

V130111

Access Controller

Touch-panel Metal Housing / Illuminated Touch-panel

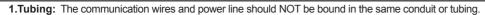
Installation AR-321 (H) • Pull the cables from the square hole of the mounting plate. Use a screwdriver to screw the mounting plate onto the wall. Attach the water proof strip to the body, then connect the terminal cables to the body and attach the body to the mounting plate. • Use the Allen key and screws (accessories supplied) to assemble the body onto the mounting plate. • Turn on the power, and LED will light and beep will sound. AR-331 (H) / AR-331 (H-S) Remove the rubber plug. • To cut tamper-resistant column and make it fit the appropriate height for actual installation. • First, take off the metal casing then screw the controller on the wall. Second, put the metal casing back and lock it with security screw. • Finally, put the rubber plug into the hole. G • Turn on the power, and LED will light and beep will sound. AR-721 (H) € • Pull the cables from the square hole of the mounting plate. · Use a screwdriver to screw the base onto the wall. Connect the terminal cables to the body and attach the body to the mounting plate. Assemble the covers with the Allen key and screws (accessories supplied). • Turn on the power and LED will light and beep will sound. AR-725 (H) AR-725 (H-M) Pull the cables from the square access hole of the mounting plate C. Use a screwdriver to screw the metal plate C onto the wall. • Take off the plastic mounting plate B from the body A, and pull the cables through the access hole of C and B, then connect to the body A. • Assemble plate B with the body A, and embed the water proof strip D onto the plastic side frame. • Assemble the body **A** onto the mounting plate **C** with the Allen key and 8 screws (accessories supplied). • Turn on the power and LED will light and beep will sound. AR-725 (H) Use a screwdriver to screw the base F onto the wall. • Attach the water proof gasket to the body A1, and pull the cables from the square hole of the base F, and connect to the body A1. 51 • Assemble the body A1 with the base F. • Screw A1 and F tight with the Allen key and screws (accessories supplied). • Turn on the power and LED will light and beep will sound. AR-725 (X) • Put on G, and attach A1 onto the plastic plate A3, and screw it with the Allen key and screws (accessories supplied). • Put the ring O on the metal frame, and put them together onto the reader A1+A3, and screw them and buckle up the 4 buckles on the back • Embed the water proof strip **D** onto the frame side of the base. Following by the install process of AR-725 (H-M) AR-757 (H) Pull the cables from the square hole of the mounting plate. Use a screwdriver to screw the base onto the wall. • Embed the water proof strip 3 onto the frame side of the base. Connect the terminal cables to the body and attach the body to the mounting plate. Assemble the covers with the Allen key and screws (accessories supplied).

• Turn on the power and LED will light and beep will sound.



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Notice

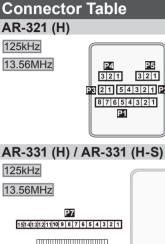


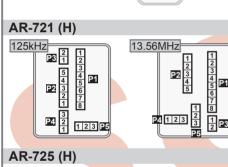
2.Wire selection: Use AWG 22-24 Shielded Twist Pair to avoid star wiring.

321

3.Power supply: Don't equip controller and lock with the same power supply. The power for controller may be unstable when the lock is activating, that may make the controller malfunction.

The standard installation: Door relay and lock use the same power supply, and controller use independent power supply.

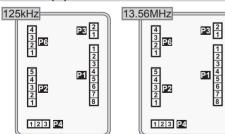




P1



AR-757 (H)



Connectors Comparison

AR-321 (H)	P1 P2 P3 P4 (P5Optional)
AR-331 (H)	P7 P8
AR-721 (H)	P1 P2 P3 P4 (P5Optional)
AR-725 (H)	P1 P2 P3 P4 (P5Optional)
AR-757 (H)	P1 P2 P3 P4 P6

Cable : P1								
Wire Application	Pin	Color	Description					
Lock Relay 1			(N.O.) DC24V1Amp					
	2	Purple White	(N.C.) DC24V1Amp					
Common-COM-Point	Common-COM-Point 3 White		(COM) DC24V1Amp					
Door contact	4	Orange	Negative Trigger Input					
Exit Switch	5	Purple	Negative Trigger Input					
Alarm Relay	6	Gray	Low output; Max 12V/100mA (Open Collector)					
Power	7	Thick Red	DC Power 12V					
	8	Thick Black	DC Power 0V					

Cable : 22

Wire Application	Pin	Color	Description	
Wiegand	1	Thin Blue	Wiegand DAT:1 Input	
	2	Thin Green	Wiegand DAT:0 Input	
Beeper	3	Pink	Beeper Output 5V/100mA, Low	
LED	4	Brown	LED Green Output 5V/20mA, Max	
	5	Yellow	LED Red Output 5V/20mA, Max	

Cable : 🕰

	Wire Application	Pin	Color	Descri	ption		
ł	Networking	1	Thick Green	RS-485	5(B-)		
	Module	2	Thick Blue	RS-485	5(A+)		
				7			

Cable : P4 (Contact Rating: 1A 125VAC/24VDC)

Wire Application	Pin	Color	Description	
Tamper Switch	1	Red	N.C.	
	2	Orange	COM	
	3	Yellow	N.O.	
				%After S/N: 0706-XXXXXX

Cable : P5 (Optional)

Wire Application	Pin	Color	Description
3-PIN Connector	1	Black	GND.
	2	White	Duress
	3	Purple	Arming/ Security trigger signal

Cable : P6

		1	
Wire Application	Pin	Color	Description
Door bell	1	Brown White	BE Output
Arming	2	Red White	AR Output/ Security trigger signal Output
Duress	3	Yellow White	DU Output/ TTL out
LED indicator 4 Green White		Green White	Hi input/ Green light brighten

Cable : **P7** (Directly connected at the Access controller)

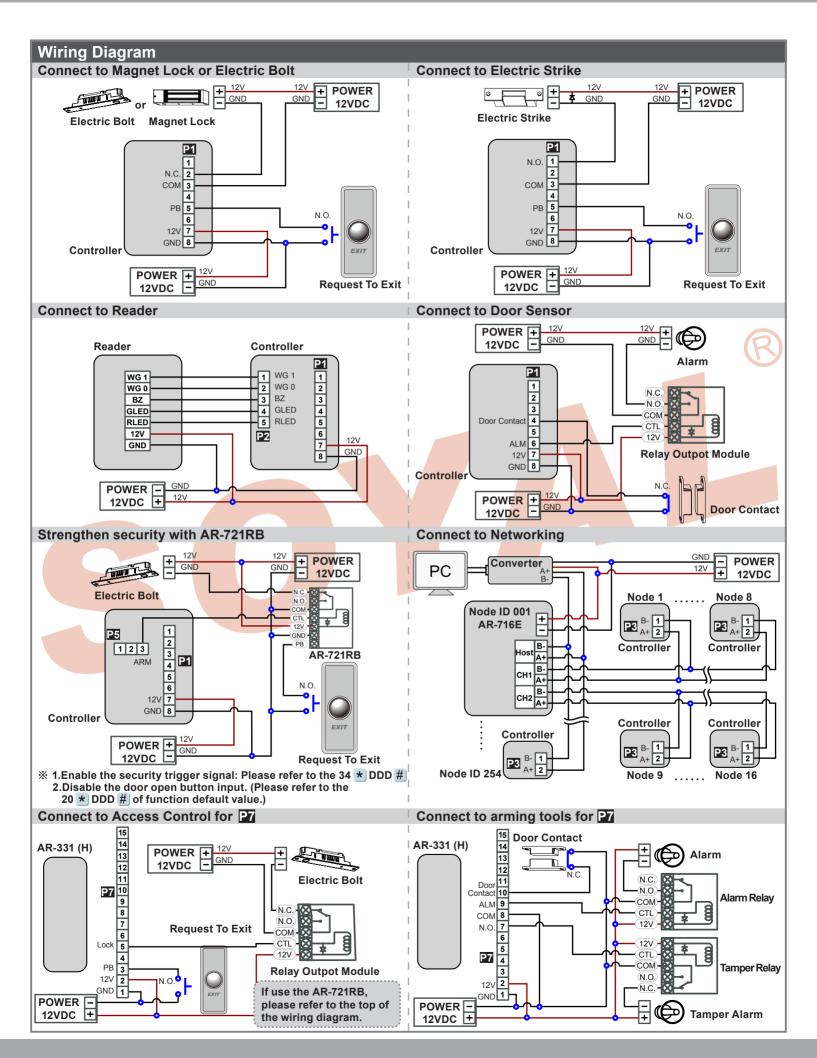
Wire Application	Pin	Color	Description				
Dower	1	Thick Black	DC Power 0V				
Power	2	Thick Red	DC Power 12V				
Exit Switch	3	Purple	Negative Trigger Input				
Networking Module	4	Thick Green	RS-485(B-)				
Leek Delew	-	\A/la:ta	Low output; Max 12V/100mA (Open Collector)/				
Lock Relay	5	White	Security trigger signal Output				
Networking Module	6	Thick Blue	RS-485(A+)				
Tompor Switch	7	Yellow White	N.O.				
Tamper Switch	8 Orange White		COM				
Alarm Relay	9	Gray	Low output; Max 12V/100mA (Open Collector)				
Door contact	10	Orange	Negative Trigger Input				
LED	11	Brown	LED Green Negative Output 5V/20mA, Max				
LED	12	Yellow	LED Red Negative Output 5V/20mA, Max				
Beeper	13	Pink	Beeper Negative Output 5V/100mA, Low				
Wiegond	14	Thin Blue	Wiegand DAT:1 Input				
Wiegand	15 Thin Green		Wiegand DAT:0 Input				

ROHS SOR FC CE MA NILNCC

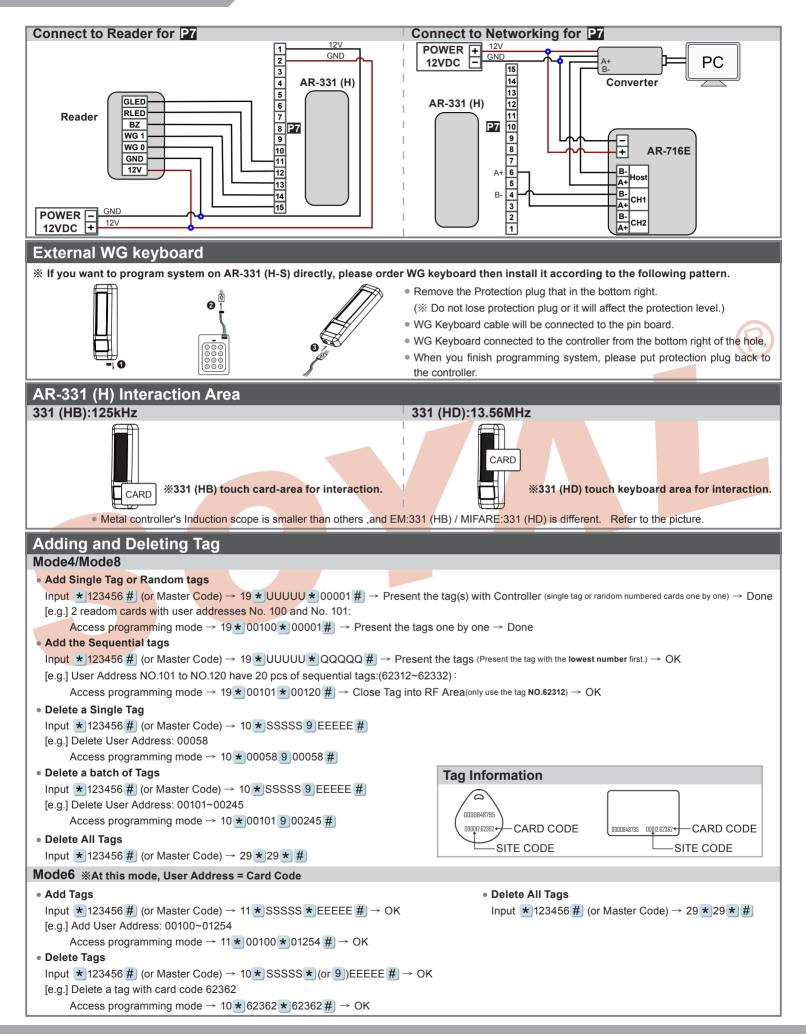
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Operation process		
A. Enter/ Exit Program Mode		
• Enter the program mode		
Input *123456 # or *PPPPP #	he changed the Master Coder 976112 input	1076110 # program made appaged
	ly changed the Master Code= 876112, input • Master Code modification	\bullet 0/0112 # \rightarrow program mode accessed
• Exit the program mode		PPPPPRRRRRR # [Input the 6-digit new master code twice.]
Input * #	[e.g.] Set the Master code to be 8761	12, input * 123456 # \rightarrow 09 * 876112876112 #
B. Chang the Node ID of Controlle Access programming mode → 00 * NNN # C.Set up M4/M6/M8		
Access programming mode → 04 ★N # [D. Set up the password • M4/M8: Individual pass code	N=4/6/8]	
•	→ 12 * UUUUU * PPPP # [e.g. User add	dress: 00001 and pass code: 1234, input 12 * 00001 * 1234 #]
		ddress: 00001 and pass code: 1234, input 13 * 00001 * 1234 #]
M6: Public pass word		
•	\rightarrow 15 * PPPP # [Input 4-digit pass code,	default value: 4321]
		e, default value: 1234; PPPP=0000: change into Card Only]
E. Dual Door Control(M4/M8)		
Controller with an reader to do the "Dual Do	oor Control"	
Access programming mode $\rightarrow 28 \times 064 \#$		
F. Anti-pass-back(M4/M8)		
• • • •	d to parking areas in order to prevent from n	nulti-entry with one card at a time, or to situations need
Enable controller		
	# 1129- Anti nega hask(0-Disable: 1-En	
[e.g.] Enable Anti-pass-back, and set to E	 #] [128= Anti-pass-back(0=Disable; 1=Ena xit door= (128 x 1) + (064 x 0) = 128 128 #] (Please refer to function default value) 	
Enable card		
Access programming mode \rightarrow 26 * SSS	SS * EEEEE * N #	
[SSSSS= User address start; EEEEE= Us	er address end; N=0(control)/ 1(Not control) enable the anti-pass-back function: 26 * 00	
	and induction into the door has not been induction $\frac{1}{20}$ and $\frac{1}{20}$ and $\frac{1}{20}$ and $\frac{1}{20}$ and $\frac{1}{20}$	uced to leave. When he represent into the door will become $154 \times 00154 \times 2 \# \rightarrow \text{Reset}$
G. Auto Open Time Zone		
	ard There are 2 time zones supported when	Stand-Alone, and 63 time zones when it connect to AR-716E.
Enable/Disable auto open zone	and mere are 2 time 20103 supported when	
	#] [004= enable Auto-Open Time Zone; 000	0= disable Auto-Open Time Zonel
	f presenting card [001= enable Auto-Open Time Zone; 000	0= disable Auto-Open Time Zone]
Set up open time		
Access programming mode \rightarrow 08 \star N \star		
N: 2 sets of auto-open zone (N=0=1st set;		
HHMMhhmm=Staring time to ending time		
7123456H= 7 days of week + Holiday (Su	n/Mon/Tue/Wed/Thu/Fri/Sat) (H= 0: disable	; 1: enable); Holidays establish by the software.
		riday: 08 ★1 ★ 09301612 ★ 01010100 # → Done
H. Lift control		
Connect with AR-401RO16B to control floor	is which the user will be able to access.	
• Enable		Please refer to below floor chart
Access programming mode $\rightarrow 24 \star 002$	[002= enable lift control]	Floor/ Stop
 Single floor 		Set F F F F F F F
Access programming mode $ ightarrow$ 27 \bigstar UUU	UU * FF #	0 8 7 6 5 4 3 2 1
UUUU=User Address FF=Floor number (0)1~32 floor)	1 16 15 14 13 12 11 10 9
[e.g.] User address NO. 45, allow to acces • Multi floors	s the 24th floor: 27 * 00045 * 24 #	2 24 23 22 21 20 19 18 17
Access programming mode $\rightarrow 21 \times UUU$		3 32 31 30 29 28 27 26 25
	ntrol (Input: 0~3) FFFFFFFF: 8 floors setting	(F=0=Disable F=1=Fnable)
[e.g.] User address NO. 168, only to the 6t		
	$00168 * [0 *]00100000 \#] \rightarrow 21 *]00168 *$	* 2 * 00001000 #



I. Set	ting Up th	ne Armir	ng						_									
• Alaı	rm conditio	ns:				•	Applie	cation:										
1. Arming is enabled								1. Door open too long: Door is open longer than door relay time plus door close time.										
2.Al	arm system o	connected						ce open (Op							-			
							3. Doo	or position a	bno	ormal: Arm	ning	is ena	bled an	d the po	wer is sudde	enly off	then on.	
		Arming s	tatus	(for M4	/M8; F	actor	ry defa	ault armingo	od	e is: 1234)	:							
Sta	Standby Mode																	
Afte	er door open									Do not op	en tl	he doo	or					
The	normal proc	edure to o	pen d	$oor \rightarrow I$	nput 4	digit	t armi	ng code \rightarrow \ddagger	•	★ → Input 4 digit arming code → Present valid card								
Ent	er Program	Mode																
Ena	able: Access	programm	ning m	node →	* *	#				Disable:	Acce	ess pro	ogramm	ing mod	de → * #			
	The normal	procedur	e to o	pen do	or] ca	n refe	er to [/	Access Mod	ə].									
Fun	ction De	fault V	alua															
					(H) /	AR-	725 ()	H) / AR-75	7 ()	H)	-	_	_	_	_	_	_	_
_	DDD #		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(,			,		ault Value								<u> </u>
Funct				Select	tion		Value	Application										(R)
Attend	dance		₩0: Ye		1: No		001	Networking									_	
	Re-lock				1: Ena	-	002	Networking										
Auto C	open button i			isable isable 🕺	1: Ena *1: Ena		004	Networking/			80	Jooti	n = 0(nono i	$(a u_{0})/(1/1)$	Y OOO		
	Controller of	· ·	×0: SI		1: Ma		032	Networking	010						(alue)/ 1(1 Enable "A			
	s/Exit		:ко: Ех		1: Acc		064	Networking			-	· ·			pass-back			-
Anti-p	ass-back	*	%0: Di	isable	1: Ena	able	128	Networking							he comma			
28 *	DDD #							ЖDе	aul	t Value								
Funct	ion			Selecti	-			pplication										
	Door Control			sable 1:	-		_	etworking/Sta										
	Open Alarm 21 (H) / Al					_		etworking/Sta	ING		7 /Ц							
_	DDD #	к-ээт (п) / A	K-121	(п) / /		· ·	⊓) %Default Valı		AR-757	•						*Dof	
Funct			Seleo	ction	1	Value		ication		24 * DDD # ** Default Value Function Selection Value Application								
Auto-op	en door without			1: En				rking/Stand-Alor	ne	Auto-open door without				1: Enable	i	1	/Stand-Alone	
cards at	auto open zone									cards at auto open zone								
		※0: Alarm	Output	1: Lift	Control	002	2 Networking/Stand-Alone			Lift Contr			:Lift Contr			002 Networking/Stand-Alone		
Contro Stop Ala	arm by door	0: Non		※ 1: Ye	<u>.</u>	064	4 Networking/Stand-Alone			Duress Function			pen 0: None ※1: Ye			064	Networking	/Stand-Alone
	by push button	0.1101			.0	004				Stop Alarm by door oper				×1. 1 6 3	004	INCLWOIKING	/Stante-Alone	
Door b	pell	ilien ≈0: Disa	ble	1: En	nable	128	Netwo	rking/Stand-Alor	ne									
Mod	le4 / Mod	de6 / M	ode	8														
	Networking/	User						-		Auto-sh	low	Eve	nt log	120	Anti	Time	Lift	Anti-pass-
Mode	Stand-Alone	Capacity	_		A	cces	s Mod	e		Duty ti	me	Сар	acity	Holida	ys force	Zone	Control	back
	Networking/	1,024 {721 (H)/757 (H	1.Ca)} 2.Ca	ard only ard and P	PIN (4-diait	PIN)+	#) 721 (H) 500					
M4	04	3,000 {321 (H)/331 (H	_{1)/} 3.Ca	ard or Use	er addre			dividual PIN (4-di	git	Yes		321 (H 72	500)/331 (H)/ 5 (H)	Yes	Yes	11	32	Yes
		725 (H)}	individ	lual PIN) + #	‡]							3,000) 757 (H)		_			
M6	Stand-Alone	65,535		ard only ard and P	PIN (4-digit p	oublic PIN=	Arming PWE))+ #		No		1	١o	No	No	No	No	No
	1		3.Ca	ard or PIN	🔰 (4-digit pub	lic PIN= Du	iress code)					1.00) 704 (U)					
1,024 Networking/ 2.Card and PIN (4-digit individual PIN)+ #) 721 (H) 500)/331 (H)/							
M8	- · · · · ·	3,000 {321 (H)/331 (H					·			Yes		72	5 (H)	Yes	Yes	11	32	Yes
× Mod	le 6 the num	725 (H)}	s un to	65535	since i	tread	S CAR	D CODE(5 di	nite)	only unlike	that) 757 (H) 4/Mode	8 read §		nd CAF		10 diaits)
					_	_			,)	5,, ar inte				5.000				
	tory Res																	
	en the devic			•		•		#	000		100	J. A .		L 000	#	20.	#	
		-						$\# \rightarrow 26 *$)					# → 29 *	29 🗶	#	
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Function	Command	Description	Mode
Entering programming mode	* PPPPPP #	PPPPP=Master Code, default value=123456	M4/M6/M8
Exiting programming mode	* #		M4//M6M8
Exiting programming mode and enabling arming status	* * #		M4/M8
Node ID setting (Connecting to 716E)	00 * NNN #	NNN=Node ID, range: 001~254	M4/M8
Node ID setting (Connecting to PC directly	00 * NNN * VVV * nnn #		M4/M8
without via 716E)		NNN=Node ID of Access Controller, VVV=Virtual 716E Node ID, nnn=Door number; range:001~254	1014/1010
Mifare tag / card format (Optional)	01 * N #	N: 0=ISO14443A; 1=ISO14443B; 2=ISO15693;	M4/M8
			1014/1010
		3=I Code1; 4=I Code2	
		PS.1. Please select the compliance,first.	
		2. Make sure reader and card using the same compliance.	
Door relay time setting	02 * TTT #	TTT=Door relay time 000= Output constantly	M4/M6M8
		001~600=1~600 sec.	
		601~609=0.1~0.9 sec.	
Alarm relay time setting	03 * TTT #	TTT=Alarm relay time 000= Output constantly 001~600=1~600 sec.	M4/M6/M8
Control mode setting	04 * N #	N=Mode 4=Mode4;6=Mode6;8=Mode8	M4/M6/M8
Arming delay time setting	05 * TTT #	TTT=Arming delay time 001~600=1~600 sec.	M4/M6/M8
Alarm delay time setting	06 * TTT #	TTT=Alarm delay time 001~600=1~600 sec.	M4/M6/M8
Master card setting	07 * SSSSS * EEEEE #		M4/M8
master out a setting	01 - 00000 - EEEEE #	SSSSS-EEEE=00000-01023 (00000-03000 for AR-725H);	IVIH/IVIO
		SSSSS=Starting user address; EEEEE=Ending user address	
Auto-open time zone setting	08 *N *HHMMhhmm *7123456H#	N= 0(1st time zone) / 1(2nd time zone)	M4/M6/M8
		HHMM= Starting time; hhmm= ending time	
		(i.e.: 08301200=08:30 to 12:00)	
		7123456H= 7 days of week (Sun/Mon/Tue/Wed/Thu/Fri/Sat)+ Holiday	
		(H= 0: disable; 1: enable); Holidays establish by the software.	
Master code setting	09 * PPPPPPRRRRR #	PPPPP=New master code	M4/M6/M8
		RRRRR=Repeat the new master code	
Suspend / Delete tag	10 * SSSSS * EEEEE #	*=Suspend 9=Delete;	M4/M6/M8
	10 * SSSSS 9 EEEEE #	SSSSS=Starting user address, EEEEE=Ending user address	
			Me
Set a sequence of cards as "read and access"	11 * SSSSS * EEEEE #	SSSSS=Starting card number	M6
		EEEEE=Ending card number	
Active the suspended cards	11 *SSSSS *EEEEE #	SSSSS=Starting user address	M4/M8
		EEEEE=Ending user address	
Set the cards as Card mode OR PIN mode	12 * UUUUU * PPPP #	Access mode: Card or PIN; UUUUU=user address;	M4/M8
by user address		PPPP=4-digit pass code 0001~9999	
Set the cards as Card AND PIN mode	13 * UUUUU * PPPP #	Access mode: Card and PIN; UUUUU=user address;	M4/M8
by user address		PPPP=4-digit pass code 0001~9999	
Arming output time setting	14 * TTT #	TTT=Arming output time; 000~250=0~2.5 sec.	M4/M8
M4/M8: Duress code setting	15 * PPPP #	PPPP=4-digit pass code (default value=0000)	M4/M6/M8
M6: Public PIN setting (Card or PIN)		P.S. Duress code will be unavailable and become a public PIN at access mode "Card or PIN" of M6	
Card number modification	16 * UUUUU * SSSSSSCCCCC #	UUUUU= User address; SSSSS=5-digit site code; CCCCC=5-digit card code	M4/M8
M4/M8: Arming pass code setting	17 * PPPP #	PPPP=4-digit pass code (default value= 1234 ; disable Arming PWD= 0000)	M4/M6/M8
M6: Public PIN setting (Card and PIN)		P.S. Arming PWD code will be unavailable and become a public PIN at access mode "Card PIN" and of M6	
	18 ± TTT #		MAINGING
Door open waiting time	18 * TTT #	TTT=Door open waiting time: 001~600=1~600 sec.; default value: 15 sec.	M4/M6/M8
Set the card by induction(M4/M8)	19 *UUUUU *QQQQQ #	UUUUU=User address;	M4/M8
		QQQQQ=Card quantity(00001=Continuously inducting)	
Reader additional setting	20 * DDD #	Please refer to function default value for details.	M4/M6/M8
Lift control setting: multi-doors	21 * UUUUU * S * FFFFFFF #	UUUUU=User address, S=4 sets of lift control(0~3); FFFFFFF=8 assigned floor	M4/M8
		(F=0: Disable, 1: Enable)	
Add/Delete tag by induction (M6 only)	22 * N #	N=0(Delete tag); N=1(Add tag)	M6
AR-401RO16 Lift Relay Activated TM	23 * NNN * TTT #	NNN=site number, TTT= relay time: 000~600=1~600 sec.	M4/M8
Controller parameter setting	24 * DDD #	Please refer to function default value for details.	M4/M6/M8
Controller time clock setting	25 * YYMMDDHHmmss #	YYMMDDHHmmss: Year/ Month/ Day/ Hour/ Min./ Sec.	M4/M6/M8
Anti-pass-back (Enable user)			
	26 * SSSSS * EEEEE * N #	SSSSS=Starting user address; EEEE=Ending user address;	M4/M8
		N=0/Enable; N=1/Disable; N=2/Initial	
Single floor setting	27 * UUUUU * FF #	UUUUU=User Address; FF=Floor (01~32 floor)	M4/M8
Dual door control/Active or inactive arming for force open	28 *DDD #	Please refer to function default value for details.	M4/M6/M8
Delete all tags	29 * 29 * #		M4/M6/M8
Enable the executive trianent size all (with AD 704DD)	34 * 128 # (321H/721H/725H/757H)	To Change the "Arming" (in 📧) become the security trigger signal,	M4/M6/M8
Enable the security trigger signal (with AR-721RB)	34 120 # (02110121001010)	To change the Arming (in 13) become the security trigger signal,	