

HID® Signo™ Reader

Install Guide



13.56 MHz/125 kHz/2.4 GHz Contactless and Keypad Reader
SRD Model: 40T

Supplied parts

- HID Signo Reader (1)
- Install Guide (1)
- Flat head/countersunk 0.138-20 x 1.5" self-tapping screws (2) – for installing the reader directly to a wall (no junction box)
- Flat head/countersunk 0.138-32 x 0.375" machine screws (3) – for Imperial (US) junction box installation (2) and attaching the reader to the mounting plate (1)
- Flat head/countersunk M3.5 x 12mm machine screws (2) – for Metric (EU etc) junction box installation
- Flat head/countersunk 0.138-32 x 0.375" security screw (1) – alternative anti-tamper screw for attaching the reader to the mounting plate
- 5-pin terminal connectors, terminal strip models only (2)

Recommended parts (not supplied)

- Cable, 5-10 conductor (Wiegand or Clock-and-Data) or 4 conductor Twisted Pair Over-All Shield and UL approved, Belden 3107A or equivalent (OSDP)
- Certified LPS DC power supply
- Metal or plastic junction box
- Security tool HID 04-0001-03 (for anti-tamper screw)
- Drill with various bits for mounting hardware
- Mounting hardware
- Reader spacer or adapter plates for alternate mounting scenarios. Refer to the **Reader and Credentials How to Order Guide** (PLT-02630) for available options and part numbers at <https://www.hidglobal.com/documents/how-to-order>
- HID® Reader Manager™ app for configuration of the reader (available for download from the App Store or Google Play).

Specifications

Input Voltage (V DC)	12V DC
Standby Current AVG¹	97 mA
Max Current AVG²	100 mA
Peak Current³	250 mA
Operating Temperature	-30° F to 150° F (-35° C to 66° C)
Humidity Range	93% @ 32° C
Cable Length	Communication Lines Wiegand = 500 ft - 18 AWG (152 m) 300 ft - 20 AWG (91 m) RS-485 = Max bus length: 4,000 ft - 24 AWG (1,219 m) Max length between nodes: 1,640 ft - 24 AWG (500 m)
Regulatory Ref Number	40T
Frequency	BLE: 2.4–2.480 GHz, HF: 13.56 MHz, LF: 125 kHz
FCC IDS	JQ6-SIGNO40T
IC IDS	2236B-SIGNO40T

¹ Standby AVG - RMS current draw without a card in the RF field.

² Maximum AVG - RMS current draw during continuous card reads. Not evaluated by UL.

³ Peak - highest instantaneous current draw during RF communication.

Optional features

Tamper – Enabled by default and activated when the mounting plate is removed. The tamper is normally closed and changes to open circuit between Tamper 1 and Tamper 2 control lines. Tamper 1 and Tamper 2 control lines are interchangeable. Either of these lines can be connected with the reader ground line to reduce the number of cable cores required in the reader cable. Tamper 1 and Tamper 2 are rated 0–12VDC at 100mA.

Hold Input – When asserted, this line either buffers a card (default) or disables a card read until released, as configured.

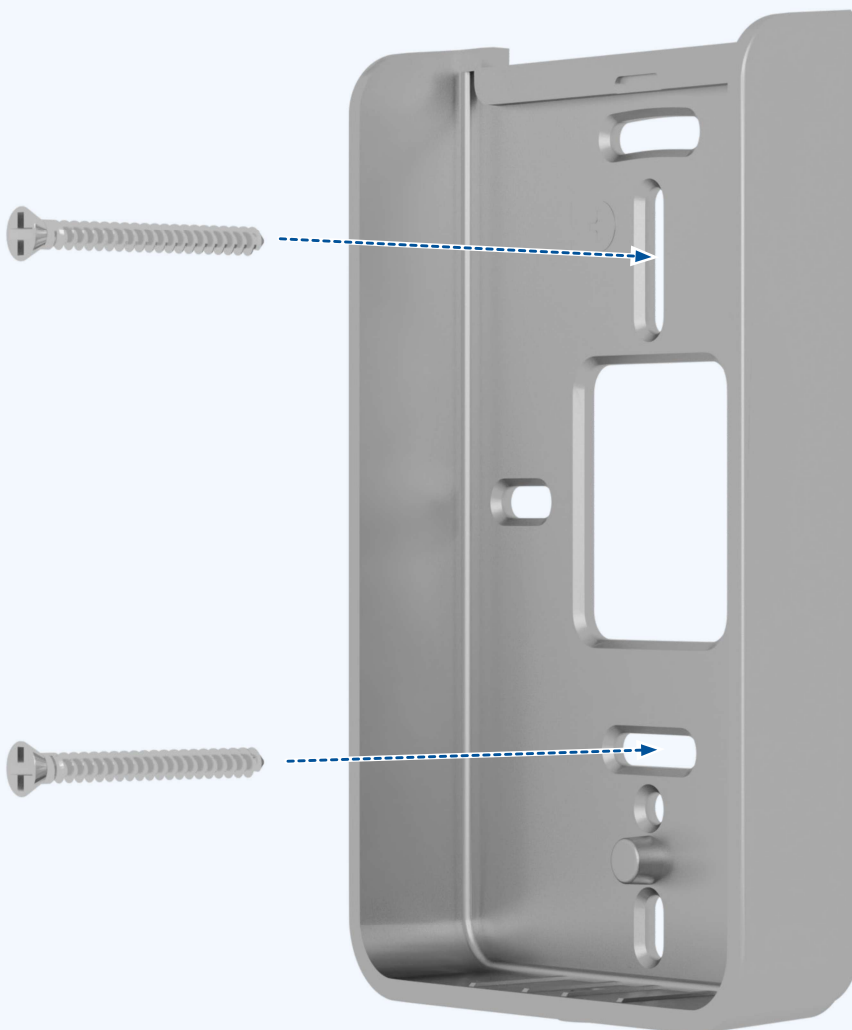
1. Mount the mounting plate



ATTENTION

Observe precautions for handling
ELECTROSTATIC SENSITIVE DEVICES

IMPORTANT: If you are mounting multiple HID Signo readers to metal stud walls, and the readers are positioned within six feet (1.8 m) of each other, refer to the additional installation recommendations in technical bulletin PLT-05722 <https://www.hidglobal.com/PLT-05722>



CAUTION: Install the reader on a flat, stable surface. Failure to do so may compromise the IP rating and/or tamper feature. If mounting on or near metal, a spacer is recommended for optimal read performance. Refer to the **Readers and Credentials How to Order Guide** (PLT-02630) for available options and part numbers.

CAUTION: Use the supplied screws to ensure correct fitting and to avoid damaging the reader or mounting plate. HID is not responsible for damage due to use of unapproved mounting hardware.

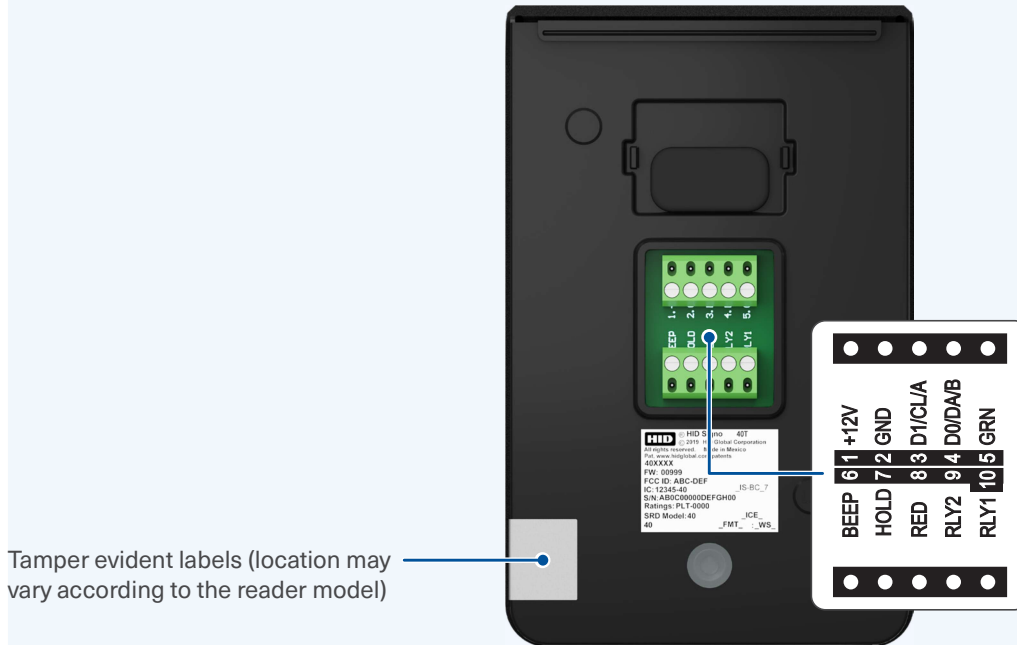
For Imperial (US):

Use supplied flat head/countersunk 0.138-32 x 0.375" screws.

For Metric (EU etc):

Use supplied flat head/countersunk M3.5 x 12mm screws.

2. Wire the reader



TERMINAL	DESCRIPTION
1	+VDC
2	Ground (RTN)
3	Wiegand Data 1 / Clock / RS485-A*
4	Wiegand Data 0 / Data / RS485-B*
5	LED Input (GRN)
6	Beeper Input
7	Hold Input / LED Input (BLUE)*
8	LED Input (RED)
9	Tamper 2 (RLY2 - 12VDC, 100mA resistive)
10	Tamper 1 (RLY1 - 12VDC, 100mA resistive)

*Dependent upon reader configuration

Notes:

- Wiring the reader incorrectly may permanently damage the reader.
- Previous iCLASS® readers had reversed RS-485 wiring (P2-7 & P2-6 - A & B). When upgrading to a HID Signo reader, ensure proper connections as defined above.
- Data 0 and Data 1 wires for Wiegand may be reused for OSDP. However, standard Wiegand cable may not meet RS485 twisted pair recommendations.
- For OSDP cable lengths greater than 200 ft (61 m) or EMF interference, install 120Ω +/- 2Ω resistor across RS-485 termination ends.
- For keypad configuration, with the keypad reader operating as 26 bit emulation, enter the facility code followed by # within five seconds of power-up. The facility code must be entered as three digits (for example, for a facility code of 10 enter 0-1-0-#). If unsuccessful, the reader LED displays solid red. Power-cycle the reader and retry entering the facility code.
- HID Signo readers use facility codes between 1-255, and no default is set. Once a facility code is entered, the reader LED displays violet, then solid red. Then, power-cycle the reader. If there are two short beeps after entering a PIN, the reader facility code is not configured. In this case, power-cycle the reader and retry entering the facility code.
- For readers with Tamper Evident Labels, inspect your reader after first unboxing. If any seals are broken, please contact HID Technical Support.

3. Secure the reader to the mounting plate



1. Hook the top of the reader on the top of the mounting plate.
2. Align the bottom of reader with the bottom of the mounting plate.
3. Secure the reader to the mounting plate using the supplied 0.138-32 x 0.375" screw.

Security/anti-tamper screw:
0.138-32 x 0.375" screw (supplied)

Non-security/standard screw:
0.138-32 x 0.375" screws (supplied)

4. Power and test the reader



Power the reader. The reader will beep and the LED will flash.



Test the reader with a credential. The reader will beep and the LED will flash.



CE Marking

HID Global hereby declares that these proximity readers are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

Por el presente, HID Global declara que estos lectores de proximidad cumplen con los requisitos esenciales y otras disposiciones relevantes de la Directiva 2014/53/EU.

HID Global déclare par la présente que ces lecteurs à proximité sont conformes aux exigences essentielles et aux autres stipulations pertinentes de la Directive 2014/53/EU.

A HID Global, por meio deste, declara que estes leitores de proximidade estão em conformidade com as exigências essenciais e outras condições da diretiva 2014/53/EU.

HID Global bestätigt hiermit, dass die Leser die wesentlichen Anforderungen und anderen relevanten Bestimmungen der Richtlinie 2014/53/EU erfüllen.

HID Global dichiara che i lettori di prossimità sono conformi ai requisiti essenziali e ad altre misure rilevanti come previsto dalla Direttiva europea 2014/53/EU.

Download copies of the Radio Equipment Directive Declaration of Conformity (DoC) at: <http://www.hidglobal.com/certifications>

Taiwan

根據NCC低功率電波輻射性電機管理辦法 規定:

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Korean KCC

항목	규격
송신주파수	RFID:13.56 MHz
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출력	RFID: 10m에서 47.544mV이하
전원	DC 12.0V
전파형식	A1D
발진방식	X-tal
변조방식	RFID: ASK, NFC: GFSK

Israel

יטוחלא הלעפּה ווישרמ רוטפו "ינשמ" סיסב לע וניה רישכמב שומישה
יטוחלא הלעפּה ווישרמ רוטפ חוקלה, דבלב חוקלה לש ימצע שומישל "קזב תלועפב" קר
רחא ינכט יוניש לכ וב תושעל אלו, רישכמה לש תירוקמה הנטנאה תא פילחהל רוסא

Singapore



Australia and New Zealand



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