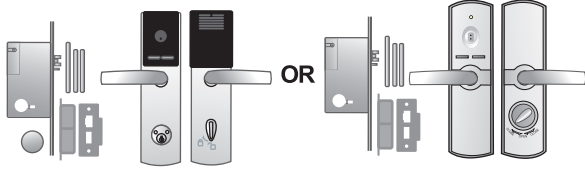


Contents

1 AR-321D / AR-323D



2 User Guide



3 Keys



4 CR1220 Lithium battery



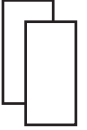
(Equipped)

5 Screws



2 x hex cap screws
2 x hex socket screws
1 x alley key

6 Stickers

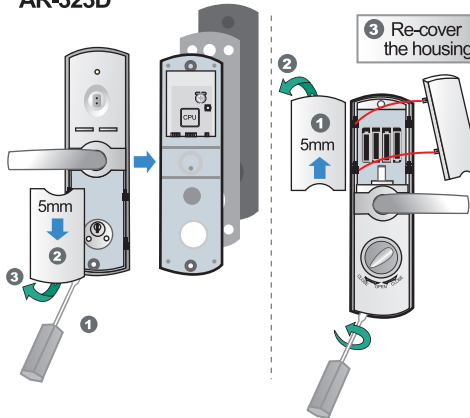


Battery replacement

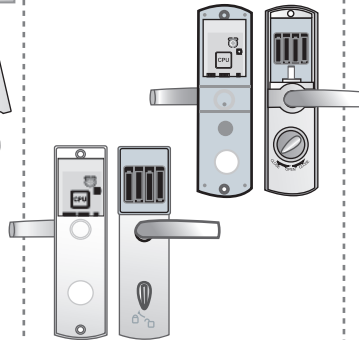
1 AR-321D



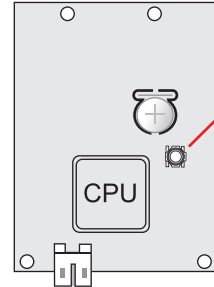
AR-323D



2 Low battery warning: 5 beeps when flashing a card



3 Ensure AA alkaline batteries are fresh and electrified before replacing lithium battery.



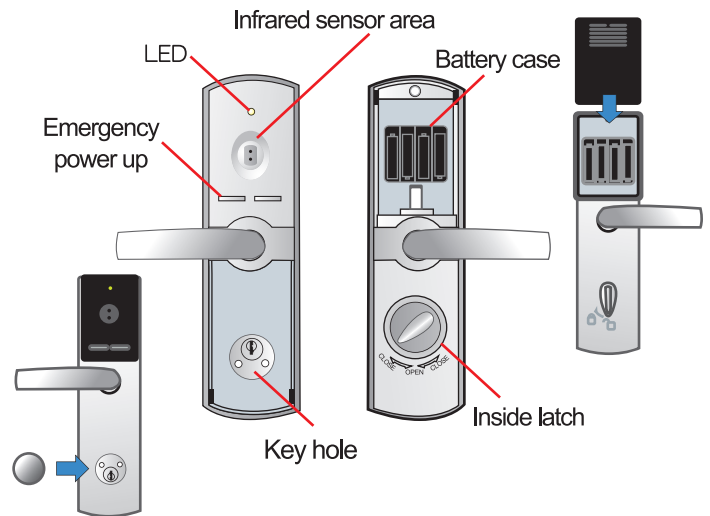
Factory reset button (activates only when power on and red light on while reset)

When the 3rd AA battery loaded in the battery case, press and hold it till the 4th battery is in.

Main features

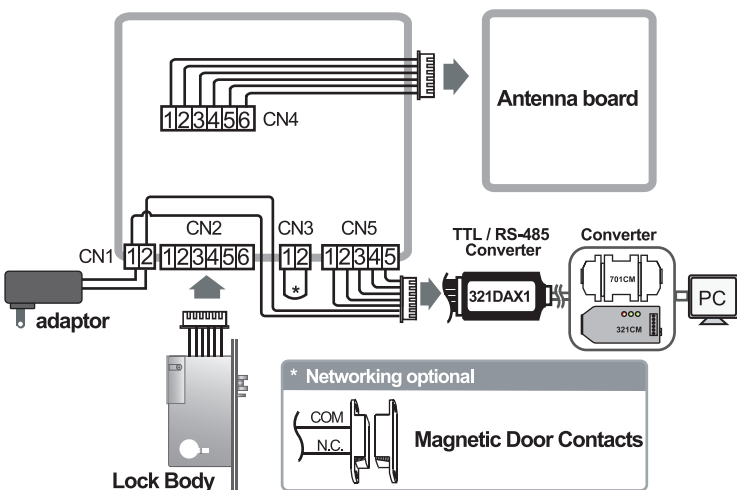
- Networked locking system and stand-alone supported
- SOR function provided:
 - expiry date setup
 - stored value capability
 - global access control with built-in commands
- Built-in Real Time Clock (R.T.C.)
- Door alarm output:
 - non-stop beeping after 6 seconds when door closed improperly
 - non-stop beeping after 3 seconds of attempting to force door
- A pair of mechanical keys for emergency override use
- 9V battery for emergency override use while power failed. Once powered, flash card to access.
- Infrared design for energy saving purposes. RF deactivates if blocked by an object for more than 5 seconds. (It reactivates when clear).
- N.O. & N.C. setting provided but N.O. setting will be deactivated once inside latch is locked up. For emergency use, door can be opened from inside even though inside latch is locked up.

Front Panel Indicators

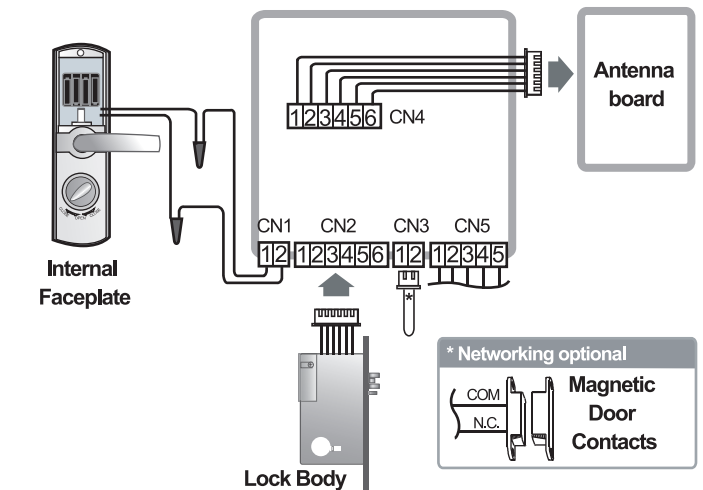


Wiring

networking



stand-alone



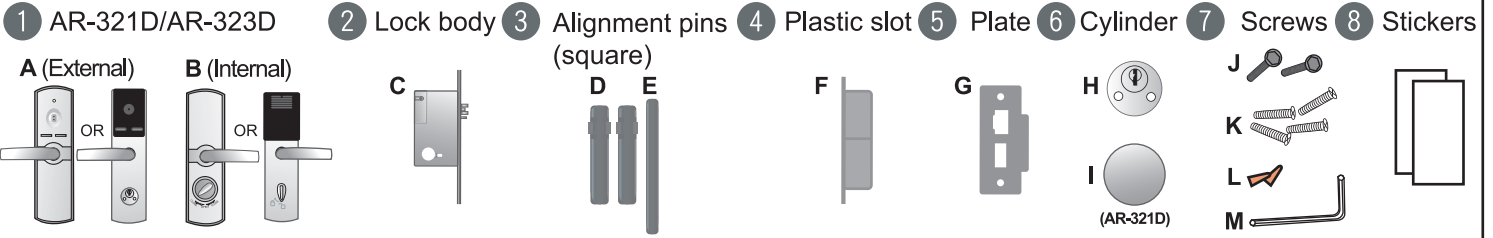
Connectors		
CN1 - Power		
Wire Application	Wire	Color
VBAT	1	Red
GND	2	Black
CN2 - Signal of lock		
Wire Application	Wire	Color
M- Out	6	Red
M+ Out	5	Black
SW COM	4	Brown
Door DI	3	Blue
Lock DI	2	Yellow
Key DI	1	White
CN3		
Wire Application	Wire	Color
SW COM	1	-
Int Lock	2	-
CN4 - Atena board		
Wire Application	Wire	Color
VBAT	1	Red
GND	2	Black
ANT-	3	Blue
GND	4	Black
ANT+	5	Purple
DAT	6	White
CN5 - UART		
Wire Application	Wire	Color
6V	1	Red
GND	2	Black
TE	3	Gray
GND	4	Black
J1	5	Brown
TX	6	Yellow
RX	7	Orange

Specification	
Material	Zinc alloy + aluminum plate + baked painting (AR-321D) Zinc alloy + plastic plate + baked painting (AR-323D)
Door Thickness	35mm~45mm
Supply Voltage	6VDC (LR6-AA*4, 2500mAh)
Lifetime of Battery	1 year (6 times operation per day)
Power Consumption	<40uA (Idle state)
Operating Environment	-20 C ~ 50 C
Operating Humidity	15% ~ 95%RH
Weight	3.2 kg (AR-321D) / 3.5Kg (AR-323D)
Indicators	One bi-color LED One buzzer Conditions : 1.Green LED + 1 beep : operation ok 2.Green LED + 7 beeps after card presented : inside latch is locked up 3. Red LED + 2 beeps : operation error 4. 5 beeps after card presented : low battery warning
Unlock	Smart Card, Mechanical Key
Door Hands	RH/RHR/LH/LHR (Optional)
Frequency	Mifare 13.56MHz (ISO14443A)
Reading Range	0~2cm
Respond Time	<1.5 sec.
Low Battery Voltage Warning	Yes (<5.3VDC)
Low Battery Voltage Solution	Capability to connect an external 9VDC power supply
Networking Capability	Extra on-line module

Indication Chart	
Beep	Status
1	Accepted (Identification conformed)
2	Denied (Identification does not conform)
	Keycard doesn't comply with Soyol Open System Rule Message read from reader failed
3	Invalid time zone
	Incorrect reading failed via SOR commands: Keycard expired Insufficient value amount Execution failed Incorrect authorized area (distributor code)
Beep	Status
4	Blacklist keycard
	Data of keycard conformed but failed in writing to memory buffer area
5	Identification conformed but deduction failed
	Identification conformed but violated anti-pass-back rule Message successfully read from reader
6	Incorrect pin code
	Keycard is not issued by SOR
7	Global access conformed but inside latch is locked up
	RS-485 communication failed (disconnected or weak signal) Internet connection failed
9	Memory in system breaks down

Troubleshooting		
Status after keycard presented	Caused by	Solution
2 beeps, red light on (invalid while card presented)	1. invalid keycard	Present a valid keycard
	2. range of date incorrect	Re-setup the keycard
	3. belongs to another door number	Go to compatible door number
	4. Not issued by SOR	Present a keycard issued by SOR
1 beep, green light on (door unopened while turning handle with click)	1. rotor turning direction incorrect	Rectify direction
	2. coil springs back	Rectify or replace it if coil is too long
1 beep, green light on (no click while turning)	1. no signal	circuit failure Replace circuit board terminal cables loose Re-plug in and direction test required
	2. with signal; coil failure	Replace circuit board and inspection required
	3. coil reverse (didn't test after replacing base board or coils)	Adjust direction of connector attached on circuit board
No beep, no light signal (by presenting any keycards)	1. battery loose	Re-position battery properly
	2. incorrect battery polarity	Re-position battery properly
	3. wires disconnected	Emergency power up with 9V battery
7 beeps, red light on (questions relate to inside latch)	1. with authorization to open inside latch but door remains unopened	Internal checking of switch, cables and transmission shaft of lock case
	2. shifting switch breaks	Check if indicator switch breaks
5 beeps, green light on	Low battery warning	Replace battery with specific screwdriver

Contents



Attention

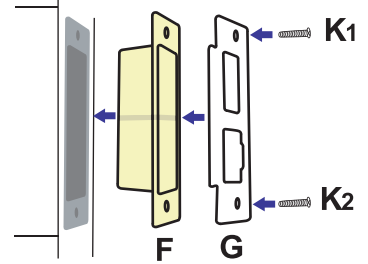
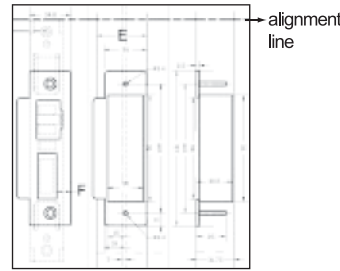
Before installation please check which door hand you require

※Type of Door Hand and Part Number (How To Order) AR-321DD ☒ / AR-323DD ☒

	RH		RHR		LH		LHR	
US	A	P	B	Q	C	R	D	S
EU	E	T	F	U	G	V	H	W

Door Jamb Assembly

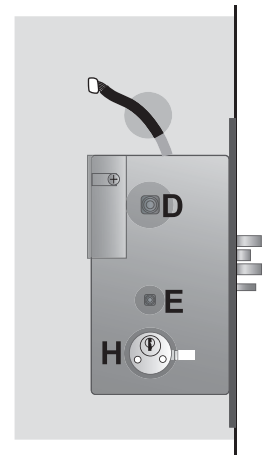
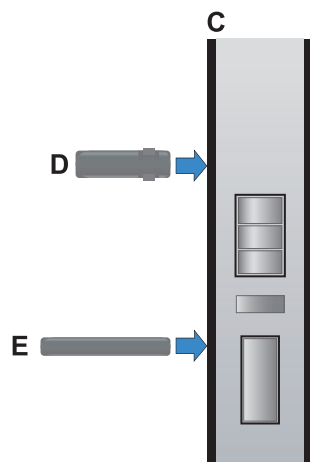
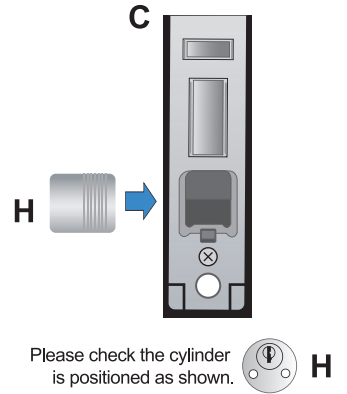
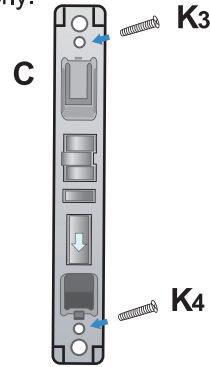
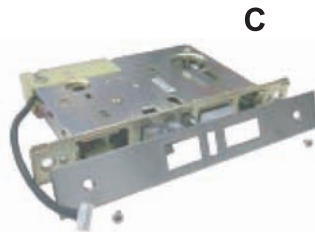
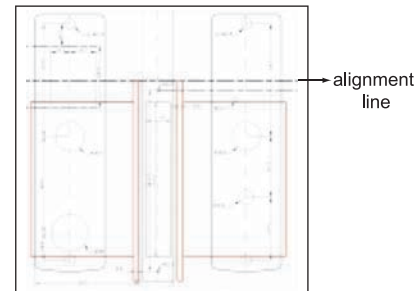
1. Tape the door jamb sticker to the door jamb and lining the jamb's alignment line with the door frame's alignment line before making cuts for the face of the lock body.
2. Use the screws provided after placing the plastic slot and the plate in order.



Door Frame Assembly

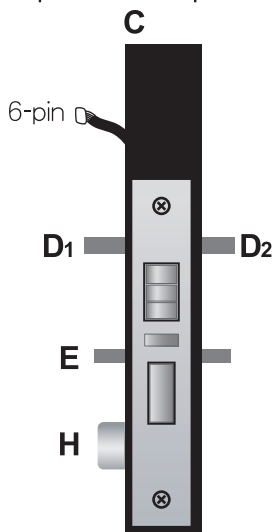
1. Tape the door frame sticker to the door frame and lining the jamb's alignment line with the door frame before making any cuts.
2. Unscrew the screws on the lock body to take off the faceplate.
3. Install the lock body into the door frame with the latch downward. Use the screws to fix it in the door frame properly.
4. Install the cylinder into the lock body and stop when reaches the central of the outer door frame.

Please check the cylinder is positioned as shown.
5. Use the screw to fix the cylinder properly.
6. Put the plate on and fix it with the screws.
7. Insert the alignment pins separately into the lock body
8. Pull the 6-pin connector out of the door frame.



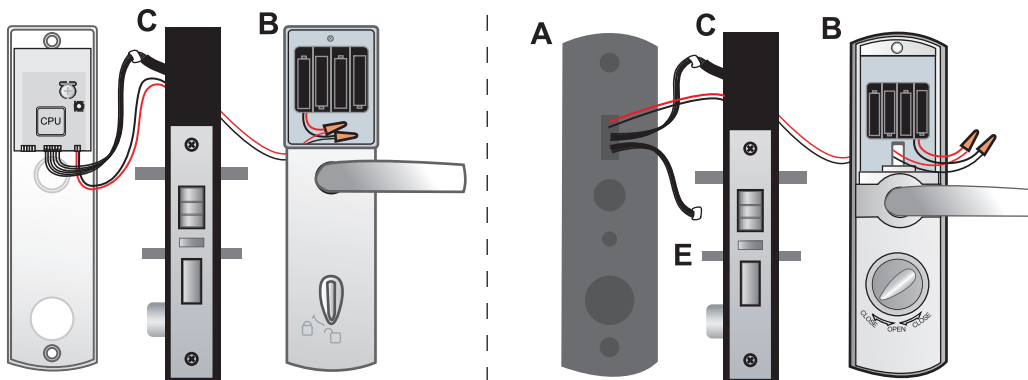
Door Frame Assembly

9. Double check if all parts are positioned as pictured.



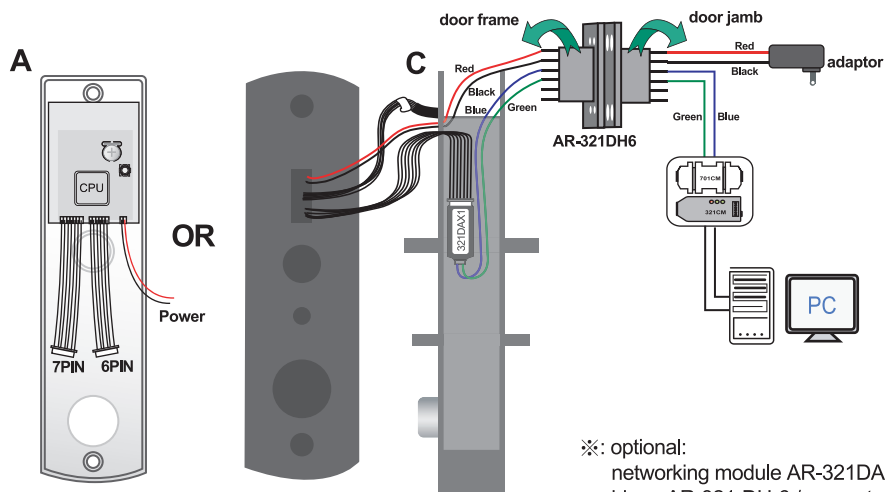
10. 1 Stand-alone mode

- Connect 6-pin connector.
- Pull 2-pin power wires (red + black) through the door frame and connect them to the wires from the inner faceplate. Put the caps on afterwards.

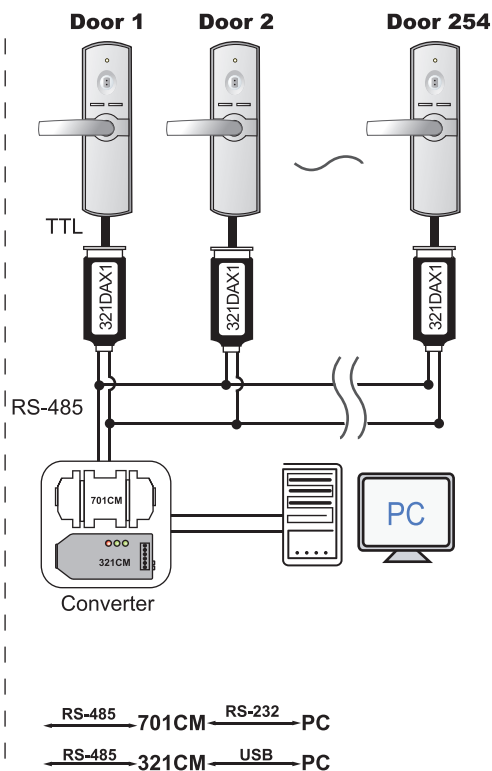


2 Networking mode

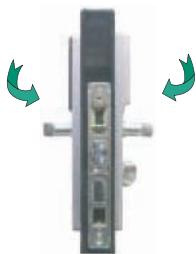
- Connect 6-pin connector and make cuts on the stile of the door frame and the door jamb for the hinge AR-321DH6.
- Connect 7-pin connector to the AR-321DAX1.
- Pull 2-pin power wires (red + black) and RS-485 wires (blue + green) through the stile of the door frame and connect them to AR-321DH6. (please see user guide of AR-321DH6)
- Apply DC6V power and computer (AR-323D can connect up to 254 doors).



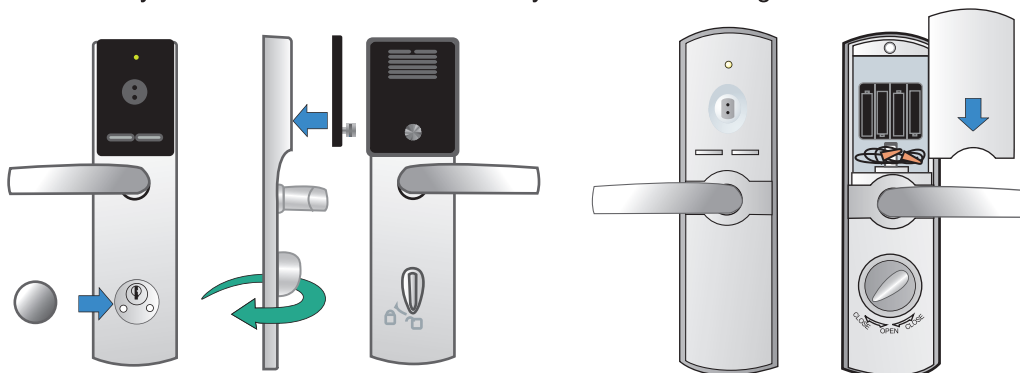
※: optional:
networking module AR-321DAX1 /
hinge AR-321-DH-6 / converter
AR-321CM or AR-701CM



11. Install the outer and inner door faceplates to the alignment pins and the cylinder. Use the screw to fix them properly.



12. Put the keyhole cover on and close the battery cover after inserting the batteries.



※: AA alkaline batteries are not required when operates in networking mode.