PAL ELECTRONIC SYSTEMS

VERSION 1.1

CONNECTION GUIDE

PAL Terminal

Connection instructions for the PAL Terminal pay parking station.



CHAPTER 1

Power connection (220 VAC)

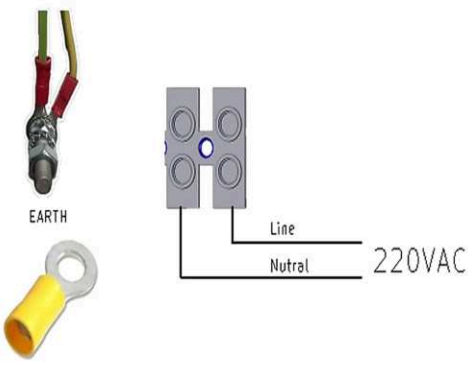


Figure 1 · Power and earth connection

- Connect the power wires – phase (LINE, brown) and neutral (NEUTRAL, blue) – to the terminal block.
- Connect the earth wire to the earth screw with an M6 ring terminal.
- Secure the ring terminal with a nut and a serrated washer.

> ⚠ **Warning**
> Make sure the earth is connected properly to prevent electric shock and to ensure that the system protections work correctly.

CHAPTER 2

Control and status connections

Connect the controls and status signals to the green 8-pin connector (IN1, GND, IN2, IN3, GND, IN4, NO, COM).

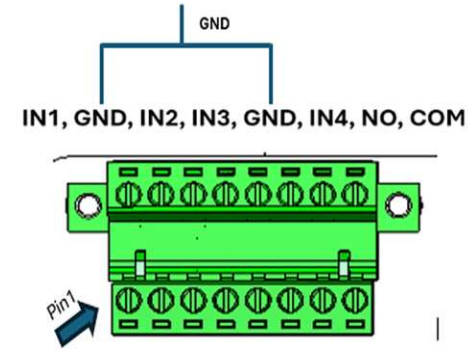


Figure 2 · 8-pin connector (green)

TERMINAL	FUNCTION
IN1	Terminal loop
GND	Common ground
IN2	Barrier loop
IN3	Barrier status – gate open/closed
GND	Common ground
IN4	Arm status – broken arm
NO	Relay contact NO
COM	Relay contact COM

> ⚠ **Important**
> NO and COM connect to the gate opening input.

2.1 Connecting a loop detector through an external controller

1. The standard connection uses the NC and COM contacts of the controller, connected to the IN and GND inputs of the terminal. You do not need to connect the NO contact.
2. If the wiring on site is limited, you can change and program the input type (NO/NC) remotely through the PAL Web Portal.

CHAPTER 3

Network connection

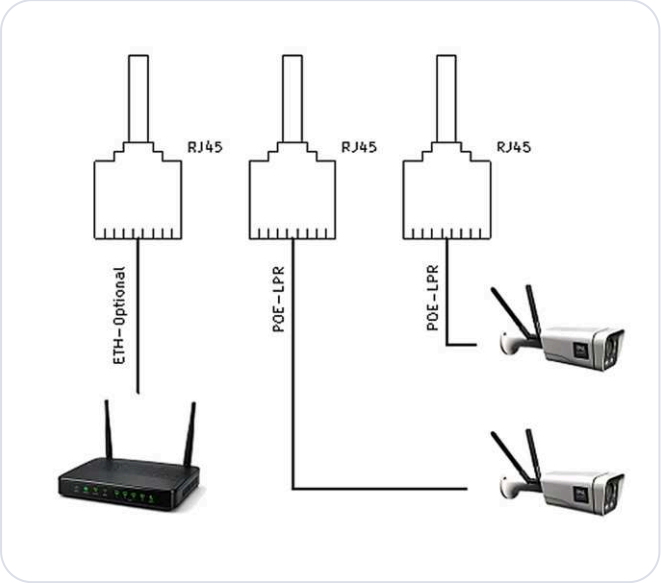


Figure 3 · Network connections

The unit has 3 male RJ45 connectors that support PoE:

- 2 connectors for LPR cameras
- 1 connector for an existing network infrastructure

> ⚠ **Important**
> Each camera must be connected to the terminal with a network cable.

CHAPTER 4

Connecting the system to the gate control

Connect the gate opening command from two places:

1. Connect the “ALARM OUT” output of the LPR camera.
2. Connect the NO and COM outputs on the terminal connector.

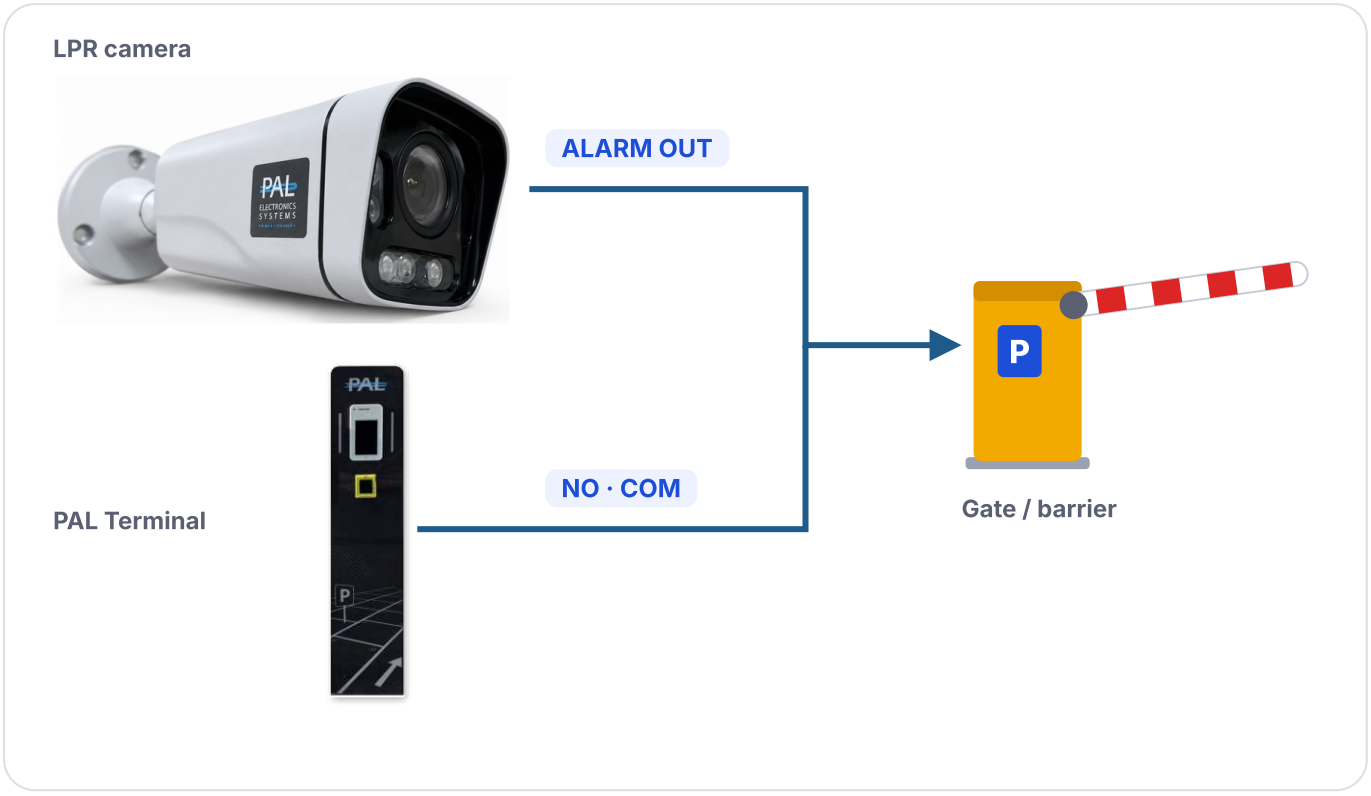


Figure 4 · Gate opening command from the LPR camera and the terminal

> ⚠ **Note**
> Connect the command from the camera, because the camera “decides” when to open the gate.
> Connect the command from the terminal to provide a backup for opening the gate.

CHAPTER 5

Installation example

A typical installation: the PAL Terminal on the island next to the gate barrier, with the LPR camera facing the approaching vehicles.

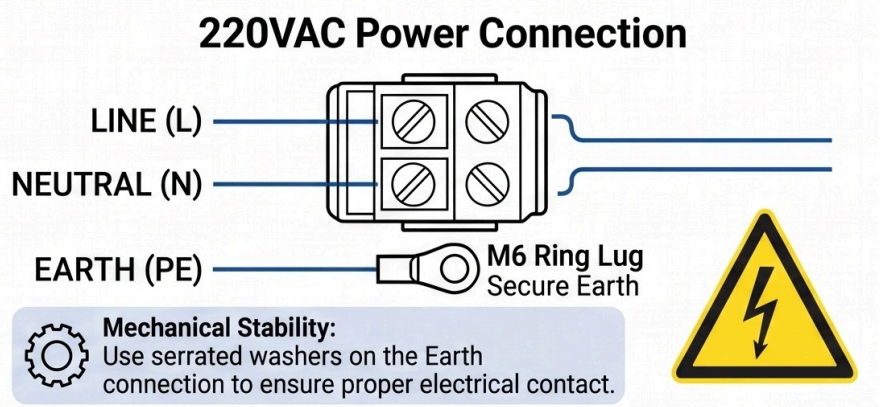


Figure 5 · PAL Terminal installed at a car park entrance

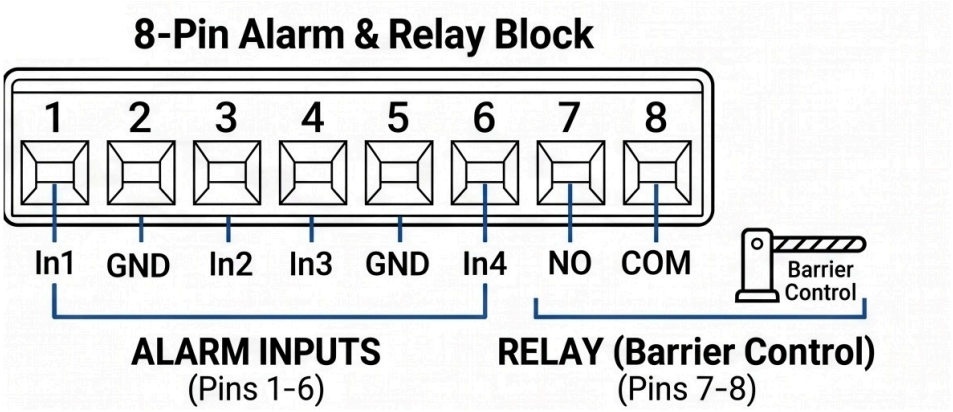
CHAPTER 6

Wiring diagram

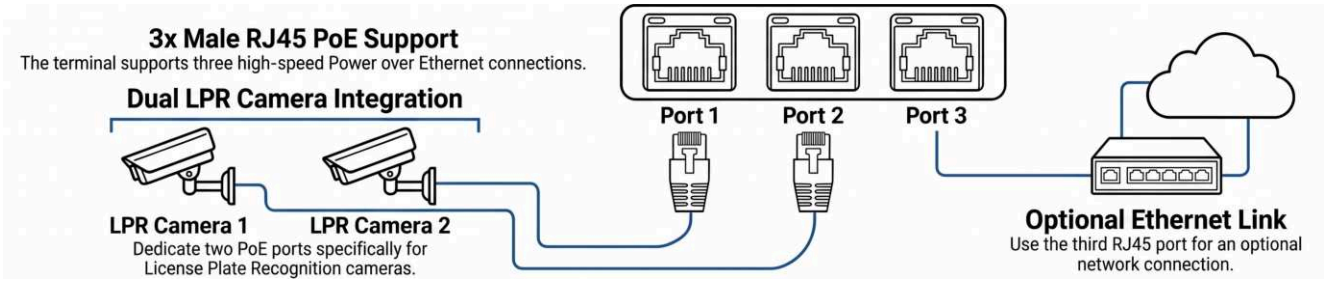
1 Power connections



2 Control connections



3 Network connection



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