DANGEROUS THINGS

xAC Access Controller v3 - LF

Specifications	
Operating Voltage	+12vdc
Operating Current	<100mA
Operating Temperature	-20° to 60° C
Supported Card Type	EM4100
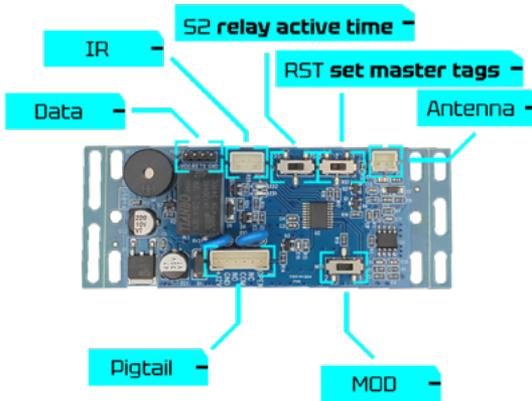
Connector Pin-out		
#	*Color*	*Pin*
1	Red	+12vdc
2	Black	Ground
3	Blue	NO - Normally Open -> Relay Out
4	Yellow	COM - Common -> Relay Input
5	Grey	NC - Normally Closed -> Relay Out
6	White	Push-to-Exit

Operation

When the board is powered, it waits for an authorized or master tag to be scanned. While waiting, the common (COM) is connected to the normally closed (NC) pin. When an authorized tag is scanned, the NC pin is disconnected and the normally open (NO) pin is connected for the duration set by jumper S2. If the Push-to-Exit pin is shorted to ground, the relay will also actuate.

Switch Settings		
Jumper	*Position*	*Function*
S1	Left	Setup
	Right	Normal Operation
S2	Left	Relay Delay 5 Seconds
	Right	Relay Delay 1 Second
Mod	Left	Normal Operation
	Right	Auto-Enroll

Setup

To assign master tags (and clear all authorized tags), ensure the board is powered off, set jumper S2 to position 1-2, and power on the board. The first tag scanned will be "master add" and the second will be "master remove." Power off the board, set S2 to 2-3 and power it back on.

Management

To add authorized tags, scan the "master add" tag followed by any tags you want authorized then scan "master add" again to exit. To remove a tag, follow the above using the "master remove" tag. To clear all authorized tags without removing the master tags, scan "master remove," "master add," and then "master remove" again.

Mod

When powered on with the Mod switch in Auto-Enroll, any tags scanned will be enrolled as the relay is toggled. There is a three minute timeout to exit enrollment and enter normal operation.

Data Transfer

This allows the syncing of tags between v3 access controllers. To accomplish this, two boards should be connected using the PROG pins above the relay. GND to GND, VCC to VCC, TX to RX, and RX to TX. Power on the board you want to push enrolled tags from (this will power the connected board as well). Next, scan the directly powered board's master tags in the following order: add, delete, delete, add. The time between scans must be less than five seconds. You should see a green light on the board supplying the enrolled tags and a red light on the one receiving. Within 30 seconds, both boards should chime, indicating a successful transfer.

IR Remote

You can add an IR receiver to the board to enable remote control. Default PW is 123456. Here is a Flipper IR file.

Add By UID	# PW # 23 UID #
Delete By UID	# PW # 43 UID #
Add By Scan	# PW # 1 *scan card* #
Delete All Users	# PW # 40 0000 #
Modify Unlock Time	# PW # 5 *xx* #
Add Management Cards	# PW # 91 *scan two cards* #
Delete Management Cards	# PW # 92 #
Change Programming PW	# PW # 0 New PW # New PW #