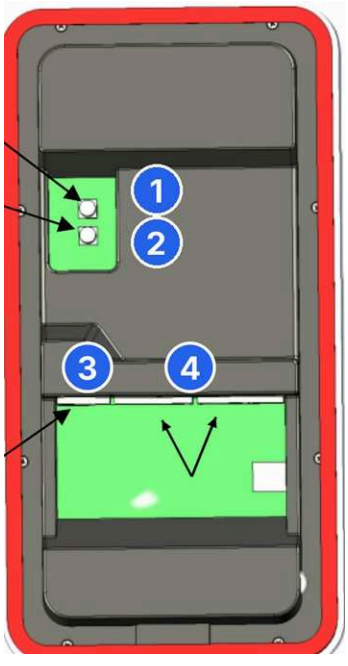


Figure 3 · Rear view

1. **Wi-Fi/BT antenna**
2. **4G cellular antenna**
3. **RJ45 connection**
   Network and PoE+
4. **Control connections**

Power input	Relay 1	Relay 2
+48 V, GND	N.O-1, COM-1, N.C-1	N.O-2, COM-2, N.C-2

Wiegand 26	Exit button / door status
D0, D1, GND	INPUT-1, INPUT-2, GND

CHAPTER 2

Installation

2.1 Wall-mounted installation

1 Step 1



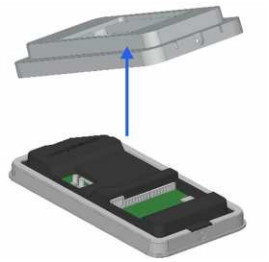
Loosen the screw.

2 Step 2



Separate the front panel from the back cover.

3 Step 3



Lift the back cover away from the front panel.

4 Step 4



Attach the gasket to the back of the unit to keep water out.

5 Step 5



Fasten the back cover to the wall with screws.

6 Step 6



The back cover is fixed to the wall.

7 Step 7



Place the front panel on the back cover.

8 Step 8



Secure the front panel to the back cover with the screw.

2.2 Flush-mounted installation

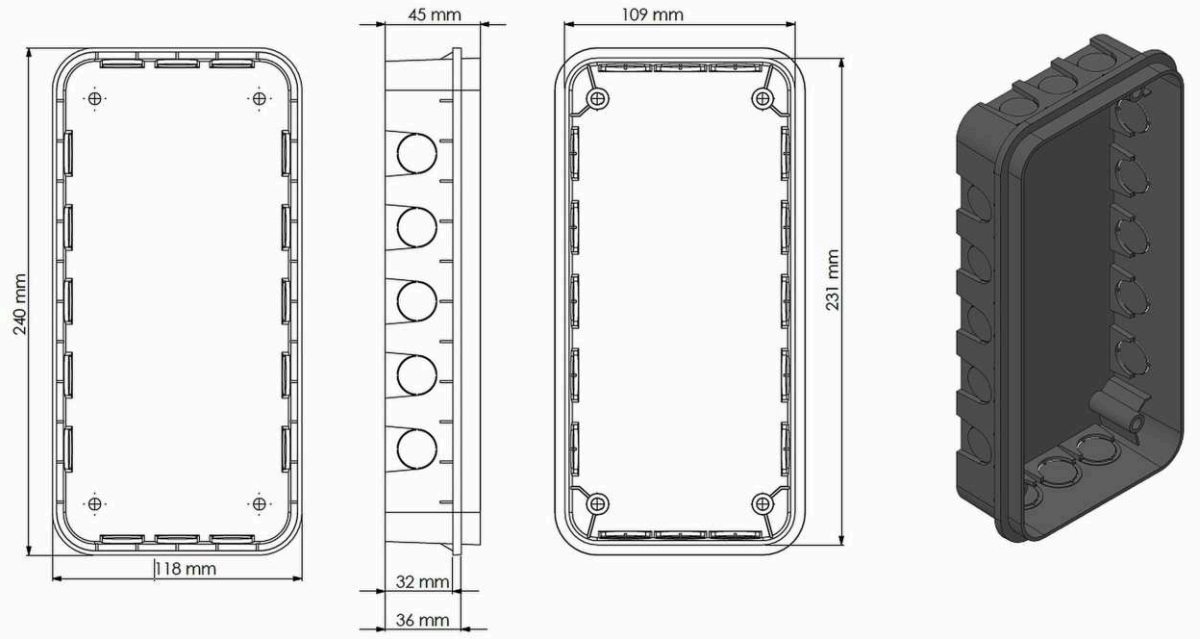


Figure 4 · Flush-mount box dimensions in mm (1 in = 25.4 mm)

1 **Attach the gasket**

Attach the gasket to the back of the unit to keep water out.

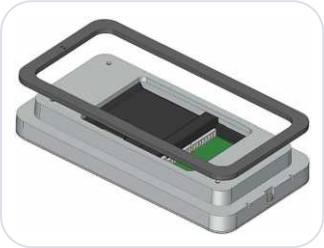


Figure 5 · Fitting the gasket



Figure 6 · Gasket fitted

2 **Mount the unit**

Install the flush-mount box in the wall opening, then fit the unit into it as shown in Figure 7.



Figure 7 · Flush mounting in the wall

2.3 Wiring diagram

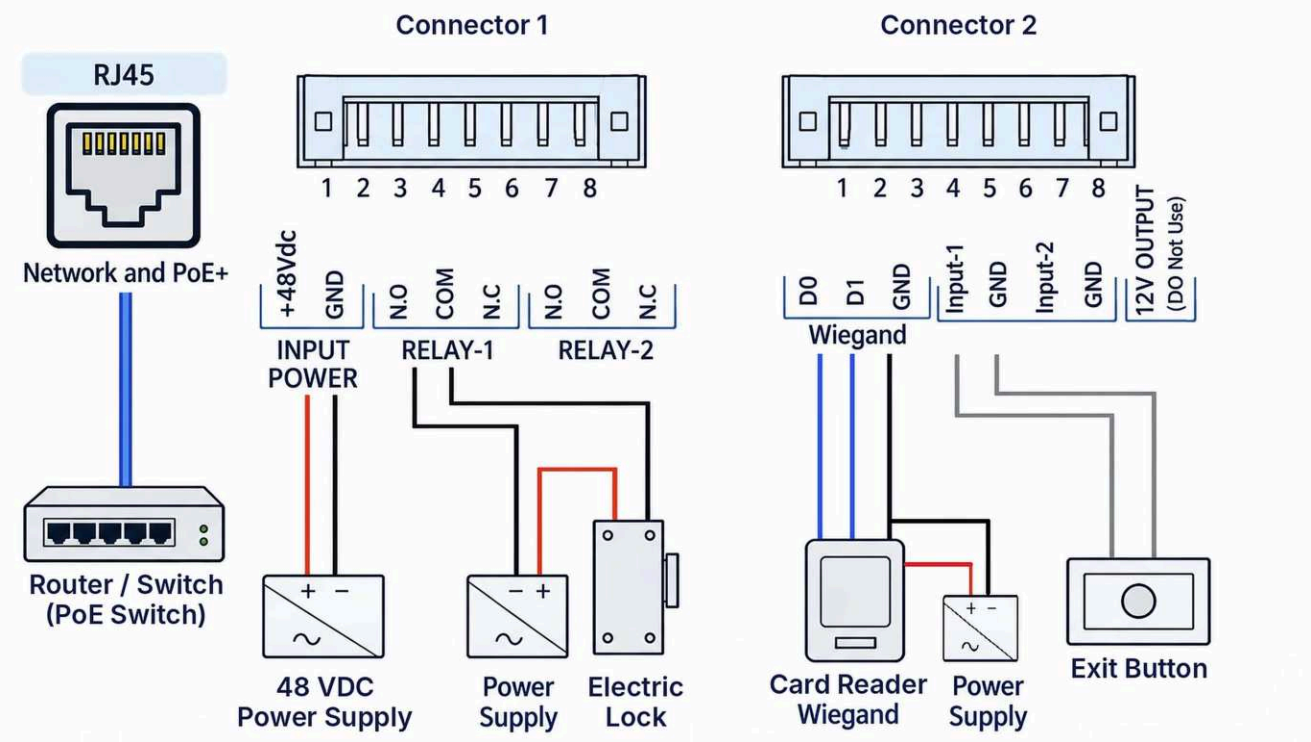


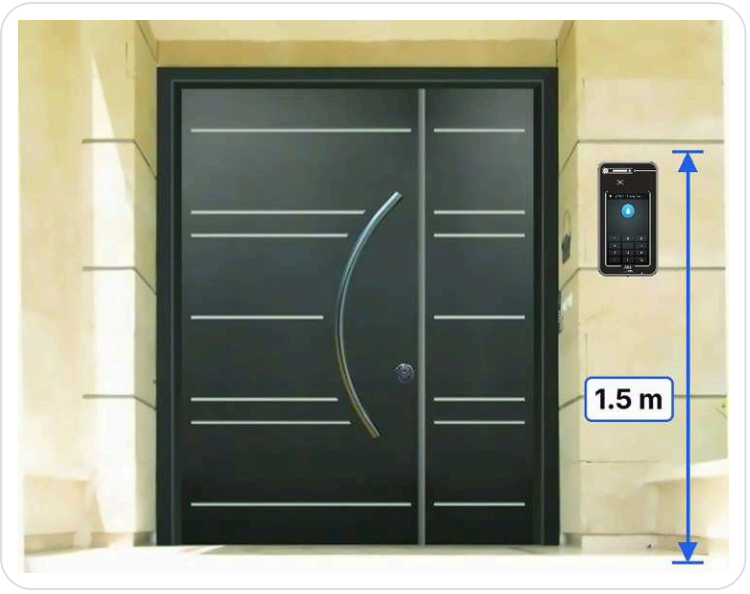
Figure 8 · VPS wiring diagram

CONNECTOR	GROUP	TERMINALS	CONNECT TO
Connector 1	**Input power**	+48 V · GND	48 VDC power supply
	Relay 1	N.O · COM · N.C	Electric lock (with its own power supply)
	Relay 2	N.O · COM · N.C	Not used in this example
Connector 2	**Wiegand**	D0 · D1 · GND	Wiegand card reader (with its own power supply)
	Inputs	Input-1 · GND	Exit button
		Input-2 · GND	Door status (not used in this example)
RJ45	**Network**	Ethernet	Router or PoE switch (network and PoE+)

Power supply
Power the VPS either from a 48 VDC power supply or through PoE+.

Important
Do not use the 12 V OUTPUT on connector 2.

2.4 Installation height



CAMERA HEIGHT

1.5 m 4.9 ft

Recommended camera height above the ground.

Figure 9 · Recommended installation height

CHAPTER 3

Setting up a new device

You can set up the system in one of two ways: in the PalGate App or in the PAL Web Portal.

3.1 Setup in the PalGate App

Download the PalGate App from the App Store or Google Play (search for “PalGate”), or scan the QR code.

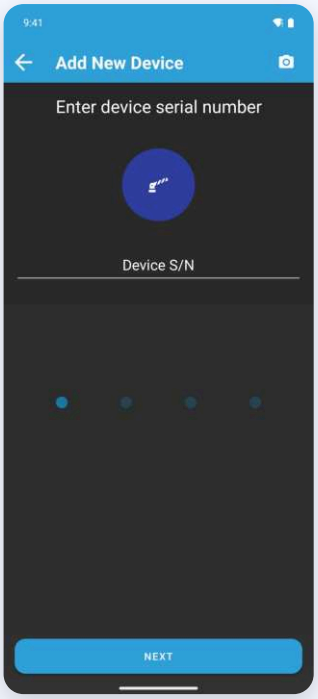
Download on the App Store

ANDROID APP ON Google play

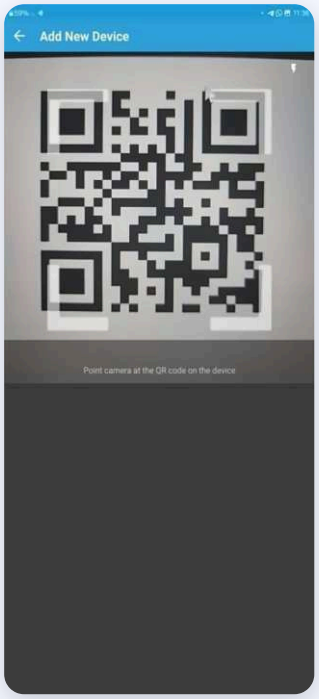
1 Open the app and tap the menu icon (three lines) at the top left of the screen.



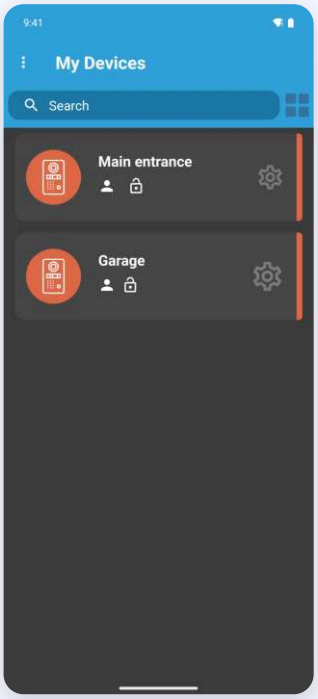
2 Tap **Add New Device**.



3 Tap the camera icon at the top right of the screen.



4 Scan the QR code shown on the VPS screen.



5 **Complete the setup**

Follow the on-screen instructions in the app. When you finish, the system setup is complete.

3.2 Setup in the PAL Web Portal

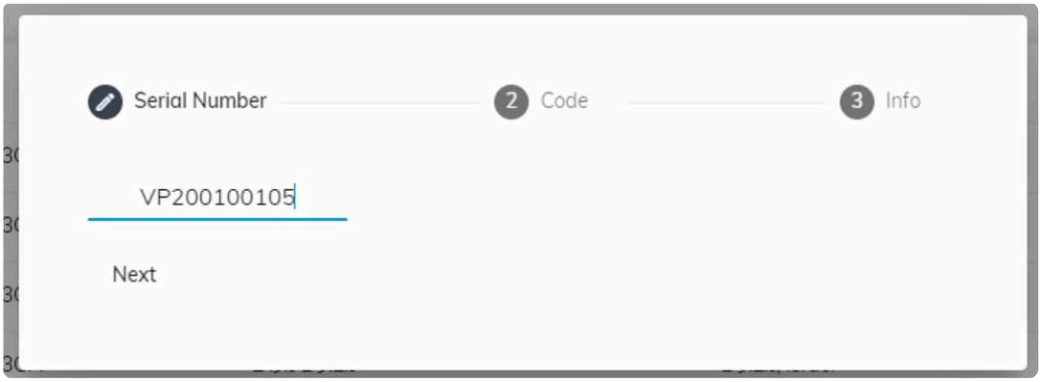
1 Add a new device

Sign in to the PAL Web Portal. On the home page, click **Devices**, then click **+**.



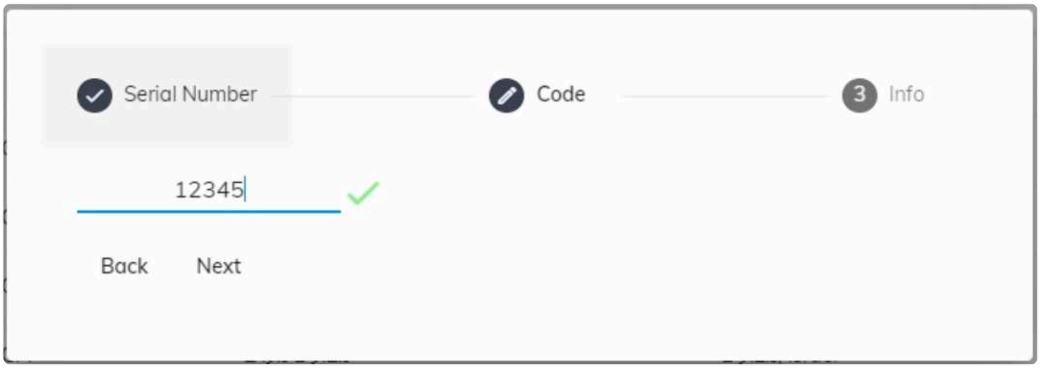
2 Enter the serial number

Enter the device serial number and click **Next**. The serial number starts with **VP** followed by 9 digits. You can find it on the label on the PAL packaging or on the back of the device.



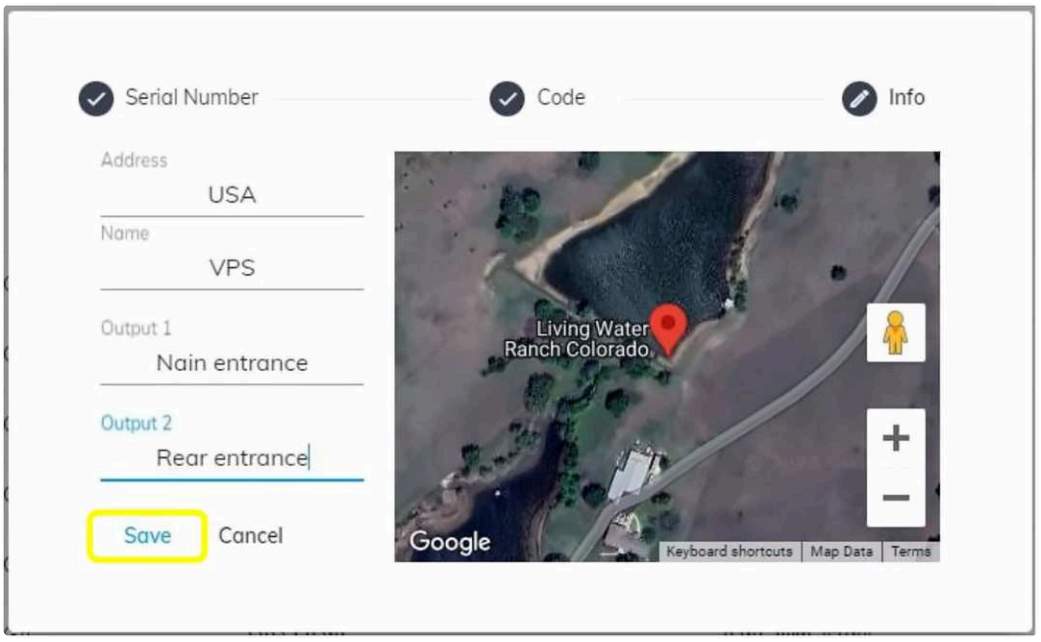
3 Enter the code

Enter the 5-digit code and click **Next**. The code is printed on the same label.



4 **Enter the device details**

Enter the address of the device; this can be just a city or a full street address. Enter a **Name** for the device, as it will appear to the account administrator. **Output 1** (and **Output 2**) is the name of the gate or door that the VPS controls. Then click **Save**.



Tip

Use clear output names, such as “Main entrance” or “Rear entrance”, so that users can easily tell which entrance they are opening.

CHAPTER 4

VPS main screen

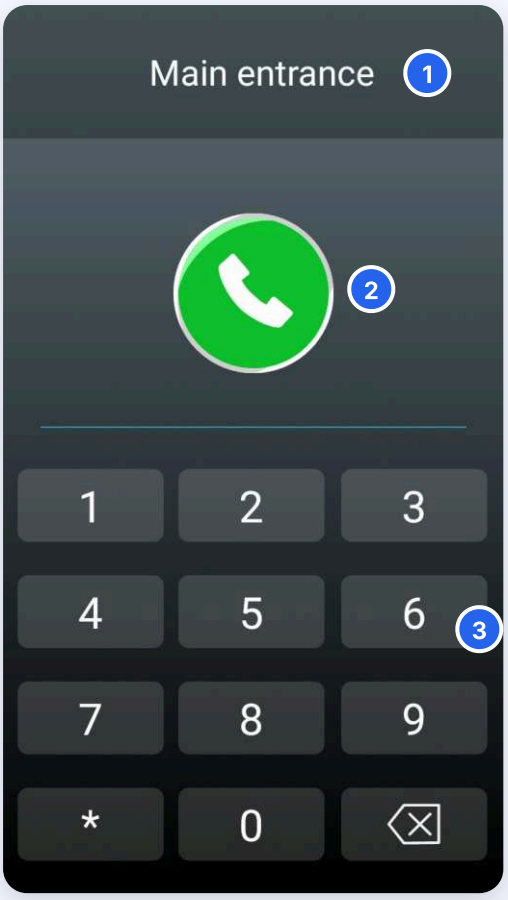


Figure 10 · Main screen

1. **Custom title bar**
   Displays a title at the top of the screen, such as an address or building name.
2. **Call button**
   Enter an apartment number and tap the bell to call all residents of that apartment, or tap the bell to open the apartment directory, then search and call.
3. **PIN code**
   Authorized users can enter an access code to open the door.

Screen saver
When the VPS detects no activity for a set period, the screen saver turns on to protect the screen and save energy. You can add a caption, such as a company name or address, to the screen saver.

CHAPTER 5

Managing users and apartments

Note

This chapter is intended for the intercom manager. Only users defined as managers can see the “Manager Options” button.

Important

Every user must be assigned to a call group, such as a family, an apartment or a company.

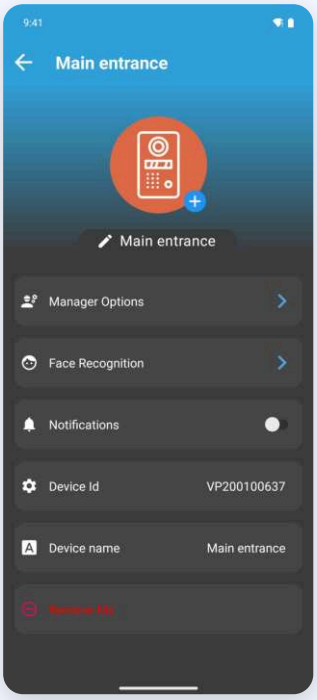
5.1 Opening the device settings

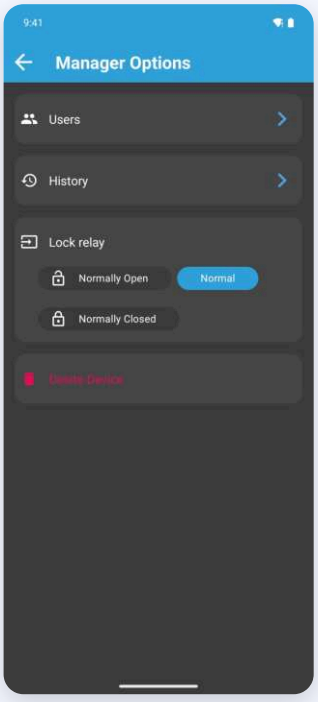
1 Open the device settings

In the PalGate App, find the VPS on the “My Devices” screen and tap its settings button (gear icon).

2 Open Manager Options

As the VPS manager, you see the “Manager Options” button. Tap it.

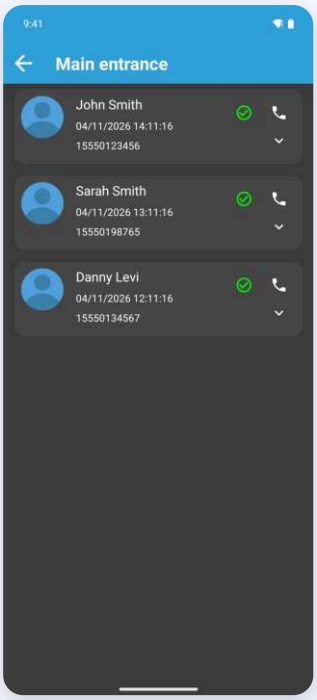




5.2 Users and history

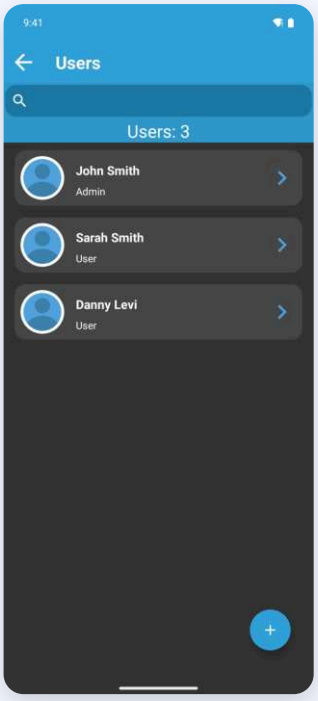
3 Open Users or History

Tap “Users” to manage users and apartments, or tap “History” to view the device history.



4 Add or manage a user

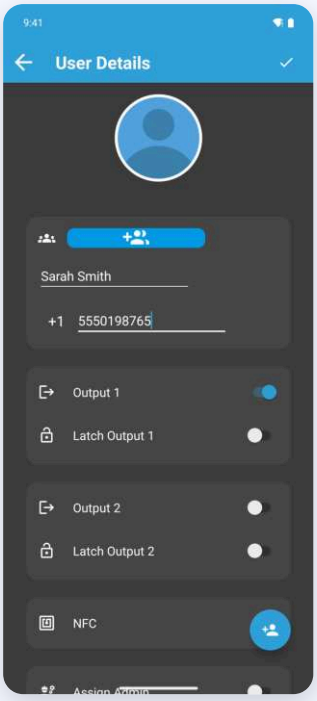
To add a new user, tap “+”. To manage an existing user, tap the user’s name.



5.3 Adding a user and a call group

5 Enter the user details

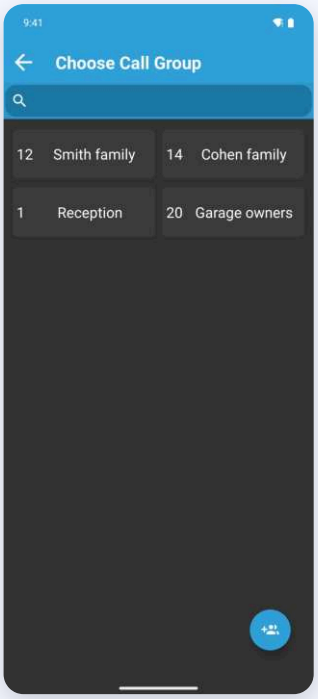
Enter the user's name and phone number, then tap "Choose Call Group".



> **Important**
> You must assign every user to a call group.

6 Choose or create a call group

Tap an existing call group, or tap "Add" to create a new one. Enter the call group details and tap "Save".

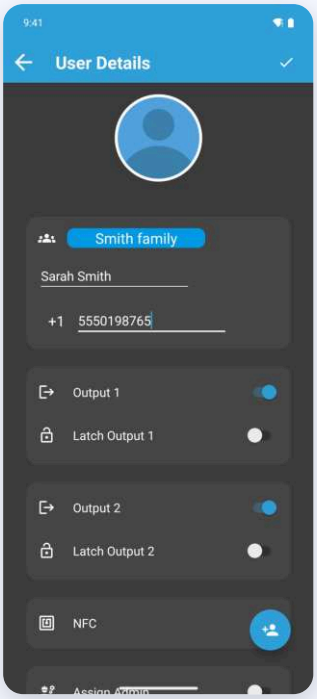




5.4 Saving the user and call group fields

7 **Save the user**

After you enter all the details, tap “Save” at the top of the screen.



Call group fields

FIELD	DESCRIPTION
Call Group Name	Name of the group (family name or company name)
Call Group Code	Code that opens the VPS
Apartment Number	The apartment number
Hidden mode	When on, the call group does not appear in the apartment directory on the VPS screen
Direct	When on, the VPS calls this call group directly from the main screen
*** + code**	To open relay 2, enter * followed by the call group code

⚠ **Important**

Tap “Save” after you enter all the information.

CHAPTER 6

Opening methods

- Face recognition
- PalGate App
- Video call
- PIN code
- NFC/RFID card or tag
- Wiegand 26 reader
- Smart watches (Google and Android)

PALGATE APP

Open your world.

Manage and open all your gates and doors from a single app. Download the PalGate App from the App Store or Google Play.

PAL ELECTRONIC SYSTEMS

We make it smarter.

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