

# keySOLVE

User Guide

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## Introducing the Controller Reader system

Number of doors controlled	1
Card reading technology	An electronic card with unique code will be read when in proximity (0-25mm) to the card reader
Lock release time	User cards: 0-20 seconds Management cards: As selected user time plus 2 seconds
Maximum number of cards	Lock models for 255 or 1500 capacity
Number of programming cards	1
Management card options	Snib (disable) User card lockout Display last 32 or 254 users
Power Supply	External

### How it works

Each electronic card contains a different code which is fixed during manufacture and cannot be copied or changed. The controller reader has a memory that can store from 255 card codes to 1500 depending on controller model. When a card is presented to the reader, the unique code is passed to the controller and compared to the codes in the memory. The codes in the memory are retained even if the power is removed from the system. If the code is recognised then the electric release will change state and the door can then be opened. Then, after a few seconds delay, automatically relock.

## Administration of electronic cards

### Using the programming card

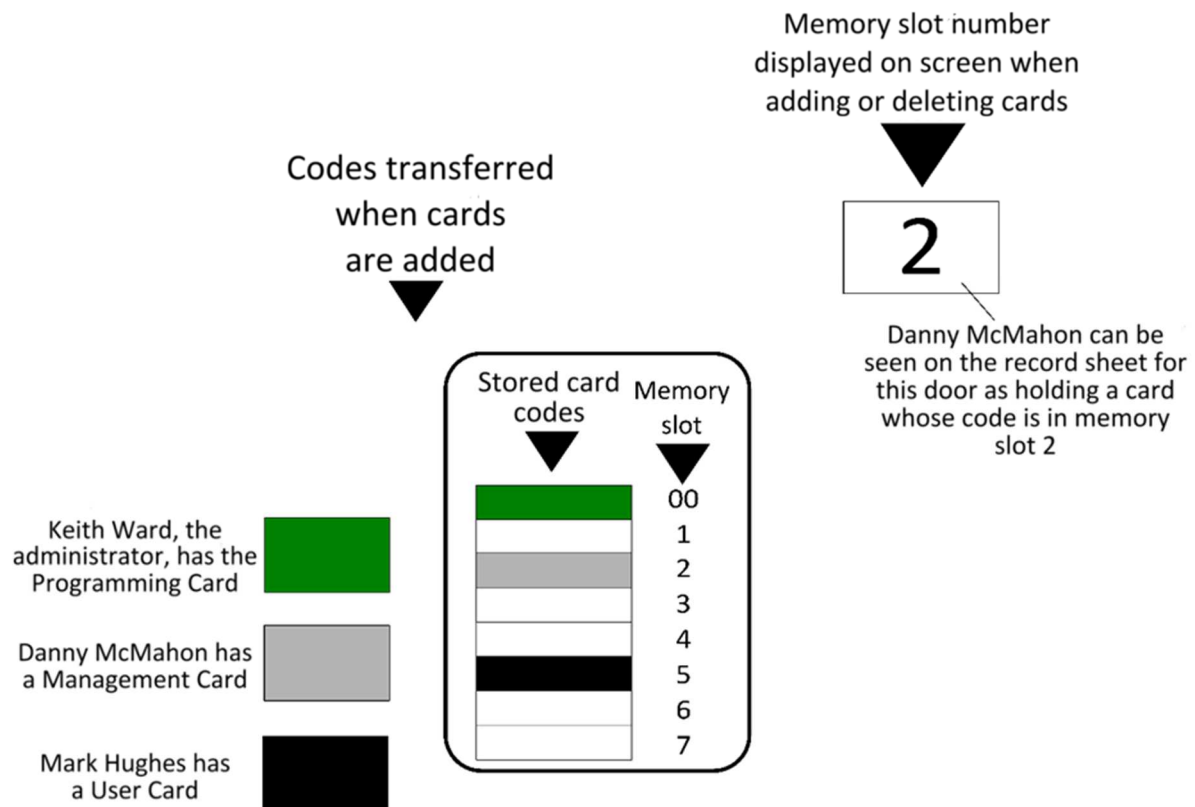
The keySOLVE system is programmed by having one card, called the programming card, which allows the person holding the card to decide who is allowed access. This card becomes the programming card by being the first card to be put in the system memory during installation and, by using this card, the administrator can add, delete and identify individual cards.

A display on the unit is used to indicate the number of the memory slot that the administrator wants the card code to be known as, and this is then recorded on an administration record sheet, as shown.

<b>Administration Record Sheet</b>							
				Management card list set to:4			
Slot	Issued to	Slot	Issued to	Slot	Issued to	Slot	Issued to
<b>00</b>	K Ward	<b>50</b>		<b>100</b>		<b>150</b>	
<b>1</b>	G Ewens	<b>51</b>		<b>101</b>		<b>151</b>	
<b>2</b>	D McMahon	<b>52</b>		<b>102</b>		<b>152</b>	
<b>3</b>	M Hughes	<b>53</b>		<b>103</b>		<b>153</b>	
<b>4</b>	A Papworth	<b>54</b>		<b>104</b>		<b>154</b>	
<b>5</b>	L Ettrick	<b>55</b>		<b>105</b>		<b>155</b>	

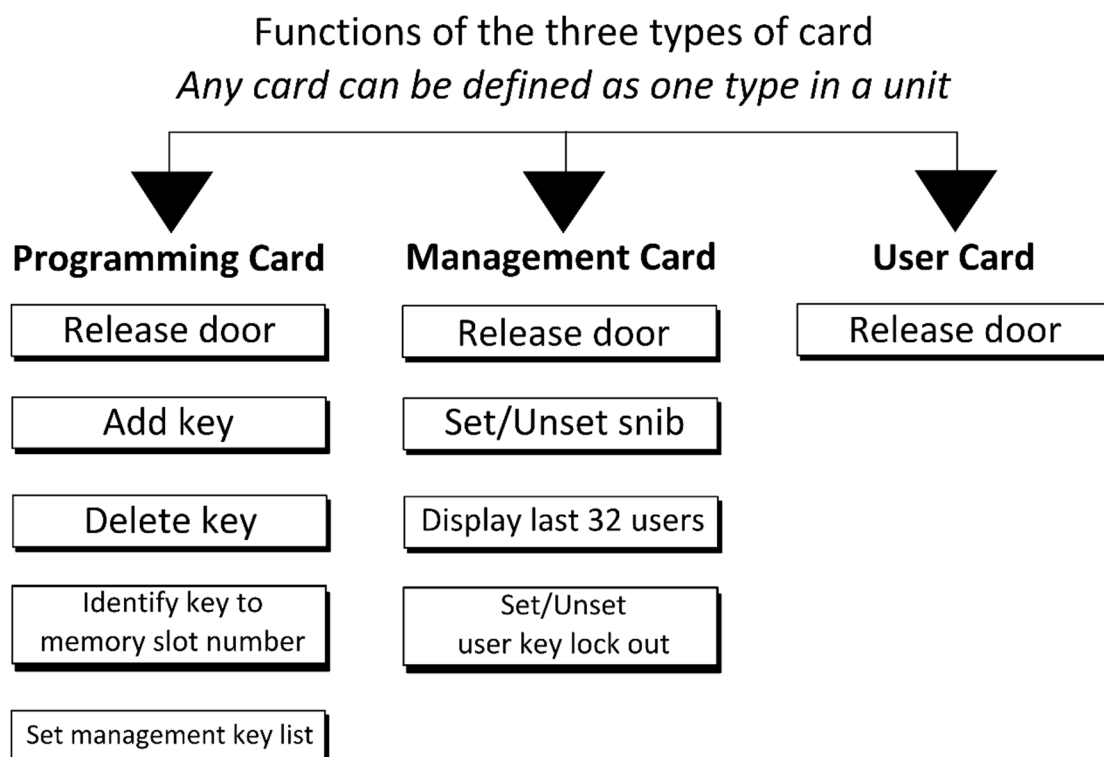
The programming card can also be used to set a privileged management card list which enables designated cards to:

1. Permanently snib (disable) the lock
2. Lock out all other cards not in the privileged cards list
3. Display the last 32 (or 254) card and snib transactions



The management card list is set for the cards in slots 1-4 in this example. Mark Hughes, whose card is in slot 5, is therefore restricted to door release only

## Administration of electronic cards overview



## Notes for the administrator

The programming card can be designated for one door or any number of doors. The number of programming cards will be determined by how many independent administrators there are. There is only one programming card per keySOLVE system door and we recommend for security that it is held in a secure place rather than being used as a day-to-day access card

Each card that is added is given a slot number by you, which is from;  
1-254 for a 255 card model  
1-1499 for a 1500 card model

You should create a card administration sheet which is used to record information on all the card holders.

When a card is added, you write on the record sheet for that particular door who it was issued to against the slot number so that if the card is lost or stolen, you can immediately select that slot number and delete the card.

The procedure for adding and issuing new cards is more easily done by putting them in an envelope with the user name and slot number on. The card code will be read through the envelope when adding a card, thus making administration much simpler.

The card itself can be marked with the slot number by attaching a sticky label.

Identification of cards that have been lost and found again is achieved by presenting them to the reader and is explained further in the identifying cards section.

Setting a management card list is optional and, if you do not require any of the enhanced card control features, then the default setting is for no management cards to be selected.

If you set the management card list, this starts at slot 1 and includes all your numbers between 1 and the highest number selected. It is suggested that you leave a gap in the numbers between the last management card and the first user card to allow room for including future management cards in the future. The management card list is completely flexible and may be changed at any time by the programming card holder.

## Notes for the management card holder

Any management card holder can use the enhanced card control features. The programming card holder and user card holders, however, cannot.

The *snib* function unlocks the door permanently until cancelled by a management card holder. This can be used by a receptionist to remove access control so that visitors enter freely during normal work hours. As she leaves, the snib is taken off and then only authorised card holding staff can gain access. A caretaker at a school may use this facility to remove access control on perimeter doors to let children have free access coming into school and then securely re-establish control some time later.

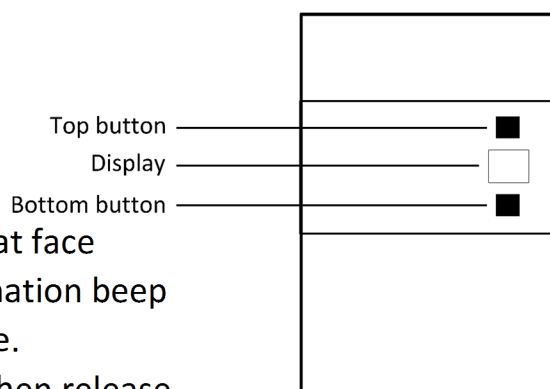
The *user card lockout* enables a management card holder to temporarily suspend all the user cards. This is useful at times where out of hours supervision in an area is not available and normal users need to be positively excluded. Any management card holder or the programming card holder can, however, still gain access.


The *card history log* enables any management card holder to view on the unit's display the last 32 or 254 transactions through the controlled access point. The memory slot numbers are displayed in the sequence of most recently used number coming up first, so that if an incident has occurred without any obvious sign of forced entry, a review of users can be seen and used as an audit trail. The history log only records a change of card codes, so a person offering a card up 32 times would not obscure the preceding transactions.

## Programming of electronic cards

### Adding Cards

1. Hold the programming card (with the flat face parallel) to the reader face until a confirmation beep is heard and remove card from reader face.
2. Immediately press the top button and then release.



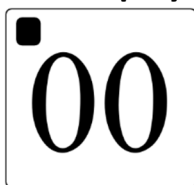
The display will show:  The illuminated dot in the top left-hand corner confirms that you can add/identify keys

3. Use either button to select the slot number that you are going to allocate for the new card. When selecting slot numbers, the top button goes up and the bottom button goes down. You can hold either button for a fast selection. The display scrolls 0, then 1, 2, 3, if the top button is pressed. The display scrolls 0, then, for instance, 254, 253, 252 for a 255 card capacity unit, thus saving selection time for higher numbers. Displayed numbers will flash if the slot is available for a card to be put into the memory. The card administration sheet should be updated when amendments are made.

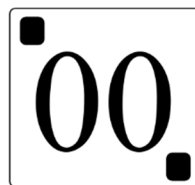
### Examples of card number displays



99 displayed  
on 255 card  
unit



100 displayed  
on 255 card  
unit



200 displayed  
on 255 card  
unit



247 displayed  
on 255 card  
unit

4. Present any new card to the reader and the number should become steady and a longer confirmation beep will be heard.
5. Select the next slot for a new card by pressing either button and present the next new card to the reader. Repeat as required.

**N.B** If a card is already in the memory then it is not possible to put it into a further slot number.

For 1500 card unit, see additional sheet.



## Identifying Cards

1. Hold the programming card parallel to the reader face until a confirmation beep is heard and remove the card from the reader face.
2. Within the lock release time, press the top button and then release

The display will show:



The illuminated dot in the top left-hand corner confirms that you can add/identify keys

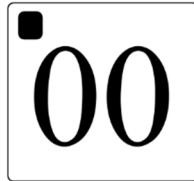
3. Present the unknown card to the reader and, if it is in the system memory, the code will be recognised and the display will change to show the slot number. The user can then be identified from the administration sheet.

If the card is not in the memory, an audible beep will be heard but the display will not change

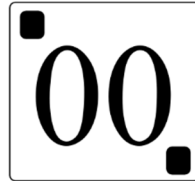
### Examples of card number displays



99 displayed  
on 255 card  
unit



100 displayed  
on 255 card  
unit



200 displayed  
on 255 card  
unit

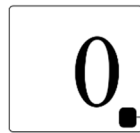


247 displayed  
on 255 card  
unit

## Deleting cards

1. Hold the programming card to the reader face until a confirmation beep is heard and remove the card from the reader face.
2. Within the lock release time, press the bottom button and then release

The display will show:



The illuminated dot in the bottom right hand corner confirms that you can delete keys

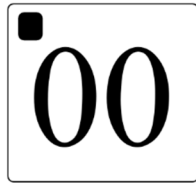
3. Use either button to select the slot you wish to delete. When selecting slot numbers, the top button goes up and the bottom button goes down. You can hold either button for a fast selection. The display scrolls 0, then 1, 2, 3, if the top button is pressed. The display scrolls 0, then, for instance, 254, 253, 252 for a 255 card capacity unit, thus saving selection time for higher numbers.

Displayed numbers will flash if the memory slot has a card ready to be deleted.

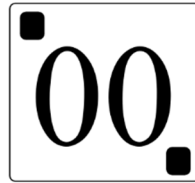
### Examples of card number displays



99 displayed  
on 255 card  
unit



100 displayed  
on 255 card  
unit



200 displayed  
on 255 card  
unit



247 displayed  
on 255 card  
unit

4. Present the programming card again to the card reader and the display will stop flashing and there will be a longer confirmation beep, showing that the card has been deleted from the memory. That particular memory slot is now available to put a new card in.

The card administration sheet should be updated when any amendments are made.

## Establishing management cards

1. Hold the programming card to the reader face until a confirmation beep is heard and remove card from reader face.
2. Within the lock release time, press the bottom button and release.

The display will show:



3. Present the programming card again

The display will show:



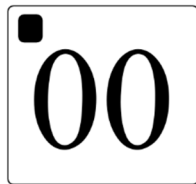
which means you should set the limit for the management card list.

4. Press either button to display the current management list. The default is 0 (No management cards)
5. To change the setting, press either button until the desired memory slot is reached. If the setting is set to the maximum number, all cards (Except the programming card) will be management cards.

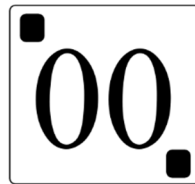
### Examples of card number displays



99 displayed  
on 255 card  
unit



100 displayed  
on 255 card  
unit



200 displayed  
on 255 card  
unit



247 displayed  
on 255 card  
unit

6. Present the programming card again to the reader to confirm the setting. The display will go out and a confirmation beep will be heard.

## Using management cards

### Setting the snib

1. Hold the management card parallel to the reader face until a confirmation beep is heard and remove the card from the reader face.
2. Within the lock release time, press the top button and release.

The display will show:



and flash for about 4 seconds.

A long confirmation beep will then be heard, indicating that the system is disabled for free access. As a reminder, **Sn** flashes each time the management card is used.

N.B Snib cannot be set if user card lockout is set.

### Releasing the snib

1. Hold the management card parallel to the reader face until a confirmation beep is heard and remove the card from the reader face. The display will flash **Sn** for approximately five seconds.
2. Within the lock release time, press the top button and release.

The display will show:



and flash for about 4 seconds.

A long confirmation beep will then be heard, indicating that the snib has been cleared and the system relocked and back on access control.

## Setting user card lockout

1. Hold the programming card to the reader face until a confirmation beep is heard and remove card from reader face.
2. Within the lock release time, press the bottom button and release.

The display will show:



and flash for about 4 seconds

A long confirmation beep will then be heard, indicating that all user cards have been locked out. The system will then relock. As a reminder, the display will flash Lo each time a management card is used

## N.B Card lockout cannot be set if snib is set

## Releasing user card lockout

1. Hold the management card parallel to the reader face until a confirmation beep is heard and remove the card from the reader face. The display will flash **Sn** for approximately five seconds.
2. Within the lock release time, press the bottom button and release.

The display will show:



and flash for about 4 seconds.

A long confirmation beep will then be heard, indicating that the lockout has cleared and all user cards are now able to gain access. The system will then relock.

## Reviewing the card history

1. Hold the management card parallel to the reader face until a confirmation beep is heard and remove card from reader face.
2. Within the lock release time, keep either button pressed for about 5 seconds until the display reappears and release.

The display will show:



This indicates that you may access the last 32/254 different card and snib transactions in the history log

3. Press the bottom button and release to see each transaction. The first number shown is the most recently used card and the numbers shown follow in order.

When **Sn** is seen, the card in the memory slot following is the card that performed the snib.

4. If the bottom button is pressed more than 32/254 times, the display will show **HL** to indicate that you have returned to the start of the history log.
5. When you have finished reviewing the log, press the top button to clear the display and the door will relock. If you forget to do this, the lock will automatically relock after 30 seconds.

## Programming summary

Use the programming card to release the lock, then select the function, using the buttons on the unit as follows;

Function	Button	Procedure	Notes
<b>Adding cards</b>	TOP	Use either button to select the required memory slot number, then present the new card to the reader. Repeat as necessary	<p>When selecting numbers, top button increments, bottom button decrements. Hold either button for fast repeat. The display scrolls between 0 and the highest number. Use this to select high numbers quickly by using the bottom button.</p> <p>Displayed numbers flash when available for a function and go steady along with a long beep when function is complete.</p> <p>Use the card log sheet to record admin numbers as they are added and deleted.</p> <p>Numbers over 99 are displayed by lighting top left dot to indicate 100 and numbers over 199 are displayed by lighting top and bottom dots</p>
<b>Identifying cards</b>	TOP	Present unknown card to reader: its number is displayed. <b>N.B If the card is not in the unit the displayed number stays the same</b>	
<b>Deleting cards</b>	BOTTOM	Use either button to select the memory slot to delete, then present the programming card again to delete	

If additional control facilities are to be used, then first use the programming card to set up the management card list as follows;

Function	Button	Procedure	Notes
<b>Setting the management card list</b>	BOTTOM	Present the programming card again whilst display shows <b>00</b> to obtain <b>SL</b> on display. Press either button to display current setting. To change, select a new setting using the buttons and present the programming card to confirm.	<p>Cards with numbers up to and including the limit set are management cards. The programming card (00) does NOT perform management functions.</p> <p>If set to 0, all cards are user cards only. If set to max, all cards are management cards</p>

## Using management cards

Use the management card to release the lock, then select the function using the buttons on the unit as follows:

Function	Button	Procedure	Notes
<b>Setting/releasing the snib</b>	TOP	Displays <b>Sn</b> for snib set, <b>cL</b> for clear	Unit release time is increased by 2 seconds for management cards. When snib or lockout is set, use of a management card displays Sn or Lo respectively, and the reader LED stays on for the entire unit release time. Card lockout and snib cannot be set at the same time. The history may be accessed if snib or lockout is set.
<b>Setting/releasing card lockout</b>	BOTTOM	Displays <b>Lo</b> for lockout set, <b>cL</b> for clear.	
<b>Card history log</b>	Either (Hold for 5 seconds)	HL appears. Use bottom button to step backward through the log. (The first number shown is the last used. When Sn is shown, the next number performed the snib) Press top button to quit.	