

1. INTRODUCTION

The AL2730CF proximity access controller is a cost effective solution for 2,728 users. It builds in with RS232 connection for **uploading thousands** of authorized **ID cards** from Card Keeper software to the controller with **just a “click”** (**Card Keeper can be downloaded from <http://www.avea.cc/spec/keeper.zip>**).

With dual output for external controlling, one output from the relay directly with NC and NO connection. The other is a power output for driving electric lock.

A **9 to 12V DC supply** is required to power the reader, which has a current consumption of less than **300mA (600mA for dual reader)**.

There are two modes of operation :

IN Mode - Single reader

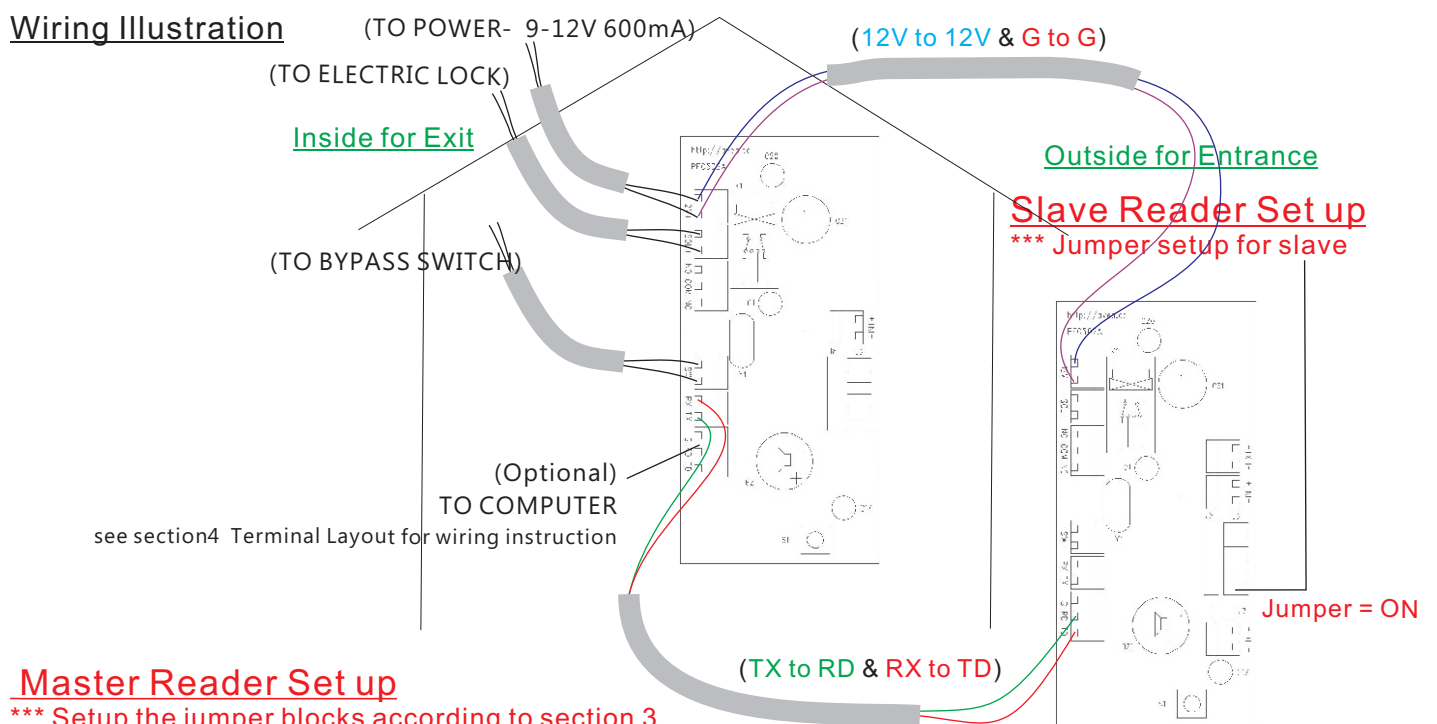
- use AL2730CF for entrance

In this mode, only a single controller is installed outside the premises. An **electric strike** can be controlled. A **bypass switch** is installed inside the premises, pressing it will release the strike. While connecting the AL2730CF's **RS232 port** to the computer and running the Card Keeper software (Windows), user can authorize thousands of AVEA's key cards or fobs repeatedly to the access controller with just a “click”. Cardholders' information can be saved, merged or exported to Excel file format.

OUT Mode -Dual reader / high security / prevent tampering

- use an AL2730CF for **Entrance** (as Slave) + another AL2730CF (as Master) for **Exit**

In this mode, one AL2730CF is installed outside the premises for entry. Another AL2730CF is installed inside the premises for exit. An electric strike and a bypass switch are connected to the OUT reader (for exit) inside the premises. Pressing the bypass switch or presenting the authorized cards will release the strike.



Master Reader Set up

- *** Setup the jumper blocks according to section 3
- *** Setup the MASTER & ACTION card from the master reader
- *** Use the ACTION CARD to authorize the ID cards

2. QUICK START

- 2.1 Configuring the **jumper blocks** according to your needs (see section 3).
 - 2.2 Set up your **MASTER** and **ACTION card** according to appendix A - section 1. Remember to remove the CLRM jumper after setting up the MASTER and ACTION card.
 - 2.3 **Remove** all authorized **ID cards** (see appendix A - section 4).
Present an authorized card to the AL2730CF, the green LED and relay will turn on as set by TMR0, TMR1 and TMR2 with a beep sound. On the other hand, if an unauthorized card is presented to the AL2730CF, the green LED and the relay will have no action but with a long beep sound.
An input contact is provided for bypass switch, if it is shorted, the unit will respond the same as an authorized card read.
- Goto 2.6 if use the Card Keeper software for granting authorization and keeping card information.
- 2.4 Use the ACTION card to **authorize the ID cards** (see appendix A - section 3).
 - 2.5 **Record** the authorized ID card number and the associated personnel. This is for removing the authorized card number in case of card losing.
 - 2.6 Power off the reader
 - 2.7 **Connect the RS232 cable** (straight through) from the computer to the terminal block of RS232 port. (See Terminal Layout)
 - 2.8 **Power on** the reader
 - 2.9 Turn on the computer
 - 2.10 **Download** the “Card Keeper” software from <http://www.avea.cc/spec/keeper.zip>.
 - 2.11 **Unzip** the file keeper.zip and run the setup.exe file to install the software.

3. JUMPER SETTING

There is a 6-position jumper block for configuring the operation of the unit.

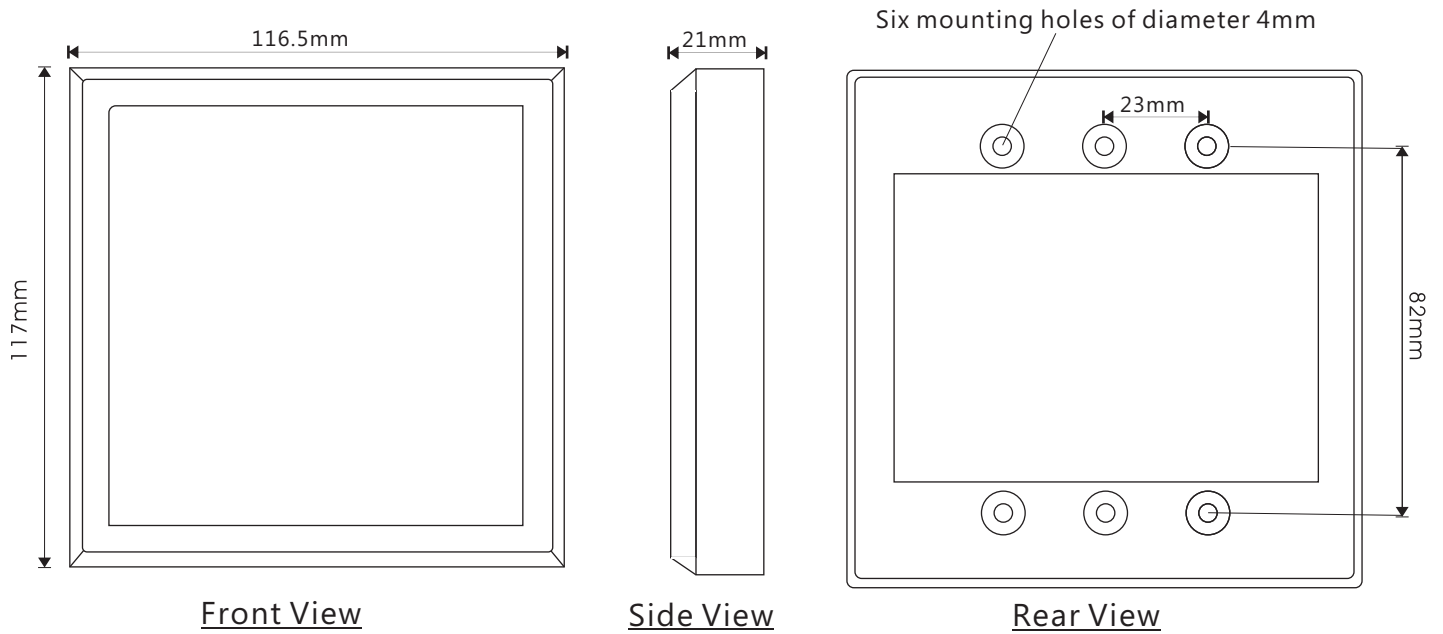
JUMPER POSITION	FUNCTION
CLRM	ON - to clear the MASTER and ACTION card memory.
TMR2	To select the relay on time with authorization granted.
TMR1	
TMR0	
RVSE	ON - to reverse the operation of the relay.
SLAVE	ON - operate in slave mode, OFF – normal operation

TMR2	TMR1	TMR0	FUNCTION
OFF	OFF	OFF	Relay on for 1 second on authorization granted.
OFF	OFF	ON	Relay on for 2 seconds on authorization granted.
OFF	ON	OFF	Relay on for 5 seconds on authorization granted.
OFF	ON	ON	Relay on for 10 seconds on authorization granted.
ON	OFF	OFF	Relay on for 20 seconds on authorization granted.
ON	OFF	ON	Relay on for 50 seconds on authorization granted.
ON	ON	OFF	Relay on for 100 seconds on authorization granted.
ON	ON	ON	Relay state is toggled on each authorization granted.

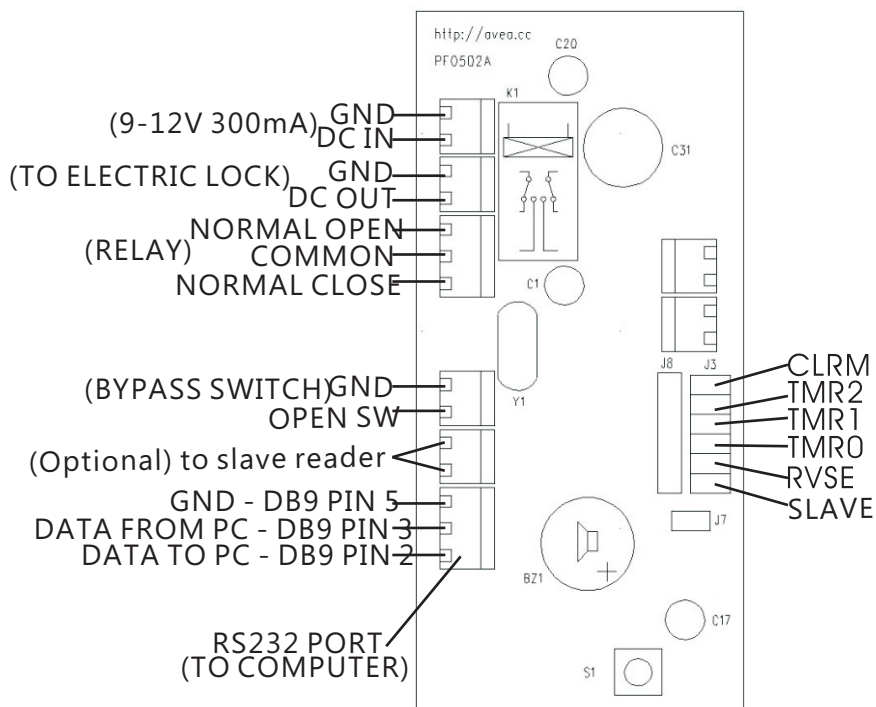
* ON : Jumper shorted, OFF : Jumper opened

4. DIMENSIONS AND TERMINAL LAYOUT

Dimensions



Terminal Layout



Card Keeper Quick Start

1. **Download** the “Card Keeper” software from <http://www.avea.cc/spec/keeper.zip>.
2. **Unzip** the file keeper.zip and run the setup.exe file to install the software .
3. **Run** the Card Keeper software.
4. Select the **communication port** which AVEA’s reader is attached.
5. Click “**Add Card**” to add AVEA’s card to the Card Keeper - Insert the ID card’s CDROM into your computer’s CD-ROM drive. Select the serial number on the packing of AVEA’s ID card.
6. Double click the ID card number or select the ID card number then click “**Edit**” to enter card information and grant access authorization.
7. Select “**Options**” to grant / release access right for **ALL** ID cards on screen.
8. Click on the column header to **sort** the card information accordingly.
9. Select the card number then click “**Delete**” to delete the ID cards that you do not need.
10. “**Save**” the database file for future use.
11. Select the correct communication port then “**Upload**” the authorized card numbers to the access controller (authorization table in the controller will be overridden).

4 Check controller’s capacity

11 Remove all authorized cards in the controller

10 Open a previous saved database file for Card Keeper

7 Merge an authorized card database file to the existing database

Export the data to Excel file format

9 Delete all the data on the screen

6 Grant access authorization

5 Enter the ID card number or name for searching

Card No	Name	Group	Granted
12453109	James Bond	Administration	✓
12451898			x
12451320			x
12450860			x
12449596			x
12448695			x
12448667			x
12447820			x
12447279			x
12446656			x
12445017			x
12443174			x
12443163			x
12442981			x
12442289			x
12440678			x
12440145			x
12437240			x
12432735			x
12432609			x

Options

Access rights

Remain unchanged

Grant to all cards

Deny from all cards

Show only access granted cards

Proceed Cancel

Edit Information

Card No.: 12446656

Name:

Group: Browse

Access Granted

Confirm Cancel