

APEX Reader Installation Guide

(EN) Included Parts:

Reader and mounting Wall Plate
 #6 Machine Screws – QTY 2 (Wall Plate Screws)
 #6 Self Tapping Screws – QTY 2 (Wall Plate Screws)
 #6-32 Phillips Screw (Security Screw)
 #6-32 Pin-in-Torx Screw (Security Screw)

Tools Needed (Not Supplied):

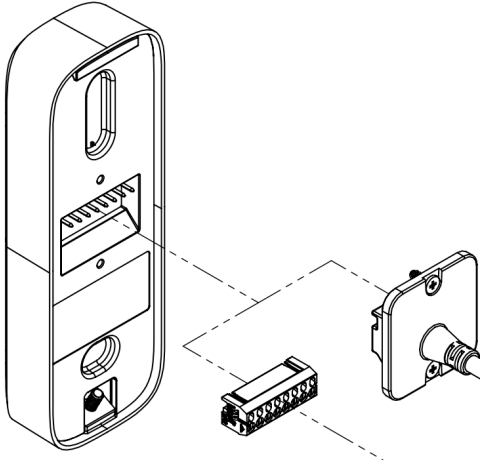
Phillips Screwdriver
 1" (25mm), 1/8" (3.175mm) drill bits
 T6 Security Torx Bit (optional for increased tamper detection)
 #6-32 Tap if required

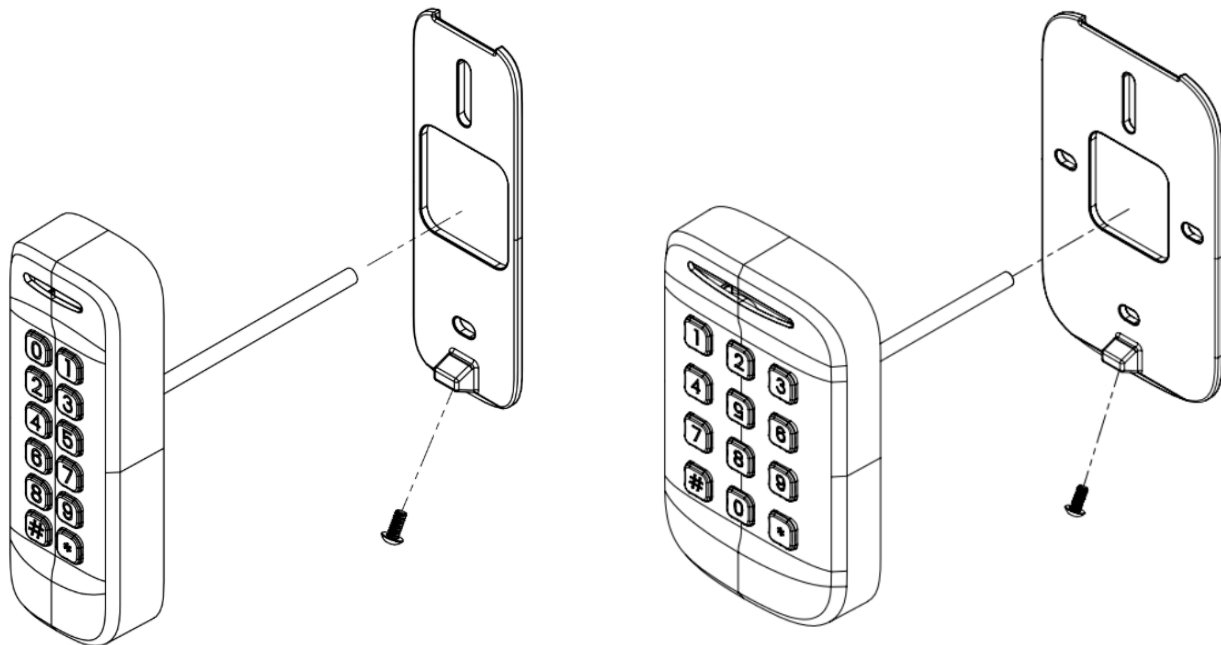
(FR) Pièces incluses:

Lecteur et plaque murale de montage
 #6 vis mécaniques – QTE 2 (Vis de plaque murale)
 #6 vis autotaraudeuses – QTE 2 (Vis de plaque murale)
 #6-32 Vis Phillips (Vis de sécurité)
 #6-32 Vis Pin-in-Torx (Vis de sécurité)

Outils nécessaires (non fournis) :

Tournevis Phillips Forets de
 1" (25mm), 1/8" (3.175mm) Embout Torx de sécurité
 T6 (optionnel pour une détection accrue des manipulations) Taraud
 #6-32 si nécessaire

Wiring			Wiring is done with the terminal block or the pigtail (sold separately)
Pin	Color	Description	
1	Red	5-24 VDC	
2	Black	Ground	
3	Green	Wieg D0/OSDP RS485A	
4	White	Wieg D1/OSDP RS485B	
5	Orange	Red LED Control	
6	Brown	Tamper Out	
7	Yellow	Buzzer Control	
8	Blue	Green LED Control	
(EN) All wiring methods used shall be in accordance with the National Electrical Code, ANSI/NFPA 70 and local codes. Readers must be powered by a compatible UL Listed, limited power source, access control panel rated 5-24VDC. (FR) Toutes les méthodes de câblage utilisées doivent être conformes au Code National de l'Électricité, ANSI/NFPA 70 et aux codes locaux. Les lecteurs doivent être alimentés par un panneau de contrôle d'accès compatible, homologué UL, à puissance limitée, et évalué pour 5-24VCC.			*Pigtail connection not tested by UL



The wallplate must be mounted with two of the provided screws, and the bottom security screw to be torqued to 8 inch-lbs

	Mullion AX-10	Mullion & Keypad AX-15	Single Gang AX-20	Single Gang & Keypad AX-25
Summit Radios	125 kHz Prox, 13.56 MHz NFC, and BLE Credentials and Configure App			
Apex Radios	13.56 MHz NFC, and BLE Configure App			
Voltage	5-24VDC			
Average / Max Current @12V	65mA / 95 mA	71 mA / 101 mA	84 mA / 125 mA	96 mA / 141 mA
Temperature	UL294 Tested -35C to 66C and EN -40C to 70C and 95% humidity			
Cable Length	Wiegand: 500 feet with 18 AWG Wiring OSDP RS485 (powered at 12VDC): 1000 feet with 22 AWG Twisted Pair			

Startup Sequence		
On power up, the Apex readers provide a LED and beeper sequence to provide information about the reader type and its communication mode. The first sequence describes the RF Technologies		
Summit (HF + Prox + BLE)	Ascent (HF + BLE)	
3 Green LED Flashes	2 Green LED Flashes	
The second sequence indicates the Wiegand / OSDP Mode		
Wiegand Only	OSDP Only	Auto-Detect
Beep and Blink Red LED Once	Beep and Blink Green LED 2 Times	Beep and Blink Green LED 4 times

Wiegand Keypad Mode Setup		
Within one minute of reader reset, enter the keypad config code: *88889999. The reader beeps three times, LED flashes green 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 green for each beep.		
4-Bit Format	8-Bit Format	26-Bit Format
*4	*8	#XXX

*Keypad formats not tested by UL

Additional technical and troubleshooting info can be found by scanning the QR Code

Performance Levels:

Destructive Attack: I

Line Security: I

Endurance: I (125 kHz, 13.56 MHz), I (BLE)

Standby Power: I

Approvals:

EN302291, EN301489, EN300330, IP65, UL294

Patents -

US9558377, & US9747738B1

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by Wavelynx Technology, LLC could void the user's authority to operate the equipment.

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. For MS1 rating, equipment should not be installed above 2 meters.

Consult the dealer or an experienced radio/TV technician for help. This telecommunication equipment conforms to NTC technical requirement This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: 1. This device may not cause interference. 2. This device must accept any interference, including interference that may cause undesired operation of the device. L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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. 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Pour la classification MS1, l'équipement ne doit pas être installé à plus de 2 mètres.

