

Keypad mode setup

Within one minute of reader reset, enter the keypad config code: *88889999. The reader beeps three times, LED flashes amber for each beep. Within 2 seconds of entering the keypad config code, press the corresponding key code below for the desired format. The reader then beeps three times, LED flashes amber for each beep.

4-Bit Format	8-Bit Format	26-Bit Format
*4	*8	#077

Note:

- Readers must be powered by a compatible UL Listed, power limited, access control panel rated 5 – 16 VDC.

Approvals

EN302291, EN301489, EN300330, IP55, UL294

Patents

US9558377 & US9747738B1

Notices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARNING: This product can expose you to chemicals including arsenic, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov



Single Gang Reader Single Gang Reader with Keypad Installation Guide

ADC-AC-ET20

ADC-AC-ET25

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210610 Rev 3.2

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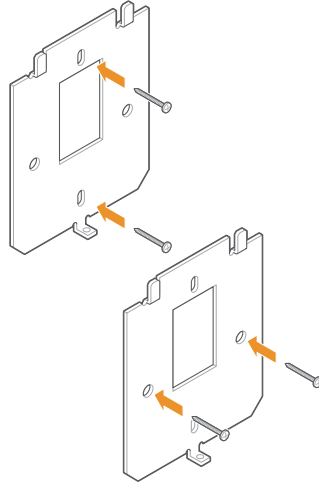
Single Gang Reader

Single Gang Reader with Keypad

The ADC-AC-ET20/25 Single Gang Reader offers a modern aesthetic and a state-of-the-art feature set. Standard technologies include Proximity (125 kHz), NFC (13.56 MHz), and Bluetooth®. The ADC-AC-ET20/25 is fully OSDP™ compliant and are enabled for Secure Channel. Additionally, the reader offers a patented feature called OSDP Auto-Detect. The reader communicates OSDP and Wiegand over the same wires to automatically detect and convert to OSDP Secure Channel protocol, eliminating the need to rewire or reconfigure the reader.

1 Mount the wall plate

Connect the wall plate to the single gang box using the provided #6 screws. Alternatively, the reader can be mounted using the provided #4 screws in the four outer holes for other installation requirements. Drywall installations will require molly bolts.



4 Power and test the reader

Power the reader and wait for the power up LED beep sequence to complete. Present a valid credential to the reader and the light-bar will turn green. If the test fails, check the wiring.

Installation tips

- When connecting the reader to a Wiegand panel connect the Green wire to Data 0 and the White wire to Data 1.
- When connecting the reader to an OSDP panel connect the Green wire to RS485A, and the White wire to RS485B.
- For an OSDP system, verify that the panel is successfully communicating with the reader prior to reading a badge or pressing a key.

Wiegand/OSDP Tips

- By default, the reader will transmit credential and keypad data in Wiegand communication mode.
- Upon each power up, and before the reader reads a credential or a key is pressed, the reader will be listening for an incoming OSDP message. If a message is received during this period, the reader will automatically switch to OSDP-only communication mode.
- To return to OSDP auto-detect mode (default mode), tilt the reader 45 degrees to simulate tamper and cycle power in this state. The power up sequence should indicate OSDP auto-detect with 4 beeps.

2 Wire the reader

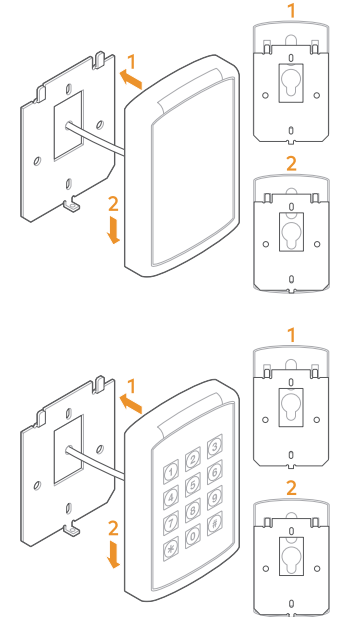
Common Cable Connections		
Red	Power In	
Black	Ground	
Shield	Shield Ground	
Brown*	Tamper Out	
Yellow*	Beeper Control	
Blue*	Green LED Control	
Orange*	Red LED Control	
	Wiegand	OSDP
White	CLK/Data 1/TR+	DAT/Data 0/TR-
Green	DAT/Data 0/TR-	CLK/Data 1/TR+

Max Length to Panel		
Wiegand		
Length	AWG	
200' (60 m)	22	
300'	20	
500'	18	
	OSDP 9600 Baud Power 12 VDC	
1000'	22 AWG Twisted Pair	
	Current @ 12 V and 25 C	
	Avg. mA	Max. mA
ADC-AC-ET20: 118	ADC-AC-ET20: 169	
ADC-AC-ET25: 143	ADC-AC-ET25: 193	

* These wires are only used in Wiegand readers.
 ** All wiring methods used shall be in accordance with the National Electrical Code, ANSI/NFPA 70

3 Secure the reader to the wall plate

- Align the reader so that the tabs of the base plate slide into the slots on the wall plate.
- Slide the reader into position.
- Secure the reader to the mounting plate using the supplied #4-40 screw or pin-in-Torx.



Reader Startup Sequence

Upon a power reset, the Alarm.com Readers provide a reset sequence using the LED indicator and the beeper, to provide information about the reader type and its communication mode. The first sequence (sequence A) describes the credential technologies built in the reader: First, a silent LED sequence will indicate the supported RF protocols. Both LEDs turn off for 250 milliseconds.

Bluetooth	NFC	Prox
Beeper Silent, Red LED on for 500 milliseconds	Beeper Silent, Green LED on for 500 milliseconds	Beeper Silent, Amber LED on for 500 milliseconds

After the above sequence identifies the supported RF protocols, the reader will then indicate the supported host communication using beep/flash sequences. Then beeper and both LEDs turn off for 250 milliseconds.

Wiegand	OSDP	Auto-Detect
Beep and Blink Red LED once for 200 milliseconds	Beep and Blink Green LED twice for 200 milliseconds each	Beep and Blink Green LED 4 times for 200 milliseconds each