ACL805SUW-RDPX

Reader Installation Sheet

EN

Surface Mount Keypad with EM/CASI/HID Proximity reader

Figure 1: Angled front view

Description

The **ACL805SUW-RDPX** is a Multiprotocol digital keypad and proximity reader for access control applications with backlit keys and a selectable output protocol. These surface mount readers includes a buzzer and a tri-color LED for state indication (access granted, access denied or idle).
The ACL805SUW-RDPX is capable of reading Casi Rusco, EM and HID.

Mounting

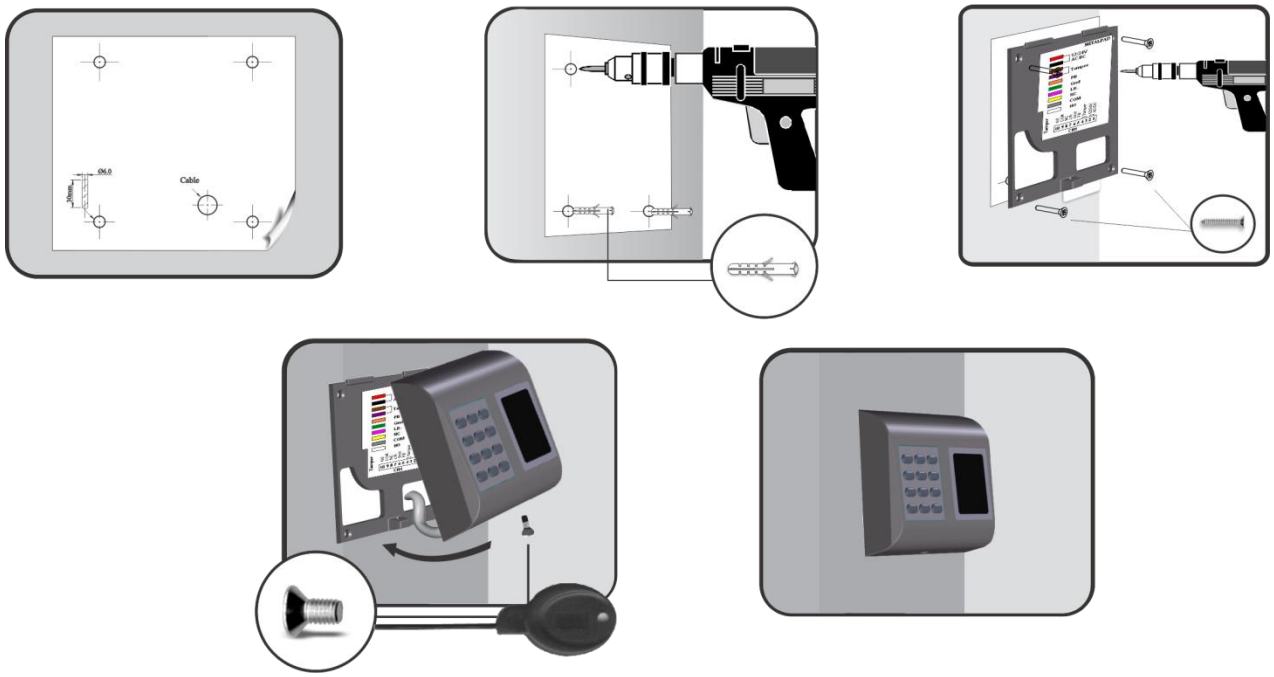

Figure 2: Mounting instructions

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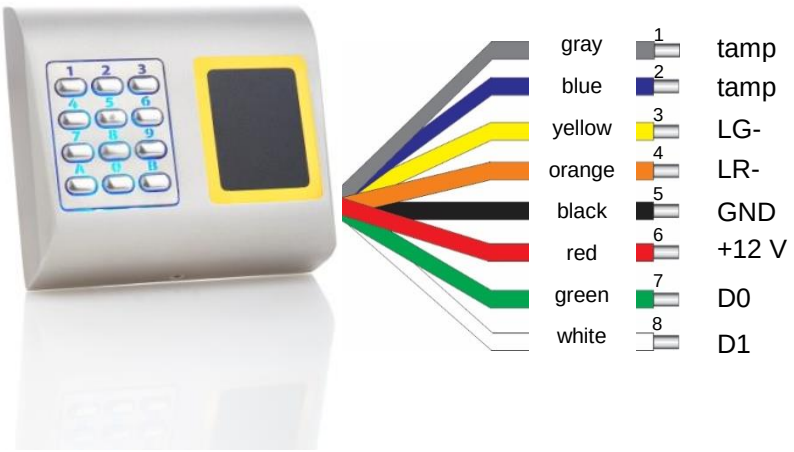
Wiring



1	tamp	Tamper
2	tamp	Tamper
3	LG-	LED Green minus
4	LR-	LED Red minus
5	GND	Ground
6	+12 V	9 to 14 VDC
7	D0	Data 0
8	D1	Data 1

Figure 3: Wiring instructions

Specifications

Operating voltage	9 to 14 VDC
Current consumption	110 mA at 12 VDC
Interface Proximity Reader	Wiegand according to the card type Wiegand 32 bit : **EM410x Cards** Wiegand 40 bit : **Casi-Rusco** Automatic Wiegand - **HID Cards**
EM410x Wiegand 32 description	**32 data bits** Pulse width: 100 µs Pause: 1 ms **Wiegand for EM410x Cards**
Casi-Rusco Wiegand 40 description	**even parity + 38 data bits + odd parity** Pulse width: 100 µs Pause: 1 ms P1 = even parity calculated over the bits 1 to 19 P2 = odd parity calculated over the bits 0 to 39 **Wiegand for Casi-Rusco cards**
HID Wiegand 26 – 37 bit	Automatic Wiegand according to the HID card type
Interface Keypad	Wiegand 26, 30, 34, 40, 42, 58 bit, 8 bit per key, 6 bit per key, 4 bit per key
Wiegand 26 description	**even parity + 24 data bits + odd parity** Pulse width: 100 µs Pause: 1 ms P1 = even parity calculated over the bits 2 to 13 P2 = odd parity calculated over the bits 14 to 25
Wiegand 30 description	**even parity + 28 data bits + odd parity** Pulse width: 100 µs Pause: 1 ms P1 = even parity calculated over the bits 2 to 15 P2 = odd parity calculated over the bits 16 to 29
Wiegand 34 description	**even parity + 32 data bits + odd parity** Pulse width: 100 µs Pause: 1 ms P1 = even parity calculated over the bits 2 to 17 P2 = odd parity calculated over the bits 18 to 33

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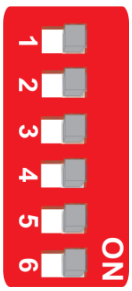
Wiegand 40 description	**even parity + 38 data bits + odd parity** Pulse width: 100 µs Pause: 1 ms P1 = even parity calculated over the bits 2 to 20 P2 = odd parity calculated over the bits 21 to 39
Wiegand 42 description	**even parity + 40 data bits + odd parity** Pulse width: 100 µs Pause: 1 ms P1 = even parity calculated over the bits 2 to 21 P2 = odd parity calculated over the bits 22 to 41
Wiegand 58 description	**even parity + 56 data bits + odd parity** Pulse width: 100 µs Pause: 1 ms P1 = even parity calculated over the bits 2 to 29 P2 = odd parity calculated over the bits 30 to 57
Wiegand 8 bit per key description	**8 data bits (sent on each key press)** Pulse width: 100 µs Pause: 1 ms
Wiegand 6 bit per key description	**6 data bits (sent on each key press)** Pulse width: 100 µs Pause: 1 ms
Wiegand 4 bit per key description	**4 data bits (sent on each key press)** Pulse width: 100 µs Pause: 1 ms
PIN Code length	1 to 8 digits
LED control	Yes, by wires
LED	Green : Externally controlled Red : Externally controlled Orange : Idle, Key press and Menu
Tamper	Yes
Cable distance	50 m according to Wiegand standard
Panel connection	Cable, 1 m
Material of design housing	ABS
Dimensions (W x H x D)	100 x 94 x 30 mm
Operating Temperature Relative humidity	−20 to +50°C 0 to 95% noncondensing
IP rating	IP65
Color	-S = Silver, -G = Grey
Weight (shipping) Weight (product)	550 g 250 g

DIP switch settings – Proximity Reader

1.**Backlight** in idle mode ON/OFF
2.**Buzzer** on card read ON/OFF
3. not used
4.**Enable HID** (ON_OFF)
5. **Enable EM** or **CASI** (ON_OFF)
6. Select **EM** or **CASI**
(ON-EM; OFF-Casi Rusco)



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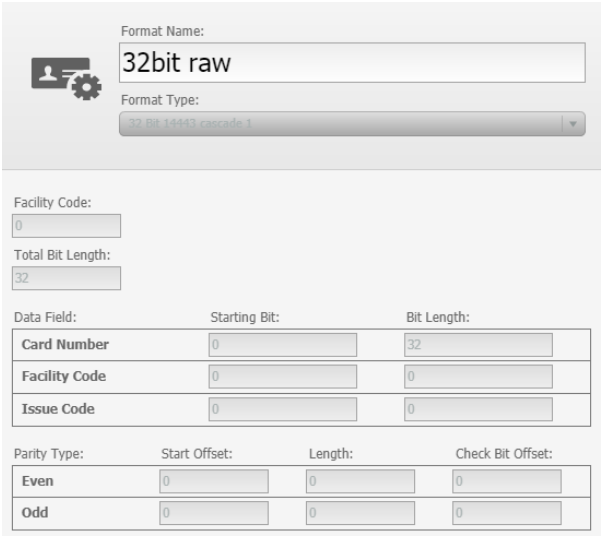
Card type selection

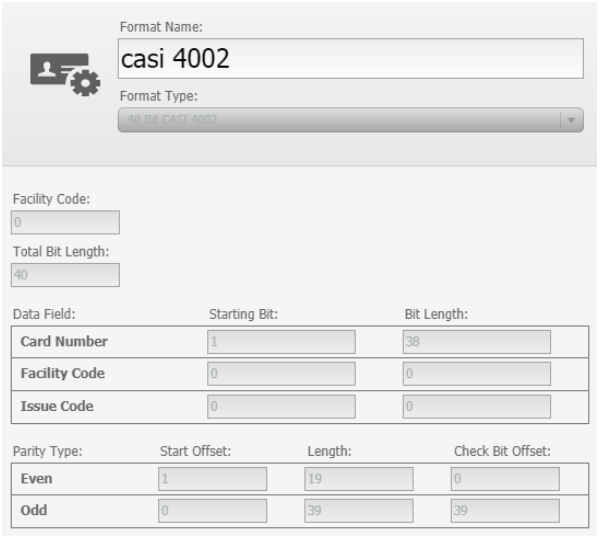
HID only | HID and EM | HID and Casi | Casi only | EM only

Settings in TruPortal Software

Go to System Administration/Card Formats. Select the Wiegand format that corresponds to the card type:

- 32 bit 14443 cascade 1 for EM Cards
- 40 bit CASI 4002 for Casi-Rusco Cards
- The HID formats available for HID Cards

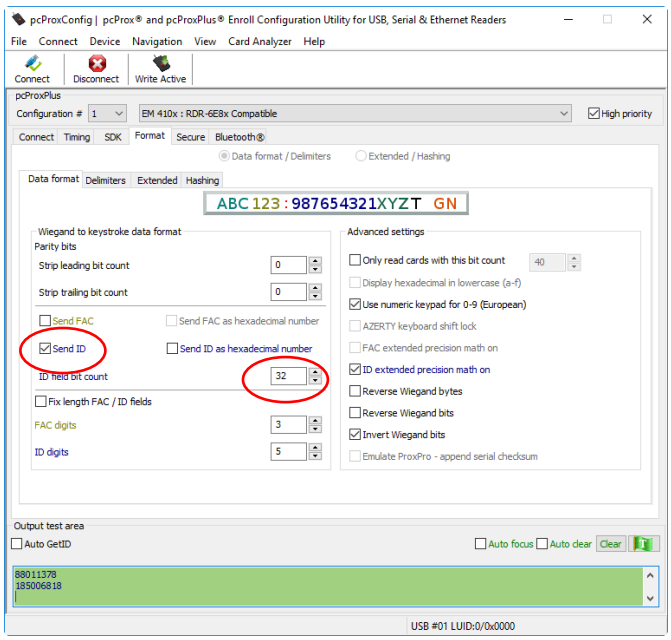




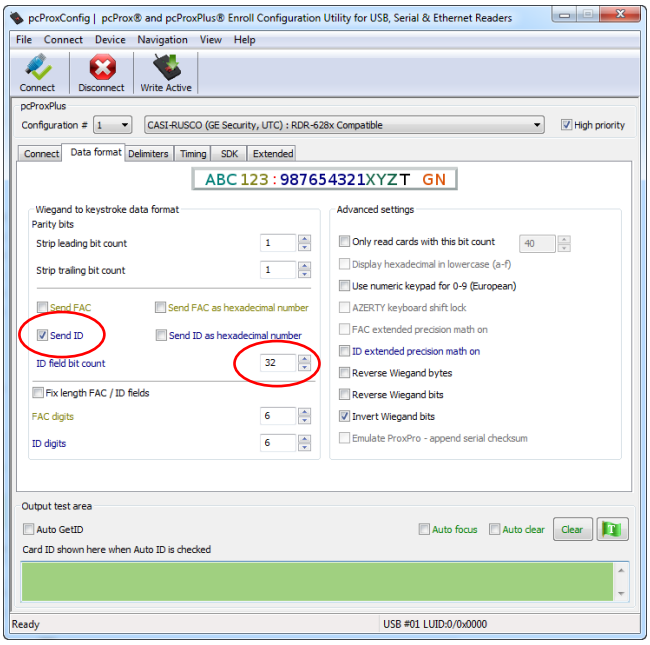
Settings in pcProxConfig Software

Select Casi Rusco (GE Security, UTC) or EM 410x or some of the available HID formats as card type.
Use these settings in the pcProx Config Software when reading the card via the TP-RDR-LRN desktop Reader.

EM



Casi Rusco



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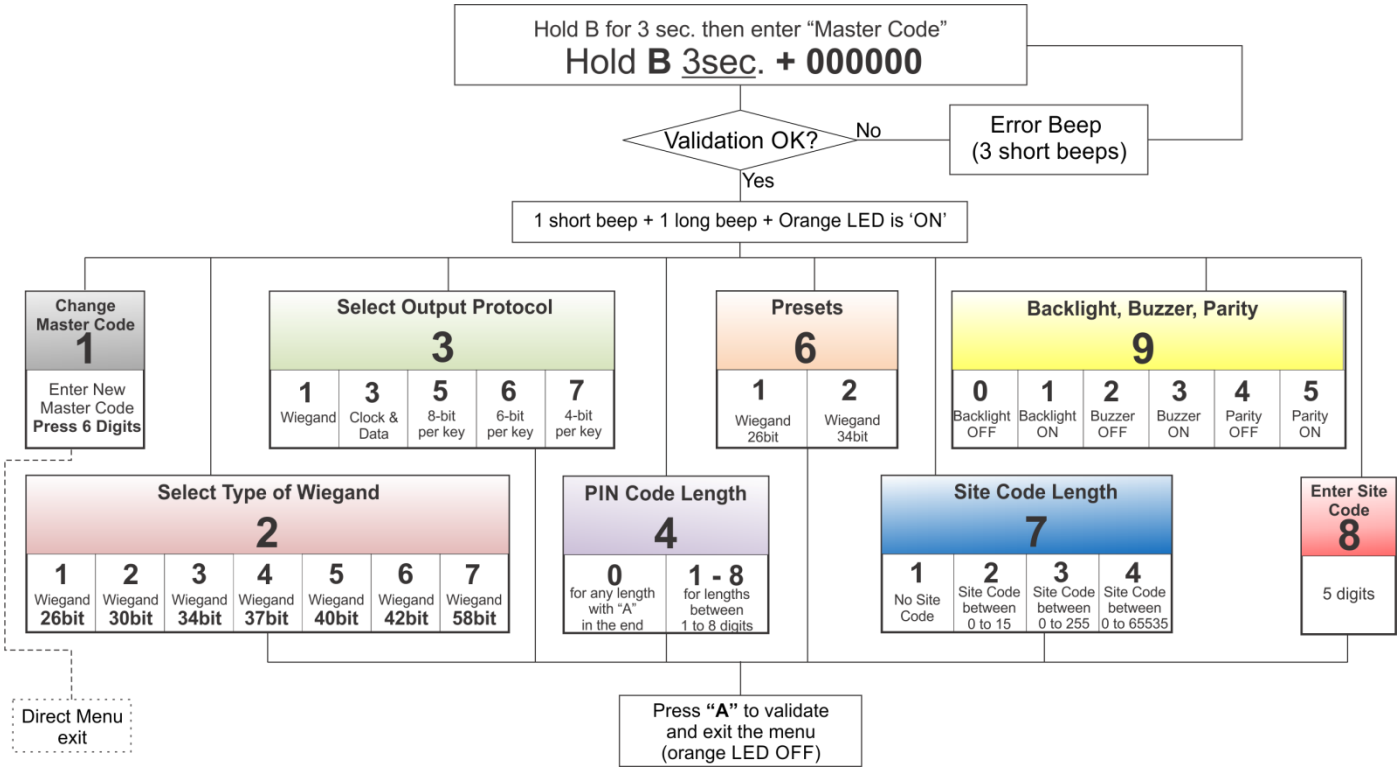
Keypad programming flowchart



Entering Menu is always done with B(3 s) + 000000 if the Master Code is not changed.

Submenu 1 - Change Master Code. The Master Code must be 6 digits. After enrolling new Master Code the ACL875W automatically exits the Menu and the new master code must be typed to enter the menu.

Submenu 2 - Select Type of Wiegand. The Wiegand selected must be the same as the controller's Wiegand Input where the ACL805SUW-RDPX Keypad is being connected. Example: If you use a controller that recognizes Wiegand 34 bit, then enter the menu of ACL805SUW-RDPX, press 2, then press 3.

Submenu 3 - Select Output Protocol. Keypad have the following outputs:

3-1 Single Wiegand - Keypad will send code in Wiegand format

3-3 Clock & Data - Keypad will send the code in Clock & Data format

3-5 8 bit per key - Each key press will be sent as 8 bit data immediately. Key press will be sent as following table:

Key	0	1	2	3	4	5	6	7	8	9	A	B
Wiegand output	240	225	210	195	180	165	150	135	120	105	90	75

3-6 6 bit per key - Each key press will be sent as 6 bit data immediately.

3-7 4 bit per key - Each key press will be sent as 4 bit data immediately.

Submenu 4 - PIN Code Length. If "0" is selected, then any PIN Code with any length can be sent, but the PIN Code is typed with "A" for confirmation (ex. 123 + A). If 1 to 8 is selected the PIN Code length is set by the number selected.

Submenu 6 - Presets. The Presets are set of preprogrammed parameters for easy programming.

6-1 "Wiegand 26 bit Normal" - Type: Wiegand 26 bit; Output: Single Wiegand; PIN Length: 4 digits;
6-2 "Wiegand 34 bit Normal" - Type: Wiegand 34 bit; Output: Single Wiegand; PIN Length: 4 digits;

Submenu 7 - Site Code Length. Set the code length sent to Host. Default is "0". To be used only in specific cases.

Submenu 8 - Enter Site Code. Put the site code always in 5 digit format (ex. 00170).

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Submenu 9 - Turns ON/OFF the backlight in idle mode, buzzer on key press, parity bit.

Reset Master Code

1. Disconnect Power
2. Press and hold “A” and reconnect Power.
3. Hold the “A” Key for at least 3 seconds.

Default Master Code: **000000**

Manufacturer	UTC Fire & Security Americas Corporation, Inc. 1275 Red Fox Rd., Arden Hills, MN 55112-6943, USA Authorized EU manufacturing representative: UTC Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, Netherlands
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Certification and Regulatory information	CE This product herewith complies with requirements of EMC directive 2014/30/EU, Radio Equipment Directive 2014/53/EU. In addition it complies with RoHS directive EN50581:2012
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