#### UNION COMMUNITY Co., Ltd.

5F, Hyundai Topics bldg., 44-3, Bangi-dong, Songpa-gu, Seoul, 138-050, Korea TEL: +82.2.6488.3000 FAX: +82.2.6488.3099

URL: www.unioncomm.co.kr www.virditech.com





User's Guide



# About Fingerprint Digital Door lock VIRDI 450FP Thank you for purchasing the VIRDI 450FP. VIRDI 450FP utilizes the latest fingerprint technology to ensure controlled access to your home. VIRDI 450FP prevents the use of duplicate keys. Please read the manual before installing the VIRDI 450FP in your door - Please use VIRDI 450FP after you read a manual and keep it carefully. - Union Community does not have any responsibility for damage by user's fault.

Fingerprint

VIRDI

### Contents

#### Before Use

Caution What's in the box? Components Assembling drawing 10 Installation checkpoints

#### Virdi 450FP

Features and Functions 12 Before use 15 Fingerprint checkpoint 16

#### Home mode

1. Registration Initial user registration 18 Initial password registration 20 22 Fingerprint registration Fingerprint deletion Changing password 24 Password deletion 25

#### 2. Door access

26 Access using fingerprint Access using password 27 Access by emergency key Access by security password To lock door 31 To exit door

#### 3. Functions

Security password set-up	32	
Security password deletion	33	
Disenabling open/close button	34	
Enabling open/close button	35	
Forced lock	36	
Automatic close and manual close function	37	
Fingerprint test	38	
Initializatio	0	

#### Office mode

#### 4. Registration

Initial master registration	42
Master or user's fingerprint deletion	43
Adding further master fingerprint	44
Master or user's ID deletion	45
User registration	46
User's ID deletion	47
Initial password registration	48
Password deletion	49
Changing password	50

#### 5. Set-up

Security password set-up

Access by security password

52

60

61

fingerprint deletion 43		Security password deletion	53
aster fingerprint 44		Fingerprint test	54
ID deletion	45		
n	46	6. Door access	
on	47	Access using fingerprint	56
registration	48	Access using password	57
on	49	Emergency key access	58

To lock door

To exit door

#### Appendix

Menu setup for home use	6
Menu setup for office use	6

# Caution

Please read manual before using VIRDI 450FP



#### Safety

Please follow the safety instructions.



#### Caution

Please follow these instructions to ensure reliability of VIRDI 450FP.



The sign is a "Prohibition"



The sign is that user should keep the manual

#### 



Please read manual before using VIRDI 450FP.



#### Caution

Do not attempt to change or fix equipment.

May damage and electric shock of the equipment. Please call A/S center for the required.



#### 

Check polarity of batteries when replacing.

If battery polarity is not placed at right position, it is caused of the battery burst or internal leakage that might be caused fire hazard or malfunction. Please make sure to use right size batteries and do not use combination of used batteries with new ones.



#### Prohibition

Keep the equipment out of children's reach.

It might be caused of accident or equipment to malfunction.



#### / Caution

Dry hands before use.

May damage and electric shock of the equipment.



#### / Caution

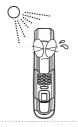
Keep emergency key in a secure place outside your home.



#### Caution

#### Do not

Install in full sunlight.



#### Do not

Do not install in dusty or humid place.

Might be caused of malfunction.



#### Do not

Install where there is a severe temperature variance.

Might be caused of malfunction.



#### Do not

Do not

taking damage.

Do not

the lock.

Expose to strong shock.

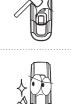
Might be caused of malfunction as

Use sharp instruments on

Might be caused of malfunction.

Keep fingerprint sensor clean at all times.

If not, it might not identify fingerprint properly.



#### Do not

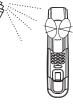
Clean with water or alcohol. Might be caused of fire and

electric shock.



#### Do not

Spray with flammable liquids.



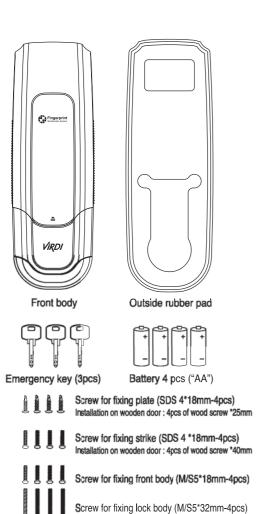
#### Do not

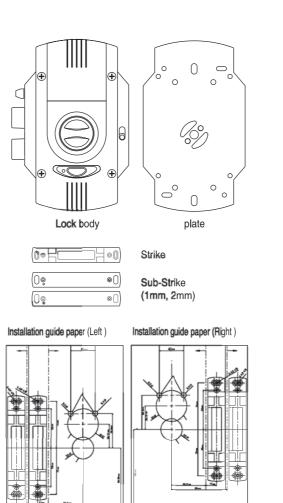
Read the operators manual, any damage caused due to misuse will be the user's liability.

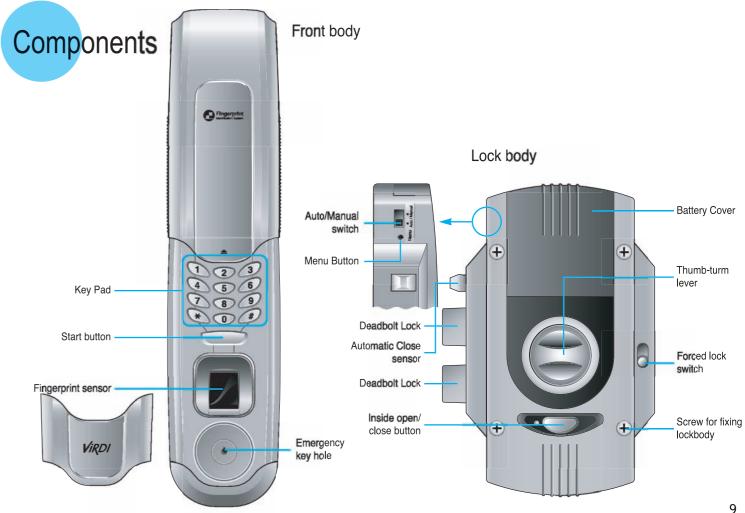


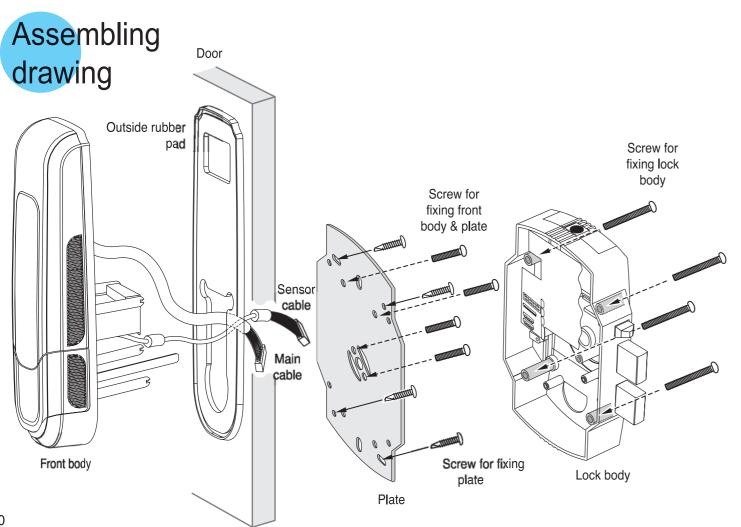
#### What's in the box?

Please check all parts are in the box









# Installation checkpoints

- VIRDI-450FP is a additional lock type installed on the door.
- If door is reinforced glass, this lock cannot be installed .
- Ensure door surface is smooth.
- Ensure there is room to install the lock and bolt fitting.
- If used on a swing door, please fix one side of the door before fitting.
- It is possible to install on wooden door, But a user's attention is required for reliable installation at wooden door.
- Please note if you remove the lock, a hole will be left in the door.
- Please ensure you have a secure password after the installer has finished.
- We cannot be held responsible for insecurity of passwords.



#### Features and **Functions**



#### Fingerprint capacity

Home mode	Office mode
30EA Fingerprint templates	Master : 5EA Fingerprint templates User : 25EA Fingerprint templates

<sup>-</sup> VIRDI 450 will "beep beep" if you try to register more than the allowed number.

#### Home & Office mode

VIRDI 450FP is simple to change from home mode to office mode.

#### The features of office model

- Identifies masters and normal users.
- Masters can only control and set up unit.
- User registration and deletion. (2 digit user ID)
- Fingerprint verification after ID input.
- Please note VIRDI 450FP will reset when switched to and from home and office mode.
- Please input the following code to change to and from office and home mode.



Input 'Menu button' inside door and input 085293790+# inside door after sounds 'Bic'





















#### Open & close function disabled

Prevents internal door open features from working. (Refer to 34 Page)

#### Back Light

Keypad is illuminated.

#### Password and fingerprint storage

Non-volatile storage to allow battery replacement without losing data.

#### Open door security

If door is not opened within 10 seconds after identification, door automatically locks itself. To manually lock the door from the outside press the start button, from the inside press the open/close button.

#### To act as a standard door

To use as a standard door with out access control please select auto/manual to manual. Manual mode removes all security at the door.

Push start button to close the door from the outside. (Refer to 37 Page)

#### Emergency alarm

VIRDI 450 FP stops operation after 10 warning beep, if the door is not closed properly or there is a fault in the unit.

Please contact your installer if the fault is not cured after closing the door properly.

Features and **Functions** 

# Features and Functions



#### Fingerprint test

To check a fingerprint can be registered. (Refer to 38 Page)

#### Low Battery alarm

Low battery is indicated by the start button flashing red with the buzzer giving 4 beeps. Flashing led on the inside next to the open/close button.

All function controls stop when low batter is indicated.

#### Changing the batteries

Remove the battery cover and replace the four AA batteries.

Please check polarity before fitting.

- If the battery is low-level of electric, The start button is twinkling with red color and ringing beef sound. When user tries to be authorised, please change the battery after open the inside battery cover.
- After the battery is electric discharge user can not enter the door,
   please change the battery after entering the door with emergency key.

#### Door access with password before set-up

Please use the following password after delivery or reset.

- When a user purchases system at first time.
- When system is reset.
- When there is no fingerprint & password data.



- To confirm the VIRDI 450FP has been reset press the start button, if you hear 3 beeps it is re-set.
- Please ensure you change the default password after installation.

Please make sure that change password after you install system.

#### Fingerprint registration and deletion

- Register or delete fingerprint with door open.
- Please look around before register password due to password protection.

#### Input time delay

If no input is made within five seconds the buzzer will beep and return to standby.

- Stand-by time for input is 5 sec. (Numeric keypad)
- Stand-by time for input is 10 sec. ( ) related on fingerprint & password.

Before use

# Fingerprint check point



#### How to place fingerprint

Please register your index finger. Please ensure the fingerprint is in the centre of the sensor and is flat on the glass.



#### Please register your index fingerprint

If using the index fingerprint data are more accurate and secure.

Please check if the fingerprint is faint or damaged
If you have dry fingerprint, damp fingerprint, faint or damaged fingerprint,
these can cause problems with registration please use different fingerprint.



#### Fingerprint problems

In according to user's fingerprint status, The user can not register his/her fingerprint in VIRDI 450FP or might have some problem to use VIRDI 450FP.

- If you cannot use fingerprint, please use password with dry fingerprint, please huff on them.
- To recognize a dried fingerprint clearly, please make it humid a little.
- Children should be re-registered every six months.
   Very young children cannot be registered.
- Old age causes the fingers to wrinkle this can prevent registration.
- Please register 2 or 3 fingerprints if you have problems.

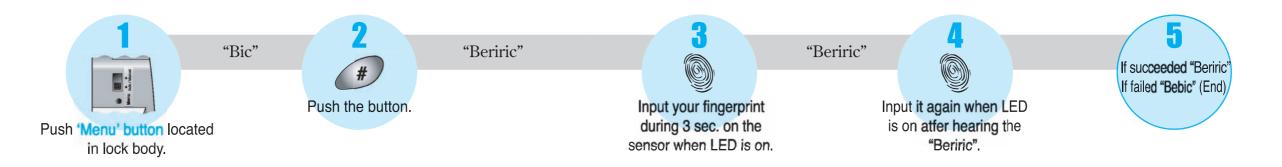
Check point of Fingerprint

17

#### 1-1 Initial user registration

Please follow the following steps to register your fingerprint for the first time.



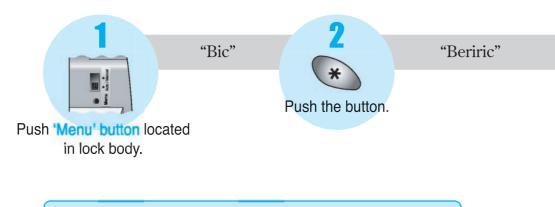


- To register a fingerprint, A user has to input his fingerprint twice on the sensor.
- During fingerprint registration, Please make sure that put the same fingerprint on the sensor. During registration process, If the fingerprint registration process is failed, The VIRDI 450FP goes back to the start after the sound "Bebic".
- Before registering fingerprint, Please check fingerprint condition such as being sweat, dry or dirty.
- When the fingerprint registration is failed, please try it again after make it humid a little.
- Please input battery 4pcs (AA-Type) on right position(+, -) of battery case before registering user's fingerprint and password. (Refer to 14 page)

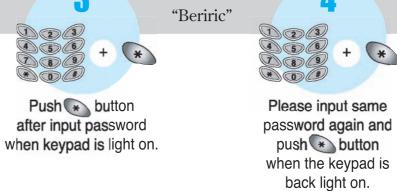


#### 1-2 Initial password registration

Please follow the following steps to register your password for the first time.



- The password is only one. Do not use different P/W each user.
- To keep the security, please change password periodically.
- Password capacity (Minimum 4/Maximum 20 digit.)
   For security, Please make password more than 8 digit.
- Registered password "00000" is not considered as password.
- If the password registration is failed, The VIRDI 450FP goes back to the start after the sound "Bebic".
- To finish registering password, Push the 🔪 , 🥟 button together.

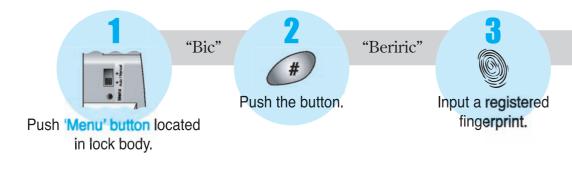






#### 1-3 Fingerprint registration

To register a new fingerprint an registered user must authorise. Please follow the following steps to register a new fingerprint.



- To register a fingerprint, A user has to input his fingerprint twice on the sensor.
- During fingerprint registration, Please make sure that put the same fingerprint on the sensor. During final registration process, If the fingerprint registration process is failed, The VIRDI 450FP goes back to the start after the sound "Bebic".
- Before registering fingerprint, Please check the fingerprint condition such as being sweat, dry or dirty.
- When the fingerprint registration is failed, please try it again after make it humid a little.

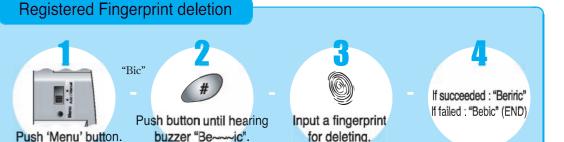
If succeeded: "Beriric" If failed: "Bebic" (END) "Beriric"

If succeeded "Beriric" If failed "Bebic" (End)

Input a new fingerprint.

Input your fingerprint during 3sec on the sensor when LED is on. the "Beriric".

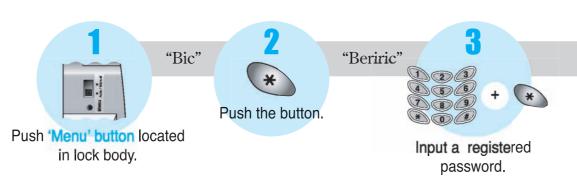
Input it again when LED is on after hearing





#### 1-4 Changing password

It is possible to change password when password already registered in system. (Refer to 38 Page)



- Only one password is allowed.
- Please change regularly to ensure security.
- Password can be 4 to 20 digits, for good security, please use more than 8 digits.
- Do not use just "00000" given as default password. It will be deleted.
- When password is registered, if password fails Virdi will return to start.
- To finish registration, please push (\*), \*\* buttons together.





"Beriric"

23 56 89 + \*

If succeeded "Beriric"
If failed "Bebic" (End)

Please input password and push button when the keypad is light on.

Please input it again and push button when the keypad is back light on.

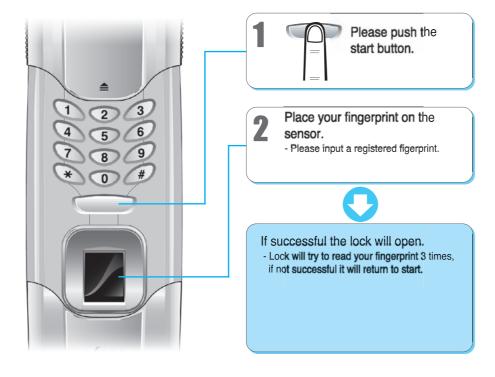
# Push 'Menu' button. Push button until hearing buzzer "Be---ic". Push button until hearing buzzer "Be---ic". If succeeded: "Beriric" If failed: "Bebic" (END) Input a password for deleting.

# 2.Door access



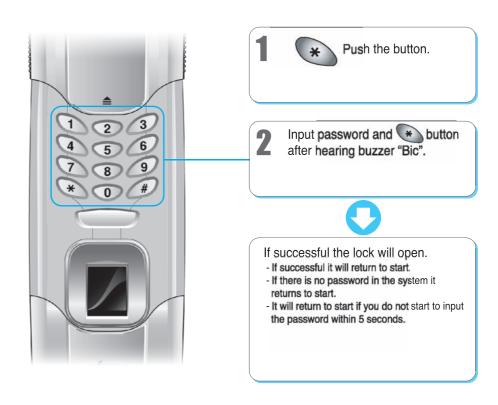
#### 2-1 Access using fingerprint

To go inside...



#### 2-2 Access using password

To go inside...



# 2.Door

# access



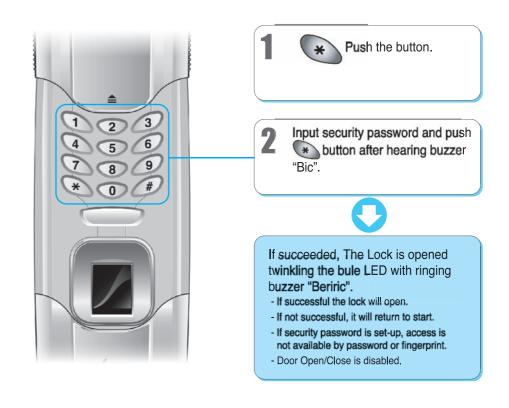
#### 2-3 Access by emergency key

To enter...



#### 2-4 Access by security password

Please refer to Page 32 for security password setup/deletion.

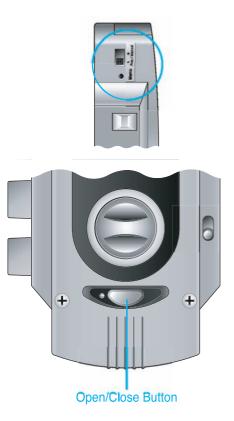


# 2.Door access

# → Negaritati

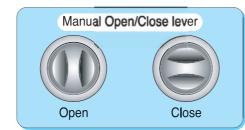
#### 2-5 To lock door

To lock door from inside...



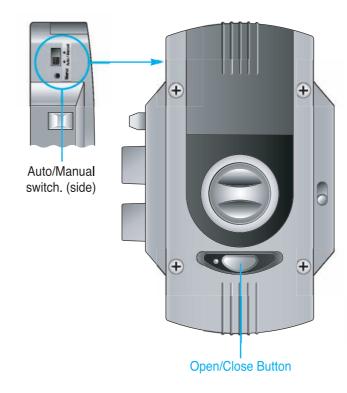
When Auto/Manual switch is in auto position, door is locked automatically.

When Auto/Manual switch is in manual position, press Open/Close button or rotate Open/Close lever.

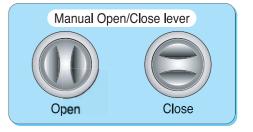


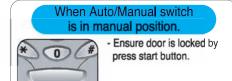
#### 2-6 To exit door

To unlock door from inside...



- Push the Open/Close button or turn the manual Open/Close lever.
  - Press Open/Close button or rotate
     Open/Close lever. Open/Close button
     will not work if security password is in operation. (refer to 34 Page)







#### 3-1 Security password setup

If you are away for a long period please use security password, this prevents misuse of lock.



"Bic" Push the button.

> If under no password in the VIRDI 450FP, it goes back to the start after buzzer "Bebic".

"Beriric"

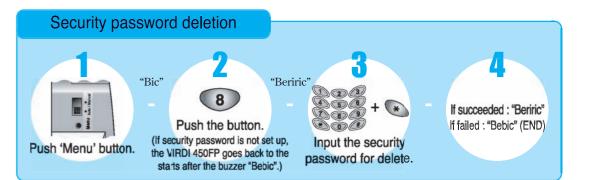
Input registered fingerprint.

If succeeded: "Beriric" If failed: "Bebic" (END)



Please input password and Please input it again and push push button when the button when the keypad is keypad is light on. back light on after ringing

If succeeded "Beriric" If failed "Bebic" (End)



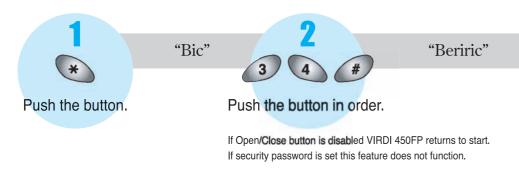
buzzer "Beriric".

- Only register fingerprint can set security password.
- Password can be 4 to 20 digits, for good security please use more than 8 digits.
- Do not use just "00000" as a password.
- If password fails Virdi will return to start.
- To finish registration, please push (\*), (\*) buttons together.
- In security password mode, fingerprint or passwords do not function.
- All set-up procedures are disabled.
- Open/Close button is disabled.



#### 3-2 Disenabling for Open/Close button

This function disables the Open/Close button.



- If this function is set up, it is ringing buzzer "Beriric".
- If security password is set up, automatically this function is set up.
- During set up, if want to stop the process, please push (\*), /# button together.



If succeeded "Beriric"
If failed "Bebic" (End)

#### Enabling Open/Close button



4

If succeeded : "Beriric"
If failed : "Bebic" (END)

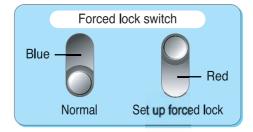
- Push the button.
- Push the button in order. Input registered fingerprint.
  - If not set to disenabling Open/Close returns to start.
  - If security password is set this feature will not function.

#### 3-3 Forced lock

If this feature is selected, no access is allowed.



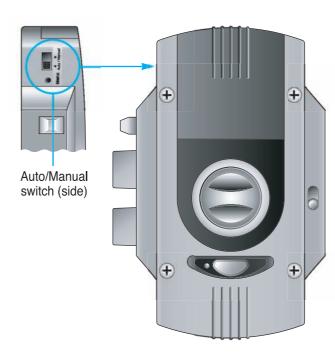




If forced locking is set, pressing the start button lights blue and red LEDs and buzzer sounds from 2 secs.

#### 3-4 Automatic close and manual close function

When door is closed, automatically locking it ON.



#### Automatic close function

Auto-close automatically locks the door when closed.

#### Manual close function

To use as a standard door without access control please select Auto/Manual to manual.



- Manual mode removes all security at the door.
- Ensure door is locked by pressing start button.

#### 3-5 Fingerprint test

This is to test Fingerprint condition of user.





Push the button.

Input fingerprint during 3 sec when the sensor lights on.

"Beriric"

Please try to input same fingerprint again after ringing buzzer "Beririric".

If succeeded "Beriric"
If failed "Bebic"

- After test is finished, if user wants to register fingerprint, please register fingerprint in order after push
   button.
- To finish the test, press , button together at one time.
- To the next fingerprint test, Press button.

- Before **testing fingerprint** please refer to pages 16 and 17 on Finger**print checkpoints**.



#### 3-6 Initialization

To initialize the VIRDI 450FP.



Push 'Menu' button located in lock body.



Push the following number in order after ringing buzzer "Bi---c".



























If succeeded: "Beriric" If failed: "Bebic" (END)

- To finish the test, press (\*), (#) button together at one time.
- To check the initialization of VIRDI 450FP, when you push the button, it is ringing buzzer 3 times "Bibic".

#### 'Office mode'

Identifies masters and normal users after master registration, only master can control and setup VIRDI 450FP.



- Master Fingerprint : 5EA Fingerprint templates, User Finerprint: 25EA Fingerprint templates.
- User registration & user ID deleting (2 digit user ID).
- When changing to office mode all fingerprints have a unique 2 digit ID.
- Please note VIRDI 450FP will re-set when switched to and from home mode and office mode.
- Enter the following to change to and from home mode or office mode.



-Input 'Menu button' located at inside operation part after sounds "Bic".















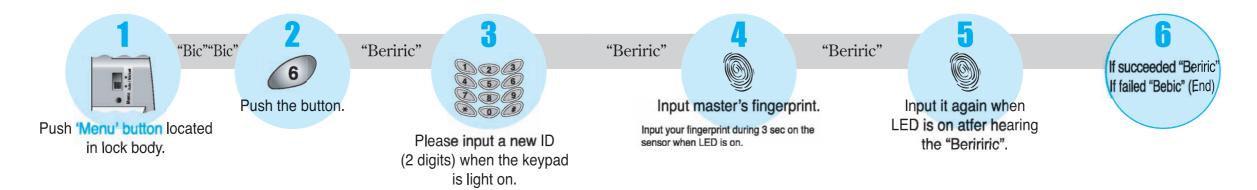




#### 4-1 Initial master registration

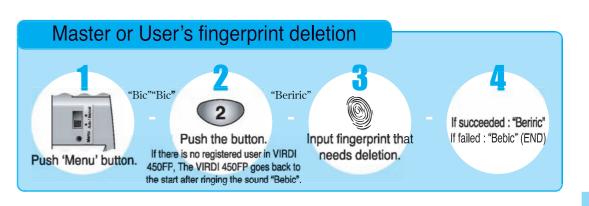
Master can register 5 templates.





If user do not register his ID within 5 sec, The VIRDI 450FP goes back to the start after ringing the sound "Bebic"

- User has to input fingerprint twice on the sensor.
- Please ensure you use the same finger each time.
- Please check your fingerprint as advised on page 16.



# @ Engagement

#### 4-2 Adding further master fingerprint

Up to 5 masters can be registered.

You need an registered master to authorise for new master registration.

Push the button.



in lock body.

"Bic""Bic"

- User has to input fingerprint twice on the sensor. - Please ensure you use the same finger each time.

- Please check your fingerprint as advised on page 16.

"Beriric"



If succeeded: "Beriric" If failed: "Bebic" (END) "Beriric"

Input master's fingerprint.

"Beriric"

If succeeded "Beriric" If failed "Bebic" (End)

master's fingerprint. When input user's fingerprint, The VIRDI 450FP goes back to the start after ringing the sound "Bebic".

Input registered master's fingerprint.

User should get authorization of

Input ID (2 digits) for new master's fingerprint when keypad is light on.

Input your fingerprint during 3 sec on the sensor when LED is on.

Please input same fingerprint again when the keypad is red LED light on after ringing the buzzer "Beririric".

#### Master or User's ID deletion





"Beriric"



"Beriric"

If succeeded: "Beriric"

Push the button. If there is no registered user in VIRDI

450FP, The VIRDI 450FP goes back to the start after ringing the sound "Bebic".

input registered master's fingerprint. If there is no master in VIRDI 450FP, Input registered user's fingerprint

Input fingerprint that needs deletion.

If failed: "Bebic" (END)

#### 4-3 User registration

User fingerprint templates can be registered up to 25 templates in office mode.





"Bic""Bic"

"Beriric"

Push the button.

Push 'Menu' button located in lock body.

#### Input a registered master's fingerprint.

If there is a master in VIRDI 450FP. User needs to get authorization of master's fingerprint. If there is no master in VIRDI 450FP, user needs to get authorization of user's fingerprint.

If VIRDI 450FP has no fingerprint data this registration processing is not necessary.

- User has to input fingerprint twice on the sensor.
- Please ensure you use the same finger each time.
- Please check your fingerprint as advised on page 16.
- If the new ID is already being used system will go back to start.

If succeeded: "Beriric" If failed: "Bebic" (END)

"Beriric"

"Beriric"

If succeeded "Beriric" If failed "Bebic" (End)

Input new user's fingerprint.

input your fingerprint during 3 sec on the sensor when LED is on.

Please input same fingerprint again when the keypad is red LED light on after ringing the buzzer "Beririric".

User's ID deletion

Input ID (2 digits) for new

master's fingerprint when

keypad is light on.







"Beriric"



If succeeded: "Beriric" If failed: "Bebic" (END)

Push the button. Input registered master's If there is no reg stered user in VIRDI fingerprint.

"Beriric"

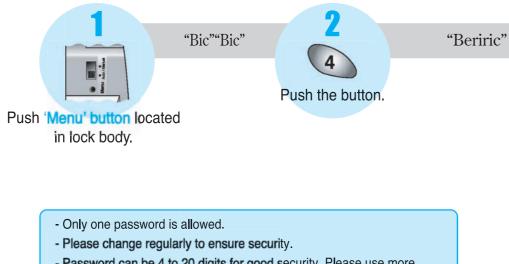
450FP, The VIRCI 450FP goes back to If there is no master in VIRDI 450FP, the start after ringing the sound "Bebic". Input registered user's fingerprint,

Input fingerprint that needs deletion.

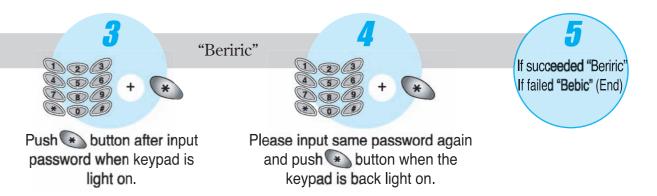


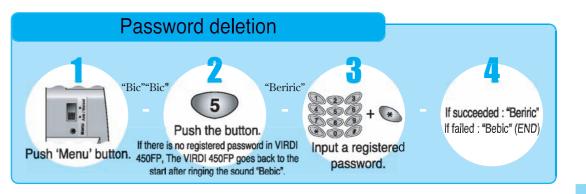
#### 4-4 Initial password registration

Please follow the following steps to install initial password. User can just use password to gain access.



- Password can be 4 to 20 digits for good security. Please use more than 8 digits.
  Do not use just "00000" given as default password. It will be deleted when password is registered.
  If password fails Virdi will return to start.
  - password fails virdi will return to start.
- To finish registration pleases push (\*), \*\* buttons together.

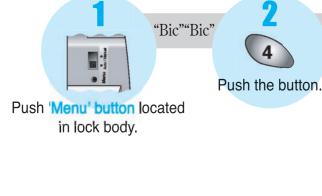






#### 4-5 changing password

It is possible to change password when password already registered in system. (Refer to 20 page)



- Only one password is allowed.

than 8 digits.

- Please change regularly to ensure security.

- If password fails Virdi will return to start .

Push \* button after input a registered password when keypad is light on.

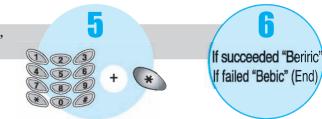
"Beriric"

- Password can be 4 to 20 digits, for good security please use more - To finish registration pleases push (\*), (\*) buttons together.

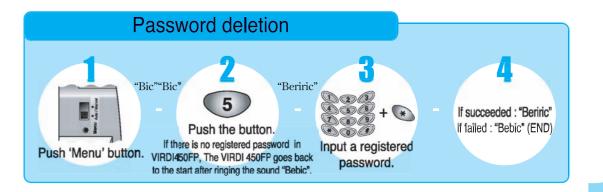
If succeeded: "Beriric" If failed: "Bebic" (END)



Please input password and push button when the keypad is light on.



Please input it again and push button when the keypad is back light on.





#### 5-1 Security password setup

If you are away for a long period please use security password. This prevents misuse of lock.



"Bic""Bic"

Push the button.

"Beriric"

If there is no registered master in the VIRDI450FP, it goes back to the start after buzzer "Bebic".

Input master's fingerprint.

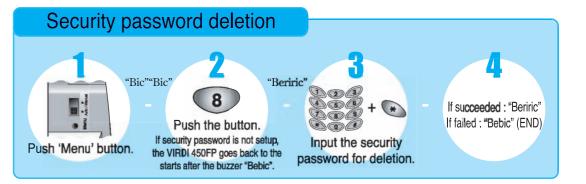
If succeeded: "Beriric" If failed: "Bebic" (END)

"Beriric"

If succeeded "Beriric" If failed "Bebic" (End)

Please input password and push button when the keypad is light on.

Please input it again and push button when the keypad is back light on after ringing buzzer "Beriric".



- Only registered fingerprint can set security password.

- Password can be 4 to 20 digits for good security. Please use more than 8 digits.
- Do not use just "00000" as a password.
- If password fails Virdi will return to start.
- To stop registration, please push (\*), (#) buttons together
- In security password mode, fingerprint or passwords do not function.
- All set-up procedures are disabled.
- Open/Close button is disabled.

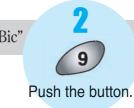
#### 5-2 Fingerprint test

This is to test Fingerprint condition of user.





in lock body.



"Beriric"





Input fingerprint during 3 sec after the sensor lights on.

"Beriric"



Please try to input same fingerprint again after ringing buzzer "Beririric".

5 ucceeded

If succeeded "Beriric"
If failed "Bebic" (End)

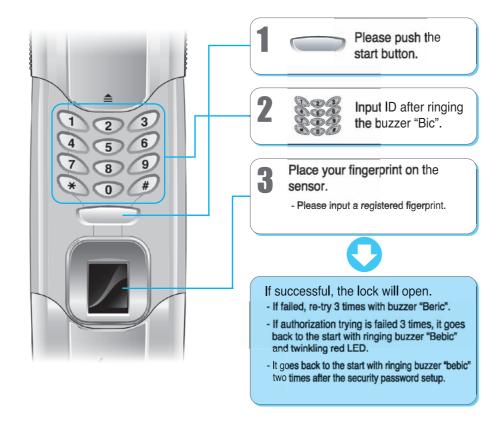
- If user wants to register fingerprint which is finished the test, Please follow fingerprint registration process after push button (user registration), button (master registration).
- To finish the test, press , button together at one time.
- To test another fingerprint, repeat the steps again.

- Before testing fingerprint please refer to pages 16 and 17 on fingerprint checkpoints.

#### 6-1 Access using fingerprint

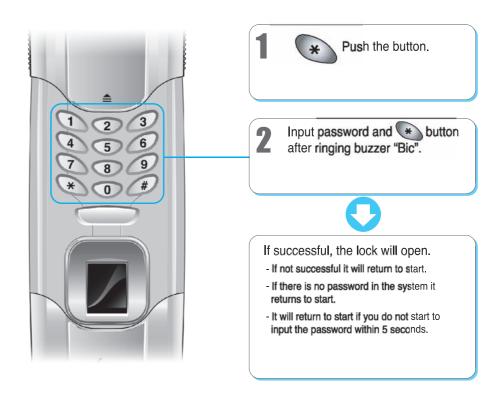
To go inside...





#### 6-2 Access using password

To go inside...



#### 6-3 Emergency key access

To go inside...



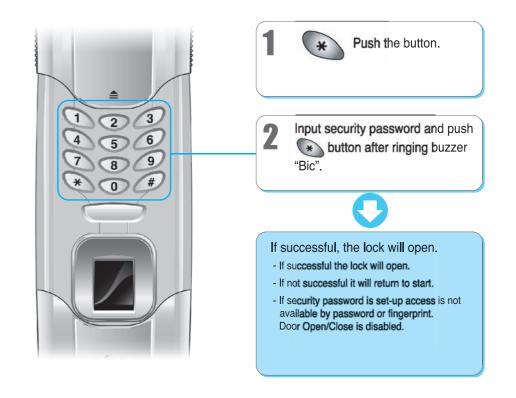


User can open the door with emergency key.

- Please keep an emergency key in safe place.

#### 6-4 Access by security password

Please refer to page 52 for security password set-up/deletion.



#### 6-5 To lock door

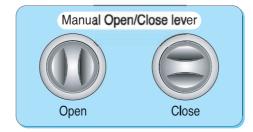
To lock door from inside.





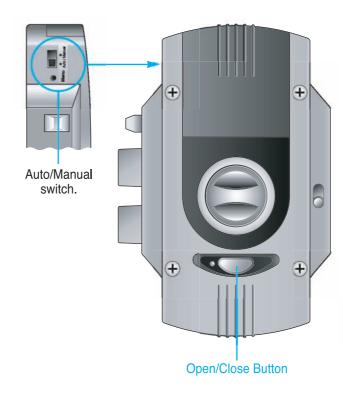
When Auto/Manual switch is in auto position door is locked automatically.

When Auto/Manual switch is in manual position, press Open/Close button or rotate open/close lever.

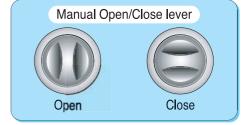


#### 6-6 To exit door

To unlock door from inside.



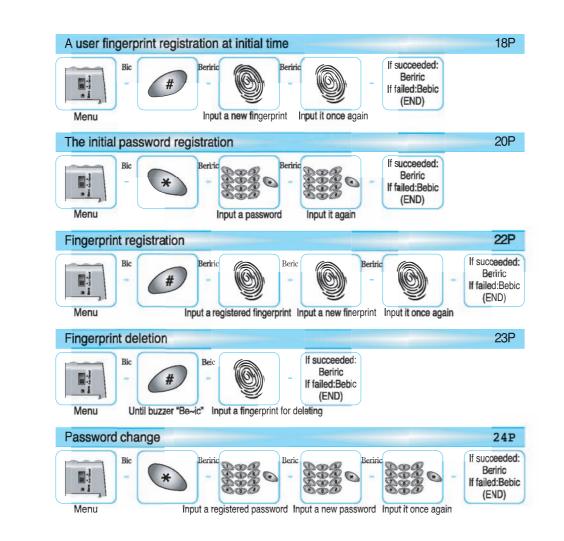
- Push the Open/Close button or rotate the manual Open/Close lever.
  - Will not work if security password is in operation page 34.

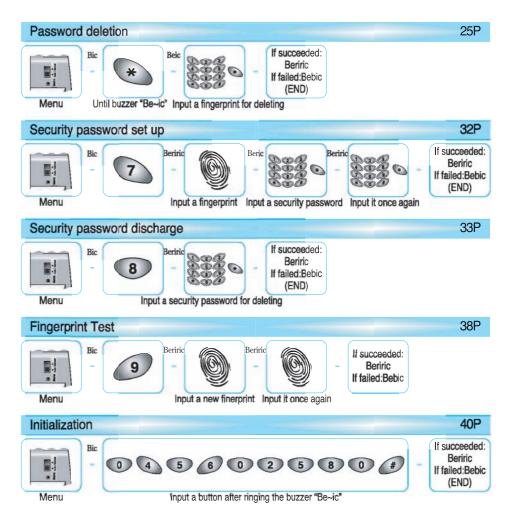




# Menu setup for home mode

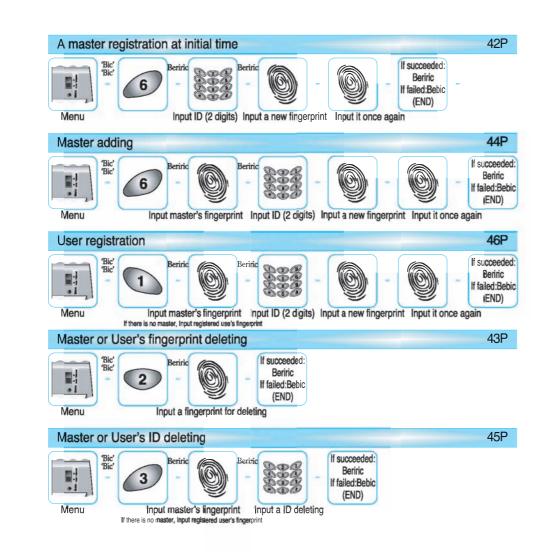


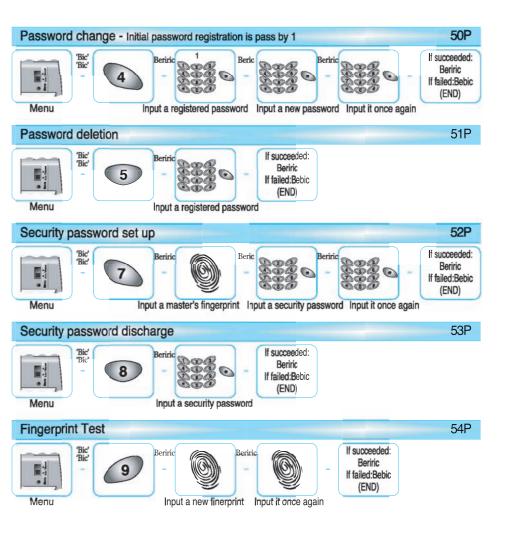




# Menu setup for office mode







Men	no			