AC-301
Standalone RFID Access Controller with keypad input
user manual
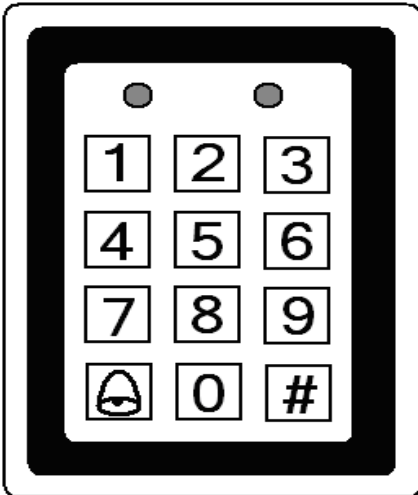

Back light keypad
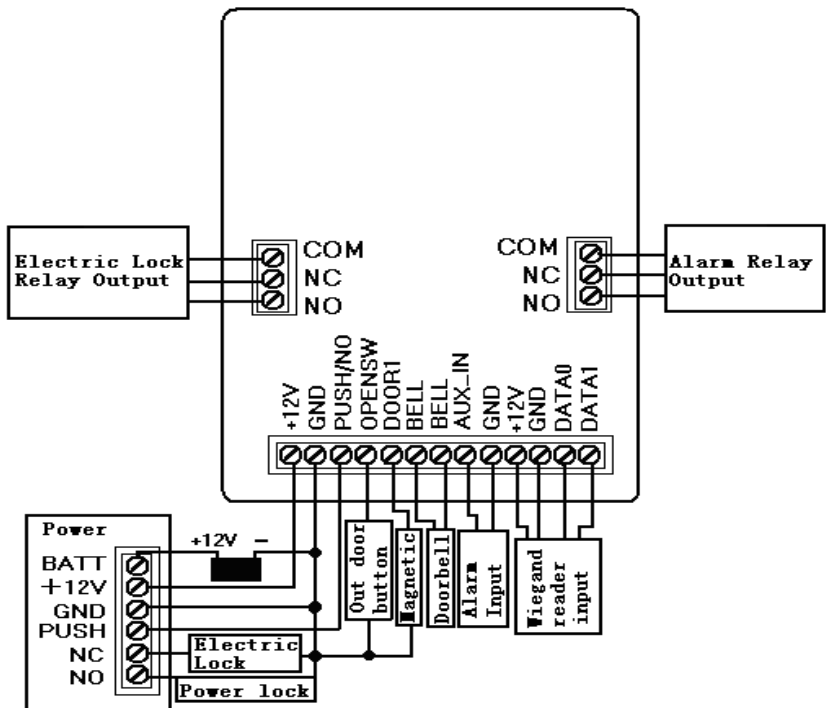

Anti-theft button

Access Controller positive

Access Controller on the back of Wiring Diagram

Electric Lock Relay Output — COM / NC / NO

COM / NC / NO — Alarm Relay Output

+12V GND PUSH/NO OPENSW DOOR1 BELL BELL AUX_IN GND +12V GND DATA0 DATA1

Power
BATT
+12V
GND
PUSH
NC
NO

+12V −

Electric Lock

Power lock

Out door button
Magnetic
Doorbell
Alarm Input
Wiegand reader input

Force to restore factory programmed Password:
after release short J2 legs

Specification

Material	Steel metal shell with blue back light keypad
Power Supply	+12VDC / 1.2A
Door relay power	+12VDC / 2A
RFID Card ID storage	1000 pcs
Password	Universal Keypad password : 1 PIN password : 1000
Built-in RFID reader support protocol	125Khz EM4100 or compatible card
RFID card reading range	~5-10 cm
Door relay control output	1
Doorbell button input	1
Door sensor input	1
External alarm output	1
External RFID reader support	1 – Weigand 26 bit interface
Size	(75x115x28)mm
Weight	0.5Kg
Operation temperature	0'-45'C
Relative humidity	40%-90%RH

Factory default setting

Programming password	881122
Door open mode	card or Universal Keypad password (default : 1234)
Valid card PIN password	0000
unlock time	3 seconds
Anti-theft Alarm	off
Door lock Alarm	off
Door lock status detection	off
Alarm delay	0 second
password modification feature	off

Sound and LED function

Normal working mode
- valid command : a short beep sound
- Invalid command : a beep sound
- Red LED keep flash

Programming mode:
- Green LED keep on continuously
- valid command : "du-du" = 2 beep sound
- invalid command : "du-du-du" = 3 beep sound

press [#] to exit programming mode

Programming mode - function and setting description

Access programming mode	press [#] + [6 digit password (default 881122)] → "du-du" sound → enter programming mode (Green LED on)
modify programming password	**press [0]** + [Enter 6 digit new programming password] + [re-type new 6 digit programming password]
Add valid RFID card	**press [5]** + [Enter 3 digit card code] "du-du" → [place RFID card 1 to read] "du,du-du" + [place RFID card card 2 to read] "du, du-du" + … … + [n RFID card] "du,du-du" → press [#] "du du" to complete **Remarks 1** **[3 digit card code]** : 001--- 999 number can not be repeated. It is used to delete the card after it is lost. **Remarks 2** When continuous set valid card, each card code will be added +1 increment automatically. For example, input card code is 015, the next card will 016 …017 ..017
Delete valid RFID card	**Method 1** **Press [7]** + [Enter 3 digit card code 1] "du-du" + [Enter 3 digit card code 2] "du-du" + … + [Enter 3 digit card code 3] "du-du" … → press [#] "du-du" to complete **Method 2** Press [7] + [place RFID card 1 to read] "du,du-du" + [place RFID card 2] "du,du-du" + … … + [place RFID card N] "du,du-du" → press [#]"du-du" to complete and exit **Method 3** Delete all cards : restore factory default settings **Remarks :** card ID and password will be deleted at the same time
Exit programming mode	**Press [#]** "du-du"

Keypad Password	**Default keypad password is "1234"**
	Default card + PIN password is "0000"
	Press [1] + [2] "du-du" (default)
	- disable change PIN password unction
	Press [1] + [3] "du-du" **–** enable change PIN function
	Modify card PIN code
	under non-programmed mode → press [#] (long by up to more than 2 seconds)
	if "du-du-du" that mean change PIN password feature is disable ,you can't change the PIN password
	(need enable it by Press [1] + [3] under programming mode)
	if "du-du" that mean enter change PIN password mode
	+ [place RFID card] "du,du-du"
	+ [Enter 4 digit original PIN] (default 0000) "du-du"
	+ [Enter 4 digit new PIN]
	+ [re-type 4 digit new PIN] "du-du"
	modify keypad access code :
	press [3] + [4 digit keypad access code] (default 1234)
	Under "card or PIN password mode" , the password is invalid
	if the keypad access code or the PIN password is "0000"
Door Access mode	**Press [1] + [0]** "du-du: (default) – card or PIN code
	Press [1] + [1] "du-du" – card + PIN password
Door relay open period	**Press [2] + [TT]** – if TT = 03 , that mean 3 seconds
Anti-theft alarm	**Press [4] + [0]** – disable function (default)
	Press [4] + [1] – enable function
	(alarm will be on if the controller case is open by force)
Door lock status	**Press [6] + [0]** – disable function
	Press [6] + [1] – enable function
	- make sure the door is open by normal card or PIN access
Door sensor alarm	**Press [8] + [0]** – disable function
	Press [8] + [1] – enable function
Alarm active delay period	**Press [82] + [TT]**
	"TT" is alarm delay period (e.g TT=03 = 3 seconds)
	Alarm will be on if reach delay time
Factory default setting	**Press [86]** "du-du" , "du-du-du" , 5 seconds "du-du-du" → completed
Access method	**Card or keypad password :**
	Enter keypad password (default 1234) or read a registered RFID card
	press [#] to exit or cancel password input
	Card + PIN password :
	[reads valid RFID card] "du-du"+[PIN password] to opens the door
	If enter incorrect PIN password , press [#] to re-input correct PIN password directly
Set to factory setting	Short J2 on the reader PCB board
Alarm output active	1. AUX_IN electric pin active Low
	2. anti–theft function is enable
	3. door sensor is enable

Frequently questions

Symptom	Reason and Solution
Press key is normal, does not read the card : open/close door, "du-du…" 8 beep sounds	Not enough power supply current - Change to high power supply
Press key is normal, short reading distance or can't read card	The controller near metal surface - change the installation position Not enough power supply current - Change to high power supply
Can read the card , "du-du" but can't open door lock	" card + PIN password" mode is enable 1. change to " card or PIN password" mode 2. Before reading the card, pressed [#] the key - waited for 5 seconds then read the card again
Can read the card , "du" but can't open door lock	Door sensor alram – enable - door already opened , check door status
Press [#] + [programming password] , can't enter programming mode	Pressed other keys before pressed [#] - press [#] again until heard a long beep sound then press [#] + [programming password] again
Press [#] , "du" can't change PIN password	Pressed other keys before pressed [#] - press [#] again until heard a long beep sound then press [#] 2 seconds "du,du-du" → okey
Press [5] "du-du-du" 3 sounds	Controller's card ID storage memory full
Press [5] + [3 digit code] "du-du-du"	This code was already used. Press [5] + [3 digit codes] to use another code
Press [5] + [3 digit code] "du-du" + [RFID card] "du-du-du"	The card already be a valid card. need assign this code to another RFID card
under programming mode the controller will exit and return to working mode	Under programming mode , If No command input within 20 second , the system will return to normal operation mode