Installation Guide
iCLASS Reader Models RK40 & RWK400

HID®
HID CORPORATION

PARTS INCLUDED

- 1 - *iCLASS* Keypad Reader
- 1 - Installation Manual
- 2 - 3.5mm x .6 pitch x 12mm Phillips machine screws
- 3 - #6-32 x .375" Phillips self-tapping machine screws
- 2 - #6 x 1.5" Phillips sheet metal screws
- 1 - #6-32 x .375" Spanner security screw

Recommended:

- Up to 10 wire splices *
- Cable, 9 conductor, 22AWG, shielded (Wiegand)
- Cable , 6 conductor, 22AWG, shielded (Serial)
- Linear DC Power Supply
- Metal or plastic junction box
- Security Tool (for security screw) HID 04-0001-03
- Magnetic Tamper switch - Ademco 945T, Sentrol 1038T, GRI 100T or 110T or Aleph DC-2531

* RK40 available with 18" wire pigtail or 10-pos. removable screw terminal connector. RWK400 includes 8-pos. and 10-pos. removable screw terminal connectors.
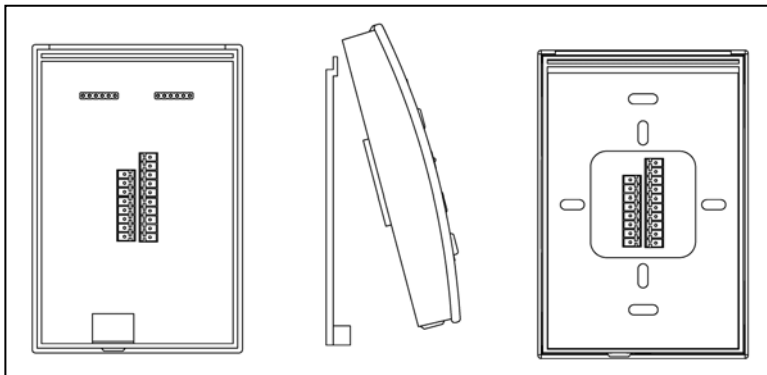
SPECIFICATIONS

- Voltage Range: 12VDC (10 - 16VDC).
- Current: 100mA avg / 220mA peak.
- Cable distance to Host: 500ft (152m) max – Wiegand.
  50ft (15m) max – RS-232.
  4000ft (1216m) max – RS-485.
- Op. Temperature: -31°F - +149°F (-35°C – +65°C)
- Open collector output: Sink – 40mA, source – 1mA.

Standards:

- Read/Write* capability in ISO 1SO 15693-2 mode with HID *iCLASS* credentials.
- Read/Write* capability in ISO 1SO 14443-B mode with HID *iCLASS* 16KS.

- Read capability of CSN/UID in ISO 1SO 14443-A1 mode with HID Mifare and other 3rd party Mifare credentials.

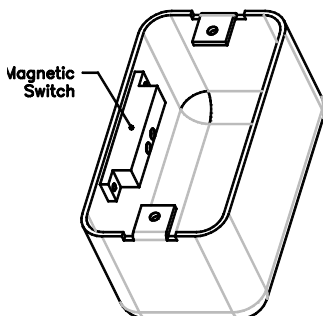* RK40 is a read only, while RWK400 is a read/write unit.
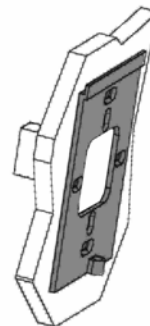
INSTALLATION

1- Disassemble

A. Remove the screw at the bottom of the unit.
B. Lift the mounting plate out at the bottom side
C. Slide mounting plate down

2- Install Tamper Switch

An internal magnet provides tamper indication when used with a magnetic reed switch connected to an external alarm system. Locate Switch behind the left side of the mounting plate, centered between the mounting holes.

Electrical Back Box
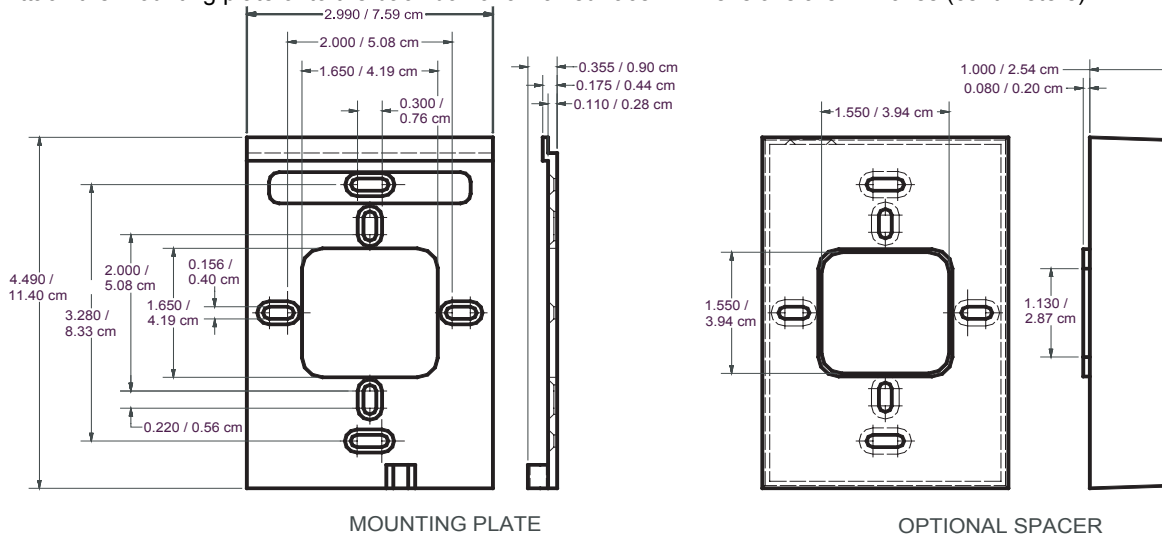

Wall Surface

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Web page - www.hidcorp.com e-mail – tech@hidcorp.com iClass Keypad Reader Install Manual 6094-901 Rev A   Page **1** of **2**

3- Install Mounting Plate

Attach the mounting plate onto the back box or a wall surface. Dimensions are in inches (centimeters).

MOUNTING PLATE   OPTIONAL SPACER

4- Connecting

Serial Port (Model RWK400 Only)		Wiegand Port (Models RK40, RWK400)		
8 Pin Terminal	Function	10 Pin Terminal	Color-coded Pigtail	Function
1	Ground	10	Violet	Open Collector[1]
2	Y / RS-232 TX	9	Blue	Hold[1]
3	Z	8	Yellow	Speaker[1]
4	Ground	7	Drain	Shield Ground[2]
5	RS485B / RS-232 RX	6	Brown	Red LED[1]
6	RS-485A	5	Orange	Green LED[1]
7	Ground	4	White	Data 1
8	DC+	3	Green	Data 0
		2	Black	Ground
		1	Red	+DC (10-16 VDC)[3]

[1] Optional Connections

[2] Drain wire can be used for data return line when a separate power supply is used.

[3] +DC, Return & Drain wires are common between the Wiegand and Serial Ports.

[4] In RS-485 mode, pin 2 must be connected to pin 6 and pin 3 must connected to pin 5 with jumpers at the connector.

5- Testing

A. Turn Power On – Watch the sign-on LED and hear the speaker tone sequences.
B. Read Card – Present a valid card to the reader and verify the visual and audio feedbacks.

6- Mounting

Reverse the procedure in step 1 to attach the unit to the mounting plate.

Optional Features

RS232/485 interface/Host Mode - for applications requiring a serial link. See Protocol Document 6090-902 for information

Open Collector Output – controls an external device (13.8VDC Max). See *iCLASS* Application Note for details

Configuration Options - Configure LED, Speaker, and other features. See How To Order Guide or *iCLASS* Application Note for details

Hold Input – when asserted, this line either buffers a card read or disables a card read until released, as configured.

FCC WARNING:

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