

SYRIS SY210NT Series

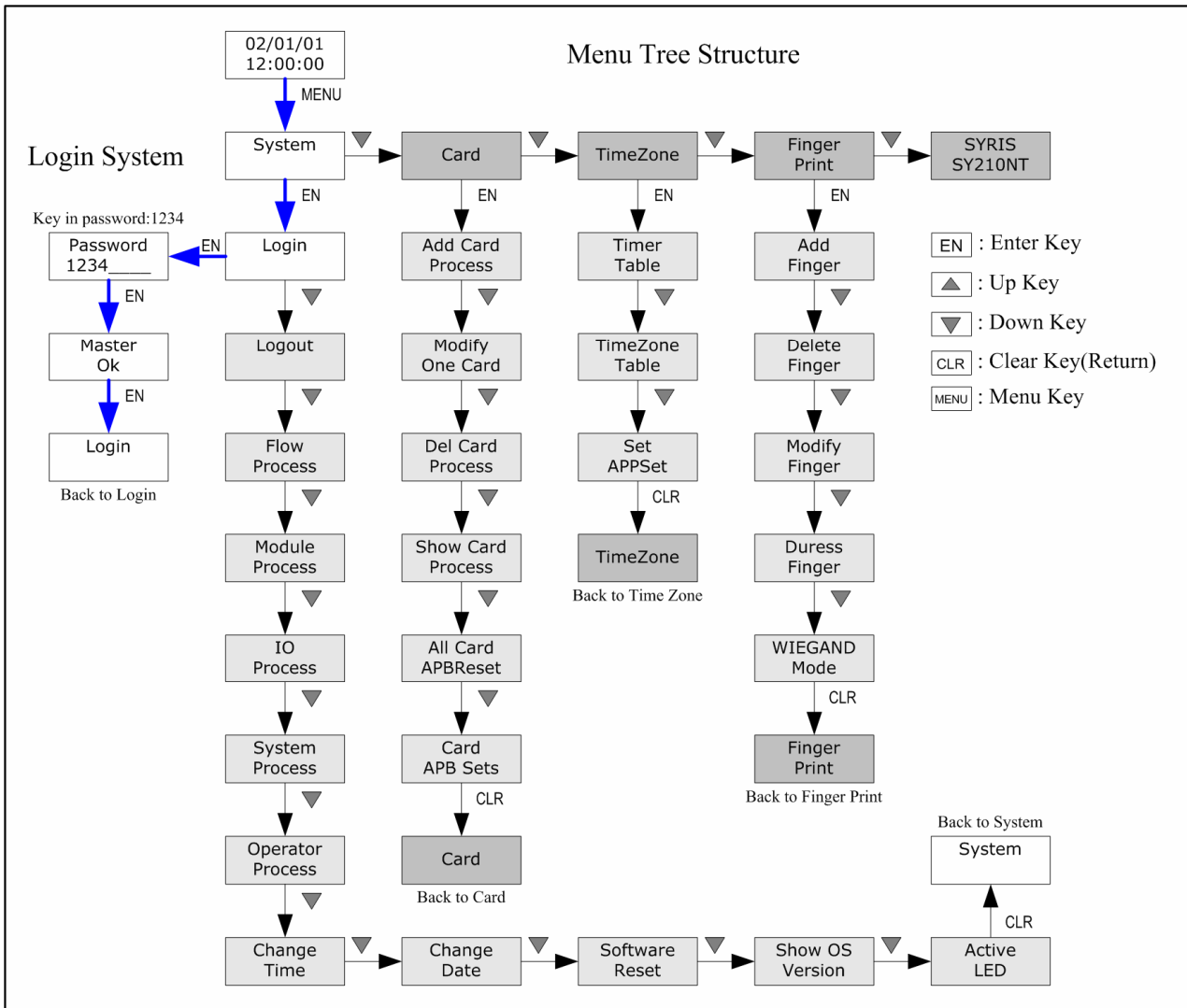
Quick User Guide Manual

Control up to 4 doors with in/out reader

Baud rate 2,400 - 115,200 bps



SY210NT Serial Basic Menu Structure



We list SY210 basic menu structural drawing here for user to get familiar with the SY210 serial controller operation procedure. The first step is to execute the **white box** “Login procedure” to enter **dark gray box** “main menu” and **light gray** “sub-menu”, please refer the diagram key and the direction of arrow, the function description of sub-menu will be introduce at below document.

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01 Attention matter

Install:

When the user ready to install SY210 serial controller, please open the controller cover on the back (TSN and SSN model) and confirm the white disconnect film has been removed. When the user first time connect the power, all the lights flash and produce serial sound, please proceed system replacement by click 1 key according to the controller LED display (1 : Clear)

Setup:

The controller and reader factory default ID all set to "1" Please setup ID first before connect multiple controller or reader to avoid ID repeat cause communication failure. Please refer the reader ID setup method of page 5 "Setup module". And about controller ID setup please refer page 17 "Setup controller ID"

02 Login/logout step

The SY210NT controller needs to complete the login step to enter function menu. The controller will automatically logout when the user stops operating about two minutes. However, in order to confirm the door access security, please **execute logout steps after finish setting.**

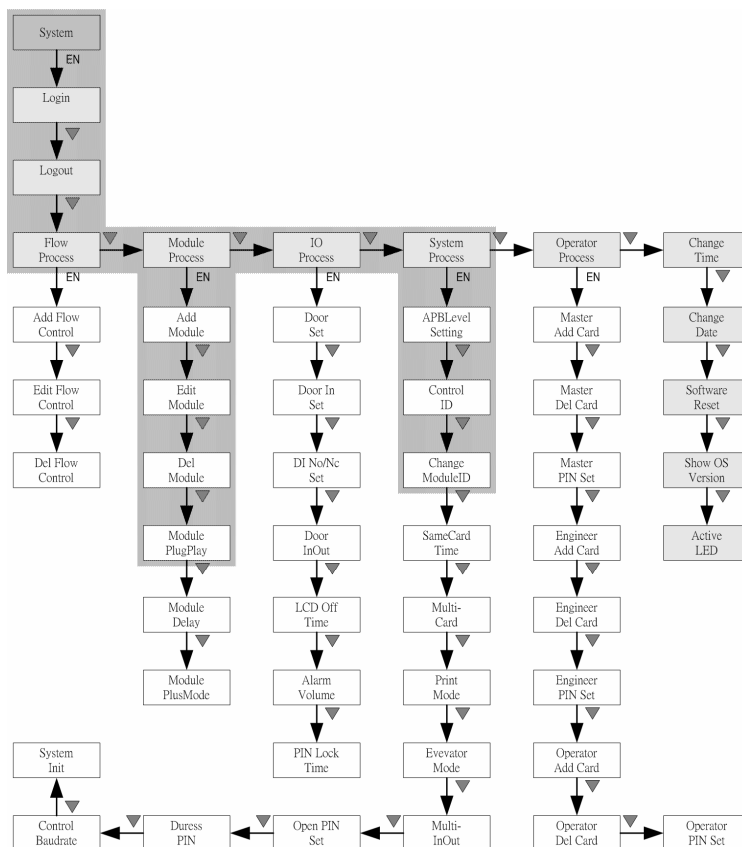
Login Step		
Enter key	LCD display	Reference
MENU	System	
EN	Login	
EN	Password	Wait for password enter
1+2+3+4+EN	Master OK	Setup light flashes, already in login status

Logout Step(in login status)		
Enter key	LCD Display	Reference
MENU	System	
EN	Login	
▼	Logout	
EN	Display date and time	Setup light goes out, complete logout step.

* The below steps pre-set in login status

03 Setup Module (setup reader)

After install controller and reader, the user needs to setup **reader ID** and **scan communication status from controller (plug & play)** to normal transmit the I/O data. The next diagram is System main menu table and the gray part is the step operation range.



Setup reader ID		
Enter key	LCD display	Reference
MENU	System	
EN	Login	
▼ * 5	System Process	
EN	APBLevel Seting	
▼ * 2	Change ModuleID	Modify/setup module ID item
EN	Module [READER]	Use ▲ ▼ key to choose the installed module type (annotate 1)
EN	Serial 03150001	Enter module serial number(annotate 2)
EN	ModuleID ID = [1]	Setup module ID (annotate 3)
EN	Change ModuleID	Setup complete, back to item

Annotation 1: Module type

READER	General proximity reader, including SYRDS1、S5、L5。
DIDO	Digital contact expand module, including MDDIDO-1S、MDDIDO-16。
PRINT	Printer module
SYRDK5	Keypad proximity reader
SYRDF5	Fingerprint proximity reader
SYRDT5	LCD display card reader

Annotation 2: The user can find the serial number sticker from card reader package or machine back.

Annotation 3: Card reader ID arrange rule

Function \ Door	Door one	Door two	Door three	Door four
Incoming reader	ID 1	ID 2	ID 3	ID 4
Outgoing reader	ID 5	ID 6	ID 7	ID 8

Scan communication from controller (plug & play)		
Enter key	LCD display	Reference
MENU	System	
EN	Login	
▼ * 3	Module Process	
EN	ADD Module	
▼ * 3	Module PlugPlay	Scan module communication item
EN	Module Waitting	Scanning communicated module
Please wait	Find : 01 OK	Display communicated module amount(annotate)
CLR	Module PlugPlay	Setup complete, back to item

Annotation:

The controllers will automatically display the plug & play result. In normal status, the display module amount will match with the practical installed module amount. In another word, the scan result should display: Find: 04 OK. If the display amount is unusual, please refer the below table to eliminate the issue.

Unusual situation	Scan (display 00) or display less amount
Possibility	The communication is not correct or repeat ID
Eliminate method	<ul style="list-style-type: none"> ◎Please confirm the communication again ◎The factory default of reader ID all set to “1”. The ID did not setup properly when communicated with multiple reader or ID repeat cause transmission conflict and can not find the module correctly.

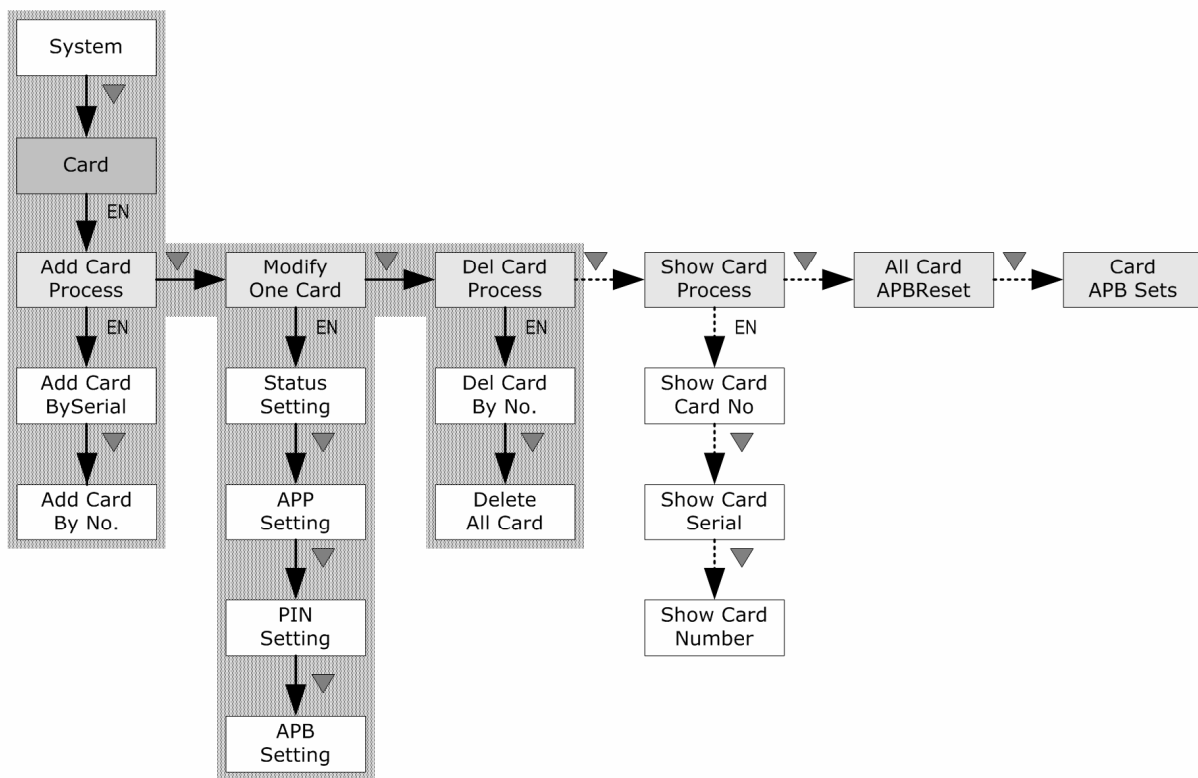
Please contact with the Syris technical personnel if confirm the above questions but still can not communicate correctly.

04 Add/delete/ edit card

The add card function separate into (Add Card By Serial) or (Add Card By No.)

The edit card function is for setup card enable/disable (Status Setting), passage application group (APP Setting), card password (PIN Setting) and anti-pass-back function (APB Setting)

Delete card can separate into (Del Card by No.) or (Delete All Card). The next diagram is the Card main menu table and the gray part is the step operation range.



Add card		
Enter key	LCD display	Reference
MENU	System	
▼	Card	
EN	Add Card Process	
EN	Add Card By Serial	Automatically sort add card module (annotate)
EN	Ins Card	Waiting for proximity un-gotten card
Proximity un-used card	Ins Card [0001]	First time enter card sort from 0001, serial proximity new card will automatically increase card number.
Proximity using card	Ins Card Card Use	If card has been used, the screen will display suggest message
CLR	Add Card By Serial	Leave automatically add card mode

Annotation:

Automatically add card function(Add Card By Serial), when user first time add card, the card number will automatically sort from 0001 and continue to proximity un-used card, the card number will automatically add up. If there are several cards have been deleted in one serial card numbers, it will be fill in the card number which has been deleted first. For example, the already add card number from 0001 to 0010 which the 0005 has been deleted lately, and next time when user use automatically add card function, it will fill in 0005 then start add up card number from 0011.

Add card by number function (Add Card by No.) is to add card by assign card number. To continue last example, the card number has add to 0010, the user can directly enter card number 0011 then add card, in the add card process, the card number will automatically skip over the already exist card number and will not cover the original number. For example, if card 0015 has been add in advance, when proximity to card 0014, the card number will automatically jump to 0016.

Edit Card(enable/disable)		
Enter key	LCD display	Reference
MENU	System	
▼	Card	
EN	Add Card Process	
▼	Modify One Card	Edit card item
EN	Card No No:0001	Enter the card number which want to edit
EN	Status Setting	Card enable/disable setup mode
EN	Card [Enable]	Card normal status is enable
▼	Card [Disabl]	Set up card to disable
EN	Status Setting	Card has been modified, back to item

The other function of edit card, we suggest the user co-operate with SYW95A door access manage software to proceed setting, the description of each function is at next page:

Passage Application Group (APP Setting):

Able to setup card (holder) group (max.16 groups). Co-operate with SYW95A door access manage software can setup the passage timer and passage door.

Card password (PIN Setting):

Install keypad proximity reader can setup card (holder) personal password, though SYW95A door access manage software can setup open door mode to “card plus password”.

Anti-pass-back (APB Setting):

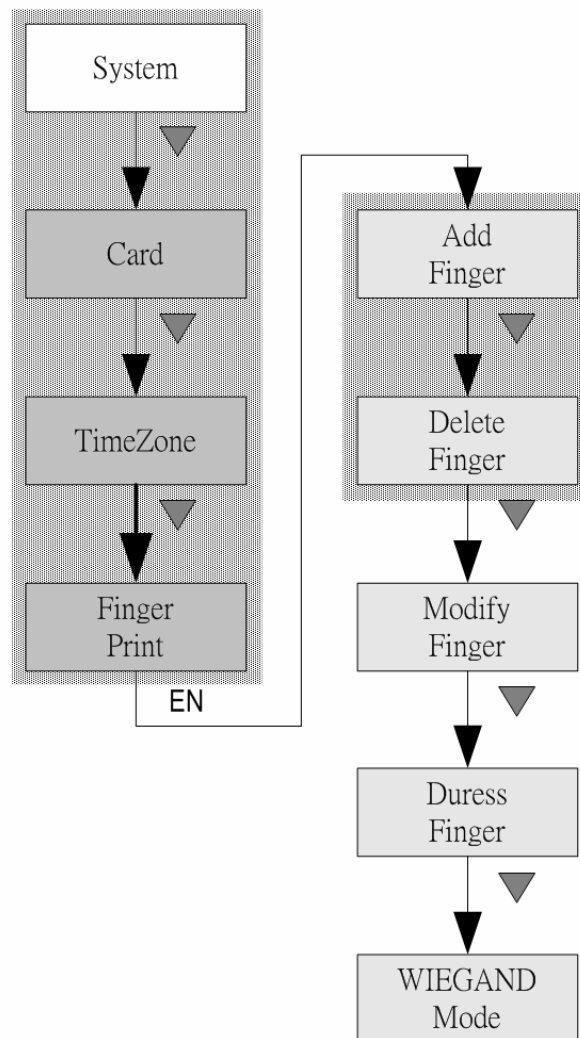
Base on “one in one out” control idea to avoid one card repeat incoming/outgoing situation, mostly apply to parking space management or research centre personnel management.

Delete Card		
Enter key	LCD display	Reference
MENU	System	
▼	Card	
EN	Add Card Process	
▼ * 2	Del Card Process	
EN	Del Card By No.	Delete card by no. mode
EN	Del Card No:0001	Enter the card number which wants to delete.
EN	Del Card By No.	Card has been deleted, back to item
▼	Delete All Card	Delete all card mode
EN	Delete [No]	Confirm delete or not
▼	Delete [Yes]	Choose Yes
EN	Delete OK	All cards have been delete
CLR	Delete All Card	Back to item

05 Add and delete fingerprint (need to install fingerprint module)

SY210 serial controller can proceed door access control by identify fingerprint through fingerprint module (SYRDF5). Able to setup **card replace by fingerprint or fingerprint corresponding to card** to attend the “fingerprint control” function. The setting of **fingerprint corresponding to card** is for one card corresponding to ten fingerprints, our suggestion is to use the Syris fingerprint manage software (SYFPM).

In the follow steps, we are going to introduce how to add/delete fingerprint and setup **card replace by fingerprint**, the next diagram is the Finger Print main menu table and the gray part is the operation range of this step.



Add Fingerprint (co-operate with S Y R D F 5)		
Enter key	LCD display	Reference
MENU	System	
▼ * 3	Finger Print	Fingerprint item
EN	Finger ID = [1]	Select fingerprint module(ID)
EN	Add Finger	Add fingerprint mode
EN	Finger No : 0001	Enter the fingerprint number which wants to add
EN	Add Finger	Press finger when F5 light flashes and produce sound (annotate)

Delete Fingerprint		
Enter key	LCD display	Reference
MENU	System	
▼ * 3	Finger Print	Fingerprint item
EN	Finger ID = [1]	Select fingerprint module(ID)
EN	Add Finger	Add fingerprint mode
▼	Delete Finger	Delete fingerprint mode
EN	Delete By No	Delete card by number mode
EN	Finger No : 0001	Enter the fingerprint number which wants to delete
EN	Delete Finger	The fingerprint has been deleted

The function of “card replace by fingerprint” is simply passed by fingerprint without using card at all. The user has to **add fingerprint** from **Finger Print item** then enter Card item and select “card replace by fingerprint” to add card.

Card Replace by fingerprint(after add fingerprint from Finger Print)增加		
Enter key	LCD display	Reference
MENU	System	
▼	Card	
EN	Add Card Process	
EN	Add Card By Serial	Automatically add card mode
EN	Ins Card	Waiting for proximity un-used card and replace by fingerprint here
Press finger	Ins Card [0001]	Card replace by fingerprint

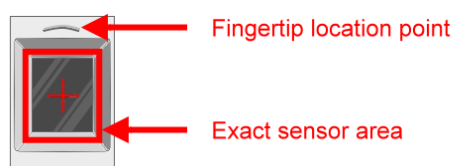
Annotation: The attention matter of press fingerprint

In order to maintain the fingerprint identify rate in standard value, please pay attention on the below introduction of press fingerprint:

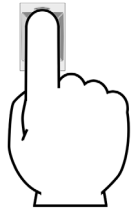
The fingerprint sampling method is to get many minutiae extend from the fingerprint center as the right image, the cross curve center is the fingerprint center



Please locate the fingerprint center and aim at effective proximity area center (as next picture) , then press finger on the effective proximity area softly, now the finger tip should parallel with the “ position ceiling”, therefore, the user can also according to the “position ceiling” to locate the fingerprint



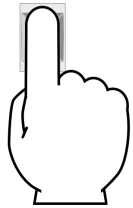
The correct and incorrect examples of pressing fingerprint:



○



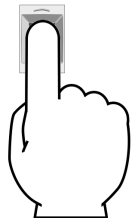
Correct: the finger tip parallel with “position ceiling” and locate the fingerprint center in the middle, press the fingerprint in the effective proximity area



X



Error : the fingerprint only touch the effective proximity area lightly and can not be identify



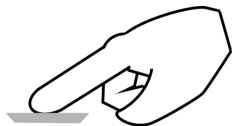
X



Error: the fingerprint center not locate in effective proximity area properly, the sampling is not enough



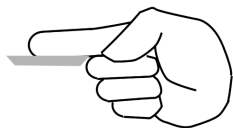
X



Error: the finger is not press equally in the effective proximity area, less contact area and can not be identify



X



Error: the finger position is too lean on one side and can not be identify

When SYRDF5 is identifying the fingerprint, it will remind the user the current status by signal lights and beep, the description as follow:

Action	SYRDF5 Signal	SYRDF5 Status
Press fingerprint	One short beep, the power light successive flashing	Verifying the fingerprint minutiae, can remove the finger
Fingerprint correct	One long beep, "OK" light flashes once	Find the fingerprint data, and identify the status
Fingerprint incorrect	One long beep and three short beeps, error light flash one long and three short times	Can not find the fingerprint data, or press way error can not identify the status

The mainly reasons of common fingerprint identification failure:

(1)The finger moved or pressed incorrectly:

→Please follow the description above to enroll fingerprint correctly.

(2)Avoid wet and oily finger (especially rainy day or the personnel who touch grease) :

→Please wipe the finger with towel then press fingerprint.

(3)The finger too dry to display the clearly fingerprint:

→Please re-press the fingerprint or wet the fingertip with a breath then press the fingerprint.

(4) Can not contrast with the recorded fingerprint because of the finger peeling or serious injured:

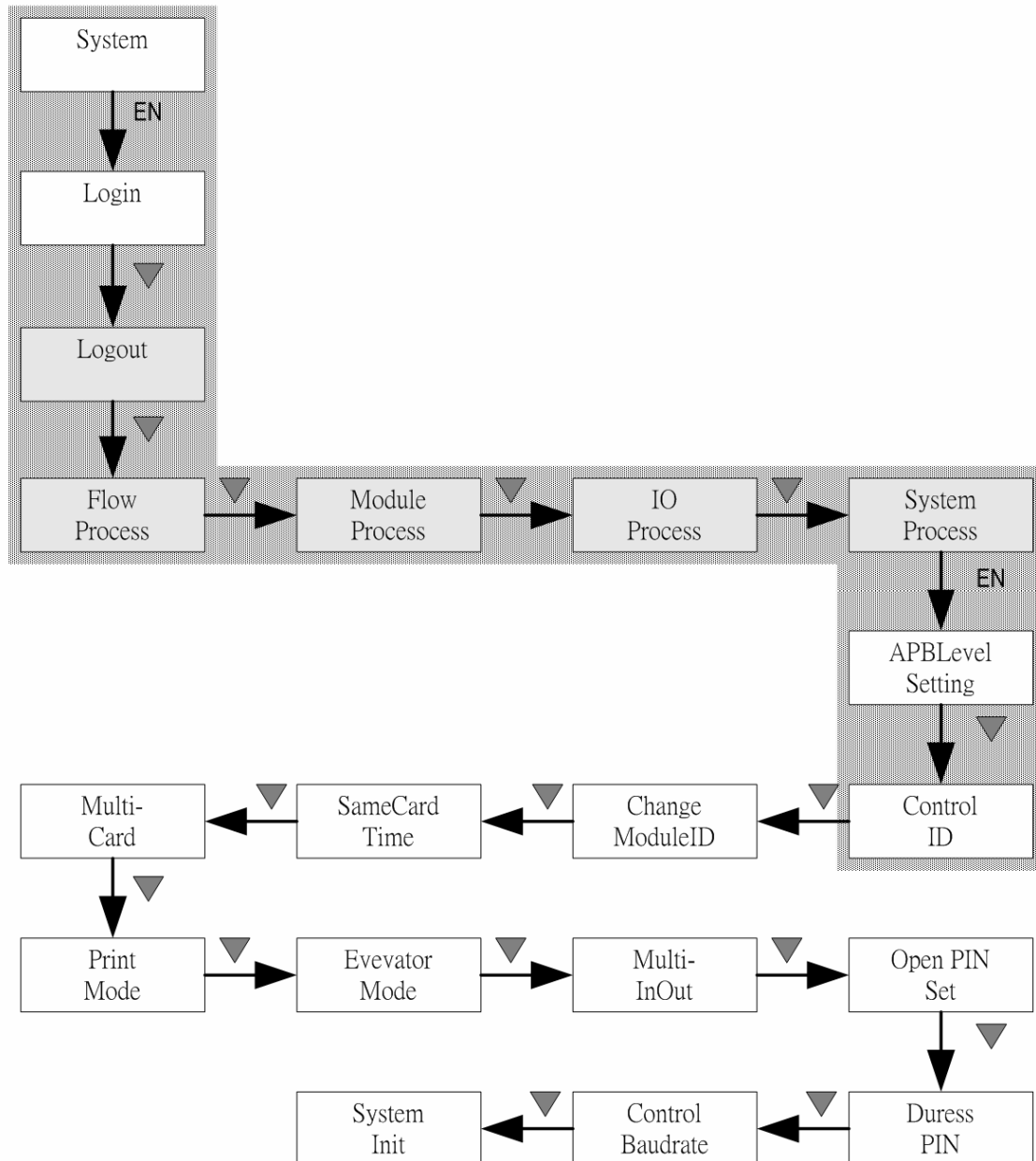
→Please re-enroll other fingerprints

(5)The employees data or fingerprint data come from other machine or transmit through Internet, the system didn't initialize after enroll fingerprint:

→Exit the system then re-enter the program to make the system data initialized

06 Setup controller ID (when multiple controllers online)

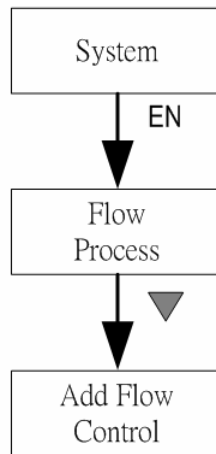
When multiple controllers operate online, the ID of each controller needs to setup separately to avoid ID conflict and cause communication abnormality. The next diagram is the System Process main table and the dotted line part is the operation range of this step.



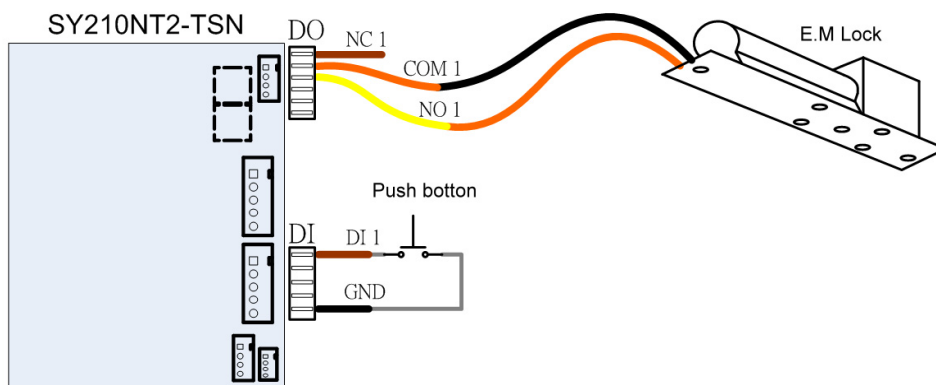
Setup Controller ID		
Enter key	LCD display	Reference
MENU	System	
EN	Login	
▼ *5	System Process	
EN	APBLevel Setting	
▼	Control ID	Setup controller ID item
EN	Control ID : 0001	Enter the controller ID number(1~99) which wants to assign
EN	Control ID	Complete the controller ID setting

07 Procedure Control

SY210 pre-set through setup procedure control, the program can control functions to attain to the different functions demand. Next diagram is the example of setup press button to open door method



The DO1 of SY210NT-TSN connects to electric lock and the DI1 connects to the open door button. Therefore, the action of press button to open door can be done through the setting of procedure control.



Procedure control (Press button to open door setting)		
Enter key	LCD display	Reference
MENU	System	
EN	Login	
▼ * 2	Flow Process	Procedure control menu
EN	Add Flow Control	Add procedure
EN	Flow No : 35	First time start with the 35 th procedure (the number before 35 are all controller assign procedures)
	Event Setting	The event item is the condition of setup open door action
EN	Event CardSenc	
▼ * 1 2	Event DI On	We connect the open door button to controller DI1, so select DI On for input signal.
EN	Event ID = [9]	Select the event source module, setup module ID: 9 which mean the signal source is controller.
EN	Event Ch : [01]	Select event channel, this case setup open door button connect to controller DI1, so choose channel 1
EN	Event Delay : 00	Event delay time, we can decide delay how many sec. to open door when DI open door signal touch off.
EN	Event Setting	Event setup complete.
▼	Action Setting	Action setup item, setup the action after open door signal touch of.
EN	Action LED	

▼ * 3	Action SY210 DO	In this case, the electric lock connects to controller DO1, so the controller DO execute the action.
EN	Action [Open]	Setup receive open door signal, the Realy action is "open"
EN	Action Ch : [01]	Select the action channel, output byDO1
EN	Action Setting	Complete the action setting (to be continued)
Procedure Control(setup open door button)		
Enter key	LCD display	Reference
▼	Method Time	Setup action time
EN	Method [Alway]	Setup time mode
▼ * 2	Method [Sec]	Choose count by second
EN	Method Time : 003	Setup time: 003 (three seconds)