palgate

SPIDER SYSTEMS



USER MANUAL



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Product Description

The Spider Systems IoT units are 4G network-based systems, enhanced with Bluetooth for access and management control. Through on board relays, users can control the unit via either a dedicated application or an easy-to-use web portal. This device seamlessly integrates with electric gates, doors, lighting systems, or any other appliance that would benefit from remote control and management.

Key Benefits

- Remote Access Complete and secure control of the unit anytime, and from anywhere.
- Peace of mind Ensures access even during rare cellular network downtimes.
- "Nearby only" Feature Allows specific users to operate the unit only when in proximity.
- Automatic opening PalGate App can operate the gate automatically when arriving at the gate by car, this feature will work only
 when the PalGate App is connected to a vehicle's multimedia system via Bluetooth.
- **Compact Size** The unit has a small footprint, measuring just 80X53 mm.
- Management and control using the free "PalGate" App and an easy to use management WEB portal.
- **Visual Indicators** Features 4 LED lights (1 to indicate that the SIM is active and 3 to indicate reception strength).
- Customizable Access Ability to set up multiple administrators and authorized users for tailored access and control.
- **Real time notifications** Receive instant email or push notifications to the PalGate App.
- Voice Control Voice-controlled operation via Siri or Google Assistant.
- **Customization** Ability to set timers, events, astronomic clocks and more.
- **User Management** Easily import and export data using Excel.
- Programmable relay pulse width

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Variants

| Model | Spider - 50 | Spider -i | Spider - B | Spider i-WRL | Spider i-WR | Spider B-WR | Spider - Wiegand 26 |
|-----------------------------------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| | Spider - 50 | Spider -i | Spider - B | Spider I-WKL | Spideri-WR | Spider B-WR | Spider - Wiegand 26 |
| Control with application IOS & Android | √ | √ | √ | √ | √ | √ | Spread Wingshill Co. |
| Control by WEB interface | √ | √ | ✓ | ✓ | √ | ✓ | √ |
| User definition Nearby only or unlimited distance | √ | √ | √ | √ | ✓ | ✓ | √ |
| Excel import/export | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Schedule management control | √ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Supports smart remote control & Wireless vehicle detector | | | | 10,000 | 10,000 | 10,000 | 10,000 |
| Output (N.O/N.C) | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Input (N.O/N.C) | 1 | 1 | 2 | 1 | 1 | 2 | 2 |
| Max users | 50 | 20,000 | 20,000 | 3 | 20,000 | 20,000 | 20,000 |
| Wiegand 26 bit reader | | | | | | | √ |
| Size and Weight of pakege | 8*5.3*2.5см 83 gr | 8*5.3*2.5см 83 gr | 8*5.3*2.5см 83 gr | 8*5.3*2.5см 87 gr | 8*5.3*2.5см 87 gr | 8*5.3*2.5см 87 gr | 8*5.3*2.5см 87 gr |
| P/N | | | | | | | |
| USA | SP100 | SP101 | SP102 | SP110 | SP111 | SP112 | SP113 |
| Australia | SP200 | SP201 | SP202 | SP210 | SP211 | SP212 | SP213 |
| Europe | SP300 | SP301 | SP302 | SP310 | SP311 | SP312 | SP313 |

Spider – 50

| USA | SP100 |
|-----------|-------|
| Australia | SP200 |
| Europe | SP300 |
| | |











- Supports 50 PalGate App users
- 1 output relays (N.O./N.C.)
- 1 input channels with real-time notifications to Email and push to PalGate App
- Multiple opening methods: Proximity, App, Dialing, Siri, and Google Assistant
- Allows customization of opening distance
- Manage with a free App or user-friendly web interface*
- API integration available*
- Provides unlimited logs*
- Features timers and event scheduling
- Equipped with a programmable astronomical clock
- Capability to import and export data via Excel files
- Adjustable relay pulse width
- Compatible with 4G networks
- Operates on an input voltage of 12VDC
- Compact dimensions: 53x80 mm



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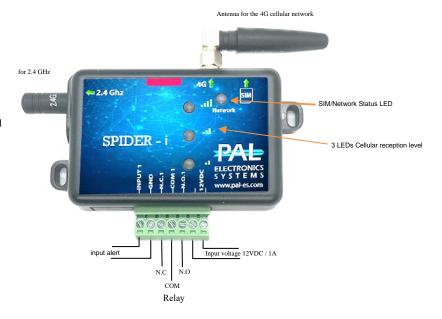


Spider - i

| USA | SP101 |
|-----------|-------|
| Australia | SP201 |
| Europe | SP301 |



- Supports unlimited PalGate App users
- 1 output relays (N.O./N.C.)
- 1 input channels with real-time notifications to Email and push to PalGate App
- Multiple opening methods: Proximity, App, Dialing, Siri, and Google Assistant
- Allows customization of opening distance
- Manage with a free application or user-friendly web interface*
- API integration available*
- Provides unlimited logs*
- Features timers and event scheduling
- Equipped with a programmable astronomical clock
- Capability to import and export data via Excel files
- Adjustable relay pulse width
- Compatible with 4G networks
- Operates on an input voltage of 12VDC
- Compact dimensions: 53x80 mm

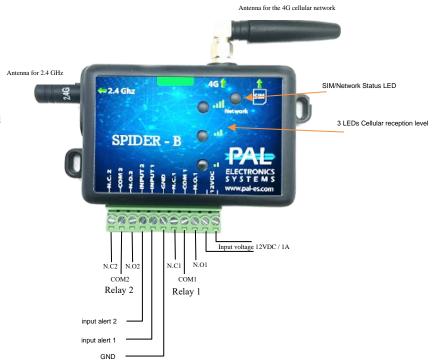


Spider - B

| USA | SP102 |
|-----------|-------|
| Australia | SP202 |
| Europe | SP302 |



- Supports unlimited PalGate App users
- 2 output relays (N.O./N.C.)
- 2 input channels with real-time notifications to Email and push to PalGate App
- Multiple opening methods: Proximity, App, Dialing, Siri, and Google Assistant
- Allows customization of opening distance
- Manage with a free application or user-friendly web interface*
- API integration available*
- Provides unlimited logs*
- Features timers and event scheduling
- Equipped with a programmable astronomical clock
- Capability to import and export data via Excel files
- Adjustable relay pulse width
- Compatible with 4G networks
- Operates on an input voltage of 12VDC
- Compact dimensions: 53x80 mm



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Spider i-WRL

| USA | SP110 |
|-----------|-------|
| Australia | SP210 |
| Europe | SP310 |

- Supports 3 PalGate App users
- 1 output relays (N.O./N.C.)
- 1 input channels with real-time notifications to Email and push to PalGate App
- Wireless receiver 433Mhz.
- Multiple opening methods: Proximity, App, Dialing, Siri, and Google Assistant
- Allows customization of opening distance
- Manage with a free application or user-friendly web interface*
- API integration available*
- Provides unlimited logs*
- Features timers and event scheduling
- Equipped with a programmable astronomical clock
- Capability to import and export data via Excel files
- Adjustable relay pulse width
- Compatible with 4G networks
- Operates on an input voltage of 12VDC
- Compact dimensions: 53x80 mm



Spider i-WR

| USA SP1 | 11 |
|---------------|----|
| Australia SP2 | 11 |
| Europe SP3 | 11 |

- Unlimited PalGate App users
- 1 output relays (N.O./N.C.)
- 1 input channels with real-time notifications to Email and push to PalGate App
- Wireless receiver 433Mhz.
- Multiple opening methods: Proximity, App, Dialing, Siri, and Google Assistant
- Allows customization of opening distance
- Manage with a free application or user-friendly web interface*
- API integration available*
- Provides unlimited logs*
- Features timers and event scheduling
- Equipped with a programmable astronomical clock
- Capability to import and export data via Excel files
- Adjustable relay pulse width
- Compatible with 4G networks
- Operates on an input voltage of 12VDC
- Compact dimensions: 53x80 mm



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Antenna for the 4G cellular network



Spider – B-WR

| USA | SP112 | | |
|-----------|-------|--|--|
| Australia | SP212 | | |
| Europe | SP312 | | |

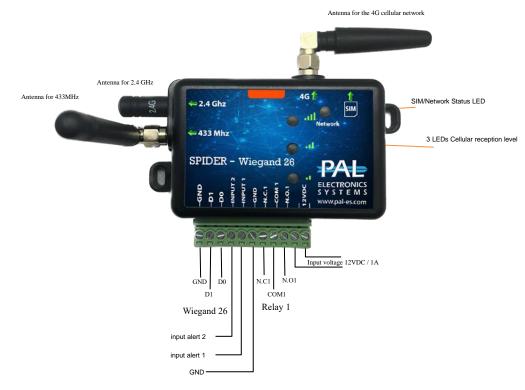
- Unlimited PalGate App users
- 2output relays (N.O./N.C.)
- 2input channels with real-time notifications to Email and push to PalGate App
- Wireless receiver 433Mhz.
- Multiple opening methods: Proximity, App, Dialing, Siri, and Google Assistant
- Allows customization of opening distance
- Manage with a free application or user-friendly web interface*
- API integration available*
- Provides unlimited logs*
- Features timers and event scheduling
- Equipped with a programmable astronomical clock
- Capability to import and export data via Excel files
- Adjustable relay pulse width
- Compatible with 4G networks
- Operates on an input voltage of 12VDC
- Compact dimensions: 53x80 mm



Spider – Wiegand 26

| USA | SP113 |
|-----------|-------|
| Australia | SP213 |
| Europe | SP313 |

- Unlimited PalGate App users
- 1 output relays (N.O./N.C.)
- 2 input channels with real-time notifications to Email and push to PalGate App
- Wireless receiver 433Mhz.
- Wiegand 26 bit reader.
- Multiple opening methods: Proximity,
 App, Dialing, Siri, and Google Assistant
- Allows customization of opening distance
- Manage with a free application or userfriendly web interface*
- API integration available*
- Provides unlimited logs*
- Features timers and event scheduling
- Equipped with a programmable astronomical clock
- Capability to import and export data via Excel files
- · Adjustable relay pulse width
- Compatible with 4G networks
- Operates on an input voltage of 12VDC
- Compact dimensions: 53x80 mm



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LEDs key:

SIM/Network LED

Fast Flashing: System is booting Slow Flashing: Module is searching for a cellular network All LEDs Flashing: SIM card not recognized

LED₁

Blinking Twice: Connecting to the internet Blinking Four Times: Connecting to the servers Signal Strength

4G Signal Strength Indicator

LED #1 ON: Low signal LED #1 and #2 ON: Good signal LED #1, #2, and #3 ON: Very good signal

Specifications:

Supply Voltage Range: 12-24V DC

Average Standby current consumption: ~70mA

Relay Contact Current Rating: 1A, 30V AC/DC (Resistive)

Antenna: 50Ω SMA Antenna interface

Temperature Range: -20° C to $+70^{\circ}$ C (-4° F to $+158^{\circ}$ F). Exterior Dimensions: 53mm x 80 mm (2.09 in. x 3.15 in).

Net Weight: 87 gr (3.07 ounces)

Voice Support: VoLTE

Frequency Bands:

U.S.A Market (SP1XX): 4G bands: B2, B4, B12, B66

Australia Market (SP2XX): 4G bands: B1, B3, B5, B8, B9, B18(B26), B19, B28

Europe Market (SP3XX):

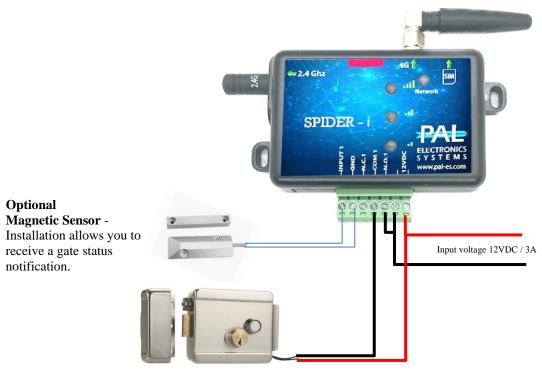
4G: B1, B3, B7, B8, B20, B28A

3G: B1, B3, B8 2G: B3, B8

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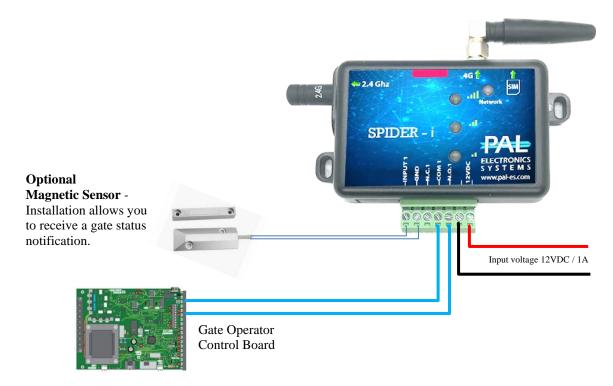


Typical wiring connection to an Electronic Lock:



Maximum load 2A/30VDC; 0.5A/125VAC

Typical wiring connection to a Gate:



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System settings using the PalGate App

ou may download our App from either the Apple App Store or from Google Play by searching for the name "PalGate". If you prefer, you can access a direct link by scanning the R codes below:

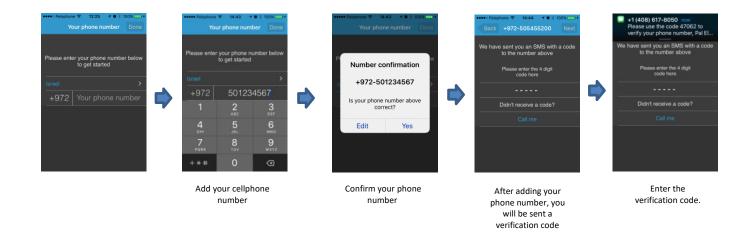








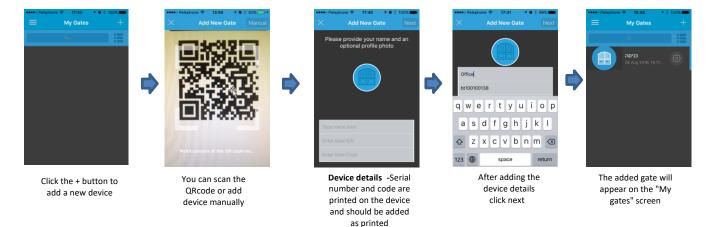
The PalGate App installation process



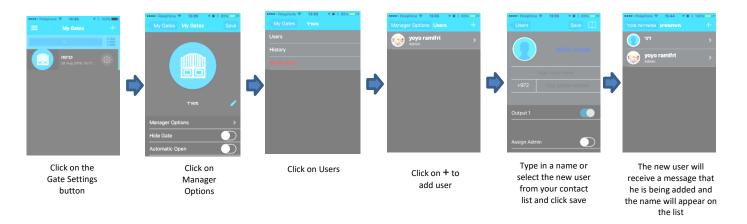
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New device setup



Add a new user



Important Information for optimal operation:

- Installation: If the device will be installed in a metal cabinet, the installer must connect an external antenna
 to the device that will reach the outside of the cabinet.
- Power Requirements: The unit requires a stable power source of 12Vdc/1A.
- **Environment:** Protect the unit from excessive humidity and prevent insect infiltration.
- Network Compatibility: The Spider Systems unit operates using 4G and Bluetooth technology. For optimal
 performance, prior to installation ensure the availability of acceptable 4G signal strength in the installation
 area. Pal Electronics Systems Ltd. is not responsible for the quality of cellular network coverage. It is the
 installer's/user's responsibility to ensure adequate 4G reception in the area.
- Maintenance: Any maintenance or repairs should only be conducted by authori ed installers.

ptional feature. Payment may apply

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