

# SmartLock

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## **The Smartlock Mifare SL950 Access Control System**

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### **1. System Components.**

Quantities as ordered;-

- 1.1. Mobile pc – laptop or tablet pc
- 1.2. Reader / writer pc
- 1.3. Interface cable
- 1.4. Installation card
- 1.5. Installation cd / memory stick
- 1.6. SL950B – door mounted locks
- 1.7. SL950M – mains powered controller and reader
- 1.8. Mifare cards – can be pre-printed and have hico mag-stripe / tokens etc.
- 1.9. Host pc supplied on request – Specification;-
  - Windows XP
  - Access 2002/3
  - Excel 2002/3 +
  - Free USB port
  - Network connection for mobile pc if required

## **2. Mifare Lock System Software Installation**

The system can be run from either the Host pc or the mobile pc. The initial set up is the same for both.

The system requires Microsoft Access 2002 / 2003. If this does not exist on the machine please install the Access Run Time by opening the Access Run Time folder and running ACCESSRT.MSI and follow the instructions.

If the Bulk Card production facility is required a copy of Excel 2003 should be installed. If a later version is available files should be saved in the 2003 format.

2.1. Reader / writer installation;- Plug in the Mifare Reader / Writer and follow the Windows® installation instructions directing the search to the supplied cd / usb memory stick and the directory ACR120 Drivers.

2.2. Run the file Smartlock.exe and follow the on screen directions.

2.3. The files will be set up in C:\program files\smartlock and the database boltdata.mdb in the sub folder Data. The database on the Host pc can be moved if required so long as the program is directed to it. Running it from a network drive would be one reason to do this (see Select Data source 2.1.4.)

## **3. Host PC**

Follow the instructions in Software installation above (2). above.

For the initial setup, click on the desk top icon and log on using the engineering logon (Ctrl L) password 'engineer'. Follow the notes for Engineering Configuration (3.1), System operation (3.4) and Lock Program (3.3.2). Finally make at least one staff card with full authority for logging on to the system and operating the doors as described in 2.3.1.

General;- you may navigate about the screen using a mouse or using the 'tab' and 'shift tab' keys.

These instructions are for principally for Mifare systems, although many of the features are applicable for both mag-stripe and dual systems. Some of the features will not be available for the mag-stripe system and procedures will vary slightly.

### **3.1. Engineering configuration**

#### **3.1.1. Configuration**

3.1.1.1. Change Password - if required the password can be changed from 'engineer'. Click on change password and then follow the instructions.

3.1.1.2. Card types – select the card types appropriate to the installed system. If Mifare is selected chose the Mifare card sector to be used. Normally this would be sector 1 if the card is not used for other purposes.

3.1.1.3. The allow connection to Mfare locks box should only be checked if the host pc and mobile pc is one and the same follow the instructions in Mobile PC (4) below otherwise leave blank

- 3.1.1.4. Select the language or function from the drop down menu.
- 3.1.1.5. System Defaults.
- 3.1.1.6. Set the authorisation time out – the system will automatically require re-authorisation so that if the system is left open it cannot be used by un-authorised personnel. The time should be selected to suit the vulnerability of the system.
- 3.1.1.7. Tick the Guest deadbolt override if guest cards are required to gain entry when the dead bolt is thrown
- 3.1.1.8. The 'Fast card eject' is for magnetic stripe card or dual systems only and if ticked will eject the card completely, otherwise the card will remain in mouth of the encoder.
- 3.1.1.9. The 'Card duplication' is for guest cards and will allow for a duplicate card to be issued to a late arriving subsequent guest. If not ticked, cards for all guests would have to be re-issued.
- 3.1.1.10. Auto card generation is ticked if bulk card production is required directly from the stored database.
- 3.1.1.11. The default lock opening times can be set here for normal and extended periods. These can be modified for individual lock during programming if required.
- 3.1.1.12. After making any required changes, click on the 'Save Changes' button.

### **3.1.2. Guest Defaults**

- 3.1.2.1. Length of stay – this is the most common duration and will be entered automatically on the guest booking form.
- 3.1.2.2. Default breakfast – this is for identification only and has no functional effect. If the type of breakfast is not required this field can be translated to give some other identification (see 2.2.1.1.6)
- 3.1.2.3. Languages – or translation to suite different uses e.g. hospital, office etc. Please contact us for the required translation.
- 3.1.2.4. VIP status – if this is checked the guest is automatically given VIP status on the guest booking form(see 2.2). This can be cancelled or added when booking and may be used for access to a VIP only area or extended check out times.
- 3.1.2.5. Exclude staff - if this is checked the exclude staff feature is automatically added to the guest booking form (see 2.2) if set, lower authority staff will not be able to gain access to the guest. This can be cancelled or added when booking.
- 3.1.2.6. Aux. Data track for guest cards – there is the possibility of writing additional information to another track on mag-stripe cards if the encoder has the capability.

### **3.1.3. Back up**

Select the location where the system back up files are to be stored.

### 3.1.4. Select Data Source

To direct the Smartlock System program to the location of the database. This can be local or on a network. For the host PC the Allow remote use box should not be checked.

## 3.2. Keycards

### 3.2.1. New Guest Cards

3.2.1.1. The booking form is reasonably self explanatory. Guest cards are identified by the room number/s for which they are valid. The cards can also be given access to areas and groups however, please note, access to these cannot be cancelled if lost so only short durations are advisable.

3.2.1.2. Lock – either simply enter the name of the room (see Lock Program (3.3.2)) or pick from the drop down menu (or a combination of the two).

3.2.1.3. Cards to issue – if more than one card is to be used on a door they must either be issued at the same time or duplicates made (see update guest card (3.2.2)). Enter the number of cards to be issued.

3.2.1.4. VIP - when checked may be used for access to a VIP only area or extended check out times.

3.2.1.5. Extended opening – When checked the lock will open for the extended period set when programming the lock (see Lock program (3.3.2))

3.2.1.6. Name – Guest's name.

3.2.1.7. Breakfasts - this is for identification only and has no functional effect. If the type of breakfast is not required this field can be translated to give some other identification

3.2.1.8. Start Date – defaults to current date but may be changed to enable cards to be made in advance. The date may be entered directly or chosen from the pop up calendar.

3.2.1.9. Days – The number of days for which the cards is to be valid from the start date.

3.2.1.10. Group A – Access to a group of locks may be given – Please note Access will not be denied when a subsequent guest card is made. Access will only be denied when the valid period has expired.

3.2.1.11. Group B– Access to a group of locks may be given – Please note Access will not be denied when a subsequent guest card is made. Access will only be denied when the valid period has expired.

3.2.1.12. Conference – checking this box will put the lock into conference mode for the valid period of the card. Job types with the lowest area authority will not gain access during this period.

3.2.1.13. Areas - Access to an area may be given – Please note Access will not be denied when a subsequent guest card is made. Access will only be denied when the valid period has expired.

Issue – When all the required information has been inputted, clicking on the 'Issue' button to write to the card. Place the card on the reader / writer for a Mifare only

system, place the card on the reader / writer and then into the card encoder for a Mifare / mag-stripe system or into the encoder for mag-stripe only system. The card issued window will come up after successful writing of the card.

### **3.2.2. Update Guest Card**

A valid card can be re-issued (if lost or damaged) or duplicated for a subsequent additional guest without having to fill out the form again.

### **3.2.3. Bulk Guest Cards**

If a large number of cards are required an excel template can be exported, filled in with the guest details and re-imported

### **3.2.4. Temporary Card**

A temporary card can be produce with a short term validity

3.2.4.1. Lock – either simply enter the name of the room (see 3.3.2 Lock program) or pick from the drop down menu (or a combination of the two).

3.2.4.2. Name – Name or function of person to whom the card is to be issued.

3.2.4.3. Duration – Time allowed for entry (1-300 minutes)

3.2.4.4. Group A – Access to a group of locks may be given – Please note Access will not be denied when a subsequent guest card is made. Access will only be denied when the valid period has expired.

3.2.4.5. Group B– Access to a group of locks may be given – Please note Access will not be denied when a subsequent guest card is made. Access will only be denied when the valid period has expired.

3.2.4.6. Areas - Access to an area may be given – Please note Access will not be denied when a subsequent guest card is made. Access will only be denied when the valid period has expired.

3.2.4.7. Issue – When all the required information has been inputted, clicking on the Issue button will bring up the issue card screen and the request that the cards is put on to the reader / writer. The card issued window will come up after successful writing of the card.

### **3.2.5. Inspect Card**

A card of any type may be inspected, the data will be shown in the same format as the new card form

## 3.3. System Keycards

### 3.3.1. Staff Cards

Staff cards are individually numbered from 1 – 10,000. From this window you may Add, Update or delete a Staff card. The procedure for adding or updating a Staff card is very similar.

#### 3.3.1.1. Add a staff card

Click on the 'Add Staff Card' button to bring up a new staff record window.

- 3.3.1.1.1. Name – Add a Staff card name
- 3.3.1.1.2. Personnel number – Either manually enter a personnel number or click the 'Next Free Number' button
- 3.3.1.1.3. Job Type - Enter a job type suitable for the member of staff to who you are issuing the card. A list of job types may be obtained by clicking on the arrow for a drop down list. The authorities may be viewed in the 'System Operation, Configuration, Jobs menu – (3.4.2.5).
- 3.3.1.1.4. Start Time – The time of day for the card to start working can be chosen in 15 minute intervals. Click on the arrow for a drop down list for the hours and again for the minutes. The default is midnight.
- 3.3.1.1.5. End Time – The time of day for the card to stop working can be chosen in 15 minute intervals. Click on the arrow for a drop down list for the hours and again for the minutes. The default is midnight.
- 3.3.1.1.6. Days of the week – Check the boxes for the days of the week you wish the card to work. The default is 7 days a week.
- 3.3.1.1.7. Duration – Set the number of days for which you want the card to be valid. You can enter 1 – 731 days or choose an end date. Leaving the default '0', the card will not expire.
- 3.3.1.1.8. Group A – You can select the first group for which the card will be valid. You can select from a drop down list by clicking on the arrow.
- 3.3.1.1.9. Group B – You can select the second group for which the card will be valid. You can select from a drop down list by clicking on the arrow.
- 3.3.1.1.10. Group C – You can select the third group for which the card will be valid. You can select from a drop down list by clicking on the arrow.
- 3.3.1.1.11. Floor - You can select a floor for which the card will be valid. You can select from a drop down list by clicking on the arrow.
- 3.3.1.1.12. Areas – You can select an area for which the card will be valid by checking the corresponding box.
- 3.3.1.1.13. Lock 1 to Lock 6 - You can select up to 6 individual locks for which the card will be valid. You can select from a drop down list by clicking on the arrow.

3.3.1.1.14. Once you are satisfied with your selection click on issue card to write to the card. Place the card on the reader / writer for a Mifare only system, place the card on the reader / writer and then into the card encoder for a Mifare / mag-stripe system or into the encoder for mag-stripe only system. The card issued window will come up after successful writing of the card.

### **3.3.1.2. Update Staff Card**

To update a card the user's name must be highlighted. You can search by the Personnel ID or Staff surname. Click on the title of the column to sort and if you enter part of the search string the first of the selection will be highlighted, entering further letters or numbers will take you closer to required record. Once you have located the staff record click on the 'Update Staff Card' button to bring up the record window. All the information from the last issue will be retained. Other than just changing the required fields the procedure is the same as Add Staff Card section above (3.3.1.1)

### **3.3.1.3. Deleting a Staff Card**

Please note that deleting a staff card off the system will not stop it from working in the locks. A new card with the same number must be produced and used in the lock for it to be invalidated.

To delete a card, the user's name must be highlighted. You can search by the Personnel ID or Staff surname. Click on the title of the column to sort and if you enter part of the search string the first of the selection will be highlighted, entering further letters or numbers will take you closer to required record. Once you have located the staff record click on the 'Delete Staff Card' button to delete it from the record.

## **3.3.2. Lock Program**

This is where you tell the lock what number it is which areas, groups, floors it is in. The procedure for adding a lock or updating a lock is very similar. The number of locks you can have on the system is practically unlimited. New locks can be added to the system whenever they are fitted. If they are put in existing areas, groups or floors access will be automatic. The procedure for adding or updating a lock is very similar.

### **3.3.2.1. Add Lock**

Click on the 'Add Lock' button to bring up a new Lock window

3.3.2.1.1. Lock Name – Insert a lock name eg 'Front Door'

3.3.2.1.2. Lock number – Insert a lock number usually the next available number.

3.3.2.1.3. Groups 1 – Group 10 – The lock can be part of up to 10 groups. You can select a group from a drop down list by clicking on the arrow.

3.3.2.1.4. Floor – The lock can be part of a floor group. You can select a floor from a drop down list by clicking on the arrow.

3.3.2.1.5. Vip - The lock can be part of a VIP group. To add it to the VIP group check the box.

3.3.2.1.6. Active From – The lock can be restricted to Full location authority cards only during certain times. Cards of lower authority will not be allowed access before this

time. Click on the arrow for a drop down list for the hours and again for the minutes. The default is midnight.

- 3.3.2.1.7. Until – The lock can be restricted to Full location authority cards only during certain times. Cards of lower authority will not be allowed access after this time. Click on the arrow for a drop down list for the hours and again for the minutes. The default is midnight
- 3.3.2.1.8. Open From - The lock will open automatically at this time. Click on the arrow for a drop down list for the hours and again for the minutes. The default is 00.00 indicating no open time.
- 3.3.2.1.9. Until - The lock will close automatically at this time. Click on the arrow for a drop down list for the hours and again for the minutes. The default is midnight.
- 3.3.2.1.10. Normal Unlock – This is the normal length of time that the lock will remain open if not operated. Change the setting to the required duration.
- 3.3.2.1.11. Extended Unlock – This is the extended length of time that the lock will remain open if not operated if the box is checked on the guest card or the staff card. Change the setting to the required duration.
- 3.3.2.1.12. Areas – The lock can be part of up to 8 /16 areas. Check the boxes for the areas that the lock is to be a part
- 3.3.2.1.13. Card Duration (mag-stripe) – Set the card validity duration; 0 the validity will not expire.

Issue Card (mag-stripe) – Clicking 'Issue Card' will bring up the 'Insert Card' Dialogue asking to insert a blank card into the encoder to produce a program card.

### **3.3.2.2. Update Lock**

This will bring up the lock update program window. To update a lock the lock name must be highlighted. You can search by the Lock Number or Lock Name. Click on the title of the column to sort and if you enter part of the search string the first of the selection will be highlighted, entering further letters or numbers will take you closer to required record. Once you have located the lock record click on the 'Update Lock' button to bring up the record window. All the information from the last issue will be retained. Other than just changing the required fields the procedure is the same as the 'Add Lock' section below

Please Note that Mifare lock updating will be set up on the Mobile pc if the box is checked in Engineering Configuration – Please see instructions in The Mobile pc section below .

### **3.3.2.3. Delete Lock**

Please note that deleting a lock record off the system will not change the lock until it is re-programmed with new parameters.

To delete a card, the name of the card must be highlighted. You can search by Lock Number or Lock Name. Click on the title of the column to sort and if you enter part of the search string the first of the selection will be highlighted, entering further letters or numbers will take you closer to required record. Once you have located the lock record click on the 'Delete Lock ' button to delete it from the system.

### **3.3.3. Function Card**

Function cards are for mag – Stripe systems only and operate in the same manner as previous systems.

### **3.3.4. Bulk Card Production**

External data may be imported from spread sheet files (Microsoft Excel® required) to speed up entry of data. Database records can be exported for reference or to be updated and re-imported.

3.3.4.1. Import Card Data – Bring up the window by clicking on the ‘Import Card Data’ button.

Chose the type of data you wish to import. You can select the type of data from a drop down list by clicking on the arrow. If cards are to be made check the Make Cards box.

Click the ‘Import’ button. Browse and select the import file and click on the Import File button.

Please Note that it is advised that a file is exported first, modified and re-imported so that the format is maintained. Check the export headings only if a new set of data is to be written

3.3.4.2. Export Data - Bring up the window by clicking on the ‘Export Card Data’ button.

Chose the type of data you wish to export. You can select the type of data from a drop down list by clicking on the arrow. If headings only are to be exported check the ‘Export headings only’ box.

Click on the ‘Export’ button and follow the Windows® instructions

### **3.3.5. Inspect card**

Click on the ‘Inspect Card ‘ button and place the card on the reader / writer. The card details will be shown on the screen.

## 3.4. System Operation

### 3.4.1. Back up

Clicking on the Back Up button brings up the window to choose the location of the back up file. Choose the location and click the 'Backup' button.

### 3.4.2. Configuration

This is the area where you need to decide on the configuration of the system. For Areas, Breakfasts, Floors and Groups you are just creating names to be used when configuring the lock.

3.4.2.1. Areas – You can configure up to 8 / 16 areas. Decide on the areas you wish to set up and name them using the 'Update Area ' button. Please note areas can overlap.

3.4.2.2. Breakfasts – This is for identification only and can be re-named if required.

3.4.2.3. Floors - You can configure up to 99 floors. Decide on the floors you wish to set up and name them using the 'Update Floor ' button.

3.4.2.4. Groups - You can configure up to 1000 floors. Decide on the groups you wish to set up and name them using the 'Update Group' button. Please note if you run out of space for groups on a staff or guest card you can combine two groups into a new group.

3.4.2.5. Jobs – In this area you need to decide on the type of people that are going to use the system and then define them with allocating the authorities of the system. The procedure for adding a job or updating a job is very similar.

#### 3.4.2.5.1. Add Job

3.4.2.5.1.1. Number - The job requires a job number, the next available number is usually used.

3.4.2.5.1.2. Name - A suitable name should be chosen eg Student, Manager, maintenance etc.

3.4.2.5.1.3. Area – The use of this authority is used differently with mag-stripe locks and Mifare locks. Mag-stripe functions the same as previous versions. This authority is associated with access to the locks.

3.4.2.5.1.3.1. None - this authority would not have access when the lock is in conference mode. This would be used for term time students for instance.

3.4.2.5.1.3.2. Group - this authority would not have access when the lock is in exclude staff mode. This would be used for maids etc.

3.4.2.5.1.3.3. Floor – this authority would always have access to the assigned locks

3.4.2.5.1.3.4. Hotel – this authority has unlimited access to all locks

- 3.4.2.5.1.4. Lock – The use of this authority is to be able to communicate with the lock.
- 3.4.2.5.1.4.1. None – No authority to communicate with the lock
- 3.4.2.5.1.4.2. Function – For the Mifare lock this has no authority to communicate with the lock.
- 3.4.2.5.1.4.3. Program – Cards with a job type with this authority will open the lock serial port for communication with the mobile pc.
- 3.4.2.5.1.5. Communicator– This authority has no application for a Mifare lock
- 3.4.2.5.1.6. Workstation This authority determines the level of access to the Host or System pc
  - 3.4.2.5.1.6.1. None – No authority to log on to the Smartlock Management system
  - 3.4.2.5.1.6.2. Reception – Limited authority to write Guest cards only
  - 3.4.2.5.1.6.3. Back Office – Full authority to use all functions
- 3.4.2.5.1.7. Deadbolt Override – Cards with a job type with this function will open the lock if valid even if the dead bolt has been thrown.

### **3.4.3. Set Pin**

This PIN number is set up when the system is set up. Changing it will make all existing cards invalid after the locks have been updated. Existing cards will not be able to be re-programmed. Please note the ramifications of changing this number.

## **3.5. Reports**

- 3.5.1. Update from communicator – This function is only available to mag-stripe systems for down loading lock logs.
- 3.5.2. Update from Lock– This function is only available to the mobile pc for down loading lock logs.
- 3.5.3. Lock Report – After downloading one or a series of lock logs; select the required lock from the drop down menu. Choose the required reporting period by either clicking on one of the buttons or manually entering the date directly, or from the calendar function. Click on report to view the report on the screen. This may then be sorted and printed as required.
- 3.5.4. System Report – This report will identify all actions performed on the Smartlock Management System. Choose the required reporting period by either clicking on one of the buttons or manually entering the date directly, or from the calendar function. Click on report to view the report on the screen. This may then be sorted and printed as required.

## 4. Mobile pc.

The mobile pc and the host pc can be one and the same. The mobile pc is used to communicate with the lock via a cable plugged into a serial port in the bottom of the outside escutcheon or the serial port on the mains powered controller. It can only communicate when the serial port of the lock has been opened by using the key or pressing the button within the controller or a card with the correct authority (Job types 3.4.2.5). The mobile pc is used to;-

Set the locks with date and time, site, timing, door number, group and area information from the Lock Program menu.

Download the settings in the lock (if this function has been activated).

Download the event log of the last 1000 operations.

It can also be used to issue cards and maintain the system in exactly the same way as the host pc.

Any changes will be synchronised when the host database is re-connected.

### 4.1. Set up

Set up the mobile pc in exactly the same way as the Host pc in section 2.

4.1.1. Plug in the lock connection cable. If connected to the internet allow to Windows® select the drivers automatically by following the Windows® installation instructions. Alternatively if there is no internet connection direct the search to the supplied cd / usb memory stick folder 'cable drivers'. Determine the serial port number that the pc has allocated the cable by selecting 'control panel, system, hardware, device manager, Ports (com & LPT)' The port number will appear after the entry for 'USB Serial Port'.

4.1.2. Select Database – If the Mobile pc is to be used in conjunction with a host, the mobile pc needs to be networked to the host pc or more correctly the host database.

4.1.2.1. Direct the mobile pc to the host database;-

4.1.2.2. Log on using the engineering logon (Ctrl L) password 'engineer'.

4.1.2.3. Engineering configuration – Select Data Source.

4.1.2.4. Direct the browser to the database location set in (3.1.4). If the pc is to be used as a mobile pc only tick the 'allow remote use' box and connect. If the mobile pc and the host pc are one and the same **do not** tick this box.

4.1.3. Turn on communication to locks.

4.1.3.1. Log on using the engineering logon (Ctrl L) password 'engineer'.

4.1.3.2. Engineering configuration – Configuration.

4.1.3.3. Tick 'Allow Connection to Mifare locks' and set the port to that allocated. (4.1.1)

4.1.4. Exit the programme and restart – the program will make a local copy of the database for remote use

4.1.5. Exit the program and disconnect from the network. When re-started the Mobile pc will be in local mode.

### 4.2. Mobile pc Use.

The mobile pc can be used in exactly the same way as the host pc to make cards, make system changes etc. Any changes will update the host database when the mobile pc is reconnected to the database.

## **5. Battery Lock Set up and Usage**

The locks come with an installation card. This will allow access and open the communication port until the lock is set up using the lock program software.

### **5.1. Lock program**

- 5.1.1. Connect the mobile pc (set up as in 4 above) using the dedicated interface cable.
- 5.1.2. Open the lock serial port using the key or the supplied installation card.
- 5.1.3. Start the Smartlock program and logon using a System Master card.
- 5.1.4. Enter Lock Program (3.3.2). If the lock has not been added to the system click on 'Add Lock' and enter the parameters as in (3.3.2.1). If it is an existing lock select the lock to program and click update lock. Make any changes required and click on 'Update' You should get the reply 'Lock updated successfully'. Please note that if you are changing the number of the lock the software will warn you first and then erase any trail in the lock.
- 5.1.5. The lock is now ready to use.

### **5.2. Operation**

- 5.2.1. Inside - The lock can always be opened from the inside by using the handle. The dead bolt can be thrown to give added security by turning the dead bolt lever. Access will only be given to another guest occupying the room or staff with authority to override the dead bolt. The dead bolt can be withdrawn by turning the dead bolt lever or by operating the lever handle.
- 5.2.2. Outside – The lock can only be opened with a valid card or the override key. Place a valid card within 1 cm of the window of the lock. When the light flashes turn the handle to gain entry. A log of a successful or unsuccessful entry will be made in the lock trail.  
If using a key, a log will also be made.

### **5.3. Light indicators**

- 5.3.1. Flashing red light with 1 second intervals – Lock ready. Object detected but no valid card.
- 5.3.2. Green Flashing light 1 second interval – Lock opened
- 5.3.3. Green red Flashing light – Dead bolt on . No override authority.
- 5.3.4. Green red Flashing light - Battery low

### **5.4. Maintenance**

We recommend that an annual maintenance contract be taken out with an authorised installer.

- 5.4.1. Batteries – 4 x AA;- If the light flashes as above the batteries need to be changed. Use only good quality batteries – these may be obtained from Smartlock at the above contact.  
Remove the back cover using the Allen key provided. Change the batteries and replace the cover.
- 5.4.2. General – Ensure there are no loose parts, check handles, lock face plate, battery cover and strike plate regularly.

## **6. Controller and reader Set up and Usage**

The controller is supplied with an integral 2A 12V power supply to operate any suitable electric locking device. They require a 12V 7Ahr lead acid battery for back up in case of mains power failure.

The controller should be wired to a 240V 3A non switched fused spur located typically on the secure side of the door high up to discourage tampering. Fixture should be carried out by a competent person conversant with current regulations for the fitting of mains powered systems. Fitting should be to a rigid wall using appropriate fixings. The reader should be positioned on the free side adjacent to the door using the fixings provided. The wiring should be in accordance with the wiring diagram.

The systems come with an installation card. This will allow access and open the communication port until the lock is set up using the lock program software.

### **6.1. Lock program**

- 6.1.1. Connect the mobile pc (set up as in 4 above) using the dedicated interface cable.
- 6.1.2. Open the lock serial port using the button on the control board inside the controller or the supplied installation card.
- 6.1.3. Start the Smartlock program and logon using a System Master card.
- 6.1.4. Enter Lock Program (3.3.2). If the lock has not been added to the system click on 'Add Lock' and enter the parameters as in (3.3.2.1). If it is an existing lock select the lock to program and click update lock. Make any changes required and click on 'Update' You should get the reply 'Lock updated successfully'. Please note that if you are changing the number of the lock the software will warn you first and then erase any trail in the lock.
- 6.1.5. The lock is now ready to use.

### **6.2. Light indicators**

- 6.2.1. Flashing red light with 1 second intervals – invalid card.
- 6.2.2. Green Flashing light 1 second interval – Lock opened

### **6.3. Maintenance**

We recommend that an annual maintenance contract be taken out with an authorised installer.

Batteries – 1 X 7Ahr 12V Lead Acid ; - We recommend that they be checked every year for charge retention and changed after the recommended life which, for good quality batteries of this type, is 5 years.