Switch2 control unit

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Wiring

Reader

(for exit buttons
GREEN and RED wires go
to reader terminals)

Switch2

12V
Red LED
Amber LED
Green LED
Data
Clock
Media Detect
0V
Contact
Exit

Caution: For 12V d.c. readers only. For correct connection of old 5V readers, please refer to instructions.

Reader or Keypad

Inputs

Bell
Alarm
12V
Power
0V
N.C
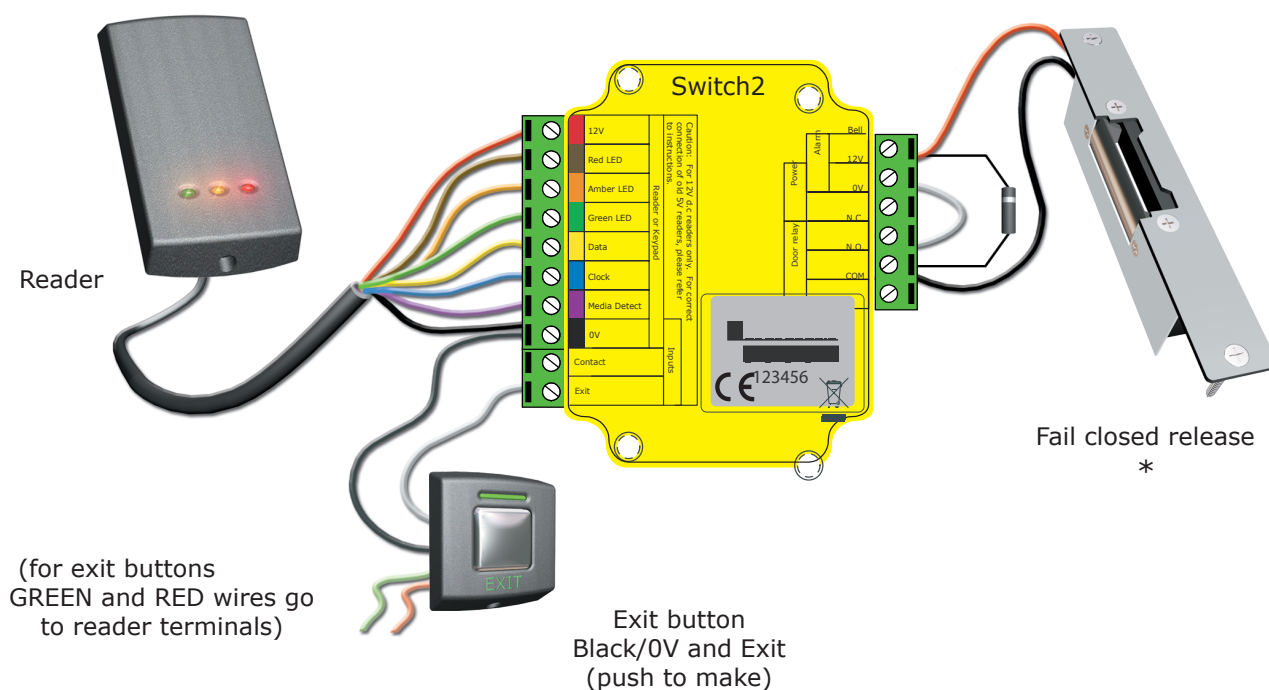Relay
N.O
Door
COM

CE 123456

Exit button
Black/0V and Exit
(push to make)

Fail closed release
*

To change a reader port voltage to 5V, move the red jumper(s) located beneath the wiring label to the 5V setting.

Fail open locks

For a fail open lock (Maglock), wire 0V to the "N.C." terminal instead of "N.O."

This product is not suitable for retail sale. All warranties are invalid if this product is not installed by a competent person.

INITIALISING A NEW SYSTEM

The first time the system is powered up the control unit will beep 3 times a second. This indicates the unit needs programming. There are 3 programming options:

Using tokens only (CARDLOCK or PROXILOCK) see Section 1

Using codes only (TOUCHLOCK) see Section 2

Using tokens and PIN/codes (CARDLOCK/PROXILOCK with TOUCHLOCK) see Section 3

The reader's default indication has all the LED's on. Access granted is denoted with a single flashing Green LED. Access Denied is a single flashing Red LED.

Section 1 - CARDLOCK or PROXILOCK

Enrolling a card pack.

Present/swipe enrolment card

All tokens will now be validated. Tokens can now be issued to users

Adding an additional Proxilock card pack. You need to be in possession of a valid enrolment card for this system. Present this enrolment card to the reader and the Amber LED will flash with the Green & Red LED's off. Present the Enrolment card from the new card pack. The reader will beep and all LED's will be lit. The additional cards will now be valid. Repeat this with each reader and with any additional card packs. Any valid enrolment card can be used to add further packs. If an incorrect enrolment card is used to start the process, the Red LED will be lit and the reader will produce a squeak sound as it rejects the card.

To bar a user: Present/swipe user's shadow card
The user card is now barred

A user can be re-validated by showing the enrolment card followed by the user card or re-entered if used in Card+PIN mode.

Section 2 - TOUCHLOCK

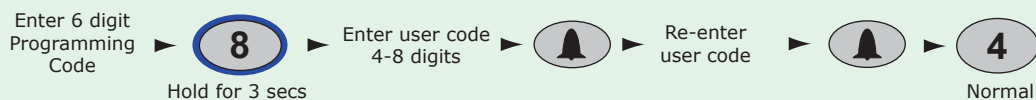**Choose a 6 digit Programming Code and load this into the unit as follows:**

DO NOT USE 123456 - The default User Code will open the door before the Programming Code had been fully entered.

🔔 ► 6 digit Programming Code ► 🔔 ► 6 digit Programming Code ► 🔔

The default user code is now set to 1234

You can now set up the user codes and features using the programming chart.

Example: - Setting a user code to unlock the door under Normal conditions.

Enter 6 digit Programming Code ► **8** ► Enter user code 4-8 digits ► 🔔 ► Re-enter user code ► 🔔 ► **4**

Hold for 3 secs   Normal
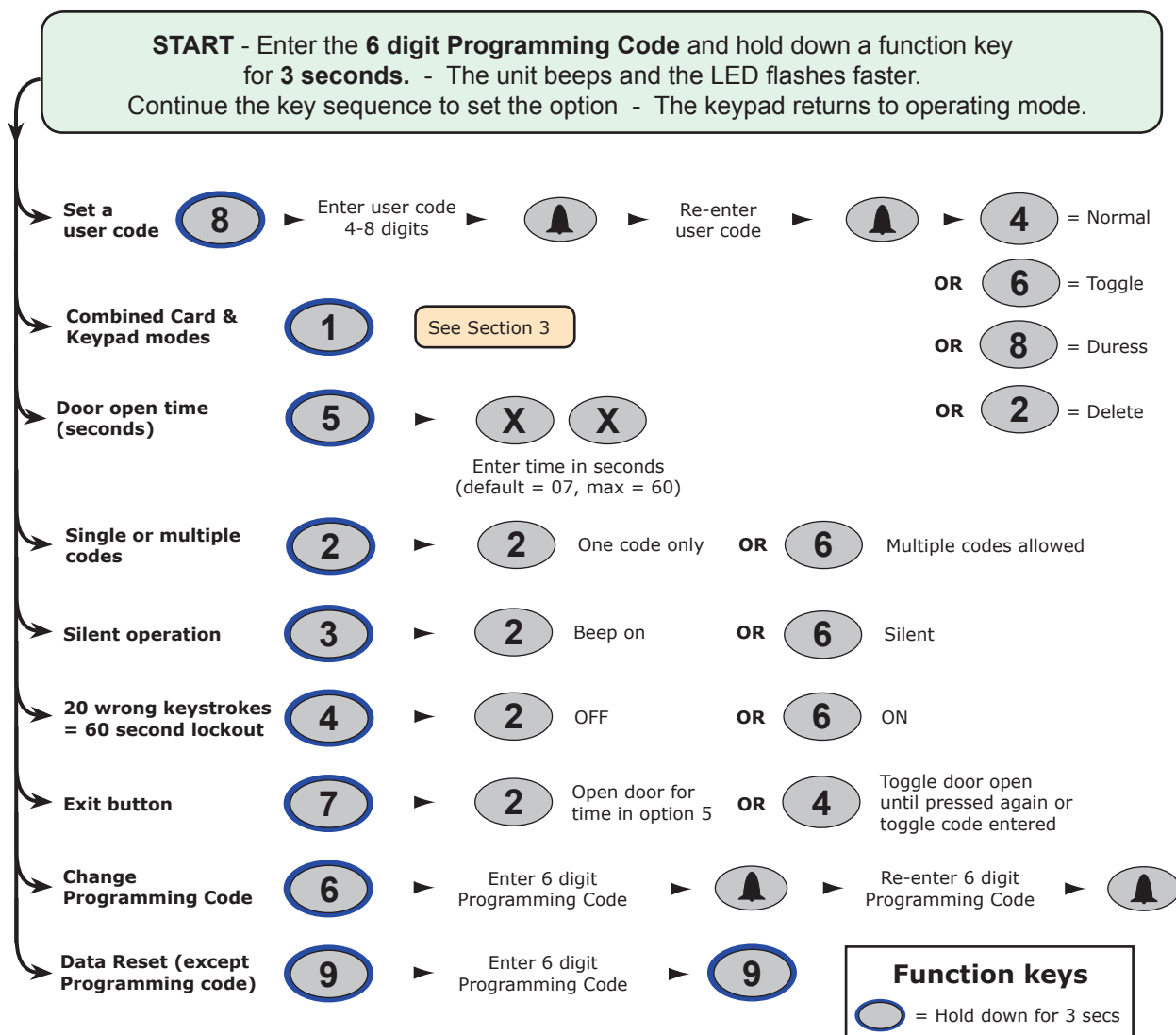
FACTORY RESET

1. Disconnect power
2. Disconnect **GREEN** and **MAUVE** wires
3. Insert link wire between **GREEN** and **MAUVE** terminals
4. Reconnect power - unit will beep 4 times
5. Disconnect power
6. Remove link wire
7. Reconnect **GREEN** and **MAUVE** wires
8. Reconnect power - unit will beep 3 times a second
9. Proceed with Initialising a new system

This box can be used to write down the Programming Code for future reference.
Ensure that this information is stored in a secure place.

Set a user code — (8) ► Enter user code 4-8 digits ► (🔔) ► Re-enter user code ► (🔔) ► (4) = Normal

OR (6) = Toggle

Combined Card & Keypad modes — (1) See Section 3

OR (8) = Duress

Door open time (seconds) — (5) ► (X) (X)

OR (2) = Delete

Enter time in seconds (default = 07, max = 60)

Single or multiple codes — (2) ► (2) One code only OR (6) Multiple codes allowed

Silent operation — (3) ► (2) Beep on OR (6) Silent

20 wrong keystrokes = 60 second lockout — (4) ► (2) OFF OR (6) ON

Exit button — (7) ► (2) Open door for time in option 5 OR (4) Toggle door open until pressed again or toggle code entered

Change Programming Code — (6) ► Enter 6 digit Programming Code ► (🔔) ► Re-enter 6 digit Programming Code ► (🔔)

Data Reset (except Programming code) — (9) ► Enter 6 digit Programming Code ► (9)

Function keys

(⬭) = Hold down for 3 secs

Section 3 - CARDLOCK/PROXILOCK with TOUCHLOCK mode

(i) The KP reader must first be initialised in TOUCHLOCK mode: See Section 2
(Individual Toggle function is not available)

(ii) Set up the required operating mode, as follows:

Enter 6 digit Programming Code ► (1) Hold for 3 secs ► (1) Card plus PIN OR (2) Card plus Code OR (3) Card or Code
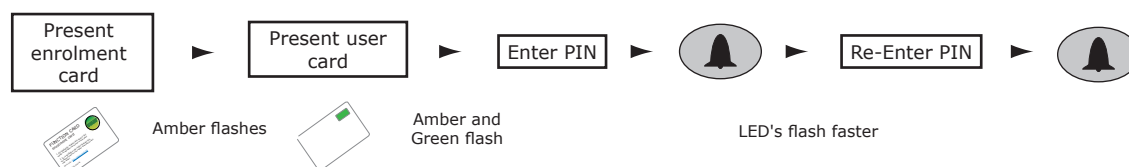
(iii) Present enrolment card

Card plus Code. Access is granted by presenting a valid token and then entering a valid user code.

Card or Code. Access is granted by presenting a valid token or entering a valid user code.

Touchlock programming - Function 2 to enable multiple user codes, Function 8 to add user codes. (4 digits)

Card plus PIN. A card requires a 4 digit PIN to be assigned to it before it will work, as follows:

Present enrolment card ► Present user card ► Enter PIN ► (🔔) ► Re-Enter PIN ► (🔔)

Amber flashes — Amber and Green flash — LED's flash faster

Technical Help

Here is the list of topics about this product that receive the most technical support enquiries.
We list them here to help you speed up the installation and trouble shooting process.

1 - How to reset the controller. - See Main Text

2 - Two readers on the same controller.
Simply wire the PROXILOCK or CARDLOCK readers in parallel, colour for colour. It is possible to mix 5V and 12V readers. The jumper on the Switch2 must be set to provide 5V at the Red terminal and the 12V reader must then be powered directly from the 12V terminal.

3. - Replacing a white labelled control unit. (pre 2004 design)
On a White labelled unit the Red voltage terminal output was 5V DC. The new Yellow labelled unit has this output set to 12V DC. For systems where 5V readers/keypads are to be used, readers must not be connected to yellow label controllers until the jumper setting has been changed on the controller PCB. NOTE: The Touchlock membrane keypad is not compatible with this control unit.

4 - Initialising with 2 keypads.
Either Keypad can be used to initialise the controller when using K-Series Keypads. Connect all wires in parallel, colour for colour. If you are using the older Touchlock/SS then you must use the master keypad which has the yellow wire connected to yellow terminal. (The slave keypad will have the yellow wire connected to the mauve terminal.)

5 - Bell/Alarm Output.
A 12V DC alarm sounder can be wired between the 12V and Bell terminals. This output is capable of driving a 12V bell/buzzer up to 1A. This load must be taken into consideration when selecting a suitable rated power supply. If door contacts are fitted on a Switch2 system, across the Black and Contacts terminals, the bell/alarm output is activated when the door is forced. On a Switch2 system using a keypad, the bell would normally activate this output. However, when using a door forced alarm, the bell on a keypad will not activate the bell/buzzer connected to this output.

Specifications			CE
Electrical	Min	Max	
Voltage	11V DC	14V DC	
Current		80 mA	
Relay switchable voltage		24V DC	
Switchable current		4 A	
Features	Min	Max	
Number of Users	1	10,000	
Number of Codes		50	
Code length	4 digits	8 digits	
Number of PIN's		3,000	
Readers per interface	1	3	
Door open time	1 sec	60 secs	
Time zones (with additional time clock)	1	2	
Access levels (Colour Zones)	1	3	
Silent operation			Yes
Can be used with fail OPEN locks			Yes
Can be used with fail CLOSED locks			Yes
Exit button input			Yes
Door Contact input			Yes
Alarm/bell output voltage			Yes
Environment	Min	Max	
Operating temperature	-20 °C	+55 °C	
Waterproof	NO - If used externally, it must be protected in a plastic weatherproof housing		
Dimensions	Width	Height	Depth
Control Unit	71 mm	70 mm	23 mm
Plastic Cabinet	200 mm	200 mm	75 mm