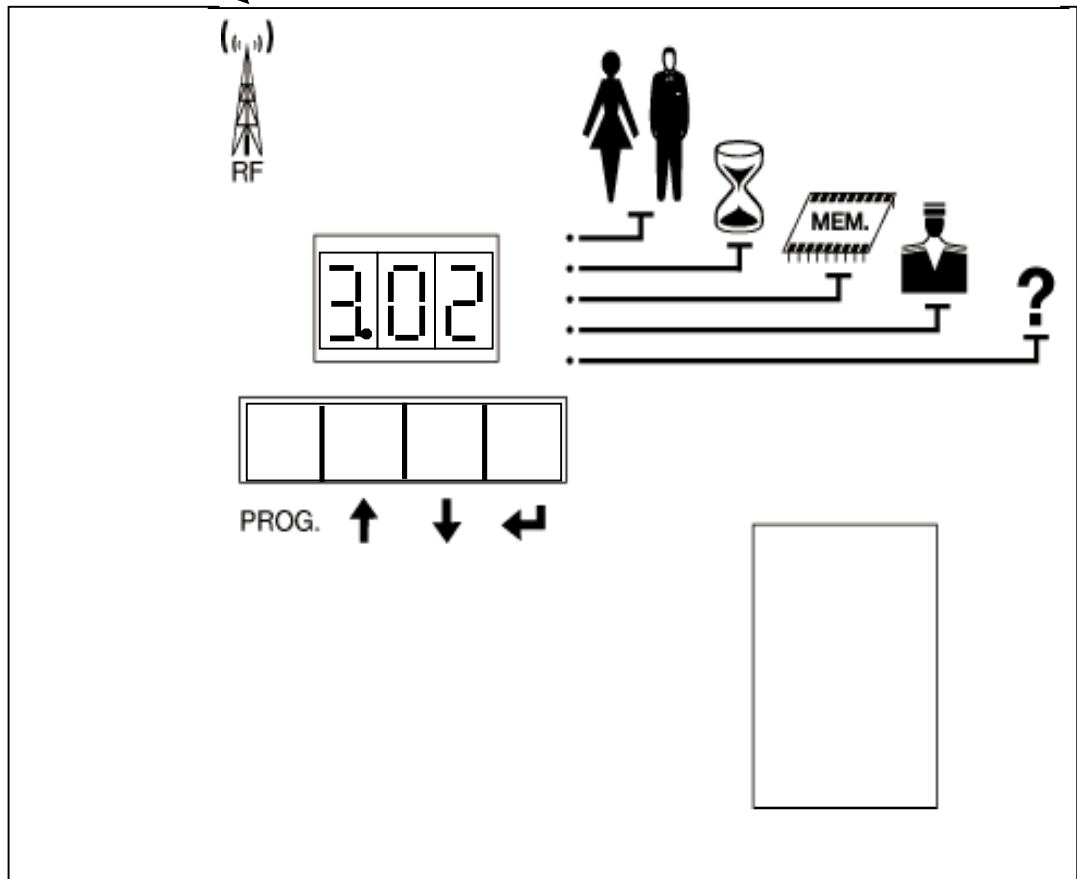




# UCA/3

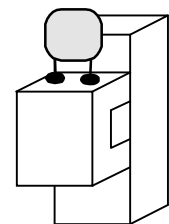
## 3-DOOR CONTROL UNIT WITH BUILT-IN RF RECEIVER

Wave  $\lambda/4$  17,3 cm antenna  
or antenna at 50  $\Omega$



Wiring diagrams at the end of the  
datasheet

This device comes with a varistor.  
The varistor must be connected to the strike terminal  
(electromagnet...) operated by the device.  
Each strike on the system should have a varistor.  
The varistor controls the overload produced by the strike coil –  
back emf.



If you are using a « Shear Lock » electromagnetic lock, it is recommended to use a  
separate power supply than the one connected to the control unit!

WIRING DIAGRAM AND INSTRUCTIONS



## **Technical specifications**

Input voltage	12VAC or DC
Outputs	3 relay outputs, N/O & N/C contact 8A/250V~
Users	800 badges (proximity and RF Transmitter)
Master badge	1 programmable proximity badge
Memory	Transfer copy of all data to another control unit
RF receiver	Built-in RF receiver on the control unit
Inputs	2 Request-to-exit inputs
Visual Programming Aid	3-digit 7 segments display 4 programming keys
Distance between the readers and the control unit	minimum 60 cm, maximum 50 m (recommended cable 7 x 0.6 mm <sup>2</sup> )

**Note:** Do not use a switching power supply with the UCA3 control unit

## **Default values**

Master Badge:	Not programmed
Relay time delay:	1 second
Programming delay:	120 seconds (2 minutes)

## **Push buttons**

The request-to-exit button activates relay RL1 and RL2 independently (the relays can be programmed as timed or latched output).

## **Programming keys**

### **PROG key (red button)**

The PROG key allows you to enter and to exit from programming. Press twice on the button to exit from programming: Press once to exit from a menu and go back to the main menu. Press a second time to exit from the main menu and go back to a normal mode.

### **Scroll Up and Scroll Down buttons (yellow buttons)**

The Scroll Up/Down keys are used to scroll in the main menu, to go back and forth to any menu.

### **Fast scrolling**

Keep the button depressed to move faster in one of the menus, especially when you selecting a user number, or time delay.

### **ENTER (green button)**

Press the Enter key for selecting a menu and also to save new data.  
To delete data, press the Enter button twice.



## Programming Mode – Main Menu

Present a proximity badge in front of the control unit proximity reader.

\*\*

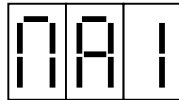
----- If a master badge is not programmed in the control unit, present **any** proximity badge to the integral reader, wait for the display to switch off and then press PROG to enter into programming – go to Set Master Badge and programme a master programming badge into the system.

----- If the master badge is programmed, present master badge, wait for the display to switch on then off, and then press PROG to enter into programming.

### Main menu

Present the master badge in front of the control unit reader, wait for the display to switch on then off, and press on the PROG button (red button). The master badge activates relay 1

The display indicates



the relay is activated. Wait for the display to switch off. Press on the PROG button to enter in the programming mode.

The first LED starts flashing:

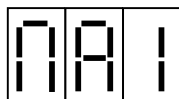
- MENU 1**      Add badges/select door – badge deletion.
- MENU 2**      Set Door Release Time
- MENU 3**      Data transfer.
- MENU 4**      Set Master badge.
- MENU 5**      Badge Identification.

Press on Scroll Up or Scroll Down buttons to select a menu. The LED will flash in reference to the menu selected.

### Deleting the master badge and reset to default values

1. Put the jumper on ST1.

The display shows



for a period of 5-7 seconds, then switches off – **remove jumper immediately.**

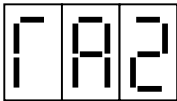
The master badge is deleted.

2. Remove the jumper from ST1.



To reset all data:

3. Keep the jumper placed on ST1 after the above procedure, to delete all the badges.

4. The display indicates  during the reset.

5. The display switches off at the end of the reset.

6. Remove the jumper from ST1.

## SETTING and DELETING BADGES (MENU 1)

**Proximity Badges:** Proximity badges can be programmed on doors 1 and 2.

**DOOR 1:** controlled by reader 1

**DOOR 2:** controlled by reader 2



Proximity badges can be programmed to operate Door 1, Door 2 or both. This is set when programming badges, and are programmed in sequence relating to the doors they are allowed access to – i.e. if you set Door 1 as the allowed access door, during that set up procedure, all users entered will have access through Door 1. For access through Door 2 or Door 1 & 2, a new procedure is entered and badges are programmed as valid for those doors during that procedure.

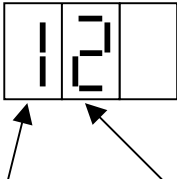
**Radio frequency:** The RF transmitter can be programmed on door 1 and 3.

**DOOR 1:** Controlled by channel 1 of the transmitter


**DOOR 3:** Controlled by channel 2 of the transmitter)

**Ensure the Green LED is flashing on Menu 1** - Press Enter – LED will go solid

Select Door types by using Yellow Scroll keys – example below is for proximity readers:

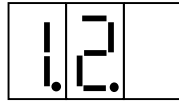
The display indicates  door 1 and 2 can be programmed with proximity badges.

(To program the RF Transmitters scroll up to move to the next choice, which is doors 1 & 3:

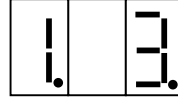
The display indicates  door 1 and 3 can be programmed with RF Transmitter).



Press Enter to confirm the door numbers to be programmed. Each door number will have a dot against it.



Proximity badges  
which will operate doors 1 & 2



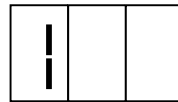
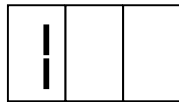
RF Transmitter  
doors 1 & 3

---

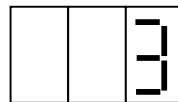
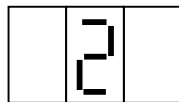
Press Left Hand Scroll Key to select door(s) for users to have access through

Scroll to select one door and Press Ent to validate it – a dot will appear next to the number when validated

**Doors are displayed one at a time**

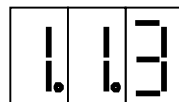


Scroll to select the next door and press Ent to validate the door - a dot appears next to the door number when validated – or scroll to next part of programming if that door is not be authorised.

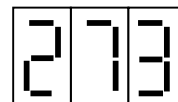


Press Ent to validate the second door or press scroll to access the badge menu.

A 3-digit user number will be displayed.  
A user number can either be occupied or free.



User number occupied  
and valid for door 1 and 2



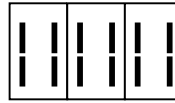
user number available, and ready  
to be validated

**Available user number**



Present the badge in front the control unit proximity reader to program the badge on door 1 and /or door 2. To program the RF Transmitter, press on one of the remote button.

if the badge is already programmed, this message will be for 2 seconds.



displayed

Present another badge.

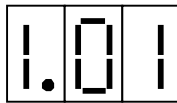
Once the badge is saved, the user number stays displayed for 2 seconds. According the door(s) selected before programming the badges, a dot will appear next to the digits of the user number. The next user number available is displayed after 2 seconds.

### Deleting a badge

Select the user number by going through above procedure to get to the badge numbers, use the scroll buttons to get to the slot you want to delete, and press, within 1 second, twice on the Ent button.

## TIME RELAY OUTPUTS (MENU 2)

Door 1 relay indicates



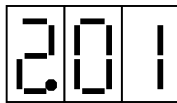
a default value of 1 second.



Change the open time for relay 1 and enter a time from 01 second to 99 seconds by scrolling up or down. Enter 00 for a latched output time. Then press Ent button to save the new time.

Scroll to select another door time relay and press Ent button to modify the time.

The second time relay indicates

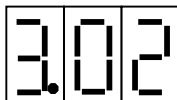


a default value of 1 second for relay 2.

Press Ent button to change the open time for relay 2 and enter a time from 01 second to 99 seconds. Enter 00 for a latched output time. Then press Ent button to save the new time.

Press Scroll to select another door time relay and press Ent button to modify the time.

The third time relay indicates



a default value of 1 second for relay 3.

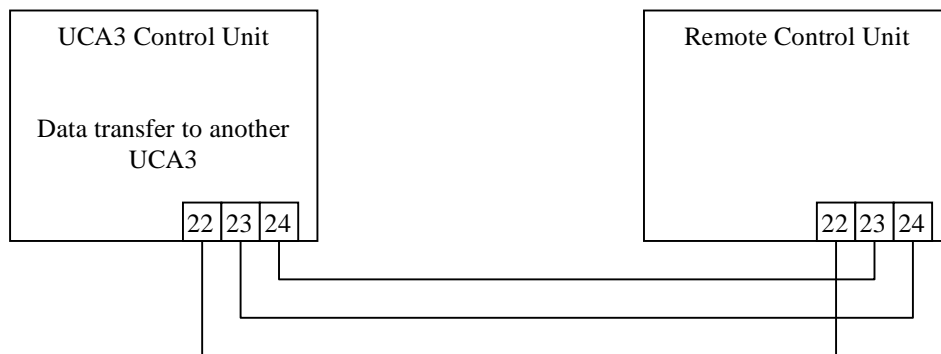
Press Ent button to change the open time for relay 3 and enter a time from 01 second to 99 seconds. Enter 00 for a latched output time. Then press Ent button to save the new time.

To exit from programming mode press on PROG button.



## DATABASE TRANSFER (MENU 3)

### Wiring Diagram



22	GND
23	Transmitting Data TX
24	Receiving Data RX

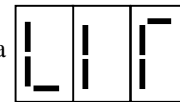
This message is displayed on the Control Unit, which will transmit the data.

Validate by pressing on the Ent button or press PROG to exit from the programming mode.

### Wiring connection between Control Unit

Verification is done between the control units, which transfers the data.

The following message is displayed on the Control Unit which transmits the data

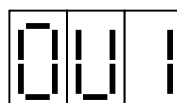


On the other receiving unit,



is displayed.

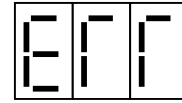
Press Ent button start the transmission.



### Connection ERROR between control units



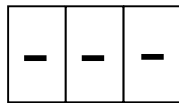
If the two Control Unit are not connected properly an error message is displayed



Verify the wiring and try again.

## PROGRAMMING A MASTER BADGE (MENU 4)

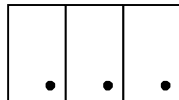
Press Ent to go into Menu 4



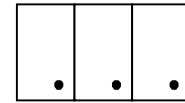
Master Badge not programmed

Present a badge in front of the proximity reader and press Ent to save the new Master Badge.

The display becomes



Master Badge Programmed

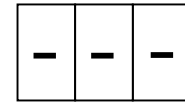


Master Badge programmed



Press twice Ent button to delete the Badge

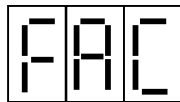
the display changes to



Present a new Master Badge.

### Select Programming Reader

Scroll up to enter into the programming reader Menu then the display shows:



This display indicates that the auxiliary 1 reader is set as the programming reader (keypad). The built-in proximity reader can not be used to program any proximity badges.

To select the built-in proximity reader as the programming reader press the Ent (green button). Three dots appears next the each letter.

Press PROG button to go back to the main menu.

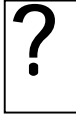


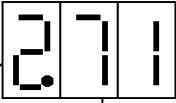
# BADGE AND RF IDENTIFICATION (MENU 5)

Present the badge in front of the Control Unit proximity reader or Transmitter.



press on one the button of the RF



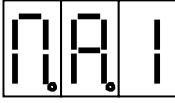
The display indicates  the badge is identified as 271 (the user number). This badge is authorised on door 1 only .

Door 1      Door 2      Door 3 - .....Door number

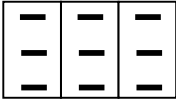
When the display indicates  an RF Transmitter is programmed on door 3 with a user number 702

It is not necessary to go out from the identification Menu for identifying more than one badge.

The user number is not displayed if the badge or RF Transmitter is not programmed in the control unit.

The following message is displayed  when the control unit identifies the master badge.

The master badge is authorised on door 1 and 2.

This message is displayed  when a badge or RF Transmitter is invalid.

To exit from the identification menu, press the PROG button. Pressing a second time to exit from the programming mode.

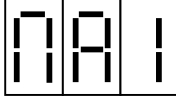
## Antenna

It is possible to connect an antenna of 50 Ω to the terminal block 25 and 26.



## RESET OF MASTER BADGE AND GENERAL RESET

Cut the power supply. Put ST1 jumper and put back the power supply.

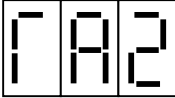
The message is displayed  during 5 seconds. The master badge is then deleted from the unit.

The display is switched off during 5 seconds.

Remove the ST1 jumper return to the stand by mode.

OR

Keep the jumper to reset all the memory.

The message  is displayed during all the time of the reset.

The display is switched off when the reset is completed.  
Remove the jumper to go back to a normal operating mode.

## SETTING PIN CODE ON THE KCP KEYPAD

### CONNECT THE KCP KEYPAD TO THE AUXILIARY 1 INPUT

Enter in programming  
Select **MENU 4** with the NEXT and PREVIOUS keys.

The master badge status is displayed (if a master badge is programmed, three dots are displayed. If no master badge is programmed, three hyphens are displayed).

Press on the first yellow key. The message **F.A.C.** is displayed with three dots.  
This message indicates that the built-in reader is active and then used as the badge enrolment unit.

Double click on the V key. The three dots are switched, then the auxiliary 1 reader is used as the enrolment unit.  
The built-in reader is deactivated.

Press on the red key to go back to the main menu.  
The fourth LED flashes.

Go to the first LED by using the NEXT or PREVIOUS keys then select the access level (door 1 and/or 2).

Select a new user number (pigeon hole). Enter the 5-digit pin code on the KCP keypad then press #.

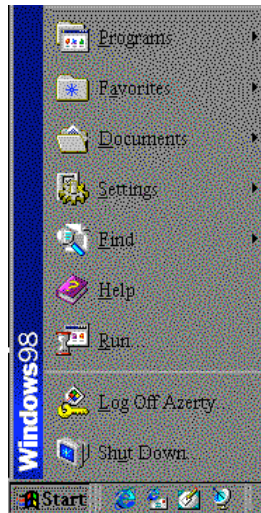
Press twice on the red key to exit from programming.  
To check the new pin code enter it and press on the **# key**.



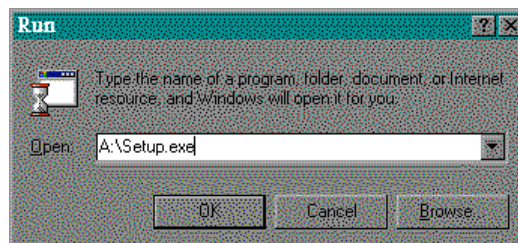
## Software Installation

The UCA3 help on-line comes with the software and is installed on the PC after installing the software.

Insert the CDROM, then click on "Start" and select "Run"

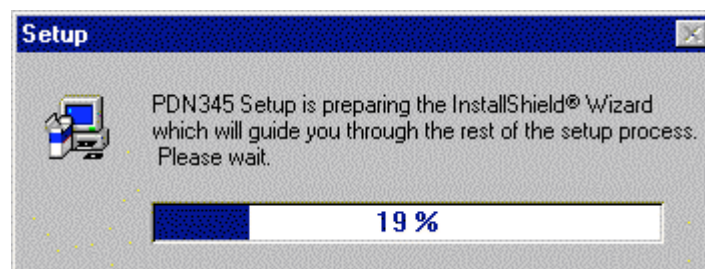


When the window is displayed:



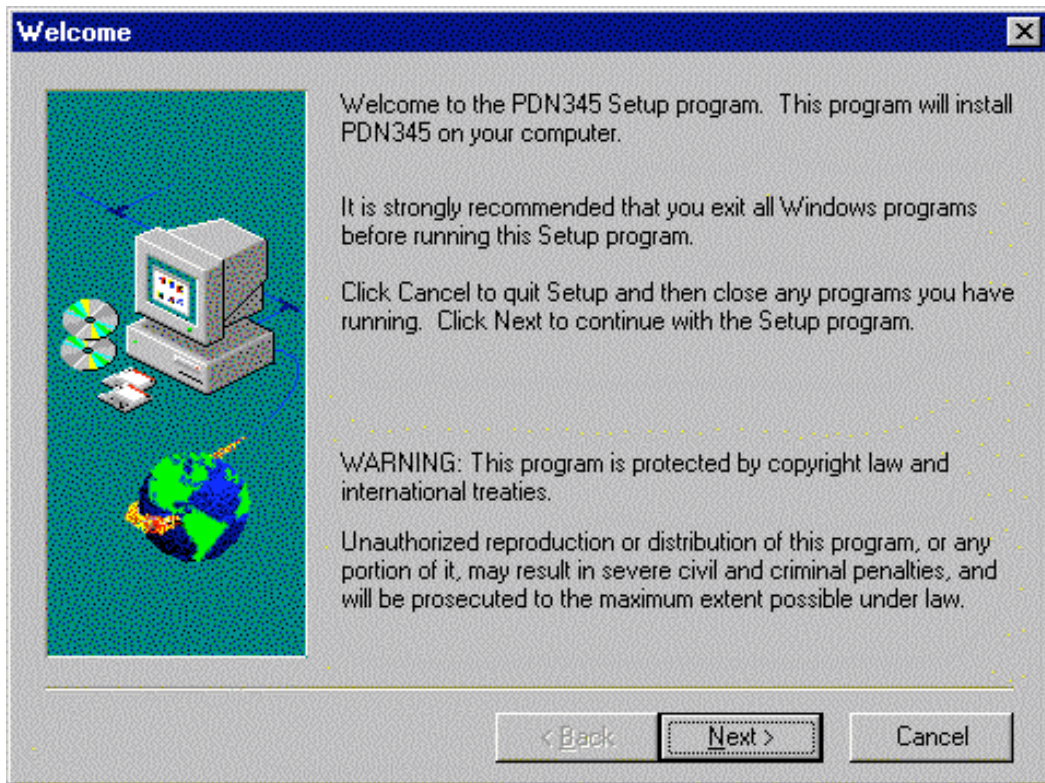
Enter "*D:\Setup.exe*", and press on **OK**.

Windows starts the installation:





The following window is displayed:



Press on "Next".

Read the license and click OK if you agree.

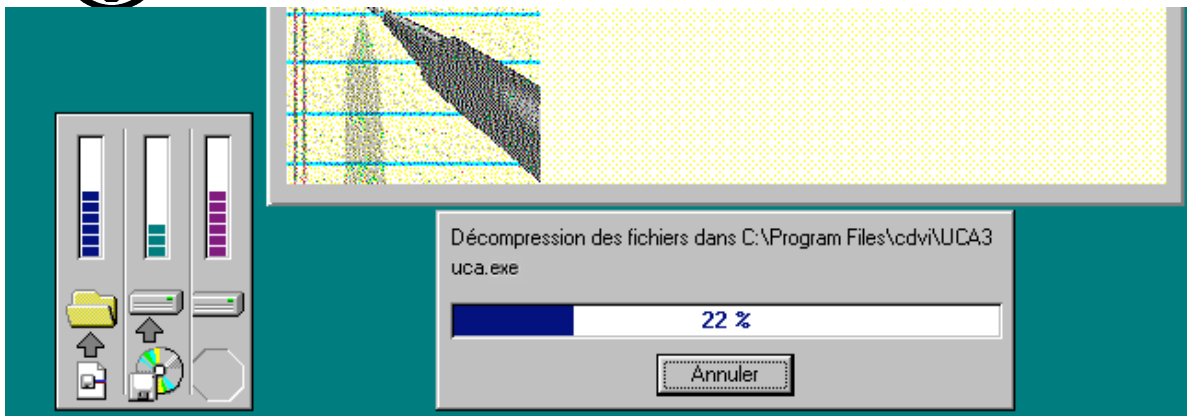
Enter the Name and company:

Name:	<input type="text"/>
Company:	<input type="text"/>

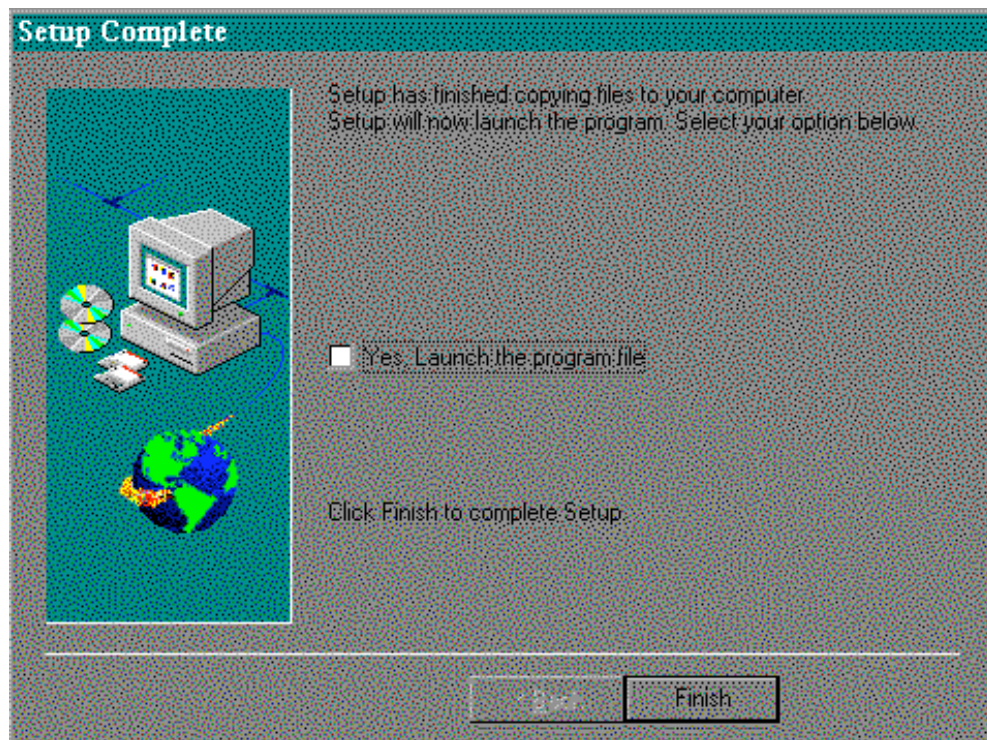
These two fields must be filled to continue the software installation. Press "NEXT".

Keep the default directory or select another one and press « NEXT »:

The following window indicates in which program directory the software will be installed, keep the default directory and press "Next" to start the installation. The status bar is displayed to view the installation progress.



The UCA3 software is installed:



Click on the icon Finish

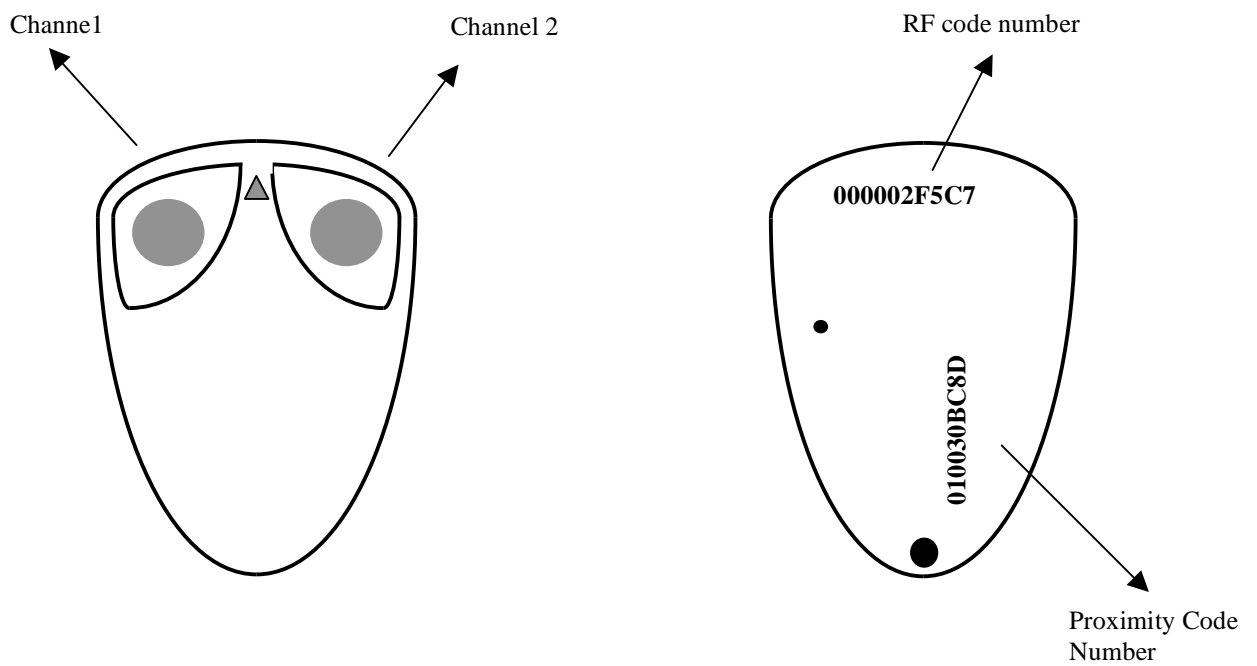
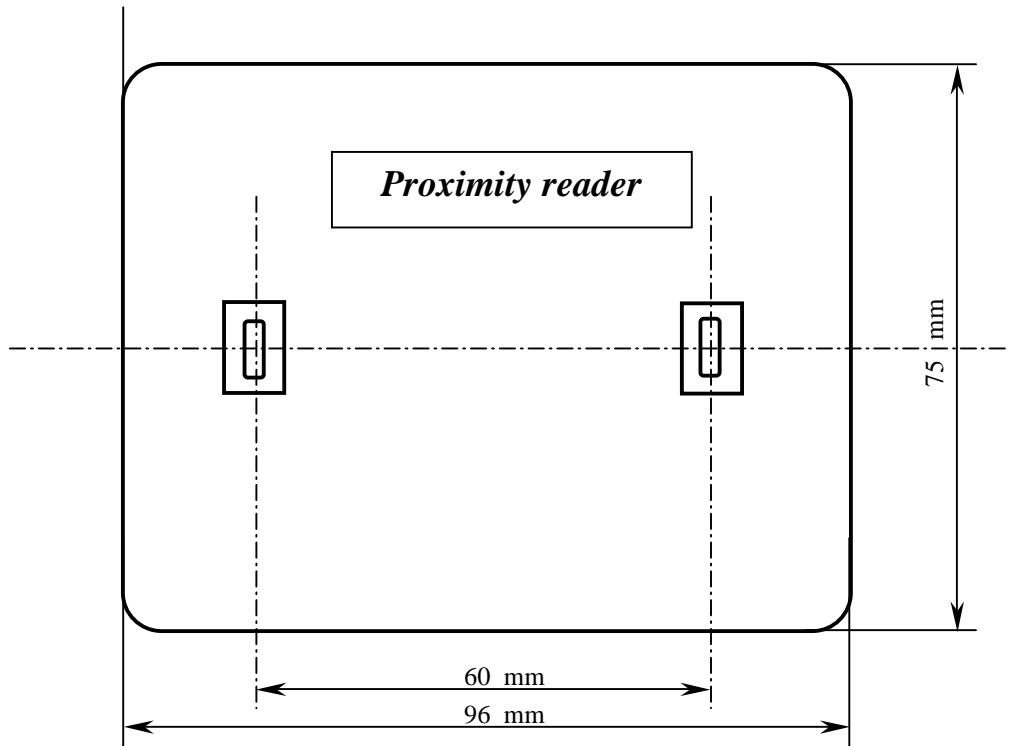
To launch the software, click on "Start" select "Program" then choose "UCA" and "UCA"



Press F1 to view the help on-line.



**TEMPLATE**





## Block terminal

1	Input voltage
2	Input voltage
3	Input voltage
4	Input voltage
5	Reader 2 green LED
6	Reader 2 common
7	PB2
8	Reader 2 data
9	N/C contact relay 1
10	Common relay 1
11	N/O contact relay 1
12	N/C contact relay 2
13	Common relay 2
14	N/O contact relay 2
15	Reader 1 green LED
16	Reader 1 common
17	PB 1
18	Reader 2 data
19	N/C contact relay 3
20	Common relay 3
21	N/O contact relay 3
22	GND
23	Data transmission
24	Data receiving
25	Antenna 433 MHz(optional)
26	Antenna 433 MHz(optional)
V1 V2 V3	Varistors

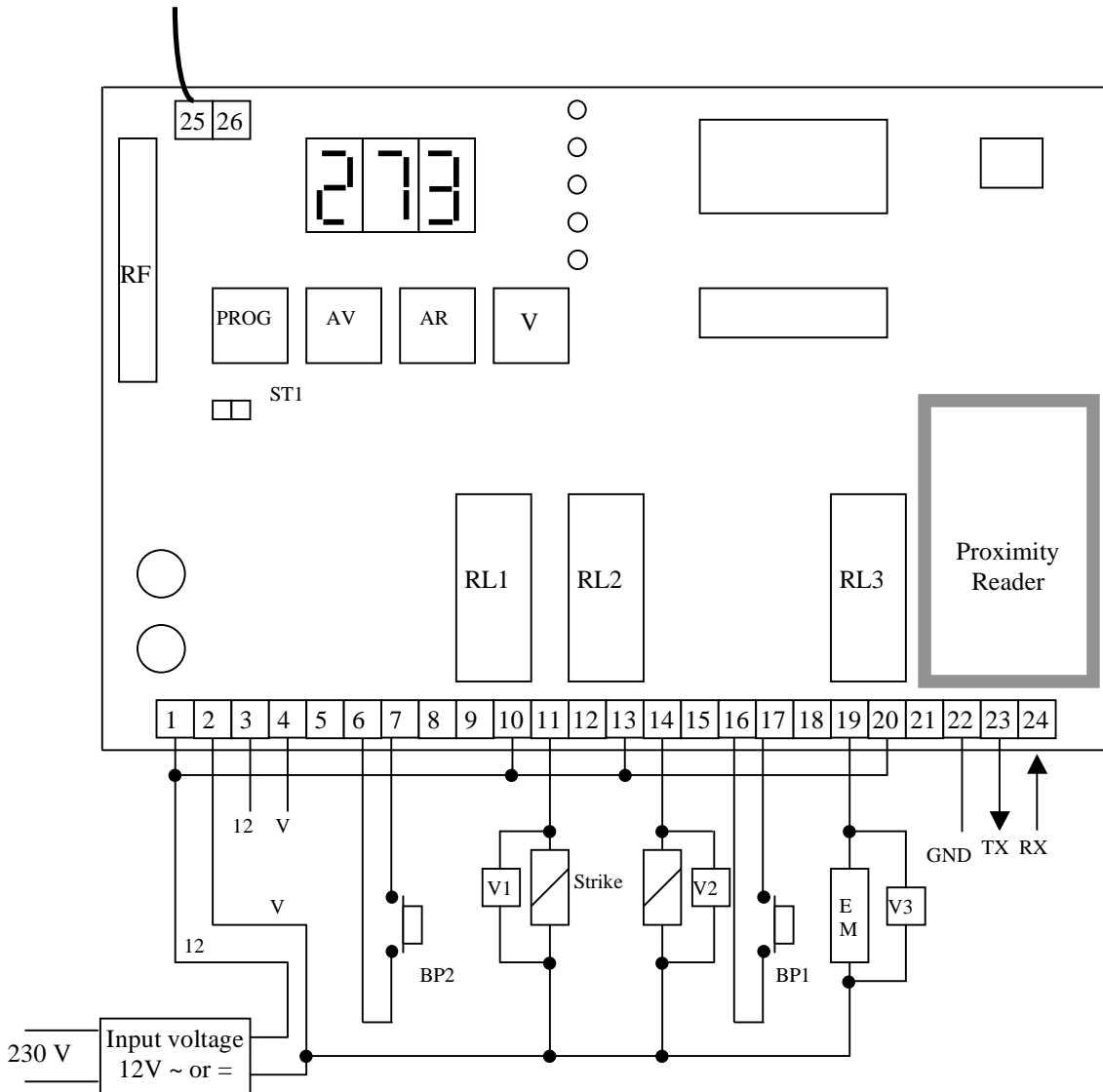
## Proximity reader

12	Input voltage
V	Input voltage
1	Data
4	GND
5	Red LED
3	Green LED
2	Not used



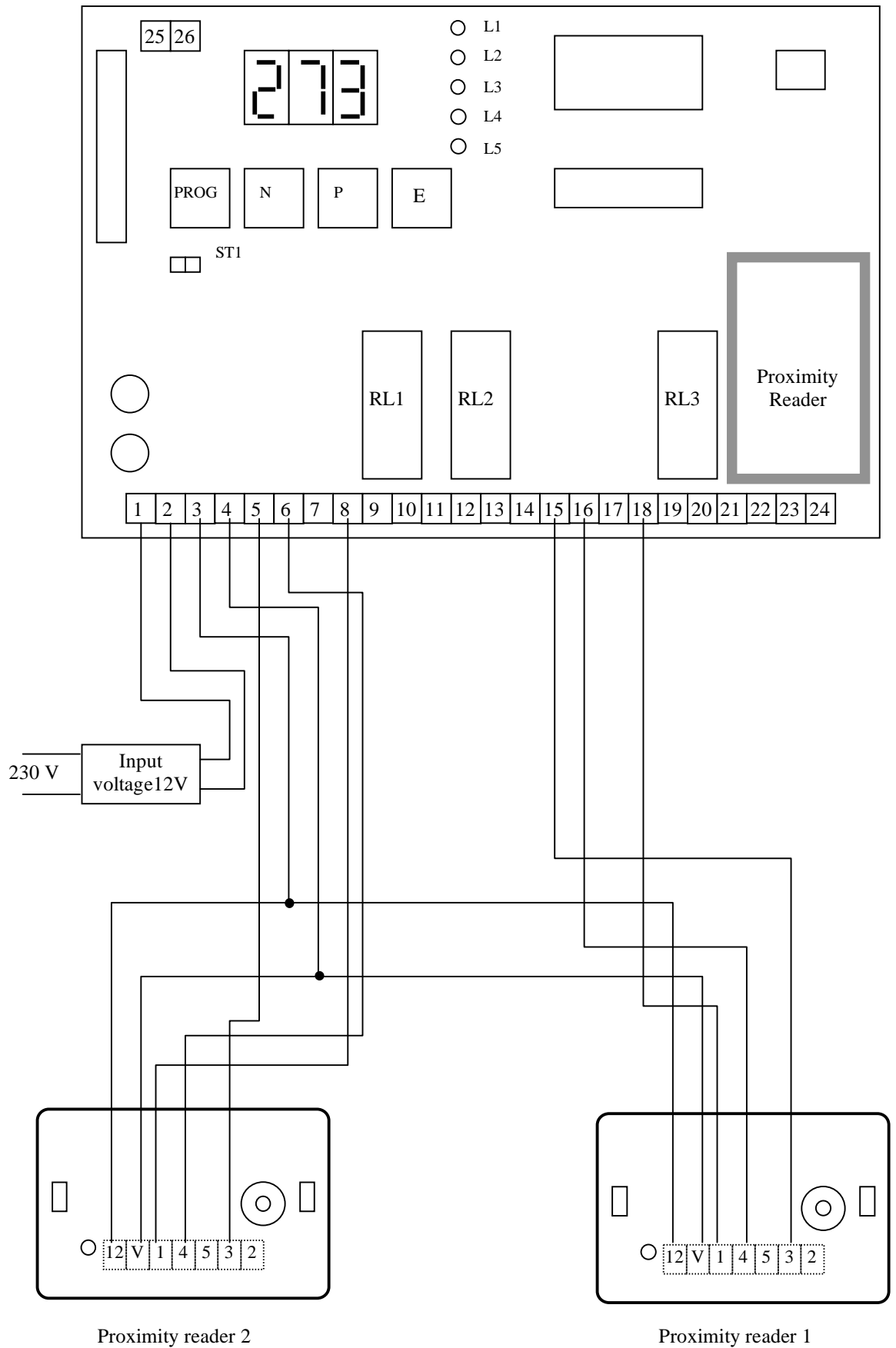
## Wiring Diagram

17.3 cm Antenna  $\lambda/4$  frequency  
or antenna of 50  $\Omega$



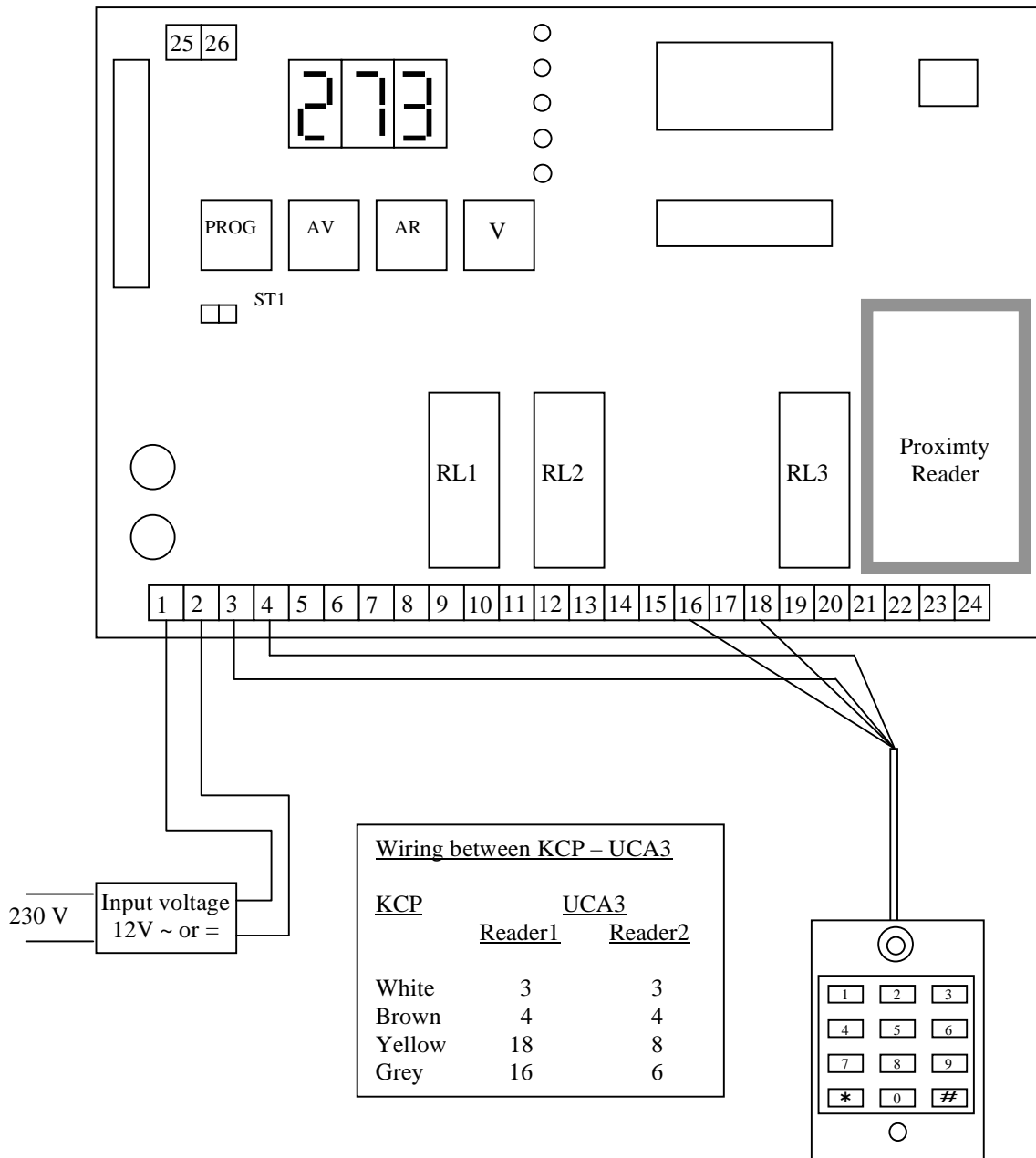


**Wiring diagram with proximity readers**



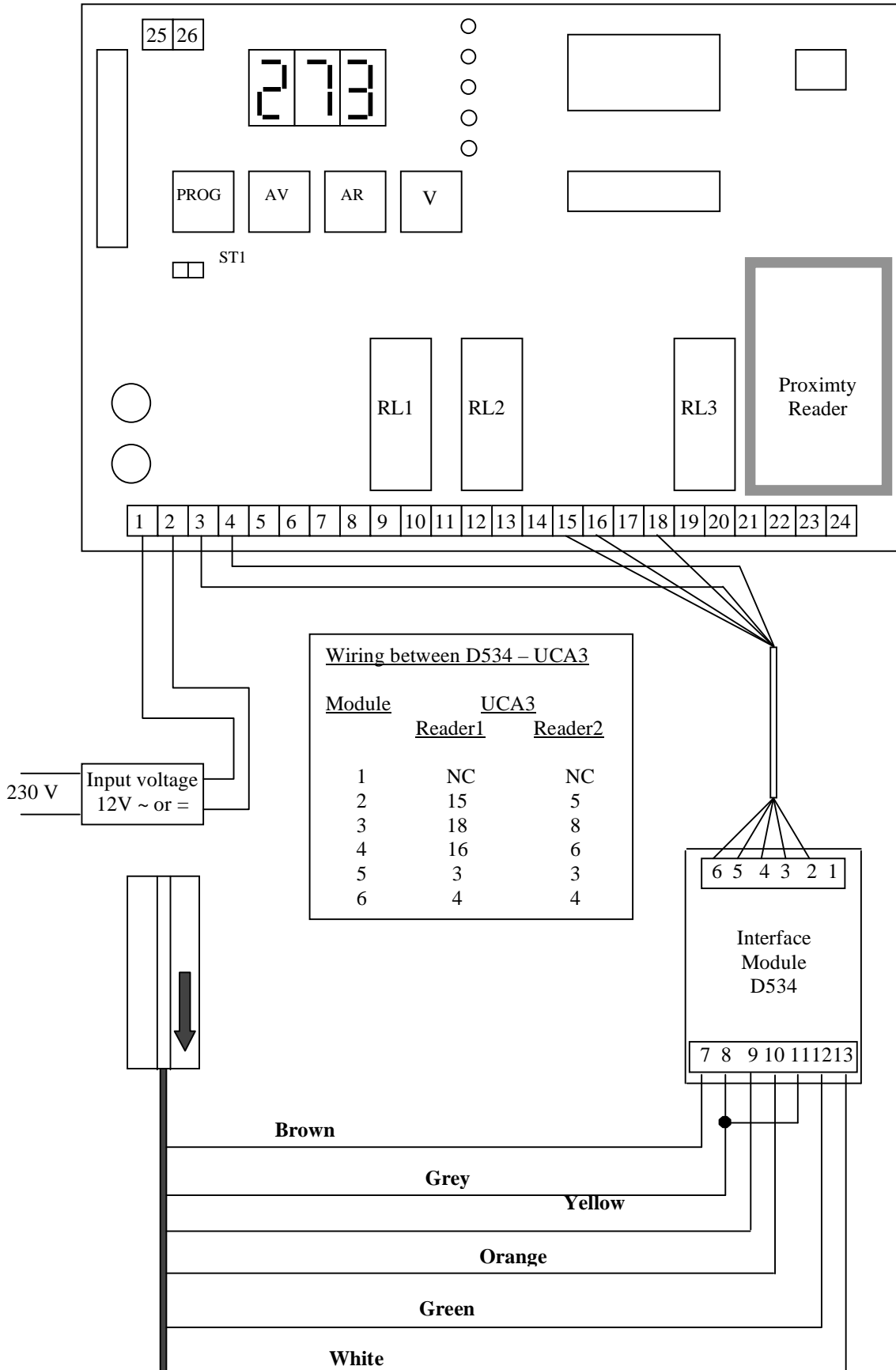


**Wiring diagram with a keypad**





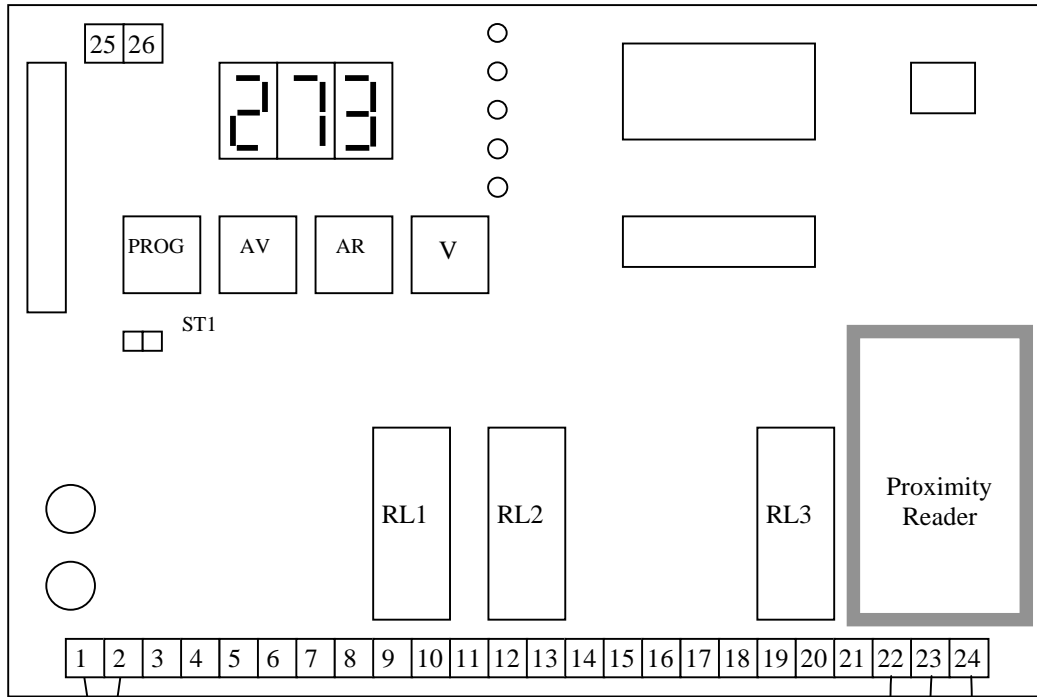
**Wiring diagram with a magnetic stripe reader**







# Connection between the PC and the UCA3



Do not Forget the ST1 and ST2 Jumpers

