IDTi

BSC-101

USER MANUAL

V.4.0

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BSC-101 V.4.0 Manual

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WARNING!

15.19:

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION

IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST

ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

15.21:

The user manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT
EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Limited Warranty

All Products sold to Dealer hereunder shall be subject to IDTi standard warranty for the Product included with the Product by IDTi ("Product Warranty"). The Product Warranty shall be extended to end user purchasers of the Products from Dealer who purchases such Products within twelve (12) months of the date the Products are shipped to Dealer. Provided within the aforementioned time period, the warranty period for a Product shall commence upon the date stated in the Product Warranty. Dealer shall not extend any warranty regarding the Products other than IDTi then standard warranty. The limited warranty statement included in the Product Warranty is the exclusive statement of the controlling terms and conditions of the limited warranties on the Products. Nothing in this Agreement or any other written document or any oral communications with Dealer or other parties may alter the terms and conditions of the Product Warranty. IDTi may, in its sole discretion, revise its limited warranties from time to time, however; no change in limited warranties will affect Product orders already accepted by IDTi. Dealer agrees to only pass on to Dealer's end-users IDTi limited warranties and Dealer will be liable for any greater warranty that Dealer purposely or inadvertently transfers to end-users. Dealer will indemnify, defend and hold IDTi harmless for any damages or other costs that arise because of Dealer's failure to properly inform Dealer's end-users of current limited warranties.

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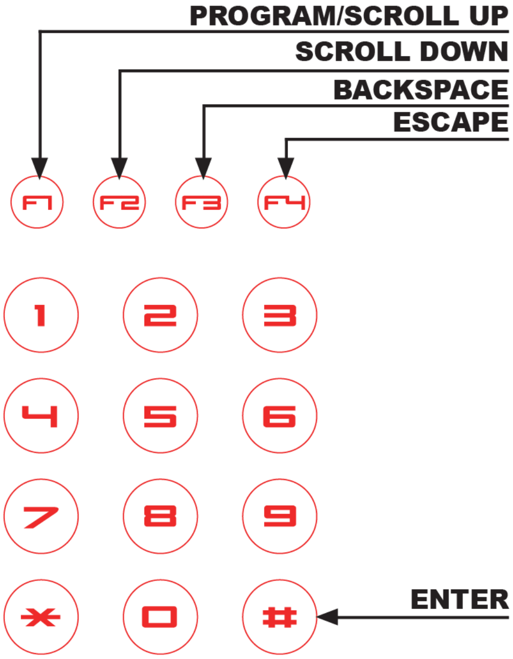
Part I

1 Navigating the System



Part II

2 Using the Fingerprint Scanner

How Much Pressure is Required For a Good-Quality Fingerprint?

If too much pressure is applied to the sensor window, the ridges adhere to each other and are rendered indistinguishable. In this case, the net effect is similar to the hard-to-find minutiae of the wet fingerprint image. Alternatively, if too little pressure is applied the resulting image is similar to the dry fingerprint. Issues related to pressure are easily addressed however. A little practice is all that is needed for users to get the feel of it. Touching the sensor as if pressing a button creates an image that lacks information-rich fingerprint data.

1. Position: Placing your finger far from the center of the sensor will increase the rejection rate. Ridge of the finger must me touching the touch sensor to turn on the fingerprint sensor. Touch sensor is located just below the sensing area.
2. Rotation: Finger rotation should be kept to a minimum during enrollment and verification
3. Pressure: Apply moderate pressure when making contact with the sensor. Too much pressure may cause smudging of the fingerprint. Too little pressure may not allow the sensor to recognize the presence of a finger. The ideal amount of pressure would be similar to a firm grip used to hold a pen

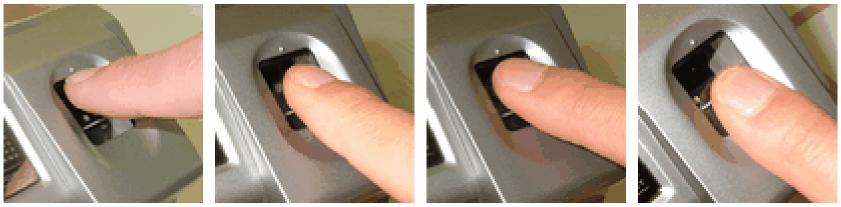


Figure1: Improper Alignment Causes Problems

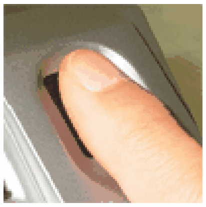


Figure2: Proper Alignment

Position of the Finger

In order to capture the most minutiae, maximize the surface area of the fingerprint on the fingerprint input window by covering the sensor completely. It is okay for the fingertip to extend beyond the length of the sensor to center the fingerprint. Apply pressure lightly and evenly without moving it during the capturing process. Figure2 shows the correct positioning of the fingerprint on the input window. Figure1 shows the most common mistakes made during the initial phase of enrollment.

When the Red light (Fingerprint Scanner) is on, slide the finger across the scanner.

1. Position the finger where the first joint of the finger meets the edge of the sensor.
2. Lower the finger onto the sensor and apply moderate pressure.
3. Keep the finger on the sensor until the Red light (fingerprint scanner) turns off. You may then remove the finger

Getting Good Fingerprint Images

The quality of a fingerprint image is relative to the number of minutiae points captured. If the number and locations of the minutiae remain consistent whenever an individual's fingerprint image is scanned and captured, the fingerprint image is successfully matched to the template of the registered finger. Fingerprint images that do not contain adequate minutiae data are not acceptable as personal credentials, and are therefore invalid. Figure 3 shows poor-quality fingerprints, characterized by smudged, faded, or otherwise distorted areas on the fingerprint. Conditions like these may be attributable to a number of factors, including excessively dry or wet skin, or scarring.

1. Use index, middle or ring fingers
2. Avoid using thumb and pinky fingers since they are typically awkward to consistently position on the sensor
3. Completely covering the area of the sensor with the fingerprint will provide the best performance

Part III

3 Quick Start

3.1 Pre-Installation Checklist

Make sure all wires are checked.

Check for communication module. There are several types of communications, Ethernet. Make sure you have the correct communication modules.

Set network address. All devices are defaulted to address 1. If you're connecting 2 or more, change network address to 2 and up.

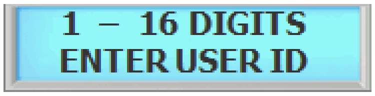
3.2 Entering the System Menu

When the reader is powered on with no fingerprint templates enrolled in the unit, anyone can enter the system menu by pressing the F1/p key. If you are enrolling the first administrator card via the reader's keypad, you must first determine the 1~16 digit PIN that the administrator will use. Once this PIN is determined, the administrator must be present to enroll their card into the reader. Note that this operation is not valid if there are administrator card in the reader.

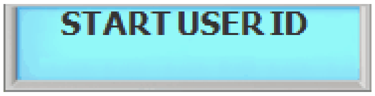
⚠ NOTE :

Device factory default has no system administrator password. If you've just purchased the unit, you should be able to get into the system mode by pressing the F1 key.

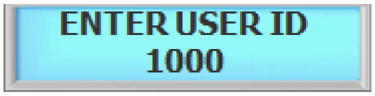
3.2.1 If Administrator has been enrolled


1 – 16 DIGITS
ENTER USER ID

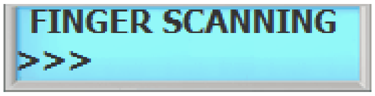
1
Press F1/P key to enter system mode.


START USER ID

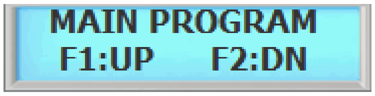
2
Key in administrator ID followed by the # key


ENTER USER ID
1000

3
Present either finger or card which ever administrator has been enrolled with. For now we will use the fingerprint

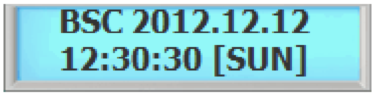

FINGER SCANNING
>>>

4
Finger scanning message will appear

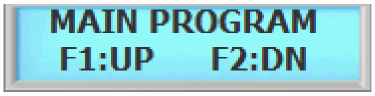

MAIN PROGRAM
F1:UP F2:DN

5
Now you're into system mode.
Press F1 key to scroll up the main menu
Press F2 key to scroll down the main menu

3.2.2 If no Administrator has been enrolled


BSC 2012.12.12
12:30:30 [SUN]

1
Press F1/P key to enter system mode


MAIN PROGRAM
F1:UP F2:DN

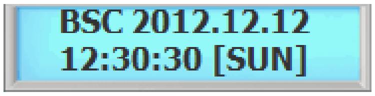
2
Now you're into system mode.
Press F1 key to scroll up the main menu
Press F2 key to scroll down the main menu

3.3 Operating System

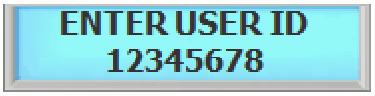
To use the system, simply enter enrolled user fingerprint to the scanner. Touch sensor will automatically activate the fingerprint sensor when user finger is presented to the scanner. Remove the finger when **red** scanning light turns off.

There are 11 operating modes in the system, depending on which mode is running, operating the system varies.

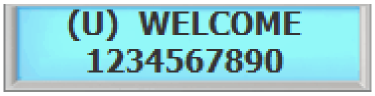
3.3.1 Operating with User PIN


BSC 2012.12.12
12:30:30 [SUN]

1
From the standby menu, key in user PIN and press the # key.

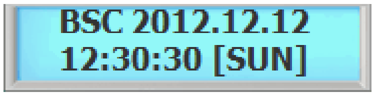

ENTER USER ID
12345678

2
Enter user PIN and press the # key.

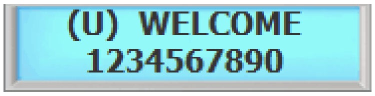

(U) WELCOME
1234567890

3
Welcome message will appear if the verification has been successful.

3.3.2 Operating with User CARD

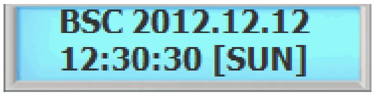

BSC 2012.12.12
12:30:30 [SUN]

1
From the standby menu, present user card to the reader.

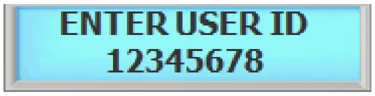

(U) WELCOME
1234567890

2
Welcome message will appear if the verification has been successful.

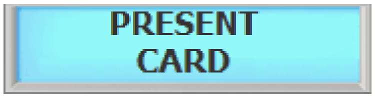
3.3.3 Operating with User PIN & CARD


BSC 2012.12.12
12:30:30 [SUN]

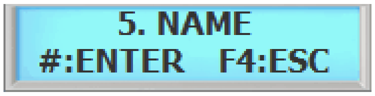
1
From the standby menu, key in user PIN and press the # key.


ENTER USER ID
12345678

2
Key in user PIN followed by the # key

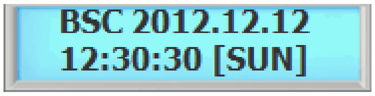

PRESENT
CARD

3
Present user Card to the reader.

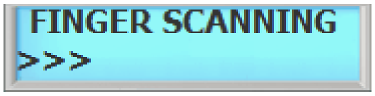

5. NAME
#:ENTER F4:ESC

4
Welcome message will appear if the verification has been successful.

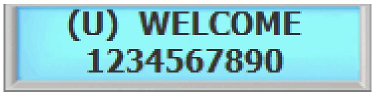
3.3.4 Operating with User FINGERPRINT


BSC 2012.12.12
12:30:30 [SUN]

1
From the standby menu, present user fingerprint to the scanner. If the scanner doesn't turn on then press the # key to manually turn scanner on.

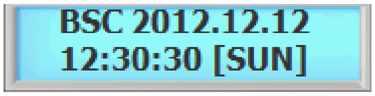

FINGER SCANNING
>>>

2
Enter user fingerprint to the scanner.

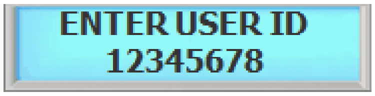

(U) WELCOME
1234567890

3
Welcome message will appear if the verification has been successful.

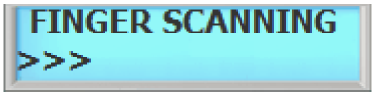
3.3.5 Operating with User PIN & FINGERPRINT


BSC 2012.12.12
12:30:30 [SUN]

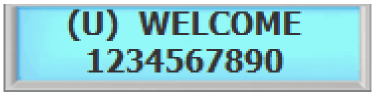
1
From the standby menu, key in user PIN and press the # key.


ENTER USER ID
12345678

2
Once the user ID has been entered, fingerprint scanner will flash red.

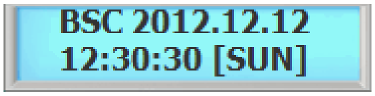

FINGER SCANNING
>>>

3
Enter user fingerprint to the scanner.

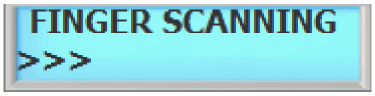

(U) WELCOME
1234567890

4
Welcome message will appear if the verification has been successful.

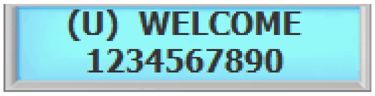
3.3.6 Operating with User CARD & FINGERPRINT


BSC 2012.12.12
12:30:30 [SUN]

1
From the standby menu, present user card to the reader. Fingerprint scanner will flash red, once the user card has been verified.


FINGER SCANNING
>>>

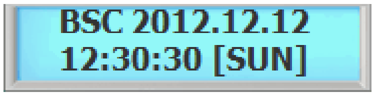
2
Enter user fingerprint to the scanner.


(U) WELCOME
1234567890

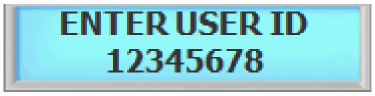
3
Welcome message will appear if the verification has been successful.

.

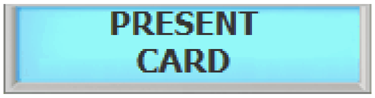
3.3.7 Operating with User PIN & CARD & FINGERPRINT


BSC 2012.12.12
12:30:30 [SUN]

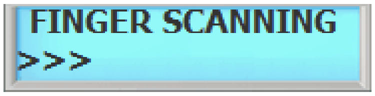
1
From the standby menu, key in user PIN and press the # key.


ENTER USER ID
12345678

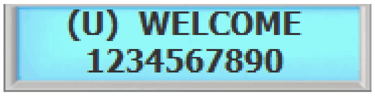
2
Once the user ID has been entered, fingerprint scanner will flash red.


PRESENT
CARD

3
Present user Card to the reader.


FINGER SCANNING
>>>

4
Present user fingerprint to the scanner.

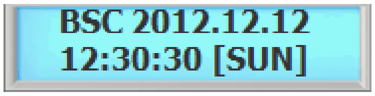

(U) WELCOME
1234567890

5
Welcome message will appear if the verification has been successful.

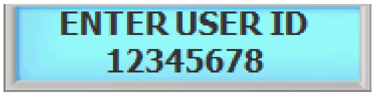
3.4 Operating the System with Funtion Key

There are 5 operating modes in the system, depending on which mode is running, operating the system varies.

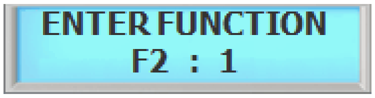
3.4.1 Operating Function Key in PIN


BSC 2012.12.12
12:30:30 [SUN]

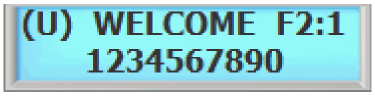
1
From the standby menu, key in user PIN and press the # key.


ENTER USER ID
12345678

2
Once the user ID has been entered press the function key but DO NOT PRESS # KEY

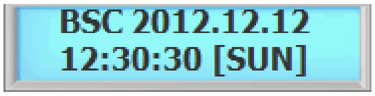

ENTER FUNCTION
F2 : 1

3
Enter the function key.

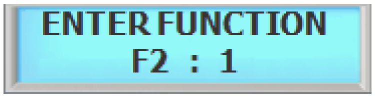

(U) WELCOME F2:1
1234567890

4
Welcome message with function key will appear if the verification has been successful.

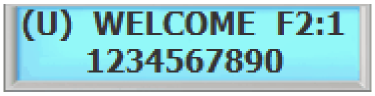
3.4.2 Operating Function Key in CARD


BSC 2012.12.12
12:30:30 [SUN]

1
From the standby menu, key in user PIN and press the # key.

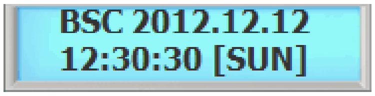

ENTER FUNCTION
F2 : 1

2
Enter function key followed by presenting user card.

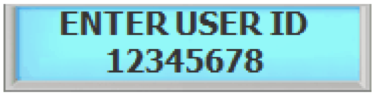

(U) WELCOME F2:1
1234567890

3
Welcome message with function key will appear if the verification has been successful.

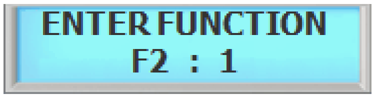
3.4.3 Operating Function Key in PIN and CARD


BSC 2012.12.12
12:30:30 [SUN]

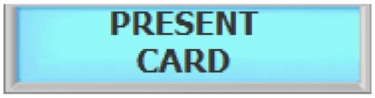
1
From the standby menu, key in user PIN. DO NOT PRESS THE # KEY.


ENTER USER ID
12345678

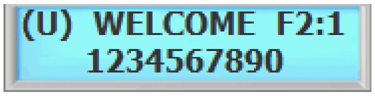
2
Key in user PIN but do not press the # key.


ENTER FUNCTION
F2 : 1

3
Enter function key followed by presenting user card.

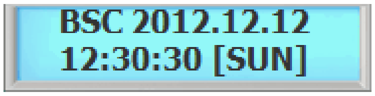

PRESENT
CARD

4
Present user Card to the reader.

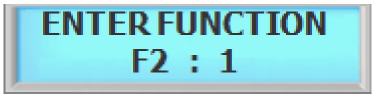

(U) WELCOME F2:1
1234567890

5
Welcome message with function key will appear if the verification has been successful.

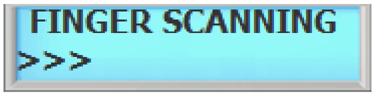
3.4.4 Operating Function key in FINGERPRINT


BSC 2012.12.12
12:30:30 [SUN]

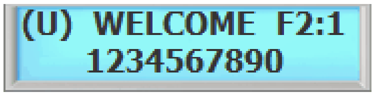
1 From the standby menu, key in user PIN and press the # key.


ENTER FUNCTION
F2 : 1

2 Press function key followed by presenting user card.

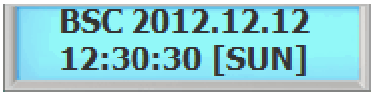

FINGER SCANNING
>>>

3 Enter user fingerprint to the scanner.

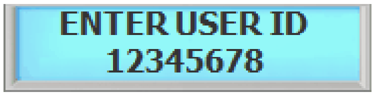

(U) WELCOME F2:1
1234567890

4 Welcome message with function key will appear if the verification has been successful.

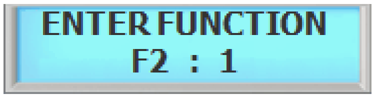
3.4.5 Operating Function key in PIN & FINGERPRINT


BSC 2012.12.12
12:30:30 [SUN]

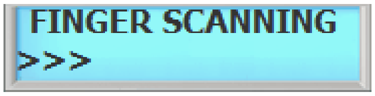
1 From the standby menu, key in user PIN and press the # key.


ENTER USER ID
12345678

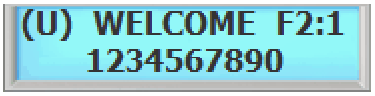
2 Key in user PIN but do not press the # key. Once the user PIN is entered, enter the function key


ENTER FUNCTION
F2 : 1

3 Press function key. Enter user fingerprint.

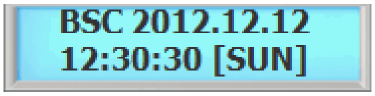

FINGER SCANNING
>>>

4 Present user fingerprint to the scanner.

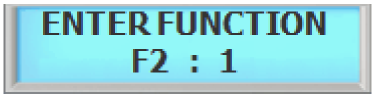

(U) WELCOME F2:1
1234567890

5 Welcome message with function key will appear if the verification has been successful.

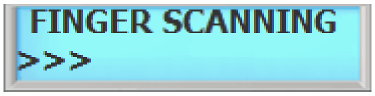
3.4.6 Operating Function key in CARD & FINGERPRINT


BSC 2012.12.12
12:30:30 [SUN]

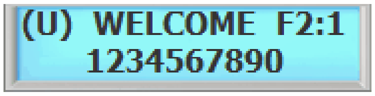
1 Standby menu….


ENTER FUNCTION
F2 : 1

2 Press function key followed by presenting user card.

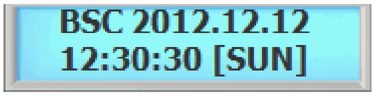

FINGER SCANNING
>>>

3 Enter user fingerprint to the scanner.


(U) WELCOME F2:1
1234567890

4 Welcome message with function key will appear if the verification has been successful.

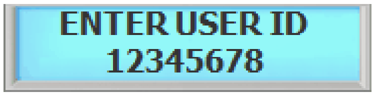
3.4.7 Operating Function key in PIN & CARD & FINGERPRINT



BSC 2012.12.12
12:30:30 [SUN]

1

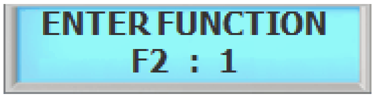
From the standby menu, key in user PIN. DO NOT PRESS THE # KEY.



ENTER USER ID
12345678

2

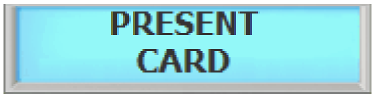
Key in user PIN but do not press the # key.



ENTER FUNCTION
F2 : 1

3

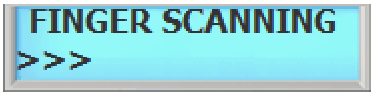
Press function key then present user Card.



PRESENT
CARD

4

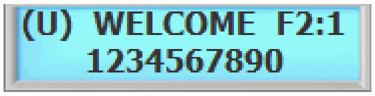
Present user Card to the reader. Fingerprint scanner will flash red



FINGER SCANNING
>>>

5

Present user fingerprint to the scanner.



(U) WELCOME F2:1
1234567890

6

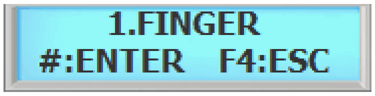
Welcome message will appear if the verification has been successful.

Part IV

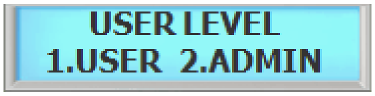
4 SYSTEM MENU 1 - ENROLL USER

4.1 1. Enroll Fingerprint User

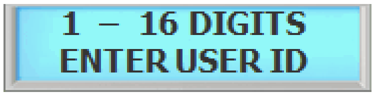
This command is used to add typical fingerprint only users to the reader so that they will be able to gain entry to the location guarded by the reader. The system has an option to enroll either 2 or 4 templates per user. The following key sequence performs this action:


1.FINGER
#:ENTER F4:ESC

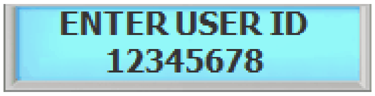
1
Press the # key to add users Fingerprint Template


USER LEVEL
1.USER 2.ADMIN

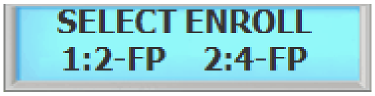
2
Press 1 for User and press 2 for Admin


1 – 16 DIGITS
ENTER USER ID

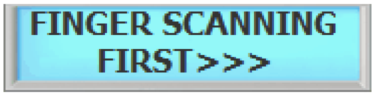
3
Key in user ID from 1 to 16 digits as shown in next figure


ENTER USER ID
12345678

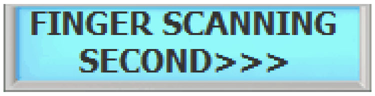
4
Key in user ID followed by the # key


SELECT ENROLL
1:2-FP 2:4-FP

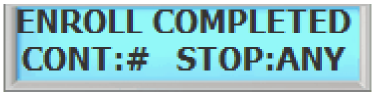
5
System has an option to enroll 2 fingerprint templates and 4 fingerprint templates per each user. For now we will select number 2 key by enrolling 4 templates


FINGER SCANNING
FIRST>>>

6
Present first finger to the scanner. Remove the fingerprint when the red light turns off. You can either enroll same fingerprint or different fingerprint after the first. Repeat this process until the last fingerprint


FINGER SCANNING
SECOND>>>

7
Scanning the last fingerprint…..


ENROLL COMPLETED
CONT:# STOP:ANY

8
Enroll completed. Press the # key to continue enrolling another user fingerprint or press any others to exit off the sub-menu

When the **Red** light (Fingerprint Scanner) is on, slide the finger across the scanner.

1. Position the finger where the first joint of the finger meets the edge of the sensor.
2. Lower the finger onto the sensor and apply moderate pressure.
3. Keep the finger on the sensor until the **Red** light (fingerprint scanner) turns off. You may then remove the finger.

Use thumb, index, middle or ring fingers.
Avoid using pinky fingers since its typically awkward to consistently position on the sensor.
Completely covering the area of the sensor will provide the best performance.

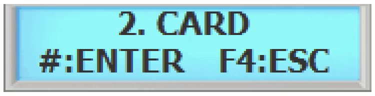
⚠ **NOTE :**

There are 2 levels of administration,

1. **USER (Level 1)** - Corresponds to an ordinary user. They may verify, but are not allowed to access any administrative functions.
2. **ADMIN (Level 4)** - This is an system administrator level and has full rights to configure the reader.

4.2 2. Enroll Card User

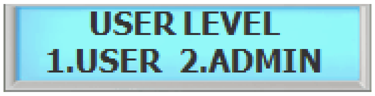
This command is used to add typical card only users to the reader so that they will be able to gain entry to the location guarded by the reader. The following key sequence performs this action:



2. CARD
#:ENTER F4:ESC

1

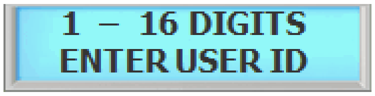
Press the # key to add user card



USER LEVEL
1.USER 2.ADMIN

2

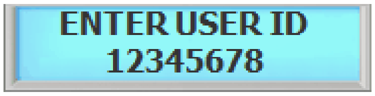
Press 1 for User and press 2 for Admin



1 – 16 DIGITS
ENTER USER ID

3

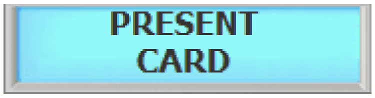
Key in user ID from 1 to 16 digits as shown in next figure



ENTER USER ID
12345678

4

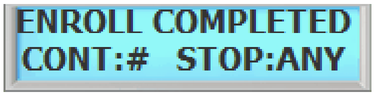
Key in user ID followed by the # key



PRESENT
CARD

5

Present user card to the reader or key in card number manually followed by the # key



ENROLL COMPLETED
CONT:# STOP:ANY

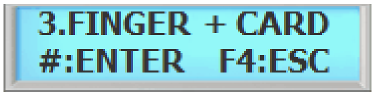
6

Enroll completed. Press # key to continue adding card or press any other key to exit off the sub-menu

4.3 3. Enroll Card and Fingerprint User

This command is used to add typical fingerprint and card users to the reader so that they will be able to gain entry to the location guarded by the reader. The following key sequence performs this action:

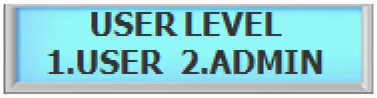
1



3.FINGER + CARD
#:ENTER F4:ESC

Press the # key to add users fingerprint and card

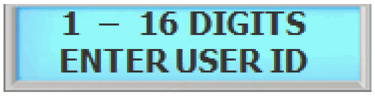
2



USER LEVEL
1.USER 2.ADMIN

Press 1 for User and press 2 for Admin

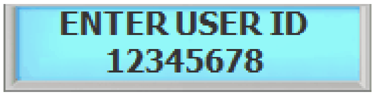
3



1 – 16 DIGITS
ENTER USER ID

Key in user ID from 1 to 16 digits as shown in next figure

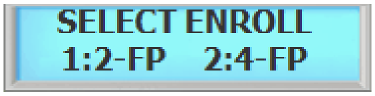
4



ENTER USER ID
12345678

Key in user ID followed by the # key

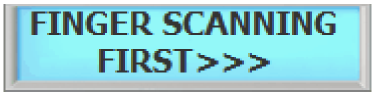
5



SELECT ENROLL
1:2-FP 2:4-FP

System has an option to enroll 2 fingerprint templates and 4 fingerprint templates for a single user. For now we will select number 2 key by enrolling 4 templates.

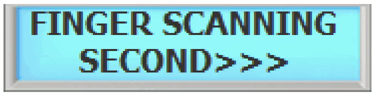
6



FINGER SCANNING
FIRST>>>

Enter in first fingerprint. You can either enroll same fingerprint or different fingerprint after the first. Repeat this process.

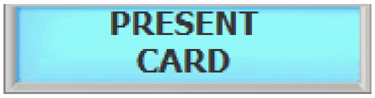
7



FINGER SCANNING
SECOND>>>

Scanning last finger

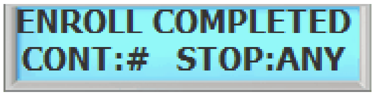
8



PRESENT
CARD

Present user card to the reader

9

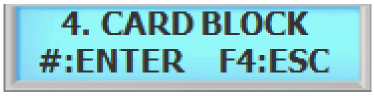


ENROLL COMPLETED
CONT:# STOP:ANY

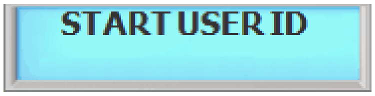
Enroll completed. Press the # key to continue enrolling another user or press any others to exit off the sub-menu

4.4 4. Enroll Block of Card User

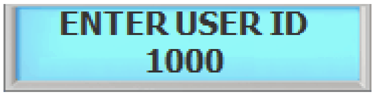
This command is used to enroll range of cards, block enrollment by card number range is best used when there are large quantity of sequential ID numbered cards or credentials. Cards or credentials do not have to be on hand when enrolled through the block enrollment by card number range process, but you must have the facility code. Below is an example to enroll 100 Users with card number starting with 1000. User ID 1000 will be addressed to card number 1000, User ID 1001 will be addressed to card number 1001 and so on. Card must be in sequential order to use the Card Block. Please check with your card provider for more information.


4. CARD BLOCK
#:ENTER F4:ESC

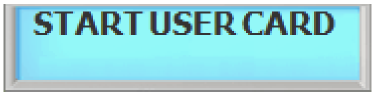
1 Press the # key to add block of card user.


START USER ID

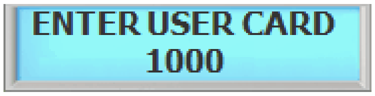
2 Enter in first number of the block ID. This will be the first ID number of the card as shown in the next figure


ENTER USER ID
1000

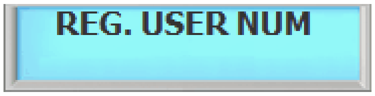
3 1000 would be the first number of user ID


START USER CARD

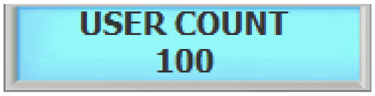
4 Following message will appear. Enter in the first card number as shown below


ENTER USER CARD
1000

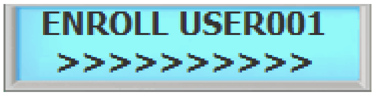
5 1000 would be the first number the card


REG. USER NUM

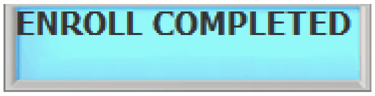
6 Following message will appear. Enter in the total number of cards to be enrolled as shown below


USER COUNT
100

7 100 would be the total number of cards to be enrolled


ENROLL USER001
>>>>>>>>>>>

8 Enrolling user card block. Please wait unit the process finishes. This might take up to 5 minutes depending on the total number of card block size.


ENROLL COMPLETED

9 Enroll completed. Press the # key to continue adding another or press any others to exit off the sub-menu

NOTE :

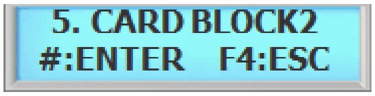
This option will write block of cards in empty slots of the memory and will not delete enrolled users. Using Card Block 1 requires more time than card block2 since it will search for empty slots in memory to enroll. Consider using card block2 if the memory is empty or stored memory is no longer needed.

	Start					**End**
User ID	User ID 1	User ID 2	User ID 3	User ID 4	User ID5	User ID 6
Card #	Card # 10	Card # 11	Card # 12	Card # 13	Card # 14	Card # 15
System Memory	Not Used	In Use	Not Used	In Use	Not Used	Not Used
Result	Yes	No	Yes	No	Yes	Yes

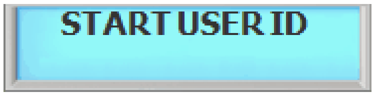
In this case only 4 user ID and cards will be recorded in to system and even though 6 user and 6 cards are being enrolled using Card Block. When using card block, system will group user id and card numbers together. So if User ID is already in use in system, then card corresponding to the user id will not be recorded and left out.

4.5 5. Enroll Block of Card User 2

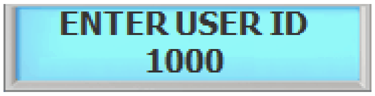
This command is used to enroll range of cards, block enrollment by card number range is best used when there are large quantity of sequential ID numbered cards or credentials. Cards or credentials do not have to be on hand when enrolled through the block enrollment by card number range process, but you must have the facility code. Below is an example to enroll 100 Users with card number starting with 1000. User ID 1000 will be addressed to card number 1000, User ID 1001 will be addressed to card number 1001 and so on.


5. CARD BLOCK2
#:ENTER F4:ESC

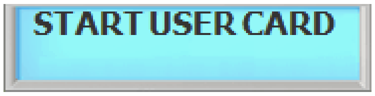
1
Press the # key to add block of card user.


START USER ID

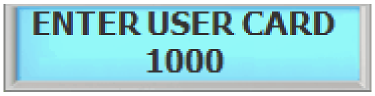
2
Enter in first number of the block ID. This will be the first ID number of the card as shown in the next figure


ENTER USER ID
1000

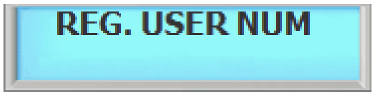
3
1000 would be the first number of user ID


START USER CARD

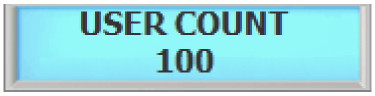
4
Following message will appear. Enter in the first card number as shown below


ENTER USER CARD
1000

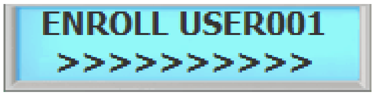
5
1000 would be the first number the card


REG. USER NUM

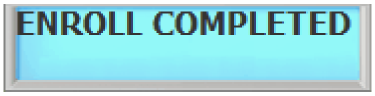
6
Following message will appear. Enter in the total number of cards to be enrolled as shown below


USER COUNT
100

7
100 would be the total number of cards to be enrolled


ENROLL USER001
>>>>>>>>>>

8
Enrolling user card block. Please wait unit the process finishes. This might take up to 5 minutes depending on the total number of card block size.


ENROLL COMPLETED

9
Enroll completed. Press the # key to continue adding another or press any others to exit off the sub-menu

NOTE :

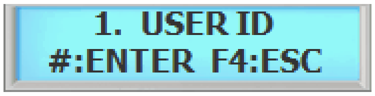
This option will write block of cards without checking memory slots and will delete currently enrolled user. All existing User ID along with card numbers will be replaced.

Part V

5 SYSTEM MENU 2 - EDIT USER

5.1 1. Edit User ID

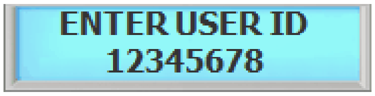
This command is used to edit existing users ID by accessing the user ID. When editing, Administrators have the ability to make changes to user ID only in this menu.



1. USER ID
#:ENTER F4:ESC

1

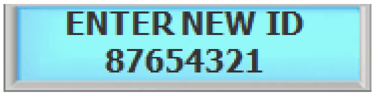
Press the # key to enter edit User ID



ENTER USER ID
12345678

2

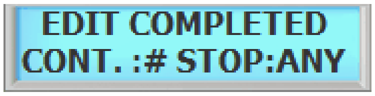
Key in user ID to be edited followed by the # key



ENTER NEW ID
87654321

3

Key in new user ID followed by the # key



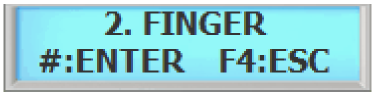
EDIT COMPLETED
CONT. :# STOP:ANY

4

Edit completed. Press the # key to continue editing another or press any others to exit off the sub-menu

5.2 2. Edit User Fingerprint

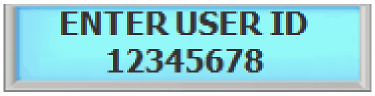
This command is used to edit existing users Fingerprint by accessing the user ID. When editing, Administrators have the ability to make changes to user Fingerprint only in this menu.



2. FINGER
#:ENTER F4:ESC

1

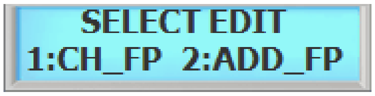
Press the # key enter user FINGER



ENTER USER ID
12345678

2

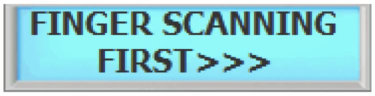
Key in user ID to be edited followed by the # key



SELECT EDIT
1:CH_FP 2:ADD_FP

3

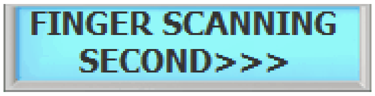
Press 1 to add 2 templates
Press 2 to add 4 templates



FINGER SCANNING
FIRST>>>

4

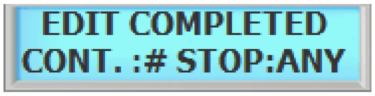
Enter in the first fingerprint. You can either add same fingerprint or different fingerprint after the first. Repeat this process until the fourth fingerprint.



FINGER SCANNING
SECOND>>>

5

Scanning the last finger....



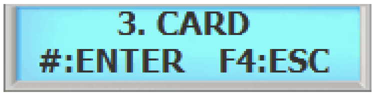
EDIT COMPLETED
CONT. :# STOP:ANY

6

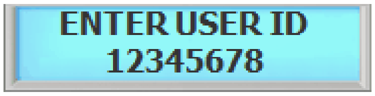
Edit completed. Press the # key to continue editing another or press any others to exit off the sub-menu

5.3 3. Edit User Card

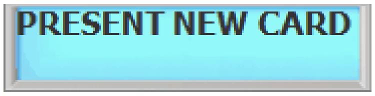
This command is used to edit existing users Card by accessing the user ID. When editing, Administrators have the ability to make changes to user Card only in this menu.


3. CARD
#:ENTER F4:ESC

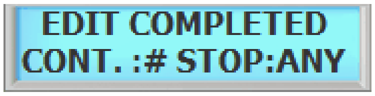
1
Press the # key to enter edit user CARD


ENTER USER ID
12345678

2
Key in user ID to be edited followed by the # key


PRESENT NEW CARD

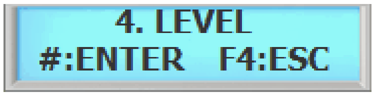
3
Present new card to be enrolled or enter in the card number manually followed by the # key. Make sure the card has not been already enrolled in the system


EDIT COMPLETED
CONT. :# STOP:ANY

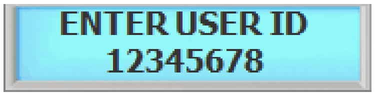
4
Edit completed. Press the # key to continue editing another or press any others to exit off the sub-menu

5.4 4. Edit User Level

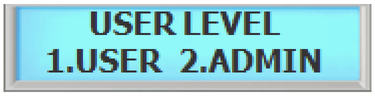
This command is used to edit existing users level by accessing the user ID. User levels determine where a user will be valid. To edit an existing user edit user level, follow the steps below.


4. LEVEL
#:ENTER F4:ESC

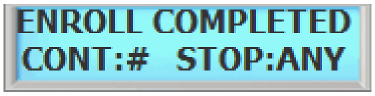
1
Press the # key to enter edit user LEVEL


ENTER USER ID
12345678

2
Key in user ID to be edited followed by the # key


USER LEVEL
1.USER 2.ADMIN

3
Press 1 for User and pres 2 for admin


ENROLL COMPLETED
CONT:# STOP:ANY

4
Edit completed. Press the # key to continue editing another or press any others to exit off the sub-menu

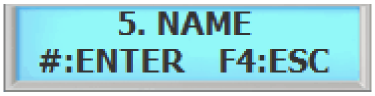
NOTE :

There are 2 levels of administration:

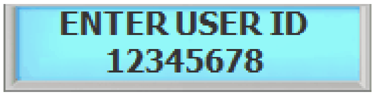
1. **USER (Level 1)** - Corresponds to an ordinary user. They may verify, but are not allowed to access any administrative functions.
2. **ADMIN (Level 4)** - This is an system administrator level and has full rights to configure the reader.

5.5 5. Edit User Name

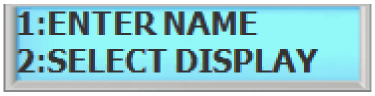
The device is able to display custom user name instead of user ID when accessed. When the system is expecting a name then the number keys on the keypad become letter keys: the letters below the keys apply. Press once to show the first uppercase letter above the key; press four times to show the lowercase letter. When the desired letter appears on the display, press the up-arrow(F1) to move on to the next letter in the name.


5. NAME
#:ENTER F4:ESC

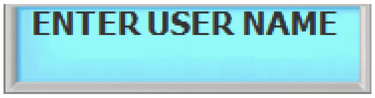
1
Press the # key to enter NAME


ENTER USER ID
12345678

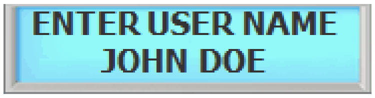
2
Key in user ID to be edited followed by the # key


1:ENTER NAME
2:SELECT DISPLAY

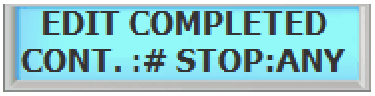
3
Press 1 key to enter user name


ENTER USER NAME

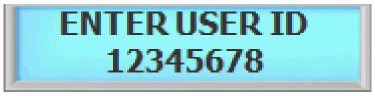
4
Key in text as shown in next figure. Continue on pressing the key to rotate from uppercase letters to lowercase letters. **i.e**. to display lowercase "c" press the number 2 key 6 times. Use the F1 key as space


ENTER USER NAME
JOHN DOE

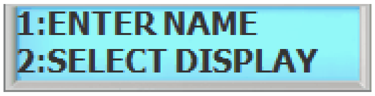
5
Key in appropriate display name and then press the # key


EDIT COMPLETED
CONT. :# STOP:ANY

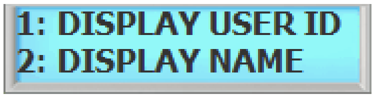
6
Press the # key to continue editing the display option. Display option must be configured in order for it will work properly


ENTER USER ID
12345678

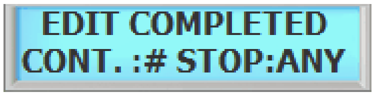
7
Once again, enter in same ID you have just edited previously


1:ENTER NAME
2:SELECT DISPLAY

8
This time select #2 to enter display option


1: DISPLAY USER ID
2: DISPLAY NAME

9
Select #2 to display ID by name. This will allow the system to display custom ID name instead of user ID

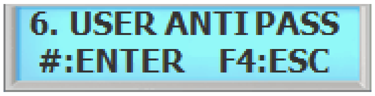

EDIT COMPLETED
CONT. :# STOP:ANY

10
Edit completed. Press the # key to continue editing another or press any others to exit off the sub-menu

	NUMBER OF TIMES KEY IS PRESSED							
KEYS	1	2	3	4	5	6	7	8
1								
2	A	B	C	a	b	c		
3	D	E	F	d	e	f		
4	G	H	I	g	h	i		
5	J	K	L	j	k	l		
6	M	N	O	m	n	o		
7	P	Q	R	S	p	q	r	s
8	T	U	V	t	u	v		
9	W	X	Y	Z	w	x	y	z
0								
*	Clear							
#	Enter							
F1	Space							
F2								
F3	Back Space							
F4	Escape							

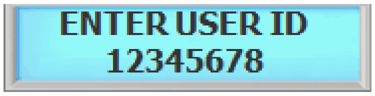
5.6 6. User Antipass

Anti pass-back is used to stop two people from using one card to gain access. This feature is designed to protect against tailgating. Once an access is granted to an IN reader, it must be presented to an OUT reader before another IN reader access is granted. In the event that the user did not read in at the IN reader, and tried to read out of an area, an anti-passback violation would occur. The violation may just log the event as an alarm condition, or may not allow the door to be released. Since users who fail to read IN and walk in with other employees may get stranded or locked in. System Anti-Passback must be enable in order for User Anti-passback to work properly.



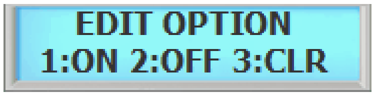
6. USER ANTI PASS
#:ENTER F4:ESC

1
Press the # key to enter USER ANTIPASS



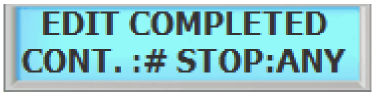
ENTER USER ID
12345678

2
Enter user ID to apply anti-pass followed by the # key



EDIT OPTION
1:ON 2:OFF 3:CLR

3
Press 1 key to enable anti-pass
Press 2 key to disable anti-pass
Press 3 key to forgiveness
Refer to NOTE for clearing the anti-pass



EDIT COMPLETED
CONT. :# STOP:ANY

4
Edit completed. Press the # key to continue adding another user fingerprint or press any others to exit off the sub-menu

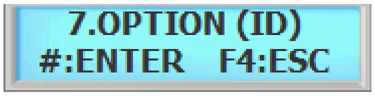
⚠ NOTE :

Anti-pass must be enabled in system setting. Before enabling the anti-pass in user setting, go to main menu 5.SYSTEM SETTING/submenu 12.ANTI PASS and enable the anti-pass for system

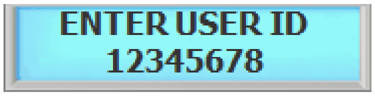
When the system has detected an anti-pass user, that user will be denied the access to that location. Administrator must clear that person of anti-pass by going into edit option and reset the anti-pass by selecting 3(CLR) forgiveness

5.7 7. Option (ID)

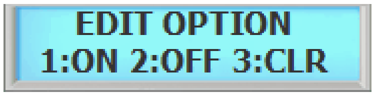
ID Option is a special mode where user can access the unit with ID only. When applied, user can override the current operating mode and access unit it with just an ID (PIN). This option can be applied to those users who does not have card. To apply this mode to user, follow the steps bellow.


7.OPTION (ID)
#:ENTER F4:ESC

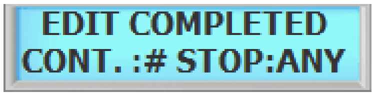
1
Press the # key to enter OPTION (ID)


ENTER USER ID
12345678

2
Enter user ID to apply ID option followed by the # key


EDIT OPTION
1:ON 2:OFF 3:CLR

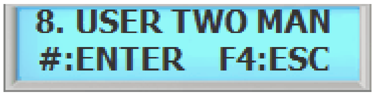
3
Press 1 key to enable ID option to this user
Press 2 key to disable ID option to this user


EDIT COMPLETED
CONT. :# STOP:ANY

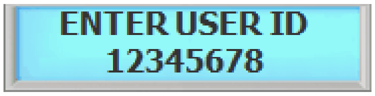
4
Edit completed. Press the # key to continue editing another or press any others to exit off the sub-menu

5.8 8. User Two Man

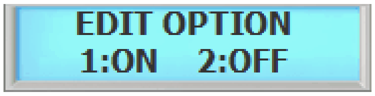
This commend prevents an individual user from entering a selected empty security area unless at least one other enrolled user is present. Once two enrolled users are logged into the area, other user can come and go individually, as long as at least two people are in the area. Conversely, when exiting, the last two occupants of the security area must exit out together. At no time will the system allow less than two users to be in the area.


8. USER TWO MAN
#:ENTER F4:ESC

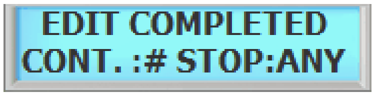
1
Press the # key enter USER TWO MAN


ENTER USER ID
12345678

2
Enter user ID to apply two man function followed by the key.


EDIT OPTION
1:ON 2:OFF

3
Press 1 to enable two man for this user
Press 2 to disable two man for this user


EDIT COMPLETED
CONT. :# STOP:ANY

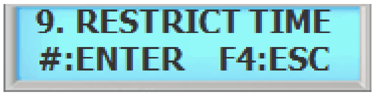
4
Edit completed. Press the # key to continue editing another or press any others to exit off the sub-menu

⚠ NOTE :

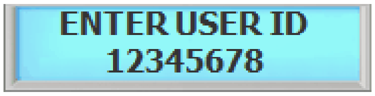
Two Man must be enabled in system setting. After enabling User Two Man option, go to main menu 5.SYSTEM SETTING/submenu 13.TWO MAN and enable the TWO MAN for system.

5.9 9. Restriction TIme

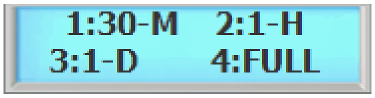
Restriction Time limits how many times a user can be allowed to access depending on value assigned to a user. There are 4 values that can be given to a user. (Ex. if a value of 1-H is given to a user. This user will only be allowed to access once every hour. User must wait another 1 hour to regain its access.)


9. RESTRICT TIME
#:ENTER F4:ESC

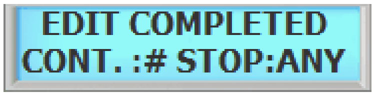
1
Press the # key enter Restriction Time.


ENTER USER ID
12345678

2
Enter user ID and press the # key


1:30-M 2:1-H
3:1-D 4:FULL

3
Select from 1 to 4. Below explains the detail

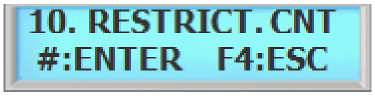

EDIT COMPLETED
CONT. :# STOP:ANY

3
Edit completed.

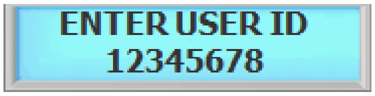
30-M: Once every 30 minutes.
1-H: Once every hour.
1-D: Once every day.
FULL: No limit.

5.10 10. Restriction Count

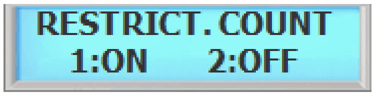
Restriction Count limits how many times a user can be allowed to access depending on value assigned to a user. There are total of 99 values that can be given to a user. (Ex. if a value of 10 is given to a user. This user will be allowed to access 10 times and it will expire. User must wait a day to regain its access or clear access permission from the administrator.)


10. RESTRICT. CNT
#:ENTER F4:ESC

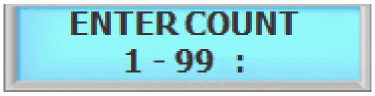
1
Press the # key enter Canteen Count


ENTER USER ID
12345678

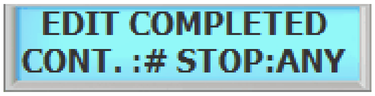
2
Enter User ID and press the # key


RESTRICT. COUNT
1:ON 2:OFF

3
Press 1 to turn on Restriction Count
Press 2 to turn off Restriction Count


ENTER COUNT
1 - 99 :

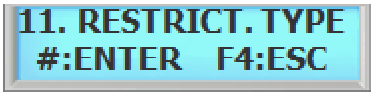
4
Enter from 1 to 99 and press # key


EDIT COMPLETED
CONT. :# STOP:ANY

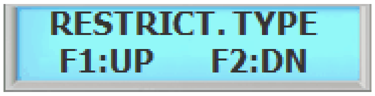
4
Edit completed.

5.11 11. Restriction Type

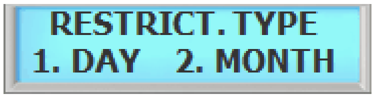
This option allows the device to automatically reset canteen time. All user will be able to access the next following day even if the the user has been limited access to Restriction count.


11. RESTRICT. TYPE
#:ENTER F4:ESC

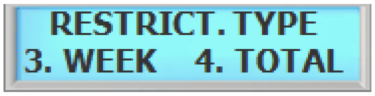
1
Press the # key enter Canteen Count 1 day reset


RESTRICT. TYPE
F1:UP F2:DN

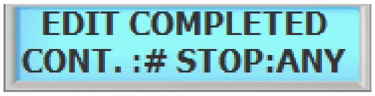
2
Press F1 to scroll up
Press F2 to scroll down


RESTRICT. TYPE
1. DAY 2. MONTH

2-1
1. DAY: Reset every day midnight.
2. MONTH: Reset every 1st day of month


RESTRICT. TYPE
3. WEEK 4. TOTAL

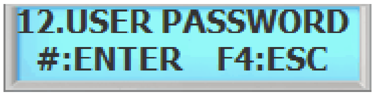
2-2
3. WEEK: Reset every Monday
4. TOTAL: Reset when total count is used


EDIT COMPLETED
CONT. :# STOP:ANY

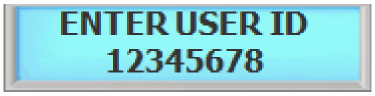
3
Edit completed.

5.12 12. User Password

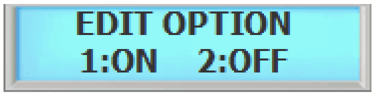
User Password enables the device to be use a password instead of User ID (PIN). Once enabled, user must enter a User ID (PIN) number and the password to access. Password only works in ID or Card or FP mode (All Mode).


12.USER PASSWORD
#:ENTER F4:ESC

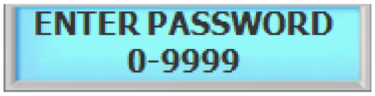
1
Press the # key to enter Firmware Update.


ENTER USER ID
12345678

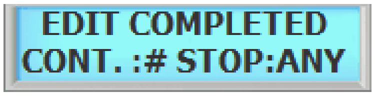
2
Enter User ID and press the # key.


EDIT OPTION
1:ON 2:OFF

3
Press 1 to enable password.


ENTER PASSWORD
0-9999

4
Enter password from 0 to 9999 and press the # key.


EDIT COMPLETED
CONT. :# STOP:ANY

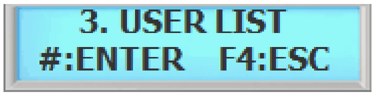
5
Setup has completed

Part VI

6 SYSTEM MENU 3 - VIEW USER

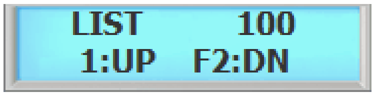
6.1 1. User List

At any time, you can view a list of all users of the system. The list can be an overall enrollment list of all users in the system, or it can be a list of the individual users that are physically enrolled on any individual fingerprint reader.



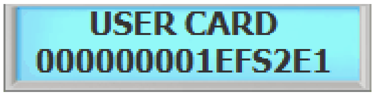
3. USER LIST
#:ENTER F4:ESC

1
Press the # key to enter to view USER LIST



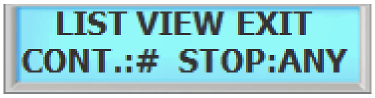
LIST 100
1:UP F2:DN

2
Press F1/P key to scroll up the user list
Press F2 key to scroll down the user list



USER CARD
000000001EFS2E1

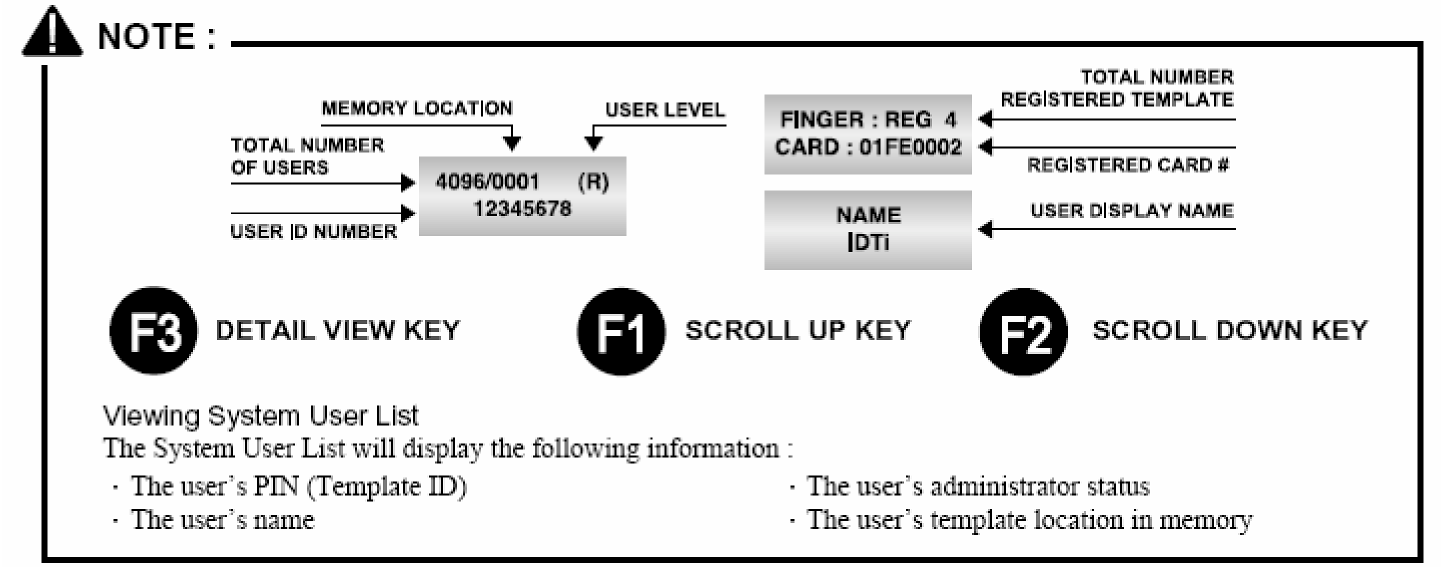
3
Press F3 key to view detail view of user



LIST VIEW EXIT
CONT.:# STOP:ANY

4
Press the F4 key to exit view.

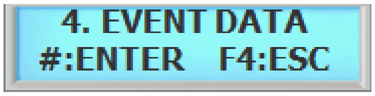
Viewing System User List
The System User List will display the following information:
. The user's PIN (Template ID)
. The user's name
. The user's administrator status
. The user's template location in memory



Viewing System User List
The System User List will display the following information :
- The user's PIN (Template ID)
- The user's name
- The user's administrator status
- The user's template location in memory

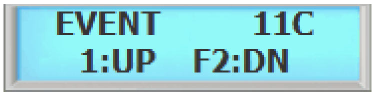
6.2 2. Events

At any time, you can view all transaction of event logs of the system. A record created that contains pertinent information about an occurrence in the access control and monitoring system.



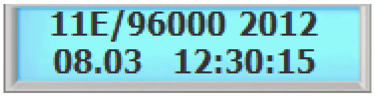
```
4. EVENT DATA
#:ENTER   F4:ESC
```

1
Press the # key to enter view EVENT



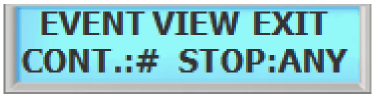
```
EVENT        11C
  1:UP    F2:DN
```

2
Press F1 to scroll up the event log
Press F2 key to scroll down the event log



```
11E/96000 2012
08.03   12:30:15
```

3
Following event log will appear. Press F3 key to view event data



```
EVENT VIEW EXIT
CONT.:#  STOP:ANY
```

4
Press the F4 key to exit event view.

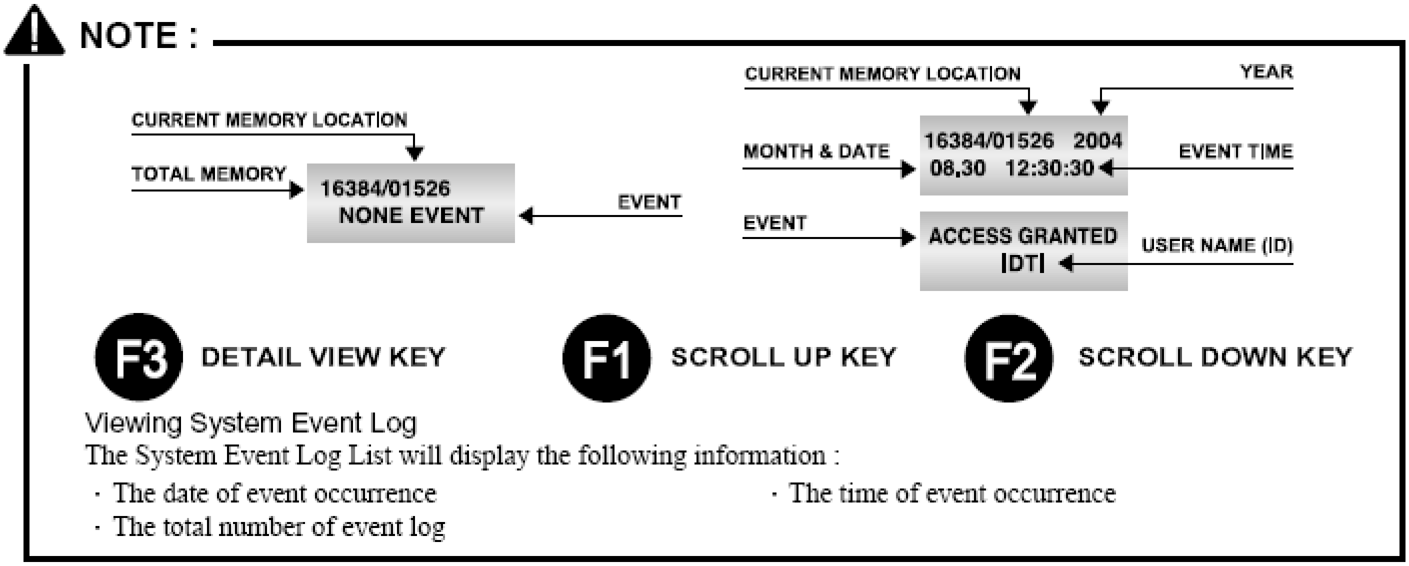
Viewing System Event Log

The System Event Log List will display the following information:

. The date of event occurrence

. The time of event occurrence

. The total number of event log



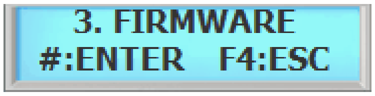
Viewing System Event Log

The System Event Log List will display the following information :

- The date of event occurrence
- The time of event occurrence
- The total number of event log

6.3 3. Firmware

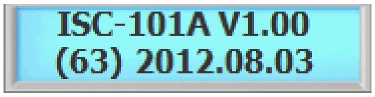
This is to view the current firmware version installed in the system. Other ways to verify the firmware is to resetting the device. When first booting up, firmware version will display.



```
3. FIRMWARE
#:ENTER   F4:ESC
```

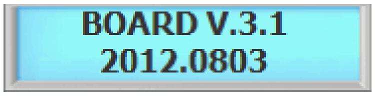
1

Press the # key to enter FIRMWARE VERSION



```
ISC-101A V1.00
(63) 2012.08.03
```

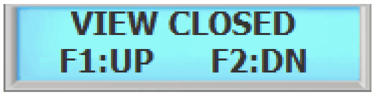
Current firmware version number will display.
Press the any key to view board version.



```
BOARD V.3.1
2012.0803
```

3

Press any key to exit.



```
VIEW CLOSED
F1:UP     F2:DN
```

1

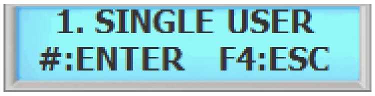
Press F4 key to exit.

Part VII

7 SYSTEM MENU 4 - DELETE USER

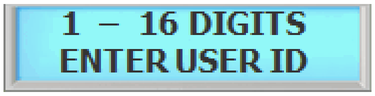
7.1 1. Delete Single User

Deleting a fingerprint template from a reader will prevent that template from being granted access to the location via the reader. Any fingerprint template can be removed from a fingerprint reader, including administrative and the last remaining fingerprint template on the reader. Templates can be deleted by a single user or all users including administrative templates.



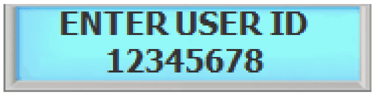
```
 1. SINGLE USER
#:ENTER   F4:ESC
```

1
Press the # key to enter delete Single User



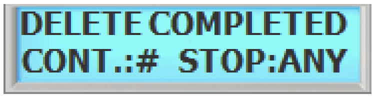
```
 1 – 16 DIGITS
ENTER USER ID
```

2
Enter in user ID to be deleted as shown below



```
ENTER USER ID
  12345678
```

3
Enter in user ID from 1 to 16 digits

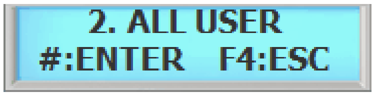


```
DELETE COMPLETED
CONT.:#  STOP:ANY
```

4
Delete completed.

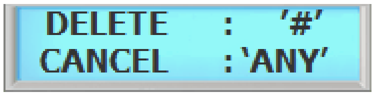
7.2 2. Delete All User

Deleting a all user will erase all template from a reader, including administrative and the last remaining fingerprint template on the reader.



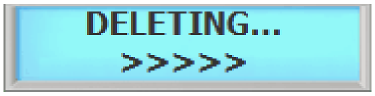
```
  2. ALL USER
#:ENTER   F4:ESC
```

1
Press the # key to enter delete All User



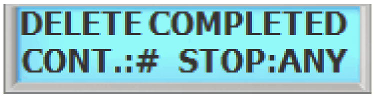
```
DELETE    :  '#'
CANCEL    : 'ANY'
```

2
Press the # key to confirm delete all
Press any other key to cancel



```
DELETING...
  >>>>>
```

33
Deleting. Please wait....



```
DELETE COMPLETED
CONT.:#  STOP:ANY
```

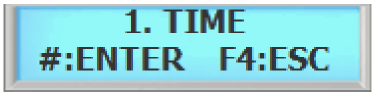
4
Delete completed.

Part VIII

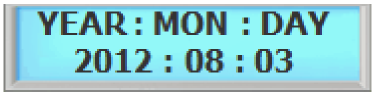
8 SYSTEM MENU 5 - SYSTEM SETUP

8.1 1.Time

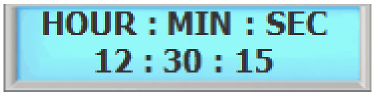
Device features an internal clock that provides the date and time for all logged events. This section discusses how to set the date and time that device uses for event logging. To set the current time, access the menu system and follow these steps:


1. TIME
#:ENTER F4:ESC

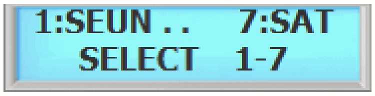
1
Press the # key to enter system Time


YEAR : MON : DAY
2012 : 08 : 03

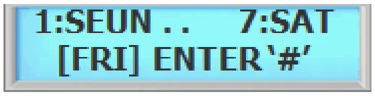
2
Enter current date


HOUR : MIN : SEC
12 : 30 : 15

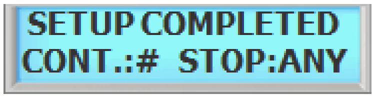
3
Enter current time in military time format. **i.e.** 20:20:20


1:SEUN . . 7:SAT
SELECT 1-7

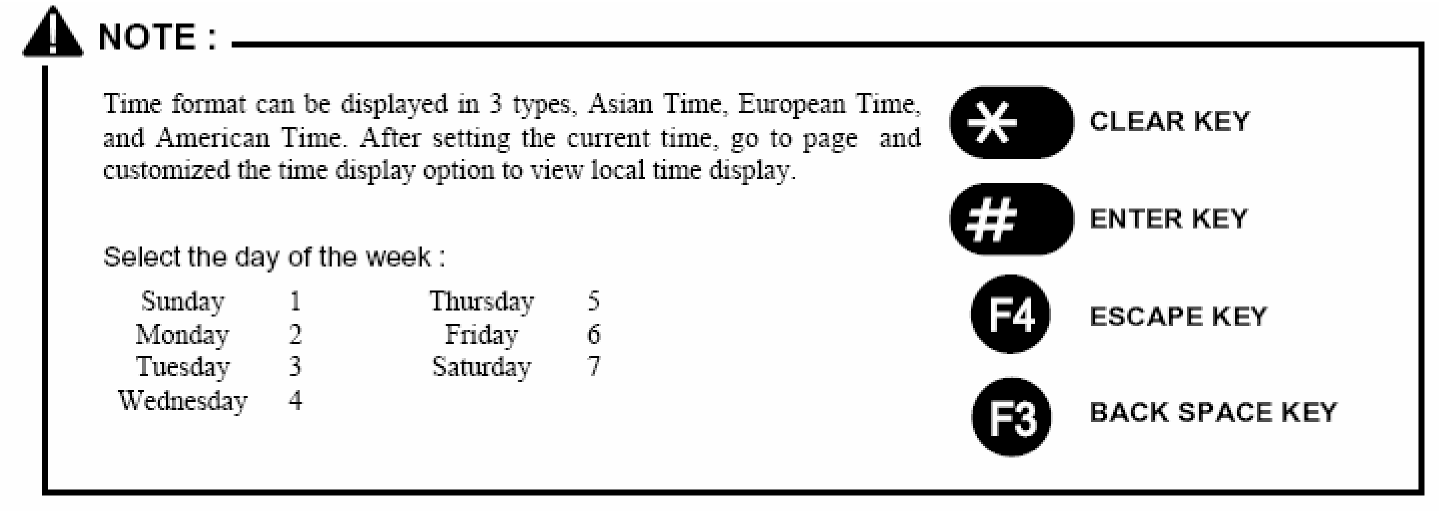
4
Select day of the week. Press 1 through 7 to enter day of the week. Refer to NOTE


1:SEUN . . 7:SAT
[FRI] ENTER '#'

5
Press the # key to confirm


SETUP COMPLETED
CONT.:# STOP:ANY

6
Set up has completed


NOTE :

Time format can be displayed in 3 types, Asian Time, European Time, and American Time. After setting the current time, go to page and customized the time display option to view local time display.

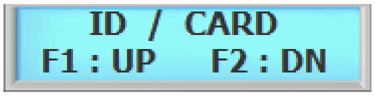
Select the day of the week :

Sunday	1	Thursday	5
Monday	2	Friday	6
Tuesday	3	Saturday	7
Wednesday	4		

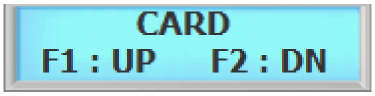
*	CLEAR KEY
#	ENTER KEY
F4	ESCAPE KEY
F3	BACK SPACE KEY

8.2 2. Operating Mode

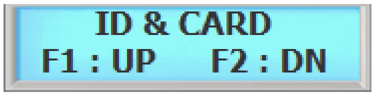
System has 5 total operating mode. List is the detail view of the operating modes available in the system.


ID / CARD
F1 : UP F2 : DN

1
[ID / CD] - PIN or CARD
User can access the device by either PIN or

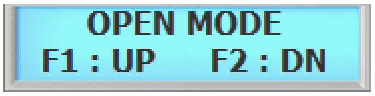

CARD
F1 : UP F2 : DN

2
[CD] - CARD
In this mode, user can access the device by


ID & CARD
F1 : UP F2 : DN

3
[ID&CD] - PIN & CARD
User must use both tokens to gain access.

CARD. When operating in this mode, simply enter user ID or CARD to the device.

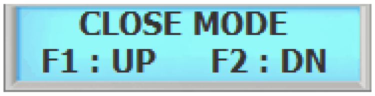

OPEN MODE
F1 : UP F2 : DN

4

[OPEN] - ALWAYS OPEN
Access point will stay open for an emergency such as fire.

&: means "AND"

just a card. To operate in this mode, user present the card to the reader.

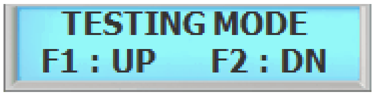

CLOSE MODE
F1 : UP F2 : DN

5

[CLOSE] - ALWAYS CLOSE
Access point will stay locked for an emergency such as intrusion.

/: means "OR"

This is the highest security mode available in ISC. To operate in this mode, first enter user PIN and present user card to the reader.


TESTING MODE
F1 : UP F2 : DN

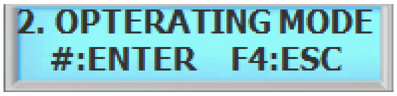
6

[TESTING MODE] - TESTING MODE
It will be a good idea to test the unit in this mode when first installed.

( ): means "OR"

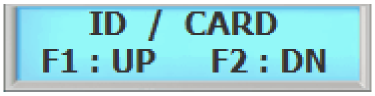
8.2.1 Setting Operating Mode

This section provides information about how to choose the operation mode. ID/CD (ALL) is the default operating mode.


2. OPTERATING MODE
#:ENTER F4:ESC

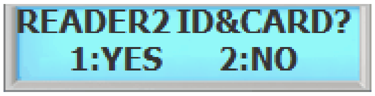
1

Press the # key to enter Operating Mode.


ID / CARD
F1 : UP F2 : DN

2

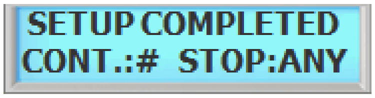
Press F1 key to scroll up the mode menu
Press F2 key to scroll down the mode menu
Press the # key to select operating mode


READER2 ID&CARD?
1:YES 2:NO

3

Select 1 to enable Operating mode for external reader
Select 2 to disable Operating mode for external reader

NOTE: External reader must be connected to READER 2. Once enabled, the connected reader 2 will operate in ID & CARD mode.

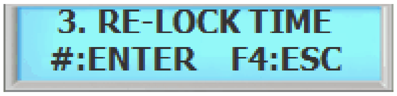

SETUP COMPLETED
CONT.:# STOP:ANY

4

Setup completed

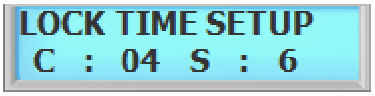
8.3 3. Re-Lock Time

This is the maximum duration that the lock release relay will be energized. The relay is de-energized if the door opens before this time has expired. The lock time can be set in the range 01~99 seconds. You cannot set a lock time of 0 seconds. Default is 4 seconds.


3. RE-LOCK TIME
#:ENTER F4:ESC

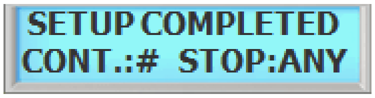
1

Press the # key to enter Re-Lock Time


LOCK TIME SETUP
C : 04 S : 6

2

Key in Re-Lock Time from 1 to 99 second followed by the # key. **C** stands for current set time, sample show 4 second.

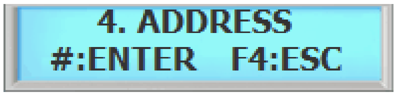

SETUP COMPLETED
CONT.:# STOP:ANY

3

Setup has completed

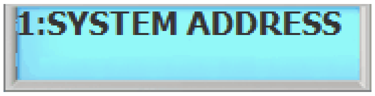
8.4 4. Address

Address options allows system to have a unique identification code used in Online Verification or GSM Network. To assign a Network ID, follow the steps listed below: Repeat this procedure for each networked unit, assigning a unique identification code to each unit. Default address is set to 1.



```
4. ADDRESS
#:ENTER   F4:ESC
```

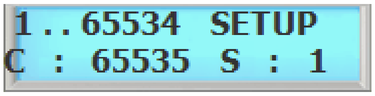
1
Press the # key to enter Address



```
1:SYSTEM ADDRESS
```

2
Press 1 to setup System Address.

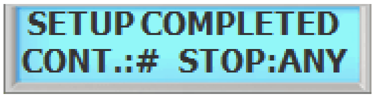
NOTE: SYSTEM ADDRESS is used in Online Verification and GSM Mode.



```
1..65534  SETUP
C : 65535  S : 1
```

3
Enter from 1 to 65,534 and press the # key.

NOTE: there can be up to 65,534 system addresses.

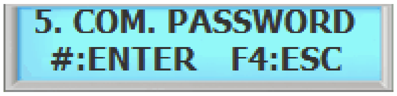


```
SETUP COMPLETED
CONT.:#  STOP:ANY
```

3
Setup completed.

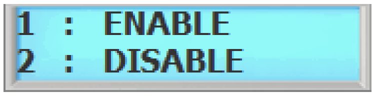
8.5 5. Communication Password

Communication password is used during network communication. This safeguards the information sent during transmission and also from hacking the system.



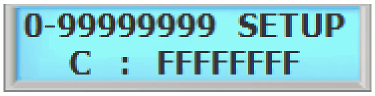
```
5. COM. PASSWORD
#:ENTER   F4:ESC
```

1
Press the # key to enter Communication Password



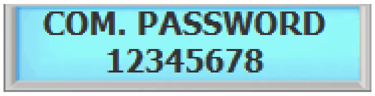
```
1  :  ENABLE
2  :  DISABLE
```

2
Press 1 to enable communication password



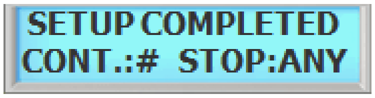
```
0-99999999  SETUP
C  :  FFFFFFFF
```

3
Current password is displayed. Enter new password as show in next figure



```
COM. PASSWORD
12345678
```

4
Key in the 8 digit password and press the # key to confirm new password

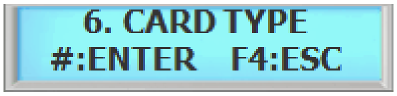


```
SETUP COMPLETED
CONT.:#  STOP:ANY
```

4
Setup has completed

8.6 6. Site Code

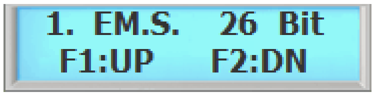
A site code, which is sometimes called a facility code, differentiates one users card group from another. A facility code is an integral code that is programmed into the card at the time of manufacture. The additional code ensures that even if card numbers are duplicated by the manufacturer, that the cards will not operate on someone else's building who has a different facility code. Limitations inherent in the card manufacturing process result in the ability to produce a finite card population, after which codes are duplicated. Facility codes overcome this limitation adding a second code which is checked at the reader. If the facility code does not match the programmed code, entry is denied.



```
6. CARD TYPE
#:ENTER   F4:ESC
```

1

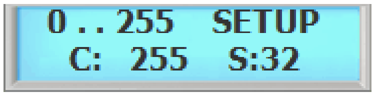
Press the # key to enter Site Code



```
1. EM.S.   26 Bit
F1:UP      F2:DN
```

2

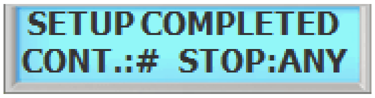
Press F1 to scroll up the menu
Press 2 to scroll down the menu
Select the card type and press the # key



```
0 . . 255   SETUP
C:  255    S:32
```

3

Se**"C"** stands for current site code which is 255. Enter from 0 to 255 and press the # key. Default setting is 255



```
SETUP COMPLETED
CONT.:#  STOP:ANY
```

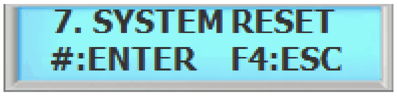
Setup completed.

NOTE:
There are 10 card types in ISC-101

1. EM. S.   26 Bit
2. 125K S. 26 Bit
3. 125K F. 26 Bit
4. 125K I. 34 Bit
5. MIFARE 32 Bit
6. MIFARE 34 Bit
7. MIFARE2 34 Bit
8. MIFARE2 32 Bit
9. MIFARE 64 Bit
10. MIFARE IDTi64

8.7 7. System Reset

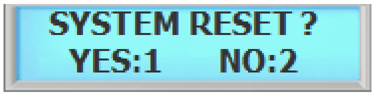
The system reset will delete all exiting database including the events and resets all system configuration to factory default.



```
7. SYSTEM RESET
#:ENTER   F4:ESC
```

1

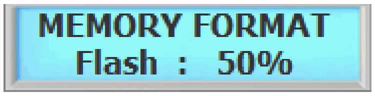
Press the # key to enter System Reset



```
SYSTEM RESET ?
YES:1      NO:2
```

2

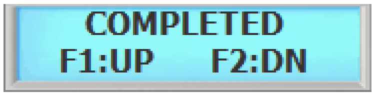
Press 1 to reset system
Press any other key to cancel



```
MEMORY FORMAT
Flash  :   50%
```

3

System resetting message. This may take few seconds to a minute depending on the size of the database



```
COMPLETED
F1:UP      F2:DN
```

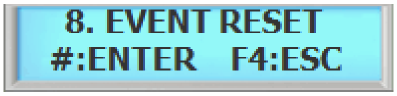
4

Setup has completed

8.8 8. Event Reset

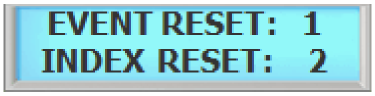
The Event Database only stores the access records. It does not contain any system information. When executed, event reset will erase all event logs that are stored in the memory. Run Index Reset to receive events again from the system stored memory.

EVENT RESET: Resets all events stored by the system.



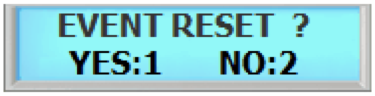
```
8. EVENT RESET
#:ENTER   F4:ESC
```

1
Press the # key to enter Event Reset



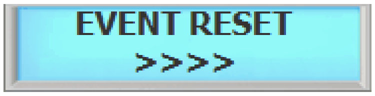
```
EVENT RESET:  1
INDEX RESET:  2
```

2
Press 1 key to reset event



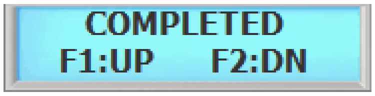
```
EVENT RESET ?
YES:1     NO:2
```

3
Press 1 key to reset event
Press any other keys to cancel



```
EVENT RESET
>>>>
```

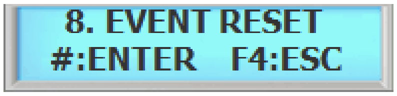
4
Event resetting message. This may take few seconds to a minute depending on the size of the event database



```
COMPLETED
F1:UP     F2:DN
```

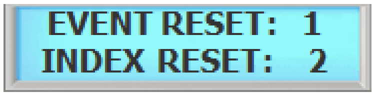
5
Event Reset has finished

INDEX RESET: Resets history index of the event but does not delete stored event information. Index reset allows the event to be resent to the software from the point where the index point is reset.



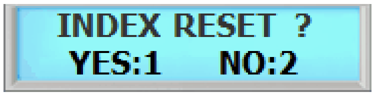
```
8. EVENT RESET
#:ENTER   F4:ESC
```

1
Press the # key to enter Event Reset



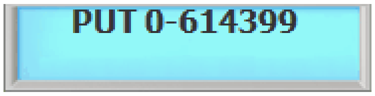
```
EVENT RESET:  1
INDEX RESET:  2
```

2
Press 2 key to reset index



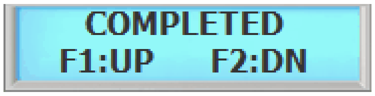
```
INDEX RESET ?
YES:1     NO:2
```

3
Press 1 key to reset index
Press any other keys to cancel



```
PUT 0-614399
```

4
Enter Index point from 0 to 614,399. 0 is the start of the index and 614,399 is the last of the index point

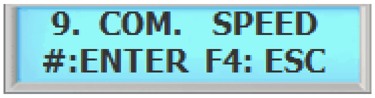


```
COMPLETED
F1:UP     F2:DN
```

5
Index Reset has finished

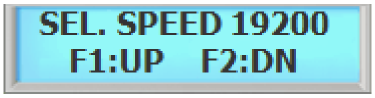
8.9 9. Com. Speed

This command sets the baud rate that the system will communicate with the device connected to its serial port. The baud rate change will become effective immediately upon completion of the command. Default baud rate is 19,200.



```
9.  COM.  SPEED
#:ENTER  F4: ESC
```

1
Press the # key to enter Communication Speed



```
SEL. SPEED 19200
F1:UP    F2:DN
```

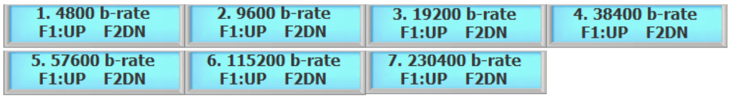
2
Press F1 key to scroll up the list
Press the F2 key to scroll down the list

There are 7 different communication speed. Select the best setting for your network.

Default is set to 19,200 baud rate.

Go to Control Panel and make sure the PC baud rate is in sync with the system.

3

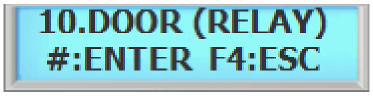


```
1. 4800 b-rate
F1:UP   F2DN

2. 9600 b-rate
F1:UP   F2DN

3. 19200 b-rate
F1:UP   F2DN

4. 38400 b-rate
F1:UP   F2DN

5. 57600 b-rate
F1:UP   F2DN

6. 115200 b-rate
F1:UP   F2DN

7. 230400 b-rate
F1:UP   F2DN
```

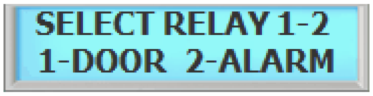
Press F1 key to scroll up the list
Press the F2 key to scroll down the list

8.10 10. Door Relay

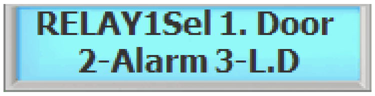
The relay output is Normally Open (N.O.), and toggles shorted when triggered by an event, such as an authentication or ID failure. The relay can be used to send power to switched items like electric door strikes, door handles, magnetic hold locks. The alarm can be used to send signals to a alarm panel, controllers or indicators.


10.DOOR (RELAY)
#:ENTER F4:ESC

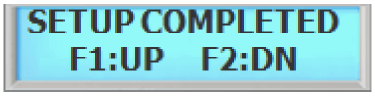
1
Press the # key to enter Door (Relay)


SELECT RELAY 1-2
1-DOOR 2-ALARM

2
There are 2 relays in the system. Select 1 to setup relay 1 and press 2 to select relay 2


RELAY1Sel 1. Door
2-Alarm 3-L.D

3
Press 1 to set relay as door or press 2 to set relay as alarm

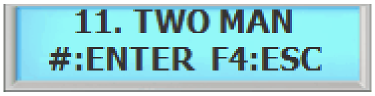

SETUP COMPLETED
F1:UP F2:DN

4
Setup has completed

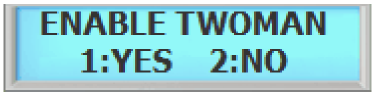
Relay 1 factory default is Door (lock)
Relay 2 factory default is Alarm

8.11 11. Two Man

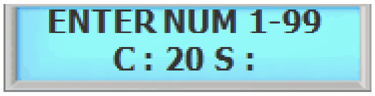
This commend prevents an individual user from entering a selected empty security area unless at least one other enrolled user is present. Once two enrolled users are logged into the area, other user can come and go individually, as long as at least two people are in the area. Conversely, when exiting, the last two occupants of the security area must exit out together. At no time will the system allow less than two users to be in the area.


11. TWO MAN
#:ENTER F4:ESC

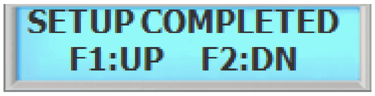
1
Press the # key to enter Two Man


ENABLE TWOMAN
1:YES 2:NO

2
Press 1 key to enable two man
Press 2 key to disable two man


ENTER NUM 1-99
C : 20 S :

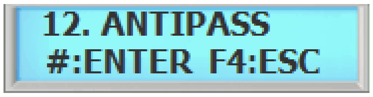
3
This is the time limit for the user to make second verification to the reader after first user has been verified. "**C**" Stands for current setting. Key in from 1 to 99 seconds and press the # key


SETUP COMPLETED
F1:UP F2:DN

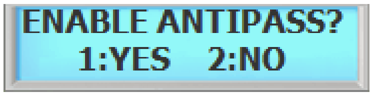
4
Setup has completed

8.12 12. Anti Pass Back

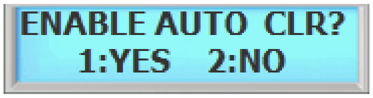
Anti pass-back is used to stop two people from using one card to gain access. If access is denied because of this, this will result in an alarm message to the printer. It may also result in a relay being energized if you have programmed one to do so. This is a system anti-pass setting and user anti-pass setting also must be enabled in order for it to work properly.


12. ANTIPASS
#:ENTER F4:ESC

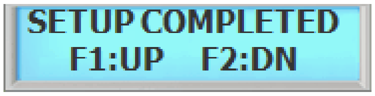
1
Press the # key to enter Antipass


ENABLE ANTIPASS?
1:YES 2:NO

2
Press 1 key to enable anti pass
Press 2 key to disable anti pass


ENABLE AUTO CLR?
1:YES 2:NO

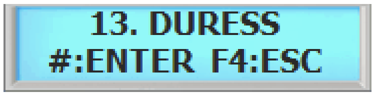
3
Setup has completed


SETUP COMPLETED
F1:UP F2:DN

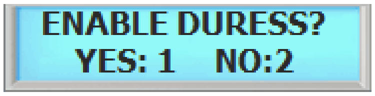
4
Setup has completed

8.13 13. Duress

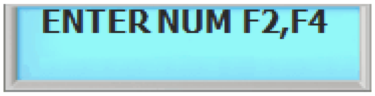
Duress is a condition whereby a user may be confronted by an intruder in an effort to gain access to a secure area. The user can "secretly" signal security that he is entering the secure area under "duress" through the implementation of a duress feature. This function must be used with a function key in order to work.


13. DURESS
#:ENTER F4:ESC

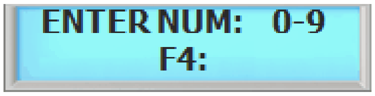
1
Press the # key to enter Duress


ENABLE DURESS?
YES: 1 NO:2

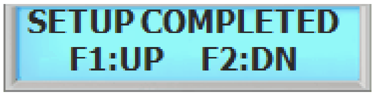
2
Press 1 key to enable duress
Press 2 key to disable duress


ENTER NUM F2,F4

3
Key in F2 or F4 to assign duress key. For now we will key in F2 key


ENTER NUM: 0-9
F4:

4
Key in from 0 to 9 followed by # key.

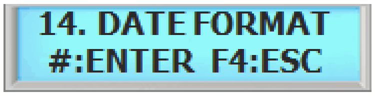

SETUP COMPLETED
F1:UP F2:DN

5
Setup completed

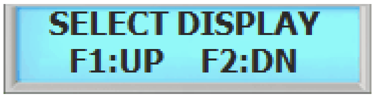
To use duress, press F2 - 2 then enter either Card / PIN depending on the current operating mode.

8.14 14. Date Format

System features option to choose time format which are available in Asia time, USA time, and Europe time. This is where user can customize time format. This section discusses how to choose time format.

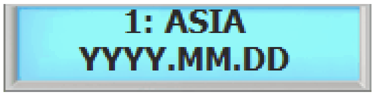

14. DATE FORMAT
#:ENTER F4:ESC

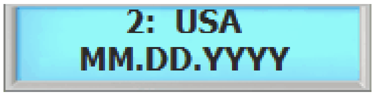
1
Press the # key to enter Date Format

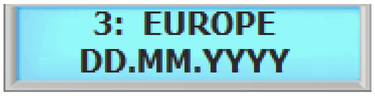

SELECT DISPLAY
F1:UP F2:DN

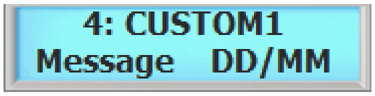
2
Press F1 key to scroll up the list
Press F2 key to scroll down the list

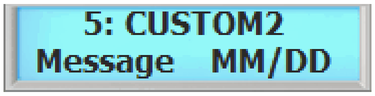
3


1: ASIA
YYYY.MM.DD


2: USA
MM.DD.YYYY

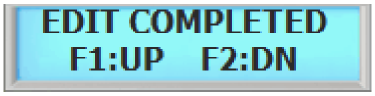

3: EUROPE
DD.MM.YYYY


4: CUSTOM1
Message DD/MM


5: CUSTOM2
Message MM/DD

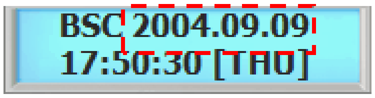
Select the right time format for your region. To use custom message, go to Custom Display on next page.

4

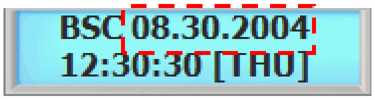

EDIT COMPLETED
F1:UP F2:DN

Time format has been set

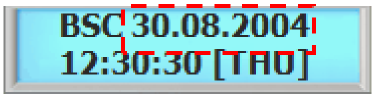
NOTE :


BSC 2004.09.09
17:50:30 [THU]

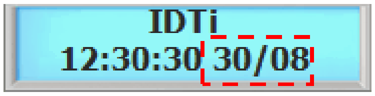
ASIA Time display format


BSC 08.30.2004
12:30:30 [THU]

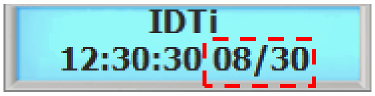
USA Time display format


BSC 30.08.2004
12:30:30 [THU]

EUROPE Time display format


IDTi
12:30:30 30/08

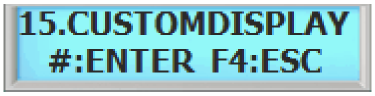
CUSTOM 1 Custom message will display with time display format with European date format. Date is displayed before the month


IDTi
12:30:30 08/30

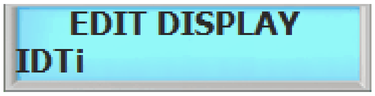
CUSTOM 2 Custom message will with time display format with American date format. Month is displayed before the date

8.15 15. Custom Display

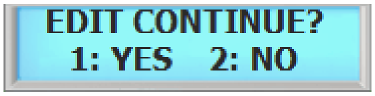
System features option to customize the display. System Allows up to 32 characters to be displayed. This is where user can customize main display window. This section discusses how to edit custom display.


15.CUSTOMDISPLAY
#:ENTER F4:ESC

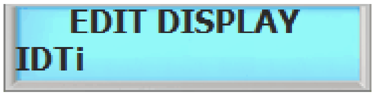
1
Press the # key to enter Custom Display


EDIT DISPLAY
IDTi

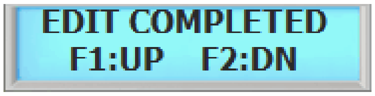
2
Key in alphabet and press the F1 key to move on to the next letter. To get an lowercase, continue pressing the key until the lowercase letter appears. If the name is longer than 16, press the # key after entering the last last (16th) letter. This will be continued in next step


EDIT CONTINUE?
1: YES 2: NO

3
If the message is longer than 16 digits, press 1 key to continue on writing the message. Otherwise press 2 to end writing custom message


EDIT DISPLAY
IDTi

4
Continue on writing the message where you've left off in **figure 2**

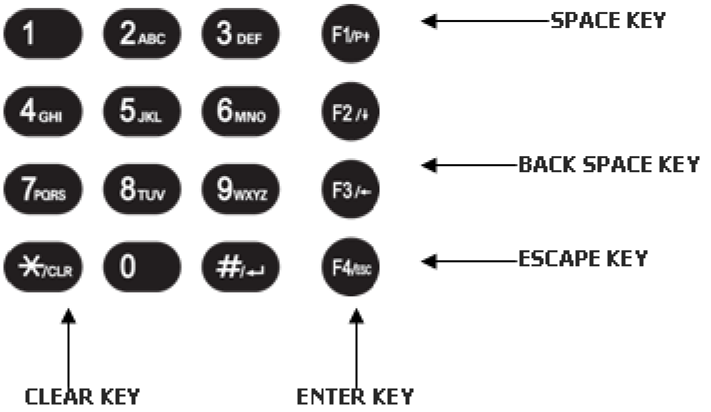

EDIT COMPLETED
F1:UP F2:DN

5
Finished editing the custom message

NOTE :

You can enter up to 32 digits. The LCD will scroll the message if it's longer than 16 digits. To view the custom display, go to Date Format and set display option to either Custom 1 or Custom 2 depending on the date format.

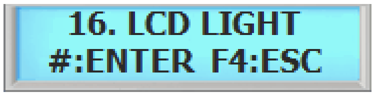
	NUMBER OF TIMES KEY IS PRESSED							
KEYS	1	2	3	4	5	6	7	8
1								
2	A	B	C	a	b	c		
3	D	E	F	d	e	f		
4	G	H	I	g	h	i		
5	J	K	L	j	k	l		
6	M	N	O	m	n	o		
7	P	Q	R	S	p	q	r	s
8	T	U	V	t	u	v		
9	W	X	Y	Z	w	x	y	z
0								
*	Clear							
#	Enter							
F1	Space							
F2								
F3	Back Space							
F4	Escape							



8.16 16. LCD Light

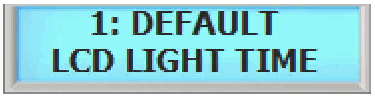
System allows you to choose whether the display will be illuminated or unlit. By default, the display is lit for 5 seconds when used. Illuminating the display allows for easier viewing in darker areas while leaving the display unlit conserves power. This section provides information about how to set illumination options for the system's display unit.

1


16. LCD LIGHT
#:ENTER F4:ESC

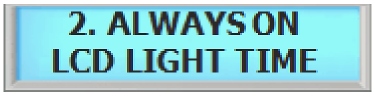
Press the # key to enter LCD Light option

2.1


1: DEFAULT
LCD LIGHT TIME

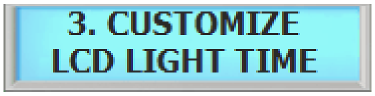
Press the # key to set it as default time
Press F1 to scroll up the menu
Press F2 to scroll down the menu

2.2


2. ALWAYS ON
LCD LIGHT TIME

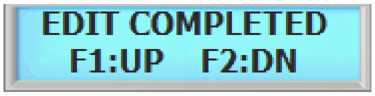
Press the # key to set it as always on
Press F1 to scroll up the menu
Press F2 to scroll down the menu

2.3


3. CUSTOMIZE
LCD LIGHT TIME

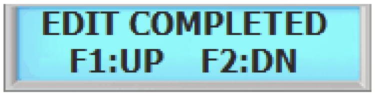
Press the # key to set it as customize
Press F1 to scroll up the menu
Press F2 to scroll down the menu

3


EDIT COMPLETED
F1:UP F2:DN

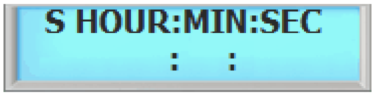
Finished editing LCD back light time

3


EDIT COMPLETED
F1:UP F2:DN

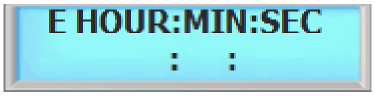
Finished editing LCD back light time

2.4


S HOUR:MIN:SEC
: :

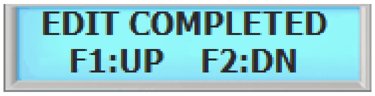
Define the start time of LCD. LCD will turn on according to this time setting. Key in military time format. For example, 15:15:15 (3:15:15 PM)

2.5


E HOUR:MIN:SEC
: :

Define the end time of LCD. LCD will turn off according to this time setting. Key in military time format. For example, 15:15:15 (3:15:15 PM). Press the # key when finished

3


EDIT COMPLETED
F1:UP F2:DN

Finished editing LCD back light time

⚠ NOTE :

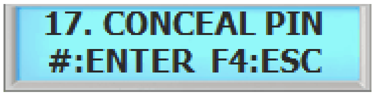
There are 3 LCD options:

1. Default: LCD will stay lit for 5 seconds.
2. Always on: LCD will illuminated all times. This will lessen the life of LCD screen.
3. Customize: You can set schedule time for LCD to turn on and turn off.

8.17 17. Conceal PIN

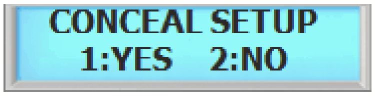
Device allows you to conceal user PIN when entering the device. To hide user PIN when entering the device, follow the instructions below.

1


17. CONCEAL PIN
#:ENTER F4:ESC

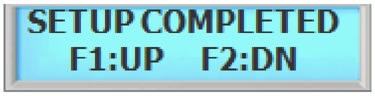
Press the # key to enter Conceal PIN

2


CONCEAL SETUP
1:YES 2:NO

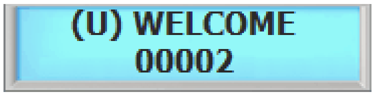
Press 1 key to enable conceal PIN
Press 2 key to cancel the conceal PIN

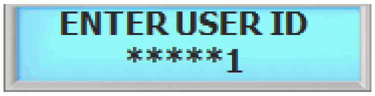
3

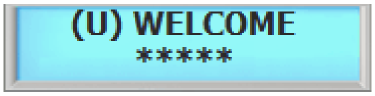

SETUP COMPLETED
F1:UP F2:DN

Setup has completed

⚠ NOTE :


(U) WELCOME
00002


ENTER USER ID
*****1


(U) WELCOME
*****

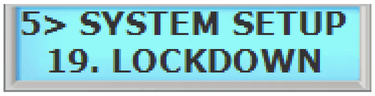
Normal View

Actual view during entrance

Concealed User PIN View

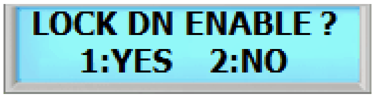
8.18 18. Lockdown

Device features option to use a auxiliary relay to arm/disarm an external alarm system called the lockdown. This section discusses how to enable lockdown device.



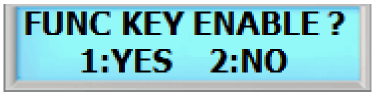
5> SYSTEM SETUP
19. LOCKDOWN

1
Press the # key to enter Lockdown



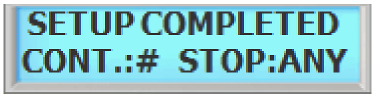
LOCK DN ENABLE ?
1:YES 2:NO

2
Press 1 key to enable lockdown
Press 2 key to cancel lockdown



FUNC KEY ENABLE ?
1:YES 2:NO

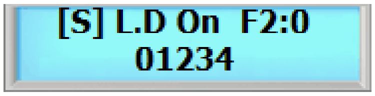
3
Press 1 key to enable function key
Press 2 key to disable function key



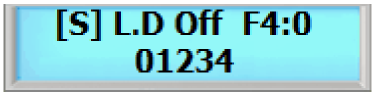
SETUP COMPLETED
CONT.:# STOP:ANY

4
Setup has completed

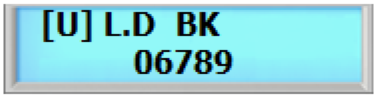
⚠ NOTE :



[S] L.D On F2:0
01234



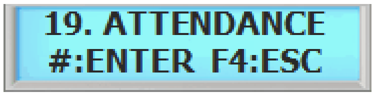
[S] L.D Off F4:0
01234



[U] L.D BK
06789

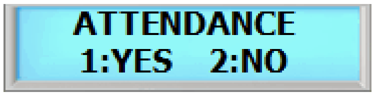
8.19 19. Attendance

Device features option to display IN or OUT when function keys are used. User must be aware of the current attendance mode that is displayed in the standby display. Last used attendance mode will be the default mode until the next mode is used. If F2-0 is used the last time, then unless second user uses a different function key, it will show as F2-0 even if second user does not press any function key. This section show how to customize the function key display.



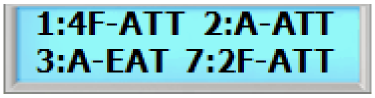
```
19. ATTENDANCE
#:ENTER F4:ESC
```

1
Press the # key to enter Attendance



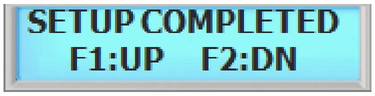
```
ATTENDANCE
1:YES    2:NO
```

2
Press 1 to enable attendance mode



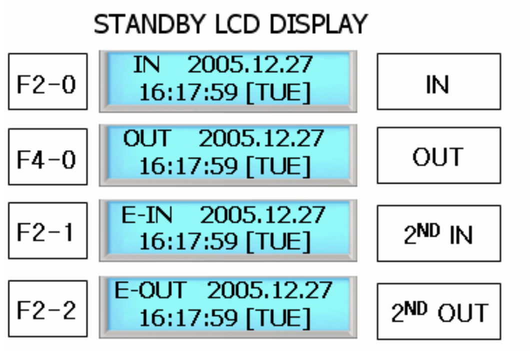
```
1:4F-ATT  2:A-ATT
3:A-EAT  7:2F-ATT
```

3
Select attendance type.
1. 4F-ATT:
2: A-ATT:
3: A-EAT:
7: 2F-ATT:



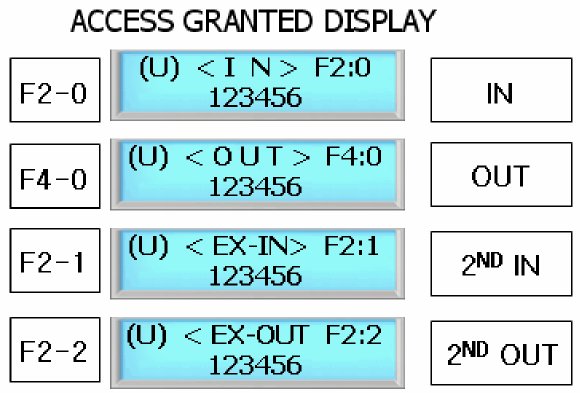
```
SETUP COMPLETED
F1:UP    F2:DN
```

5
Setup has completed



STANDBY LCD DISPLAY

F2-0	IN 2005.12.27 16:17:59 [TUE]	IN
F4-0	OUT 2005.12.27 16:17:59 [TUE]	OUT
F2-1	E-IN 2005.12.27 16:17:59 [TUE]	2ND IN
F2-2	E-OUT 2005.12.27 16:17:59 [TUE]	2ND OUT



ACCESS GRANTED DISPLAY

F2-0	(U) < I N > F2:0 123456	IN
F4-0	(U) < O U T > F4:0 123456	OUT
F2-1	(U) < EX-IN> F2:1 123456	2ND IN
F2-2	(U) < EX-OUT F2:2 123456	2ND OUT

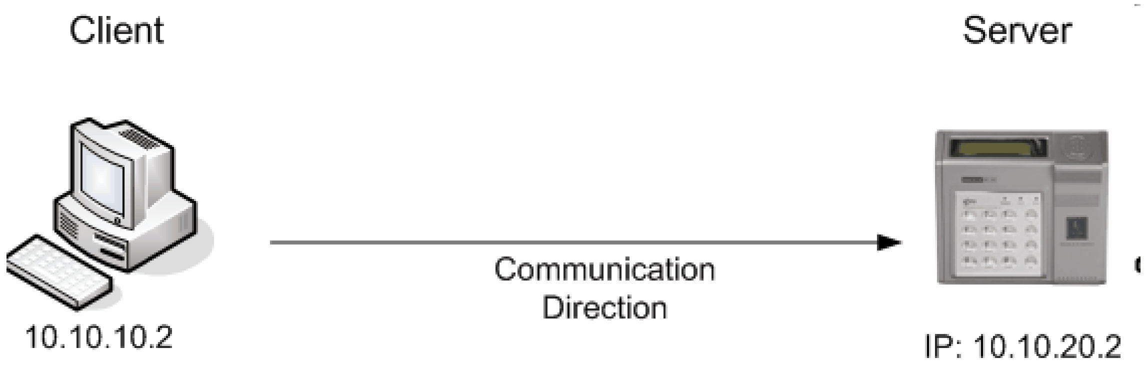
8.20 20. Network Setup

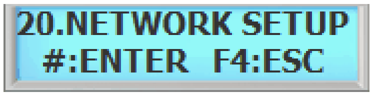
8.20.1 Device IP Address Setup

System can operate either as Server or Client. If set as Server then the software must be set as Client and if set as Client then the software must be set as Server.

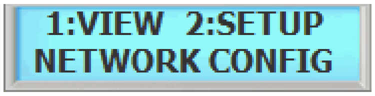
8.20.1.1 Manual Server Mode

In Server Mode, software connects to the device. This would be a ideal network setting since software will automatically re-connect if the connection is lost.

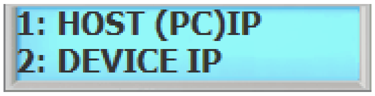



20.NETWORK SETUP
#:ENTER F4:ESC

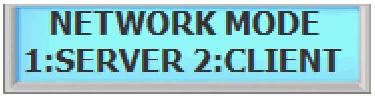
1
Select network setup from system menu 5.


1:VIEW 2:SETUP
NETWORK CONFIG

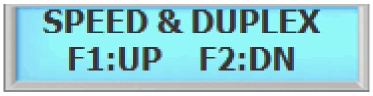
2
Press 2 key to setup network.


1: HOST (PC)IP
2: DEVICE IP

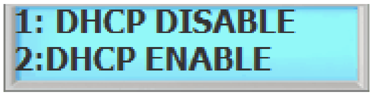
3
Press 2 to enter Device IP address.


NETWORK MODE
1:SERVER 2:CLIENT

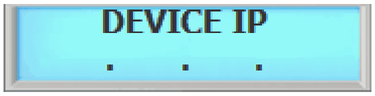
4
Press 1 to select Server Mode


SPEED & DUPLEX
F1:UP F2:DN

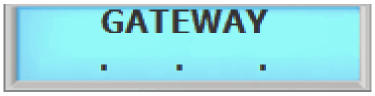
4
Manually select communication speed. Default is set to Auto Negotiation.
Press F1 to scroll up the menu
Press F2 to scroll down the menu


1: DHCP DISABLE
2:DHCP ENABLE

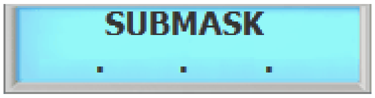
5
Press 1 to disable DHCP mode


DEVICE IP
. . .

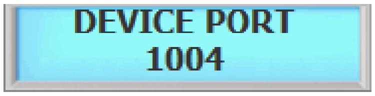
6
Enter IP address and press the # key.
(Ex. 192.168.0.10) Enter key192168000010#


GATEWAY
. . .

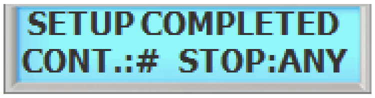
7
Enter gateway IP address and press the # key. (Ex. 192.168.0.1) Enter key 192168000001#


SUBMASK
. . .

8
Enter submask IP address and press the # key. (Ex. 255.255.255.0) Enter key 255255255000#


DEVICE PORT
1004

9
Enter device port number and press the # key.

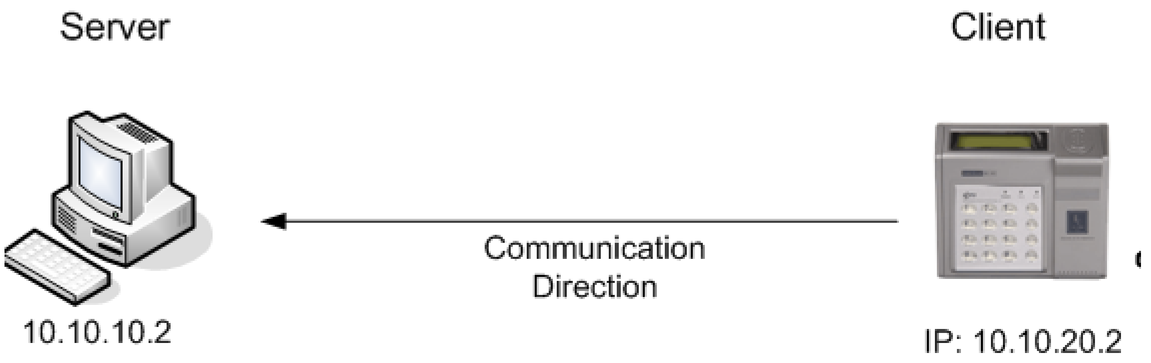

SETUP COMPLETED
CONT.:# STOP:ANY

10
Setup completed.

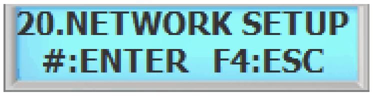
Refer to software manual for Host PC configuration.

8.20.1.2Manual Client Mode

In Client Mode, device connects to the software. This is more convenient network but it may loose connection would be a ideal network setting since software will automatically re-connect if the connection is lost.



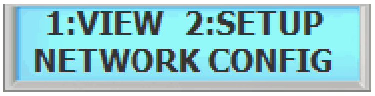
1



20.NETWORK SETUP
#:ENTER F4:ESC

Select network setup from system menu 5.

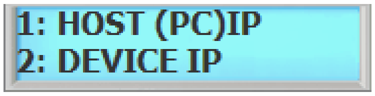
2



1:VIEW 2:SETUP
NETWORK CONFIG

Press 2 key to setup network.

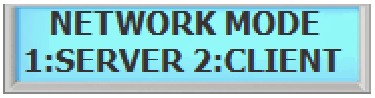
3



1: HOST (PC)IP
2: DEVICE IP

Press 2 to enter Device IP address

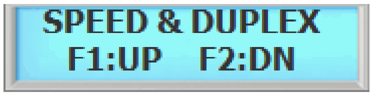
4



NETWORK MODE
1:SERVER 2:CLIENT

Press 2 to select Client Mode

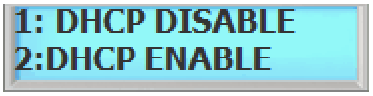
5



SPEED & DUPLEX
F1:UP F2:DN

Manually select communication speed. Default is set to Auto Negotiation.
Press F1 to scroll up the menu
Press F2 to scroll down the menu

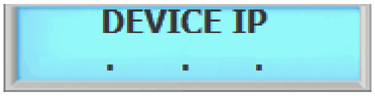
6



1: DHCP DISABLE
2:DHCP ENABLE

Press 1 to disable DHCP mode

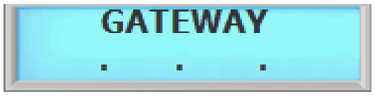
7



DEVICE IP
. . .

Enter IP address and press the # key.
(Ex. 192.168.0.10) Enter key192168000010#

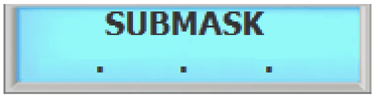
8



GATEWAY
. . .

Enter gateway IP address and press the # key. (Ex. 192.168.0.1) Enter key 192168000001#

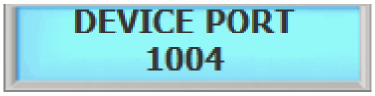
9



SUBMASK
. . .

Enter submask IP address and press the # key. (Ex. 255.255.255.0) Enter key 255255255000#

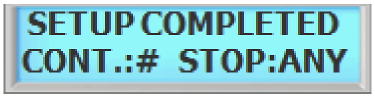
10



DEVICE PORT
1004

Enter device port number and press the # key.

11

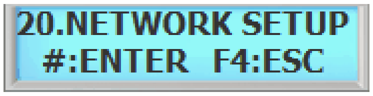


SETUP COMPLETED
CONT.:# STOP:ANY

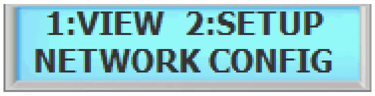
Setup completed

Device client needs Host PC information in order to make connection with host PC. Please go to Host PC Address Setup and configure Host PC IP Address once device IP information is entered.

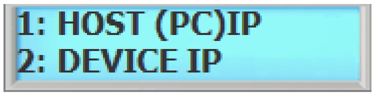
8.20.1.2.1 Host PC IP Address Setup


20.NETWORK SETUP
#:ENTER F4:ESC

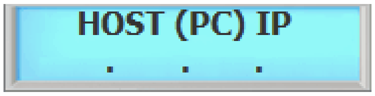
1
Select network setup from system menu 5.


1:VIEW 2:SETUP
NETWORK CONFIG

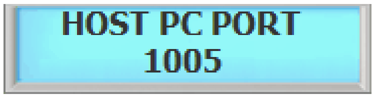
2
Press 2 key to setup network.


1: HOST (PC)IP
2: DEVICE IP

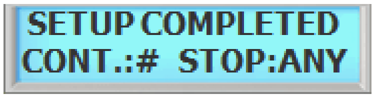
3
Press 1 to enter Host PC IP address.


HOST (PC) IP
. . .

4
Enter IP address and press the # key.
(Ex. 192.168.0.10) Enter key 192168000010#


HOST PC PORT
1005

5
Enter Host PC port number and press the # key.
Default Host PC Port is set to 1005.


SETUP COMPLETED
CONT.:# STOP:ANY

6
Setup completed.

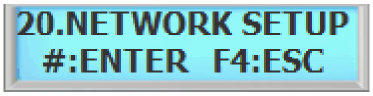
8.20.1.3DHCP Mode

The Dynamic Host Configuration Protocol (DHCP) is a set of rules used by a communications device to allow the device to request and obtain an IP address from a server which has a list of addresses available for assignment.

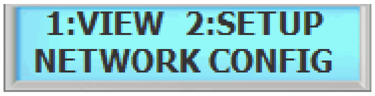
DHCP is a protocol used by device to obtain unique IP addresses, and other parameters such as default router, subnet mask, and IP addresses for DNS servers from a DHCP server. DHCP can be used in both Server Mode and Client Mode.

Depending on DHCP server implementation, the device may loose its IP address. You may try to reconnect by resetting the device or manually assign a IP address, otherwise please contact your network administrator.

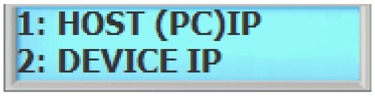
8.20.1.3.1 DHCP Server Mode


20.NETWORK SETUP
#:ENTER F4:ESC

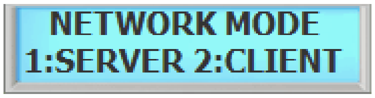
1
Select network setup from system menu 5.


1:VIEW 2:SETUP
NETWORK CONFIG

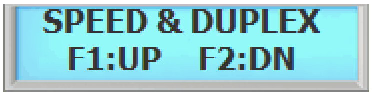
2
Press 2 key to setup network.


1: HOST (PC)IP
2: DEVICE IP

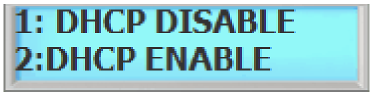
3
Press 2 to enter Device IP address.


NETWORK MODE
1:SERVER 2:CLIENT

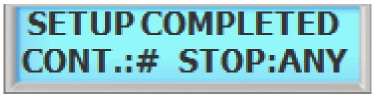
4
Press 1 to enter Server Mode


SPEED & DUPLEX
F1:UP F2:DN

5
Manually select communication speed. Default is set to Auto Negotiation.
Press F1 to scroll up the menu
Press F2 to scroll down the menu

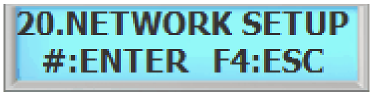

1: DHCP DISABLE
2:DHCP ENABLE

6
Press 2 to enable DHCP Server Mode.

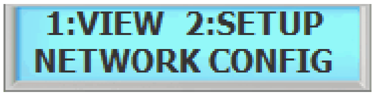

SETUP COMPLETED
CONT.:# STOP:ANY

7
Setup completed.

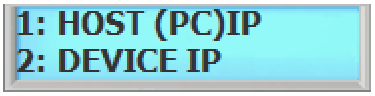
8.20.1.3.2 DHCP Client Mode


20.NETWORK SETUP
#:ENTER F4:ESC

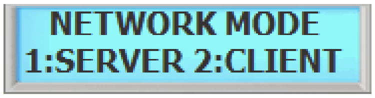
1
Select network setup from system menu 5.


1:VIEW 2:SETUP
NETWORK CONFIG

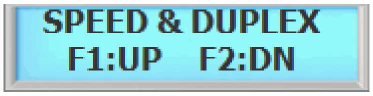
2
Press 2 key to setup network.


1: HOST (PC)IP
2: DEVICE IP

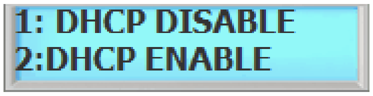
3
Press 2 to enter Device IP address.


NETWORK MODE
1:SERVER 2:CLIENT

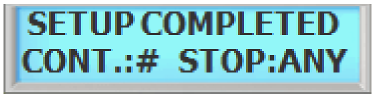
4
Press 2 to enter Client Mode


SPEED & DUPLEX
F1:UP F2:DN

5
Manually select communication speed. Default is set to Auto Negotiation.
Press F1 to scroll up the menu
Press F2 to scroll down the menu


1: DHCP DISABLE
2:DHCP ENABLE

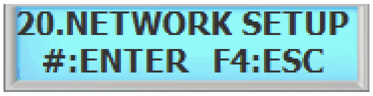
6
Press 2 to enable DHCP Server Mode.


SETUP COMPLETED
CONT.:# STOP:ANY

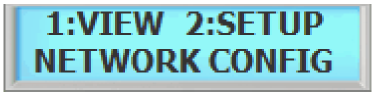
7
Setup completed.

8.20.2 View IP Configuration

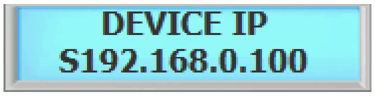
View IP configuration shows current network device settings for both Device and Host PC IP Configurations.


20.NETWORK SETUP
#:ENTER F4:ESC

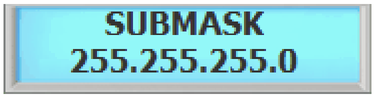
1
Select network setup from system menu 5.


1:VIEW 2:SETUP
NETWORK CONFIG

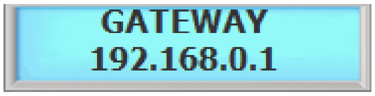
2
Press 2 key to setup network.


DEVICE IP
S192.168.0.100

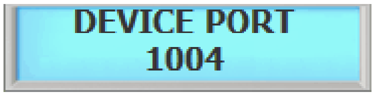
3
Press 2 to enter Device IP address.


SUBMASK
255.255.255.0

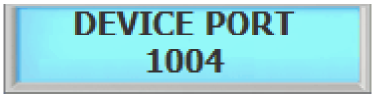
4
Press 1 to select Server Mode


GATEWAY
192.168.0.1

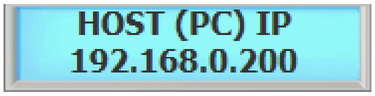
5
Displays current Submask


DEVICE PORT
1004

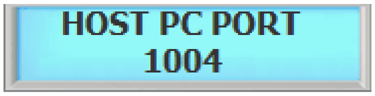
6
Displays current Gateway


DEVICE PORT
1004

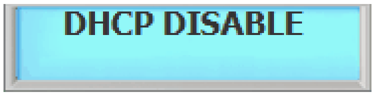
7
Displays current device IP port


HOST (PC) IP
192.168.0.200

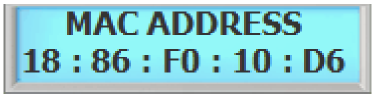
8
Displays current Host PC IP address


HOST PC PORT
1004

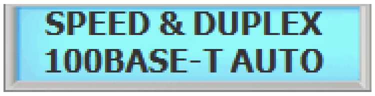
9
Displays current Host PC Port number


DHCP DISABLE

10
Displays DHCP information


MAC ADDRESS
18 : 86 : F0 : 10 : D6

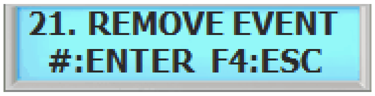
11
Displays device MAC Address


SPEED & DUPLEX
100BASE-T AUTO

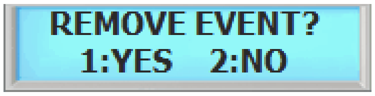
11
Displays device Communication setting.

8.21 21. Remove Event

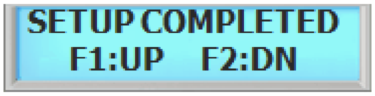
Removing event will delete all user registration events that system holds during an block user registration. After registering user in block, removing events will clear user registration events and thus events will not pile up in event list.


21. REMOVE EVENT
#:ENTER F4:ESC

1 Press the # key to enter Remove Event.


REMOVE EVENT?
1:YES 2:NO

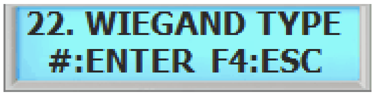
2 Press 1 to setup remove event
Press 2 to cancel


SETUP COMPLETED
F1:UP F2:DN

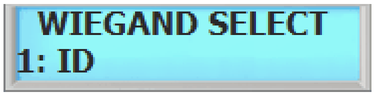
3 Setup has completed

8.22 22. Wiegand Type

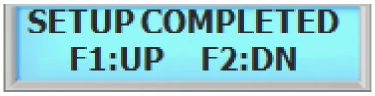
Wiegand type allows the device to select which information will be sent to the controller during an Wiegand communication. Traditionally, card numbers are sent in Wiegand communication.


22. WIEGAND TYPE
#:ENTER F4:ESC

1 Press the # key to enter Wiegand Type.


WIEGAND SELECT
1: ID

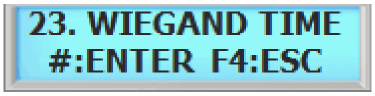
2 Press F1 to scroll up the menu
Press F2 to scroll down the menu
Select wiegand type and then press the # key.


SETUP COMPLETED
F1:UP F2:DN

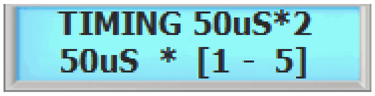
3 Setup has completed

8.23 23. Wiegand Time

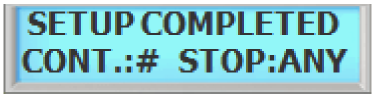
Wiegand Time allows the device to give delay time during a Wiegand communication.Wiegand Time places asynchronous low pulses on the appropriate data lines to transmit the data stream to the panel.


23. WIEGAND TIME
#:ENTER F4:ESC

1 Press the # key to enter Wiegand Time.


TIMING 50uS*2
50uS * [1 - 5]

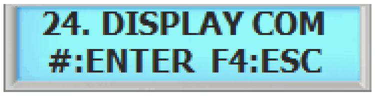
2 Enter serial timing from 1 to 5.


SETUP COMPLETED
CONT.:# STOP:ANY

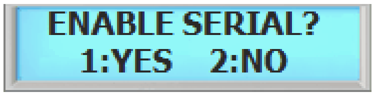
3 Setup has completed

8.24 24. Display COM

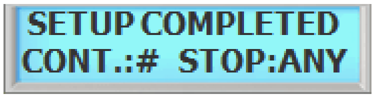
Display Com will enable / disable serial output for event text via serial connection.


24. DISPLAY COM
#:ENTER F4:ESC

1 Press the # key to enter Serial Display Command.


ENABLE SERIAL?
1:YES 2:NO

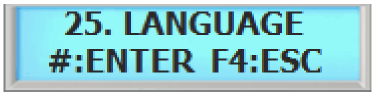
2 Press 1 to enable serial display
Press 2 to disable serial display


SETUP COMPLETED
CONT.:# STOP:ANY

3 Setup has completed

8.25 25. Lanagauge

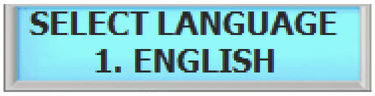
Language allows the user to select device language. There are 5 languages built-in to the device and default language is set to English.



25. LANGUAGE
#:ENTER F4:ESC

1

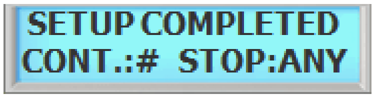
Press the # key to enter Language



SELECT LANGUAGE
1. ENGLISH

2

1. English
2. Korean
3. Polish
4. Spanish
5. Russian
6. German
7. Vietnamese



SETUP COMPLETED
CONT.:# STOP:ANY

3

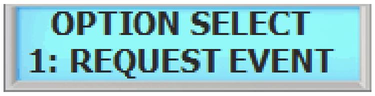
Setup has completed

8.26 26. System Option

System Option allows the configuration of the device system options.

8.26.1 1. Request Event

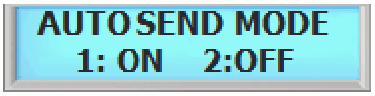
Request Event allows the device to send the events to the software without software's request. Normally software will request a event and device will acknowledge by the sending its events to the software.



OPTION SELECT
1: REQUEST EVENT

1

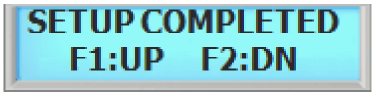
Press the # key to enter Request Event



AUTO SEND MODE
1: ON 2:OFF

2

Press 1 key to enable auto send
Press 2 key to disable auto send



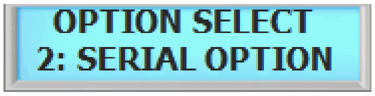
SETUP COMPLETED
F1:UP F2:DN

3

Setup has completed

8.26.2 2. Serial Port

System has 2 dedicated serial ports. This section allows to change the function of the system serial port to use either for Reader or Relay connection.

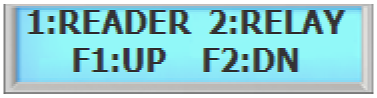


OPTION SELECT
2: SERIAL OPTION

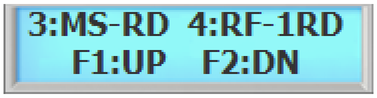
1

Press the # key to enter Serial Port option

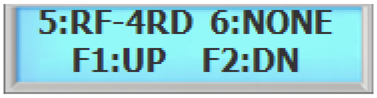
2



1:READER 2:RELAY
F1:UP F2:DN

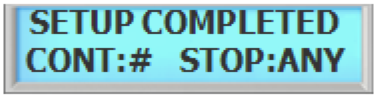


3:MS-RD 4:RF-1RD
F1:UP F2:DN



5:RF-4RD 6:NONE
F1:UP F2:DN

1. As Reader
2. As Remote Relay.(Requires Remote Relay Module)
3. As Magnetic Strip Reader
4. RFID 1 Channel
5. RFID 4 Channel
6. Not Used



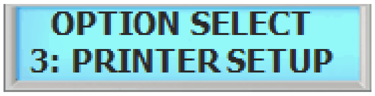
SETUP COMPLETED
CONT:# STOP:ANY

3

Setup has completed

8.26.3 3. Printer

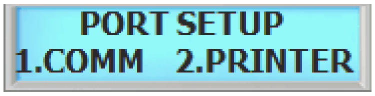
System has dedicated printer port for printing its events directly to its connected printer. System supports 2 printer types, Martel and Seawoo thermal printers.



OPTION SELECT
3: PRINTER SETUP

1

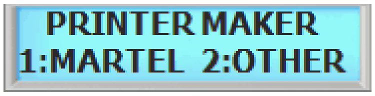
Press the # key to enter Printer



PORT SETUP
1.COMM 2.PRINTER

2

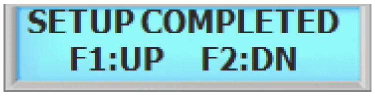
Press 2 to select printer setup



PRINTER MAKER
1:MARTEL 2:OTHER

3

Press 1 key to set as Martel
Press 2 key to set as Other (Seawoo)



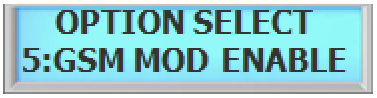
SETUP COMPLETED
F1:UP F2:DN

4

Setup has completed

8.26.4 4. GSM Mode

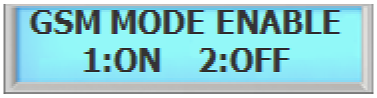
GSM mode enables the system to communicate with external GSM modem if connected.



OPTION SELECT
5:GSM MOD ENABLE

1

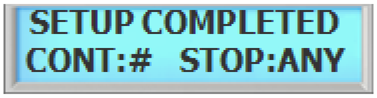
Press the # key to enter GSM Mode



GSM MODE ENABLE
1:ON 2:OFF

2

Press 1 key to enable GSM
Press 2 key to disable GSM



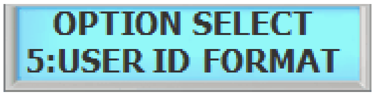
SETUP COMPLETED
CONT:# STOP:ANY

3

Setup has completed

8.26.5 5. User ID Format

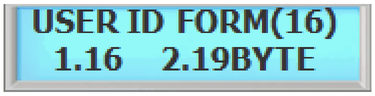
User ID format can be set to either 16 or 19 bytes.



OPTION SELECT
5:USER ID FORMAT

1

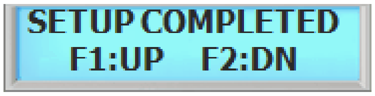
Press the # key to enter Printer



USER ID FORM(16)
1.16 2.19BYTE

2

Press 1 for 16 digits for user ID
Press 2 for 19 digits for user ID



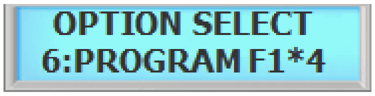
SETUP COMPLETED
F1:UP F2:DN

3

Setup has completed

8.26.6 6. Program F1 * 4

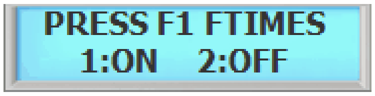
Program F1 4 times to enter program mode. this menu is used when F1 key is dedicated use for T&A.



OPTION SELECT
6:PROGRAM F1*4

1

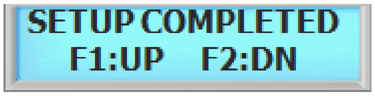
Press the # key to enter Printer



PRESS F1 FTIMES
1:ON 2:OFF

2

Press 1 to enable this mode.



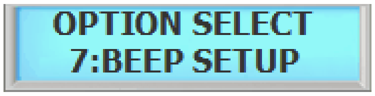
SETUP COMPLETED
F1:UP F2:DN

3

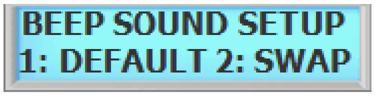
Setup has completed

8.26.7 7. Beep Setup

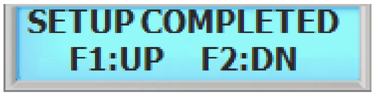
Beep Setup allows the device to reverse the verification sound from access denied to access granted sound and vice versa.

1

OPTION SELECT
7:BEEP SETUP

Press the # key to enter Beep Setup.

2

BEEP SOUND SETUP
1: DEFAULT 2: SWAP

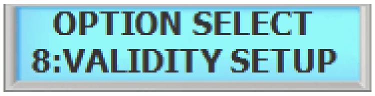
Press 2 to swap buzzer sound.

3

SETUP COMPLETED
F1:UP F2:DN

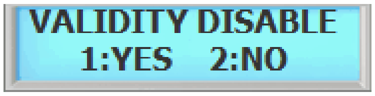
Setup has completed

8.26.8 8. Validity Setup

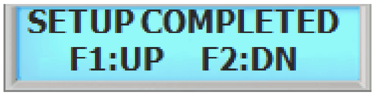
Enter topic text here.

1

OPTION SELECT
8:VALIDITY SETUP

Press the # key to enter Printer

2

VALIDITY DISABLE
1:YES 2:NO

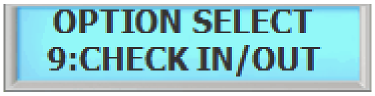
Press 2 to select printer setup

3

SETUP COMPLETED
F1:UP F2:DN

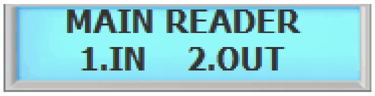
Setup has completed)

8.26.9 9. Check In/Out

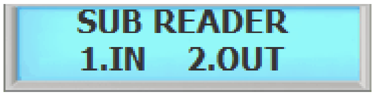
Check In / Out defines the reader to show IN or OUT in event. This function is used for T&A only.

1

OPTION SELECT
9:CHECK IN/OUT

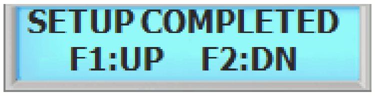
Press the # key to enter Check In/Out.

2

MAIN READER
1.IN 2.OUT

Press1 to set main reader to IN.
Press2 to set main reader to OUT.

3

SUB READER
1.IN 2.OUT

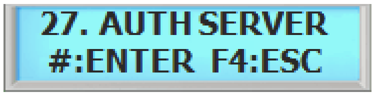
Press1 to set sub reader to IN.
Press2 to set sub reader to OUT.

4

SETUP COMPLETED
F1:UP F2:DN

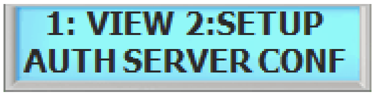
Setup has completed

8.27 27. Authentication Server

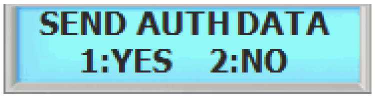
Authentication Server allows the device to authenticate from the server database. (Online Verification)

1

27. AUTH SERVER
#:ENTER F4:ESC

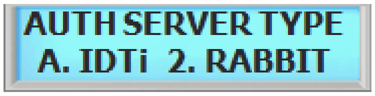
Press the # key to enter Auth Server.

2

1: VIEW 2:SETUP
AUTH SERVER CONF

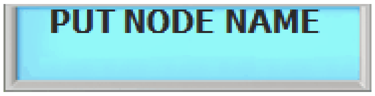
Press 2 to setup.

3

SEND AUTH DATA
1:YES 2:NO

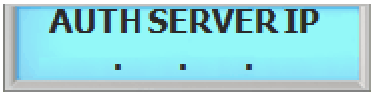
Press 1 to send Auth Data.

4

AUTH SERVER TYPE
A. IDTi 2. RABBIT

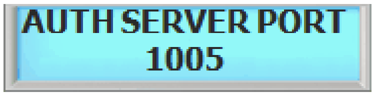
Select the type of server.

5

PUT NODE NAME

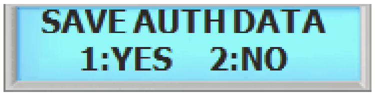
Enter device name.

6

AUTH SERVER IP
. . .

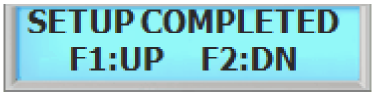
Enter Server IP address.

7

AUTH SERVER PORT
1005

Enter Server port.

8

SAVE AUTH DATA
1:YES 2:NO

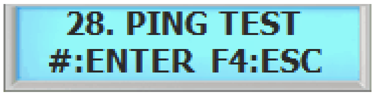
Press 1 to save configuration.

9

SETUP COMPLETED
F1:UP F2:DN

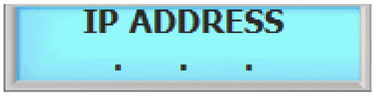
Setup completed.

8.28 28. Ping Test

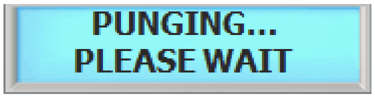
Ping test allows the device to ping server ip address.

1

28. PING TEST
#:ENTER F4:ESC

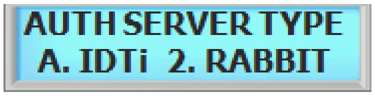
Press the # key to enter Firmware Update.

2

IP ADDRESS
. . .

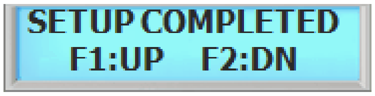
Please wait until firmware uploading process is completed.

3

PUNGING...
PLEASE WAIT

Setup has completed

1

AUTH SERVER TYPE
A. IDTi 2. RABBIT

Press the # key to enter Firmware Update.

1

SETUP COMPLETED
F1:UP F2:DN

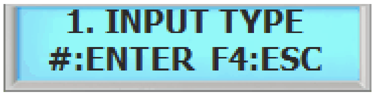
Setup completed.

Part IX

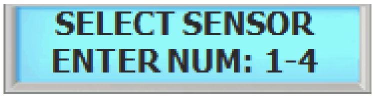
9 SYSTEM MENU 6 - SENSOR SETUP

9.1 1. Input Type

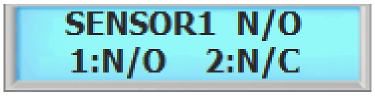
The sensor inputs are factory defaulted to Normally Open (N.O.). This section show how to change the sensor input to either N.O. or N.C.


1. INPUT TYPE
#:ENTER F4:ESC

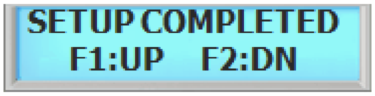
1
Press the # key to enter Input Type


SELECT SENSOR
ENTER NUM: 1-4

2
Select from 1 though 6 followed by the # key


SENSOR1 N/O
1:N/O 2:N/C

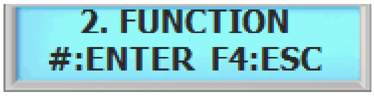
3
Press 1 key to N/O (stands for Normal Open)
Press 2 key to N/C (stands for Normal Close)


SETUP COMPLETED
F1:UP F2:DN

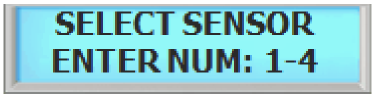
4
Finished setup

9.2 2. Function

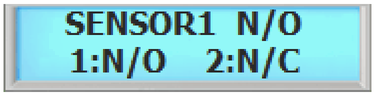
These are the senor inputs found in device control panel that control external devices. There are 6 sensor inputs in device and all of them can be programmed to handle different types of external sensors from the system menu.


2. FUNCTION
#:ENTER F4:ESC

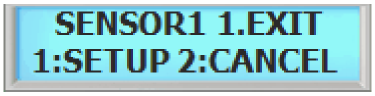
1
Press the # key to enter Function


SELECT SENSOR
ENTER NUM: 1-4

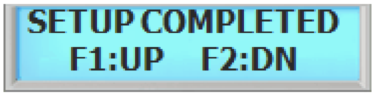
2
Select sensor from 1 through 6. Refer Note for sensor


SENSOR1 N/O
1:N/O 2:N/C

3
Default is set as EXIT. You can customize the function as show in the note


SENSOR1 1.EXIT
1:SETUP 2:CANCEL

4
Press F1 key to scroll up the list of functions
Press F2 key to scroll down the list of functions.
Refer to note for the complete list of functions.
Press the # key once selected


SETUP COMPLETED
F1:UP F2:DN

5
Setup has completed

NOTE :

Factory default sensor settings.

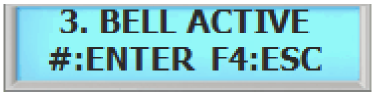
SENSOR 1: EXIT
SENSOR 2: ALARM (ALARM SETUP: ALARM SENSOR)
SENSOR 3: FIRE ALARM (ALARM SETUP: FIRE ALARM)
SENSOR 4: LOCK (ALARM SETUP: LOCK HELD)
SENSOR 5: DOOR CONTACT (ALARM SETUP: FORCE OPEN / DOOR HELD)

SENSOR 6: INTRUSION (ALARM SETUP: INTRUSION)

Sensors are used in conjunction with alarm setups. Once the sensor is made active, go to Alarm Setup and configure the output type. Sensor can be re-programmed depending on the installation.

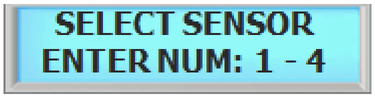
9.3 3. Bell Active

This option allows to activate the system buzzer. Once designated, the sound will beep from the device to notify that the designated sensor is triggered. (Ex. Sensor 1 is connected to a Exit Switch and value of 3 is given. System will beep 3 times every time exit button is triggered.)



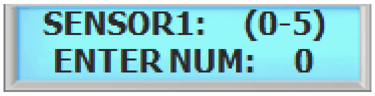
3. BELL ACTIVE
#:ENTER F4:ESC

1
Press the # key to enter Line Fault



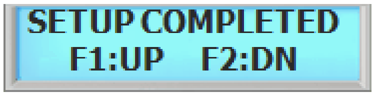
SELECT SENSOR
ENTER NUM: 1 - 4

2
Press 1 key to enable line sensing
Press 2 key to disable line sensing



SENSOR1: (0-5)
ENTER NUM: 0

3
Completed setup message



SETUP COMPLETED
F1:UP F2:DN

4
Completed setup message

Part X

10 SYSTEM MENU 7 - ALARM SETUP

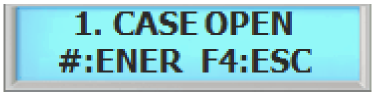
10.1 Alarm Setup

There are six sensor inputs and 2 relays outputs in the system. Either one or two relays are used for the lock, depending on the configuration, and the spare relays can be used for annunciating alarms or other form of control.

There is no programming function for alarms what you program is what happens when a specific alarm occurs. There are two things that can happen as a result of an alarm:

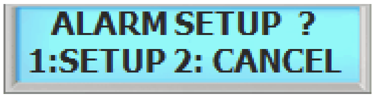
an alarm may result in a message to the speaker (Buzzer).
an alarm may also cause a relay to come on (Relay).

Device has an output to activate a sounder but also equipped with relays that can be controlled from a command station, by some type of system activity. These sensor inputs & relays can allow you to perform many functions such as motion sensor or as a means of interfacing with a home automation system. Only the internal sensors will be activated unless other sensors are connected and configured in Sensor Setup. Relay must be connected to use the alarm. Refer to Relay Connector.


1. CASE OPEN
#:ENER F4:ESC

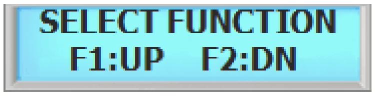
1

There are total of 12 alarms. Refer to Figure 1 Alarm List on the left for complete list. Press the # key to enter Case Open


ALARM SETUP ?
1:SETUP 2: CANCEL

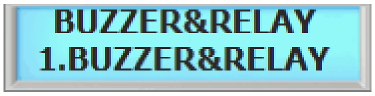
2

Press 1 key to setup Alarm
Press number 2 key to cancel


SELECT FUNCTION
F1:UP F2:DN

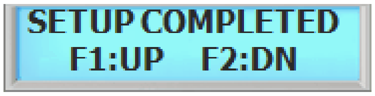
3

Press F1 key to scroll up the list of functions
Press F2 key to scroll down the list of functions


BUZZER&RELAY
1.BUZZER&RELAY

4

There are total of 4 sounder options. Refer to figure 2 list of sounder options. For now we will select 1 Buzzer & Relay followed by pressing the # key

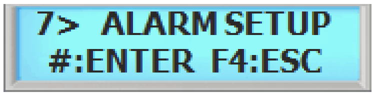

SETUP COMPLETED
F1:UP F2:DN

5

Alarm setup finished

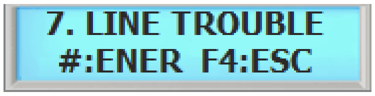
⚠ NOTE :

Figure 1

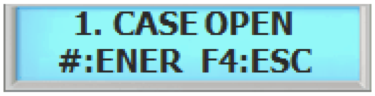

7> ALARM SETUP
#:ENTER F4:ESC

(Figure 1) List of the alarm. Select from the following list

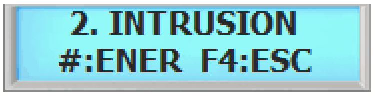
Figure 2


7. LINE TROUBLE
#:ENER F4:ESC

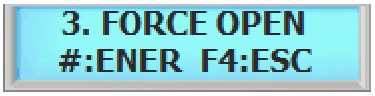
Managed by Line Fault in Sensor Setup / 3. Line Fault. Must be enabled in Line Fault in Sensor Setup.


1. CASE OPEN
#:ENER F4:ESC

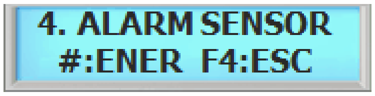
Managed by internal sensor. (Requires optional Tamper Switch)


2. INTRUSION
#:ENER F4:ESC

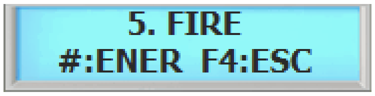
Pre-programmed to sensor 6 (INTRUSION).


3. FORCE OPEN
#:ENER F4:ESC

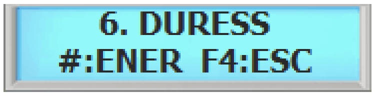
Pre-programmed to sensor 5 (DOOR CONTACT)


4. ALARM SENSOR
#:ENER F4:ESC

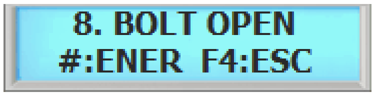
Pre-programmed to sensor 2 (ALARM).


5. FIRE
#:ENER F4:ESC

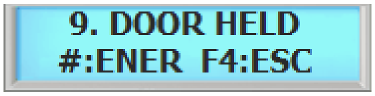
Pre-programmed to sensor 3 (FIRE ALARM).


6. DURESS
#:ENER F4:ESC

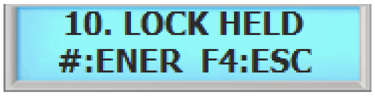
Managed by System Setup / 13 Duress. Must be enabled in Duress.


8. BOLT OPEN
#:ENER F4:ESC

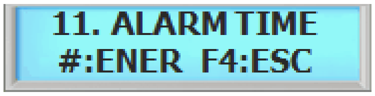
Managed by internal (Screw) sensor.


9. DOOR HELD
#:ENER F4:ESC

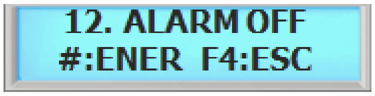
Pre-programmed to sensor 5 (DOOR CONTACT).


10. LOCK HELD
#:ENER F4:ESC

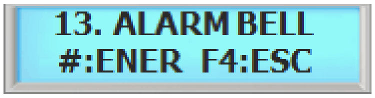
Pre-programmed to sensor 4 (LOCK).


11. ALARM TIME
#:ENER F4:ESC

Duration of alarm time. Alarm time will be applied to all alarms.

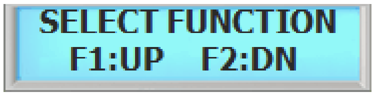

12. ALARM OFF
#:ENER F4:ESC

Disabling Alarm. Event will occur and recorded even if the alarms are made inactive. To disable alarms completely, disable sensor that is supervising the activated alarm.

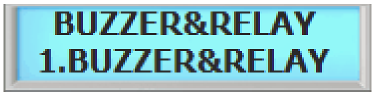

13. ALARM BELL
#:ENER F4:ESC

Manages by software Alarm Bell schedule

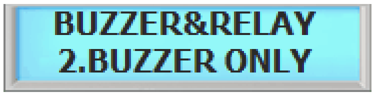
Figure 2


SELECT FUNCTION
F1:UP F2:DN

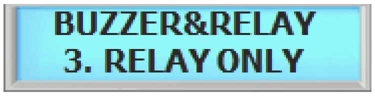
(Figure 2) List of the output function. Select from the following list


BUZZER&RELAY
1.BUZZER&RELAY

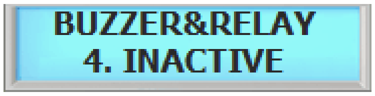
Buzzer and Relay will be activated once the alarm is triggered.


BUZZER&RELAY
2.BUZZER ONLY

Buzzer will be activated once the alarm is triggered. No relay output will be sent.


BUZZER&RELAY
3. RELAY ONLY

Relay will be activated once the alarm is triggered. No sound will be heard.


BUZZER&RELAY
4. INACTIVE

Alarm is inactive. Event will occur and recorded even if the alarms are made inactive. To disable alarms completely, disable sensor that is supervising the activated alarm.

10.2 Connecting External Lamp & Alarm

10.2.1 Alarm Connection Diagram

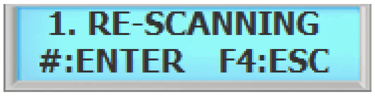
To connect external speaker or a lamp, use the Red Lamp(CN8) connection. Red Lamp is set for Relay 2 which is set as alarm.

Part XI

11 SYSTEM MENU 8 - SCANNER SETUP

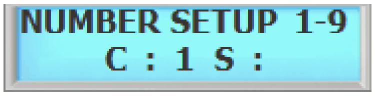
11.1 1. Re-Scan

This is an operational mode whereby the reader repeatedly attempts to identify a fingerprint on the optical unit. Access is not granted or rejected unless a finger is actually presented on the optical unit. By default system is setup to rescan 3 times and it can rescan up to 9 times.



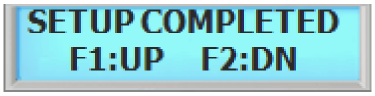
```
1. RE-SCANNING
#:ENTER   F4:ESC
```

1
Press the # key to enter Re-Scanning



```
NUMBER SETUP  1-9
  C : 1  S :
```

2
"**C**" stands for current setting. Key in from 1 to 9

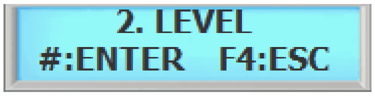


```
SETUP COMPLETED
 F1:UP   F2:DN
```

3
Finished setup

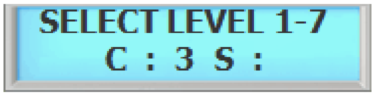
11.2 2. Level

This command sets both the security level that the reader will use when verifying fingerprints and when identifying fingerprints. Security level ranges from 1 to 7, with 3 being the normal value for verification. The highest security setting is 7 and the lowest security setting is 1. Higher security access would normally require a higher security setting.



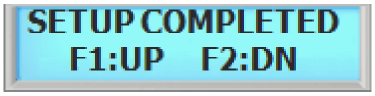
```
   2. LEVEL
#:ENTER   F4:ESC
```

1
Press the # key to enter Level.



```
SELECT LEVEL 1-7
  C : 3  S :
```

2
"**C**" stands for current setting. Key in from 1 to 7. Default level is set to 3.

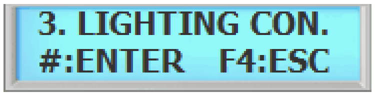


```
SETUP COMPLETED
 F1:UP   F2:DN
```

3
Finished setup

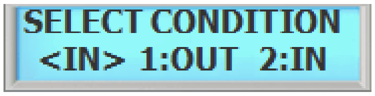
11.3 3. Lighting Condition

This is an operational mode whereby the scanner sets the environment condition. There are 2 conditions available, OUTDOOR and INDOOR. Depending on the mode, scanner automatically adjust it self to the surrounding environment to enhance the scanning ability. Setting the right mode will greatly reduce the false rejection rate(FRR).



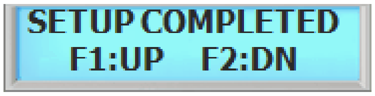
```
3. LIGHTING CON.
#:ENTER   F4:ESC
```

1
Press the # key to enter LIGHTING CONDITION



```
SELECT CONDITION
<IN> 1:OUT  2:IN
```

2
Press 1 for OUTDOOR and press 2 for INDOOR use. Current mode is displayed in the bracket. <IN> or <OUT>

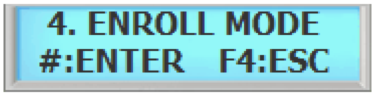


```
SETUP COMPLETED
 F1:UP   F2:DN
```

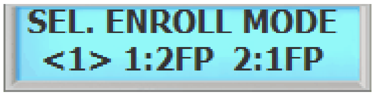
3
Finished setup

11.4 4. Enroll Mode

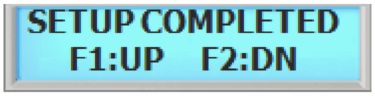
There are 2 types of enrollment procedures. By default system is setup to use mode 1 which scans 1 template per finger. Mode 2 scans 2 templates per finger.


4. ENROLL MODE
#:ENTER F4:ESC

1
Press the # key to enter Enroll Mode


SEL. ENROLL MODE
<1> 1:2FP 2:1FP

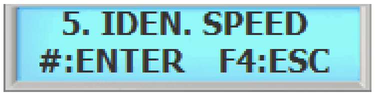
2
Press 1 for 2 fingerprint enrollment
Press 2 for 1 fingerprint enrollment


SETUP COMPLETED
F1:UP F2:DN

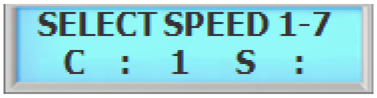
3
Finished setup

11.5 5. Identification Speed

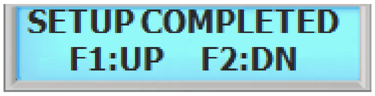
The use of a Identification Speed can accelerate the identification speed up to 10 times at normal speed with relatively small degradation of authentication accuracy. The Identification Speed has 7 different levels from mode 1 to 7.


5. IDEN. SPEED
#:ENTER F4:ESC

1
Press the # key to enter IDEN SPEED.


SELECT SPEED 1-7
C : 1 S :

2
"**C**" stands for current setting. Key in from 1 to 7.
Default is set to level 3.

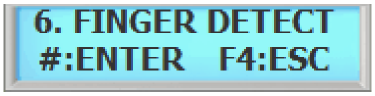

SETUP COMPLETED
F1:UP F2:DN

3
Finished setup

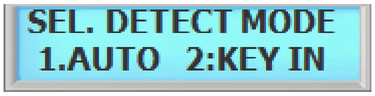
Even though the performance degradation is minimal, the fast mode does not need to be used in identification of small database, say less than 100 templates. In this case, the difference of matching time between a normal and a fast mode is not significant.

11.6 6. Finger Detect

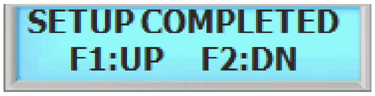
Finger Detect enables the device to automatically detect fingerprint if set to auto. Key in mode will manually press the # key to turn on fingerprint sensor for detection.


6. FINGER DETECT
#:ENTER F4:ESC

1
Press the # key to enter FINGER DETECT.


SEL. DETECT MODE
1.AUTO 2:KEY IN

2
Press 1 to turn on detect mode.
Press 2 to turn off detect mode.


SETUP COMPLETED
F1:UP F2:DN

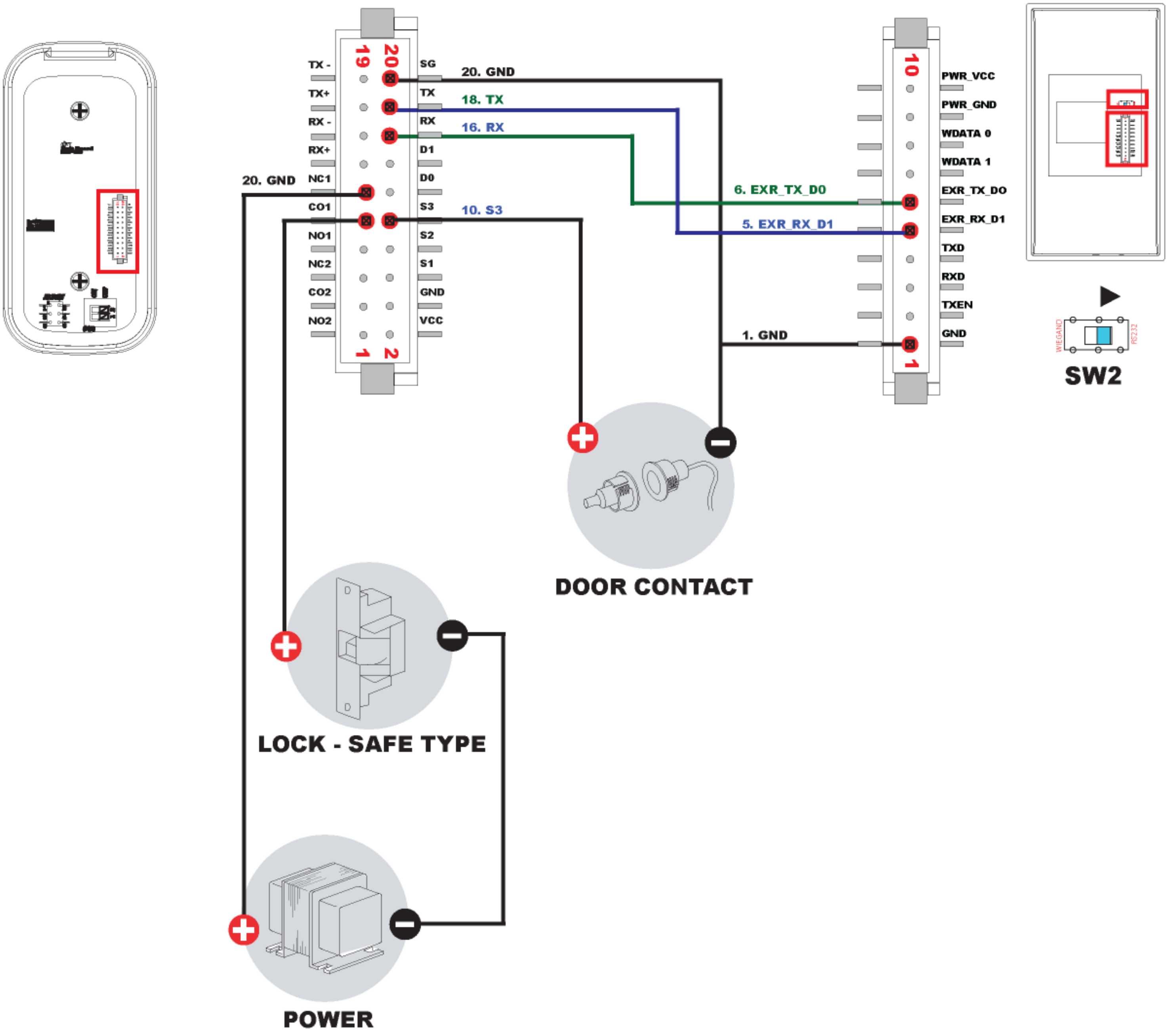
3
Finished setup

Part XII

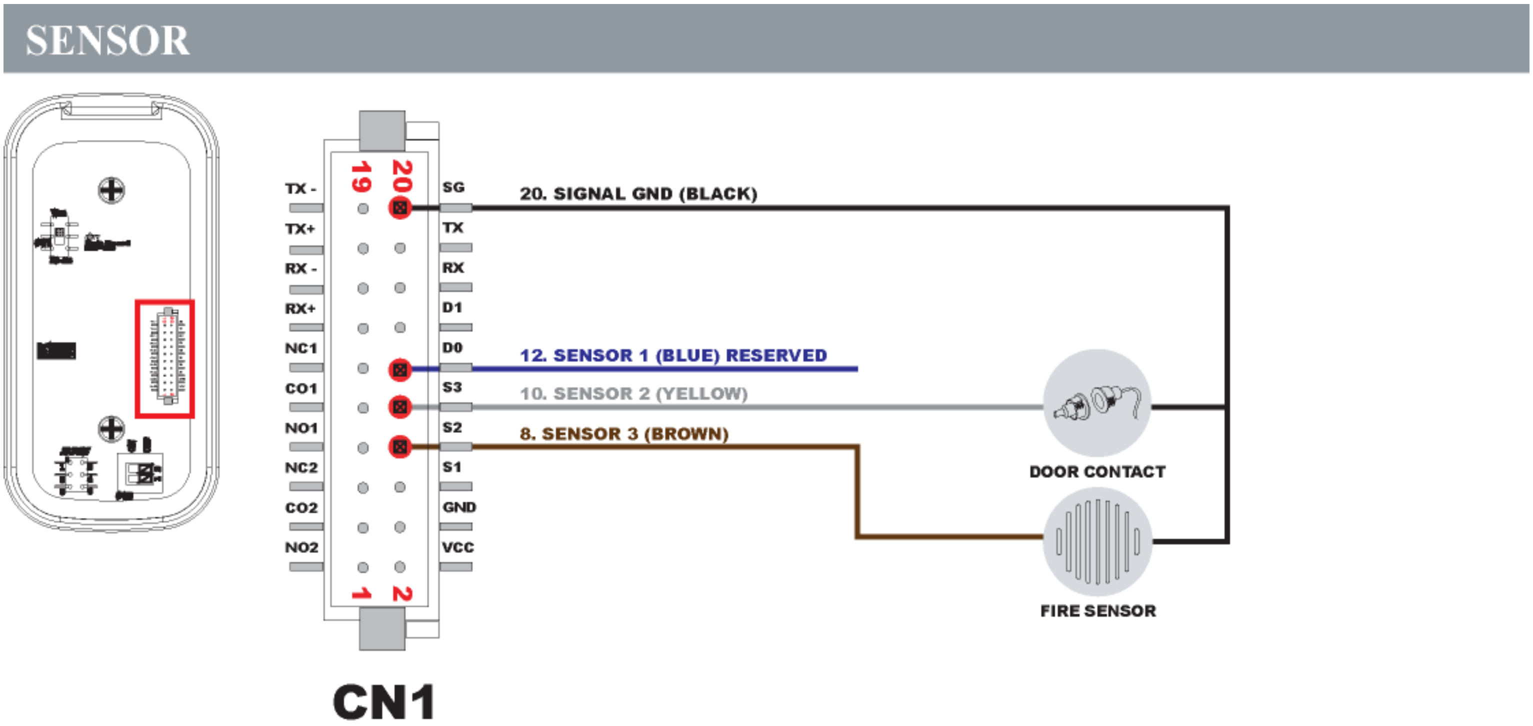
12 INSTALLATION GUIDE

12.1 Connector Layout

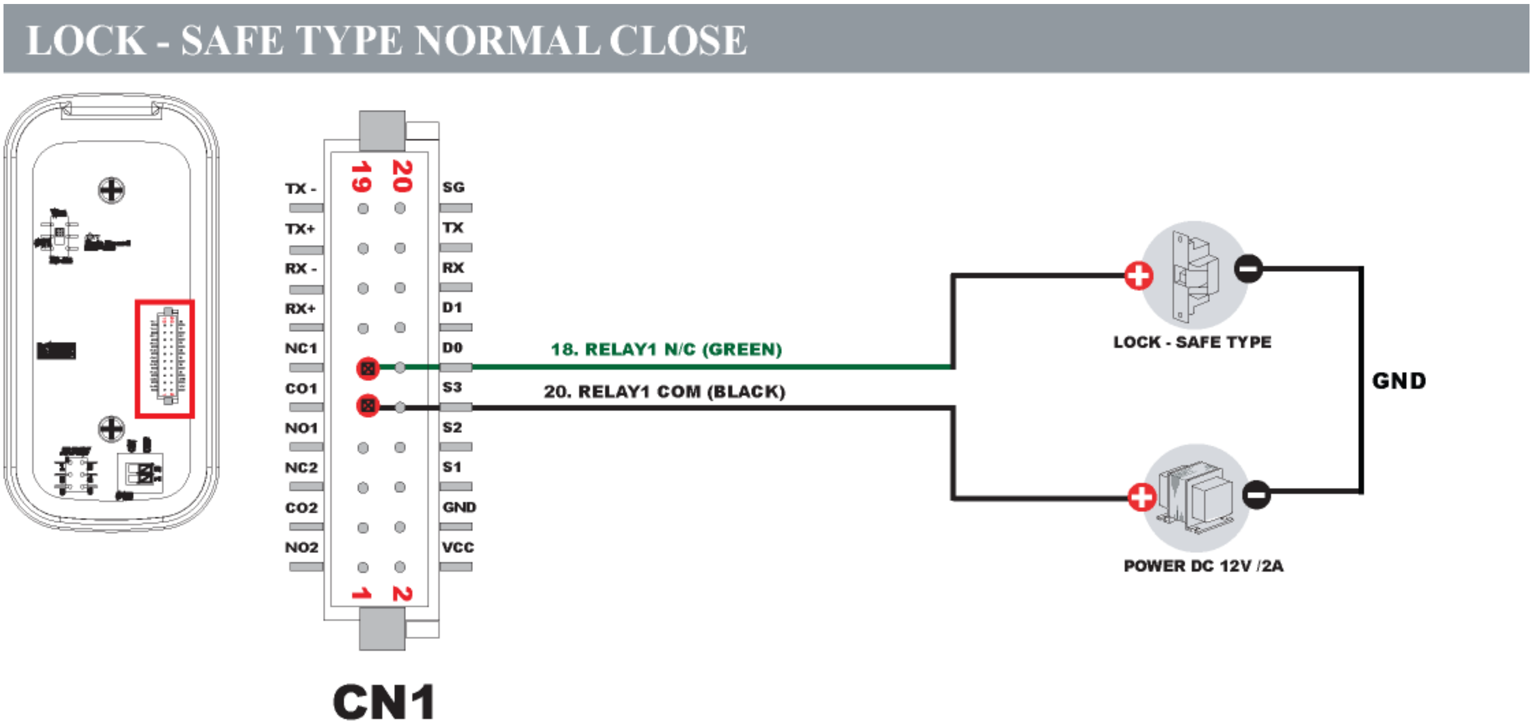
CONNECTION LAYOUT



12.2 Sensor

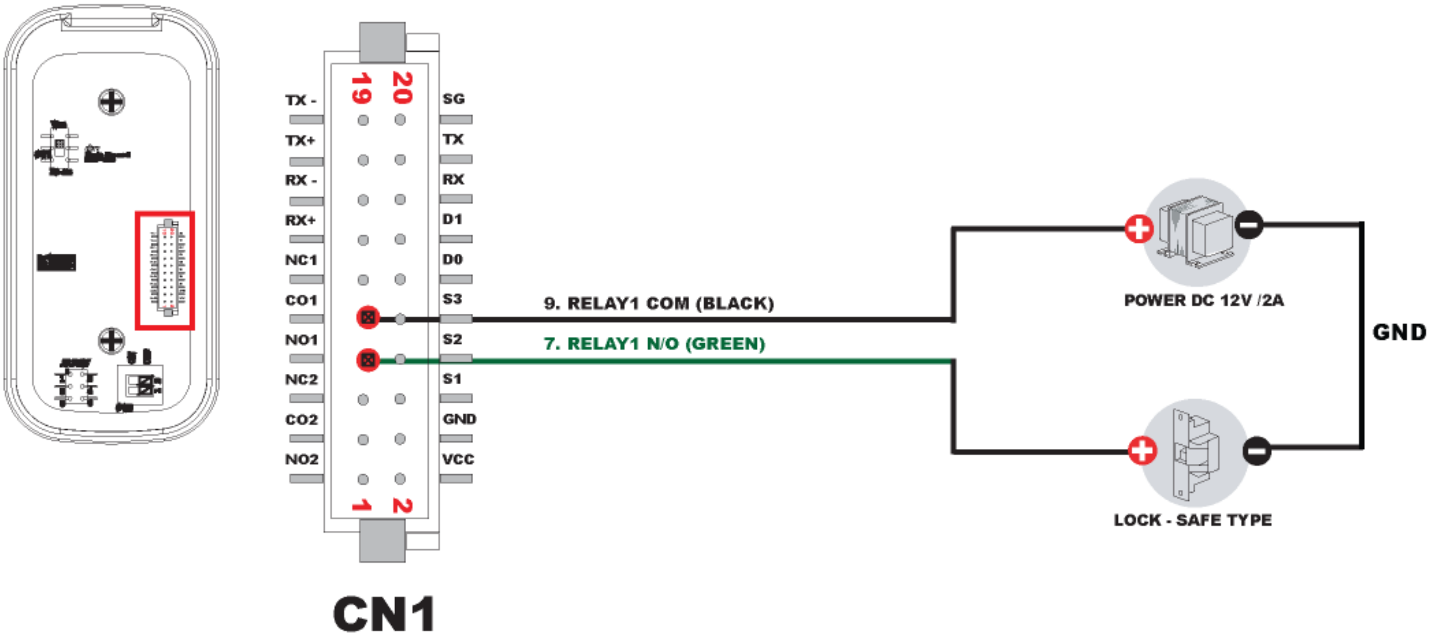


12.3 Lock - Fail Safe



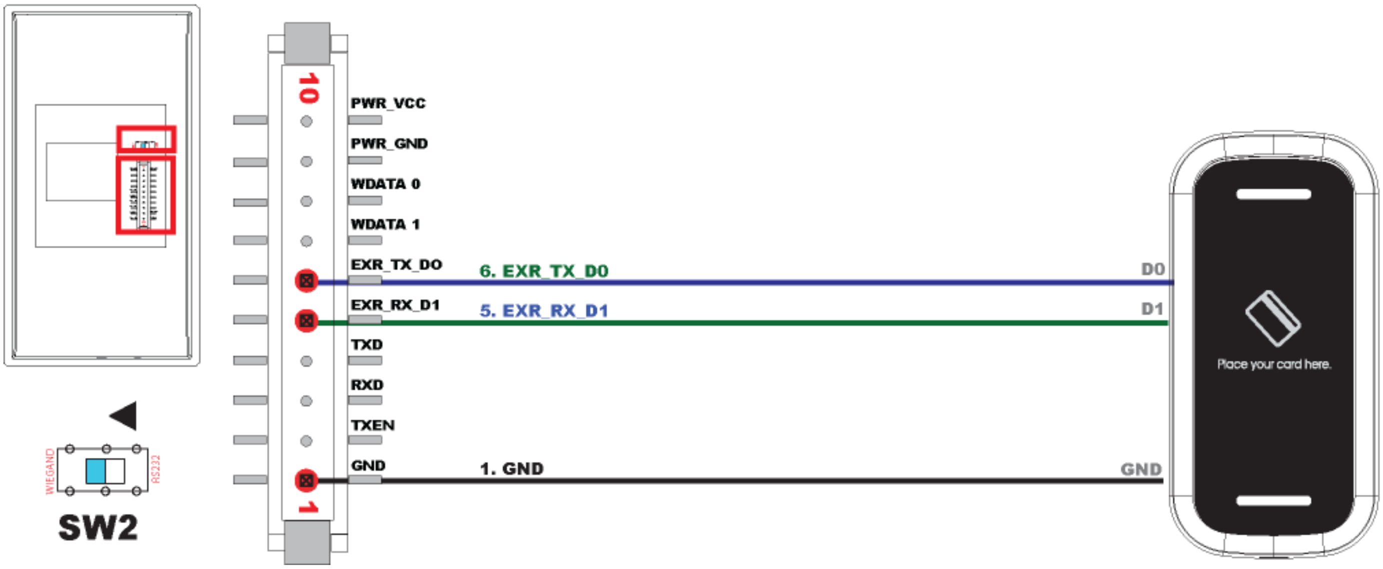
12.4 Lock - Fail Secure

LOCK - SECURE TYPE NORMAL OPEN



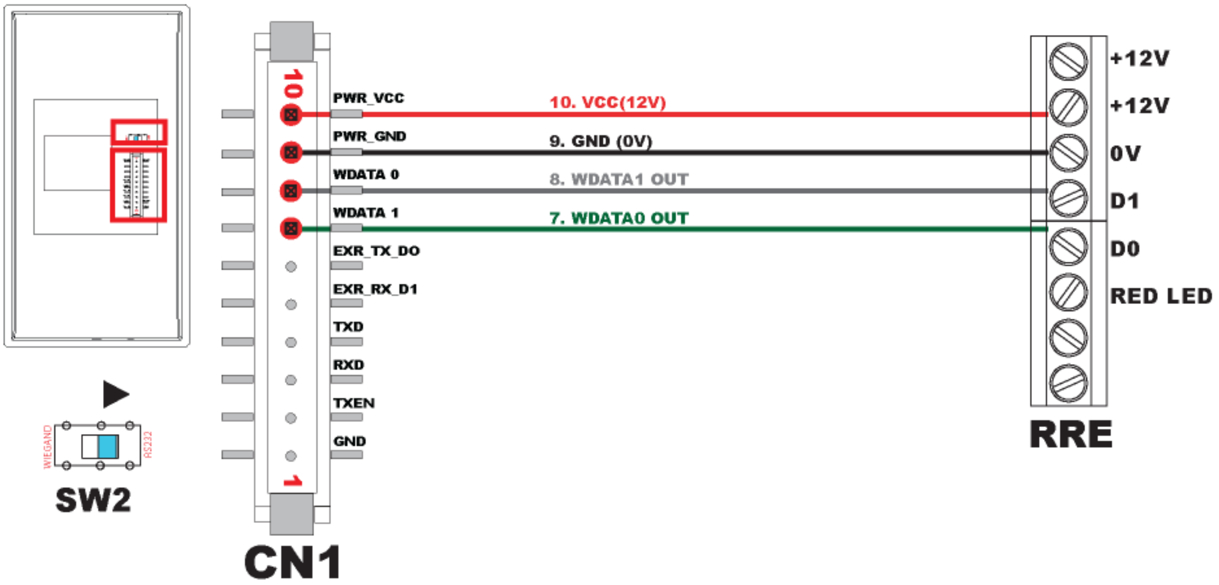
12.5 External Reader

EXTERNAL READER CONNECTION



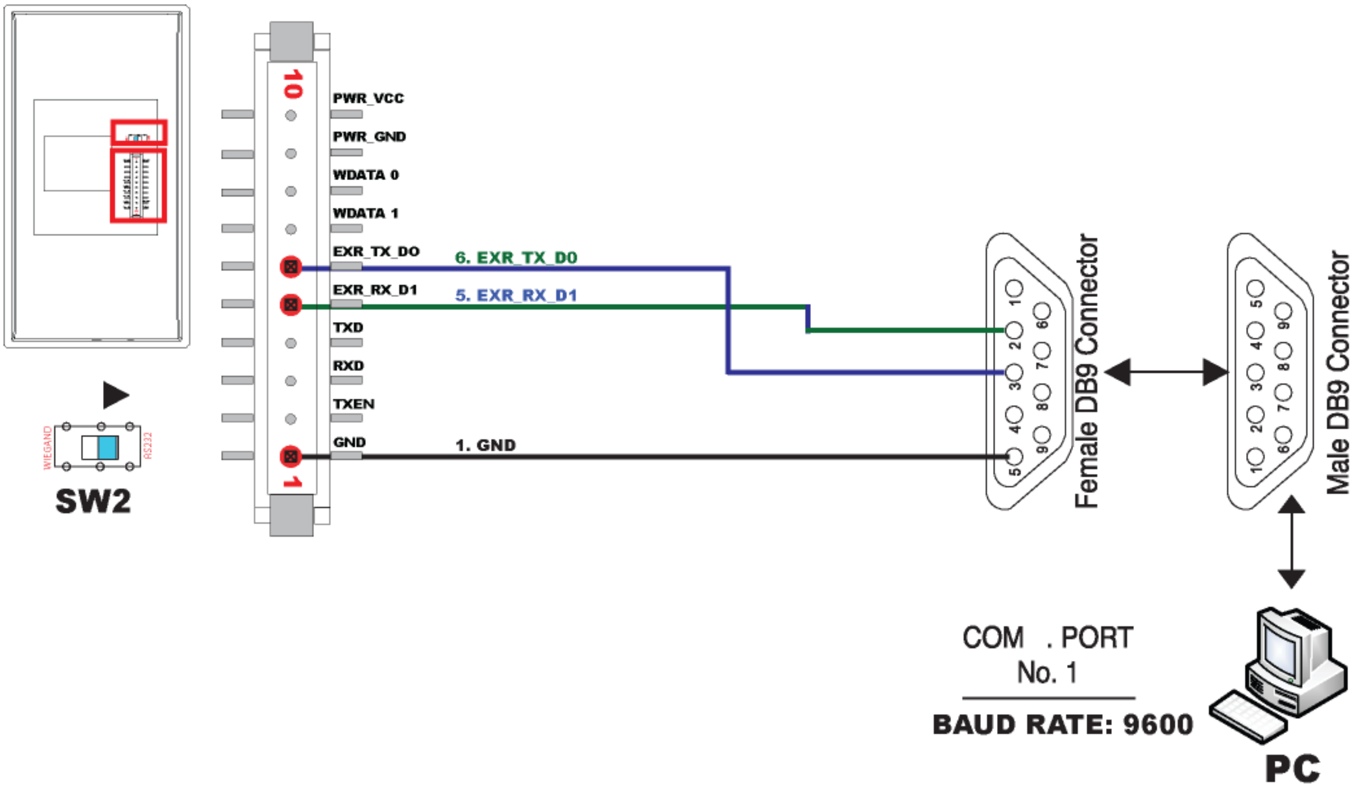
12.6 Wiegand RRE

WIEGAND RRE (WIEGAND OUTPUT)

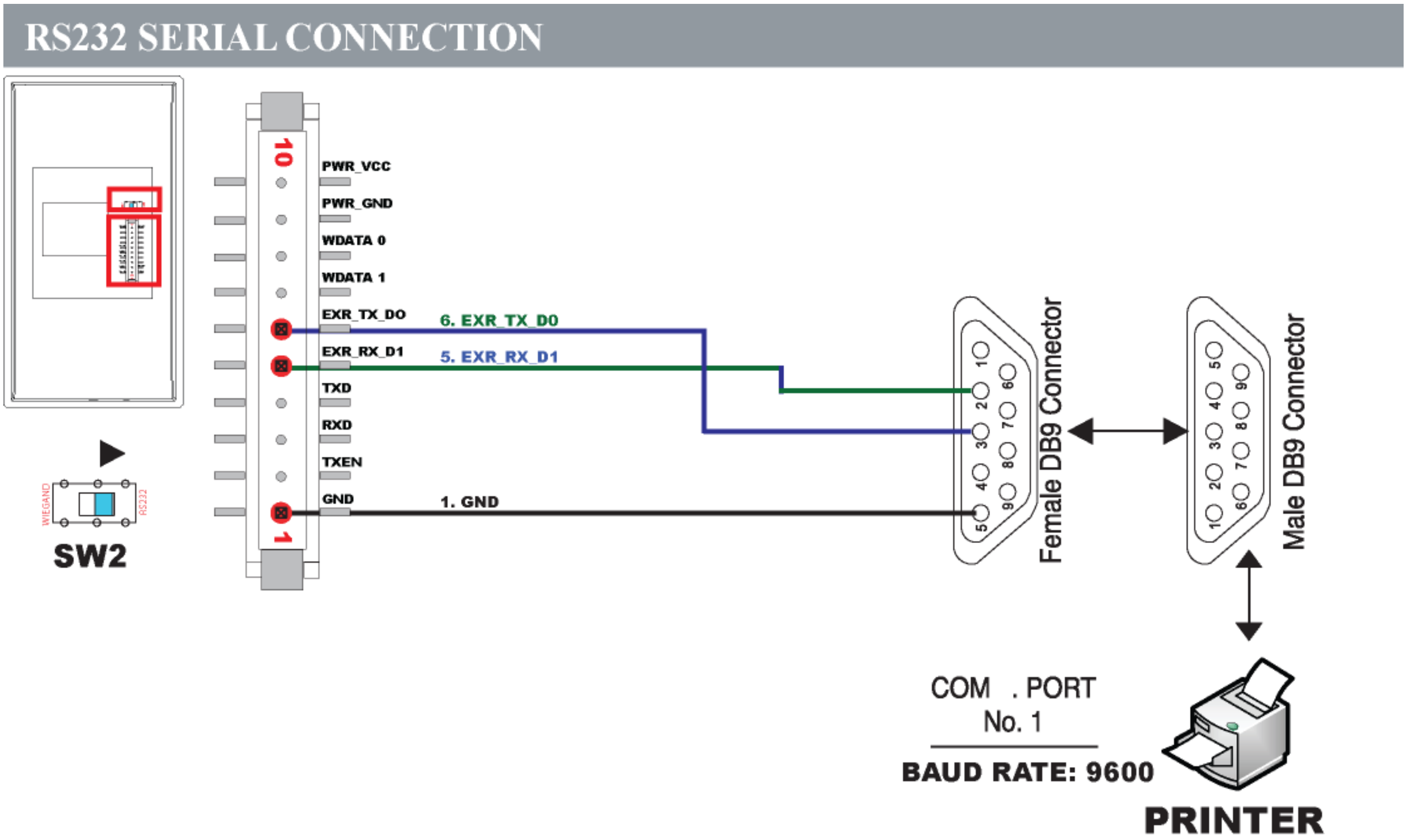


12.7 RS232

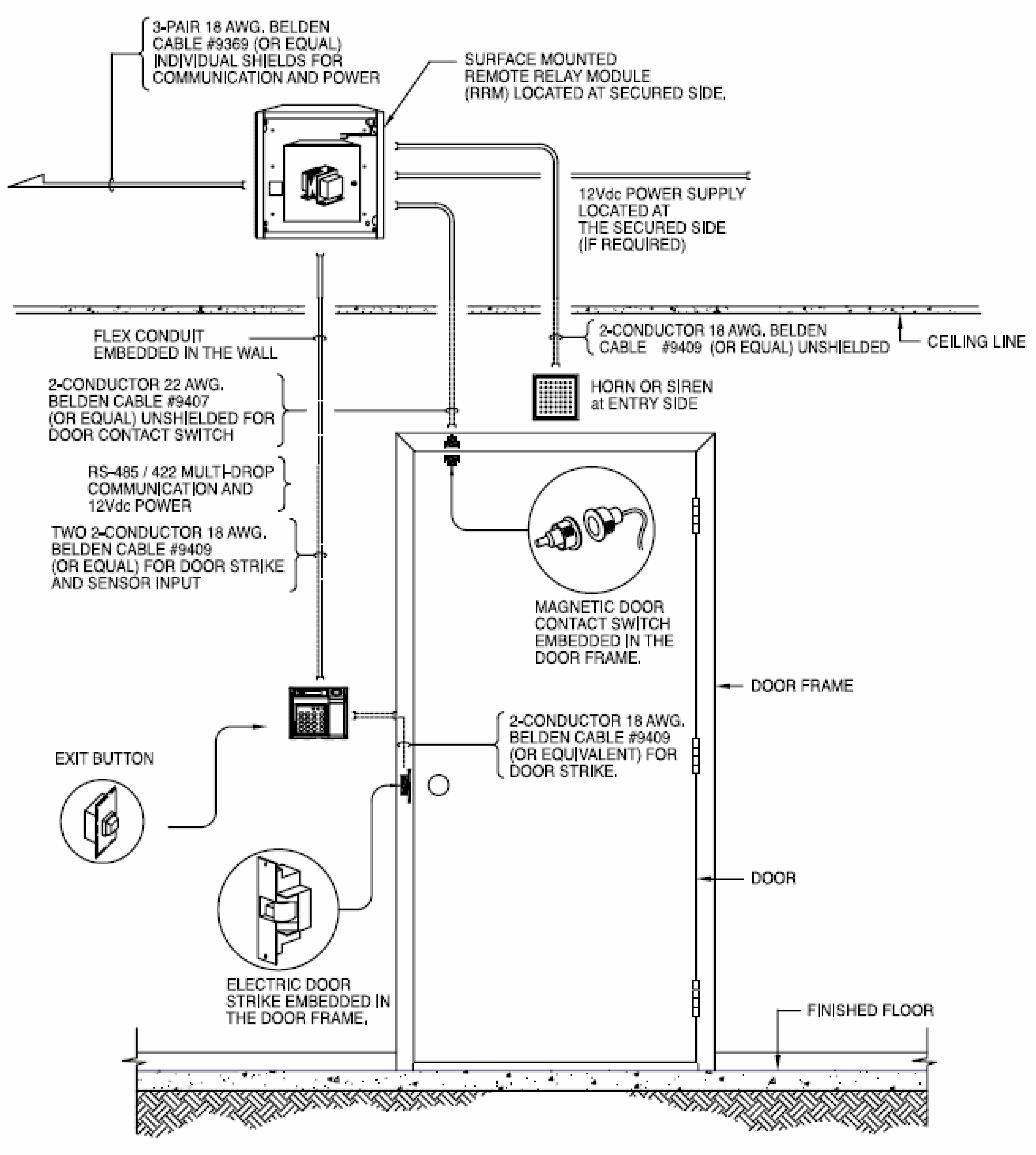
RS232 SERIAL CONNECTION (PC)



12.8 Serial Printer



12.9 Installation Diagram



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