## **ISC-401**



User Manual Version 1.00 2014.01.



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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
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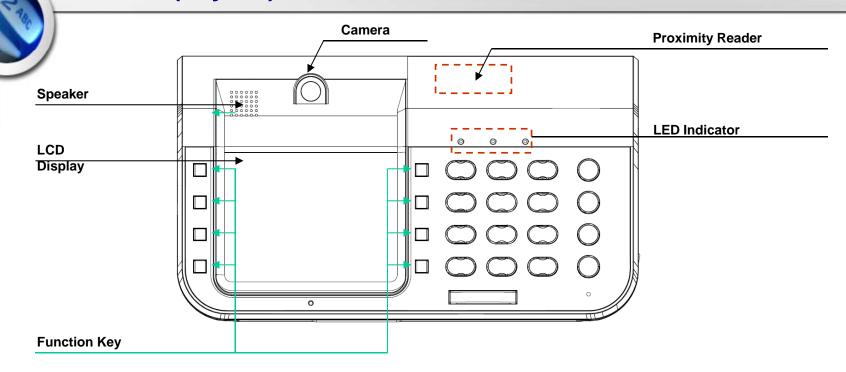


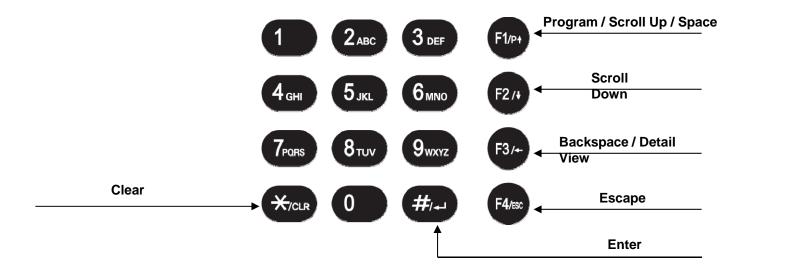
## **Table of Contents**

ISC-401	5
CHAPTER 1	9
CHAPTER 2	14
CHAPTER 3	20



## ISC-401 (Layout)

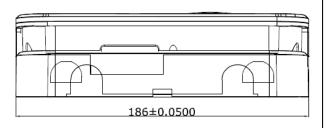


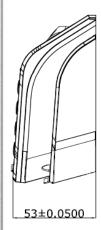


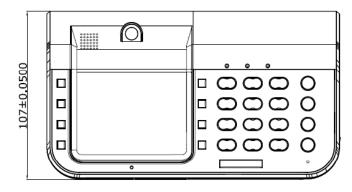


## **ISC-401 (SPECIFICATION)**









### **ISC-401 Specification**

► USER: 131,072

► Log Data : 1,000,000 (Upto 2,000,000)

Log Image : 10,000 Upto 20,000 ► Time Zone : Controller:1024,

Reader Per 1024

► Holiday : 365 ► User Level : 254 ► User Group : 1024

► FAR = 0.00008 %

► FRR = 0.09 %

► CPU:

ARM11 32bit,

ARM 32-bit Cortex<sup>™</sup>-M3 CPU

► POWER: 12V DC 1A

► SIZE :

- H107 X W186 X D53mm

► Temperature : -10 °C ~50 °C

► Humidity : 10%~90%

► RF Card : ~10 cm

► Communication : RS-232 , TCP/IP,

Option RS-422(1.2 Km),

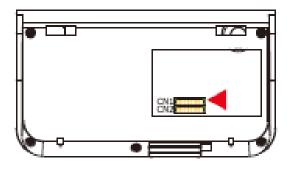
► IN/OUT: 4 In / 2 Out

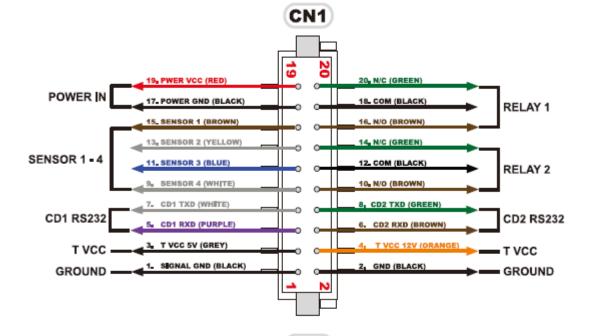
► Material : ABS (Polycarbonate)

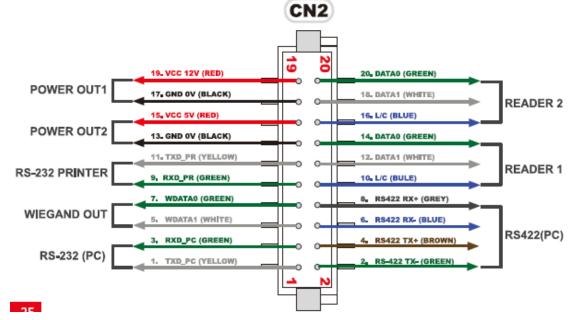


## **Connector Layout**











# C TAN

## **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.

#### If Administrator has been enrolled



Press Pro to enter system mode

**2.** Key in administrator ID followed by the # key Input fingerprint or Card

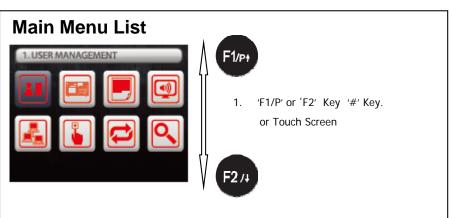


- **3.** Present either finger or card which ever administrator has been enrolled with. For now we will use the fingerprint.
- 4. Now you're into system mode. Press F1 key to scroll up the main menu Press F2 key to scroll down the main menu

#### If no Administrator has been enrolled



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





## CHAPTER 1

## **USER MANAGEMENT**

1. Enroll User	. 1
2. Edit User	1
3. Delete User	12
4. Delete All User	12
5. View User	13





## **User Enroll**

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:



Press F1/P key to enter system mode.
 Press PRO to enter system mode

2. Press '#' Key USER MEMAGEMENT Select.



3. Press F1/P(UP) or F2 Key Add-menu Select or Press LCD Icon



**4. K**ey in user ID from 1 to 16 digits as shown in next figure





**6.** System has an option to enroll 1~4 fingerprint templates per each user. For now we will select number 1~4 key by enrolling 1~4 templates



**Enroll Fingerprint** 



**Enroll Card** 



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

7. 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





#### 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.





## **Edit User**

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.

Reading Card



Press F1/P key to enter system mode.
 Press PRO to enter system mode

2. Press '#' Key USER MEMAGEMENT Select.



3. Press F1/P(UP) or F2 Key Edit-menu Select or Press LCD Icon



**4. K**ey in user ID from 1 to 16 digits as shown in next figure





**6.** System has an option to enroll 1~4 fingerprint templates per each user. For now we will select number 1~4 key by enrolling 1~4 templates





and numbers.

7. 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

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



## **Delete 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.



Press F1/P key to enter system mode.
 Press PRO to enter system mode

2. Press '#' Key USER MEMAGEMENT Select.



3. Press F1/P(UP) or F2 Key Delete-menu Select or Press LCD lcon



- **4. K**ey in user ID from 1 to 16 digits as shown in next figure
- **5.** Key in user ID followed by the # key

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



- Press F1/P key to enter system mode.

  Press PRO to enter system mode
- 2. Press '#' Key USER MEMAGEMENT Select.



3. Press F1/P(UP) or F2 Key Delete All-menu Select or Press LCD Icon



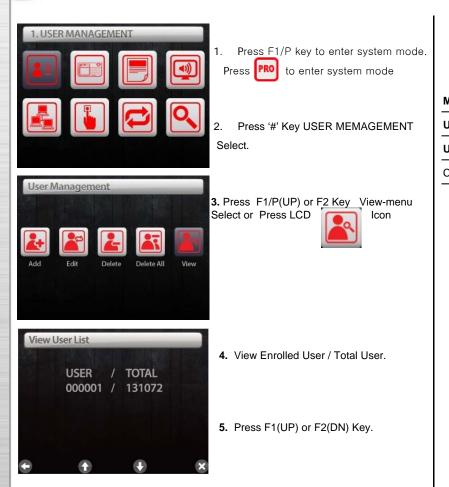
**4. Press 'OK'** or Press the # key to confirm delete all Press any other key to cancel

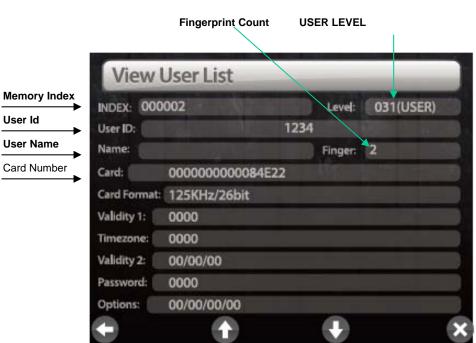


# C C TOO

## **View User**

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.









## **CHAPTER 2**

## **DEVICE SETTING**

Terminal Configuration	1	
Terminal Log	1	
AUDIO/VIDEO	1	1
Network	1	8
INPUT / OUTPUT	_1	9



## **System setup**





Press F1/P key to enter system mode.

Press PRO to enter system mode

. Press '#' Key TERMINAL Select



2. TERMINAL CONFIGURATION

ADDRESS
TIME
SYSTEMMODE
RELOCKTIME
SYSTEMRESET
OPTION
LANGUAGE

3. Press F1/P(UP) or F2 Key or Press Touch LCD Menu Select

#### **ADDRESS**

1. LOCAL ADDRESS: 1~32

2. SYSTEM ADDRESS: 0~65535

#### TIME

System Time Setup

#### **SYSTEM MODE**

Device Access Mode Setup

CARD / FINGER

CARD/ ID&FINGER

ID&CARD&FINGER

ID / CARD/ FINGER

FINGER(ID&FINGER)

**ID&FINGER** 

CARD&FINGER

**ID&FINGER ID&CARD** 

**ID&FINGER CARD&FINGER** 

ID&CARD CARD&FINGER

ID / CARD

ID&CARd

CARD

OPEN

CLOSE

#### **SYSTEM RESET**

#### **RELOCK TIME**

Lock Time Setup

1~99 Sec

**OPTION**: Access Option Setup

ANTIPASS BACK

**KEY SECURE** 

LOCK DOWN

**FUNCTION KEY** 

DAY DISPLAY TYPE

**DURESS** 

**LANGUAGE**: Display Language Setup



## Log





- Press F1/P key to enter system mode.
   Press PRO to enter system mode
- 2. Press '#' Key SYSTEM LOG Select





3. Press F1/P(UP) or F2 Key or Press Touch LCD Menu Select

#### **LOG VIEW**

Event List			_	
Photo ID:	8 ( )		XIVE	176
Save Index:			3 130	1000
Tran Index:		-		
Reader:		120		
Index:	SHIP			
Code:				
Date:				17,50
Time:	18 11 11			
			4 - 3 / 1	
Options:		N = 17   1	10 10 10	1300

**INDEX CHANGE** 

**LOG FORMAT** 

**PHOTO FORMAT** 



## **AUDIO/VIDEO**





I. Press F1/P key to enter system mode.

Press PRO to enter system mode

2. Press '#' Key AUDIO/VIDEO Select



4. AUDIO / VIDEO

CAMETA

PRINTER

TOUCH SCREEN
INFRARED

SERIAL SPEED

SPKVOLLIME
THEMES

Press F1/P(UP) or F2 Key or Press
 Touch LCD Menu Select

#### **CAMETA**

CAMERA ENABLE/DISABLE
EVENT MODE ENABLE/DISABLE
BRIGHTNESS
ANGLE
FRAME RETE
DENIED SAVE

#### **PRINTER**

#### **TOUCH SCREEN**

**TOUCH Calibration** 

#### **INFRARED**

INFRARED ENABLE/DISABLE FINGER MODE DETECT LEVEL

#### **SERIAL-SPEED**

PC PRINTER EXTERNAL 1 EXTERNAL2

#### **SPKVOLUME**

#### **THEMES**



## **Network**





Press F1/P key to enter system mode.
 Press PRO to enter system mode

Press '#' Key NETWORK Select





3. Press F1/P(UP) or F2 Key or Press Touch LCD Menu Select

#### **NET VIEW**

#### **NET 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.

Static/DHCP IP Address Gateway Subnet mask Port

Server IP Address Server Port

#### **NET SPEED**

- 0: Auto-negotiation enable with all capabilities
- 1: Auto-negotiation with 100 BASE-TX FDX/HDX ability
- 2: Auto-negotiation with 10 BASE-T FDX/HDX ability
- 3: REV(0-Auto-negotiation enable with all capabilities)
- 4: Manual selection of 100 BASE-TX FDX
- 5: Manual selection of 100 BASE-TX HDX
- 6: Manual selection of 10 BASE-T FDX
- 7: Manual selection of 10 BASE-T HDX

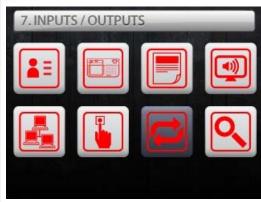
#### **CALL SERVER**

intercom PC server Setup.



### **INPUT / OUTPUT**





- Press F1/P key to enter system mode.
   Press PRO to enter system mode
- Press '#' Key INPUT/OUTPUT Select





3. Press F1/P(UP) or F2 Key or Press Touch LCD Menu Select

#### **SENSOR**

These are the senor inputs found in device control panel that control external devices. There are 4 sensor inputs in device and all of them can be programmed to handle different types of external sensors from the system menu.

#### **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.

#### **ALARM**

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.

#### **CARD TYPE**

- 1: EM Standard 26bit Card
- 2: HID Standard 26bit Card
- 3: HID Full Binary 26bit Card
- 4: HID IDTi 34bit Card
- 5: Mifare 32bit UID Card
- 6: Mifare 34bit iClass
- 7: Mifare 34bit iClass2
- 8: Mifare 32bit UID 2
- 9: Mifare 64bit UID

#### WIEGAND TIME

Wiegand data output time setup

#### **WIGAND TYPE**

- 1: USER ID
- 2: USER CARD
- 3: CARD READER DIRECT OUTPUT



## **CHAPTER 3**

## INSTALL

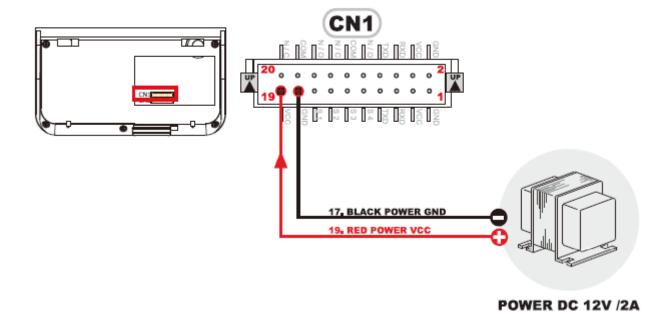
Connector Layout	2
Power Connection	
Sensor Connection	
Relay (Lock) Connection	
RRE Connection	
Card Reader Connection	26
RS-422 Connection	
RS-232 Connection	
Install Diagram	



#### **CONNECTOR LAYOUT** CN1 20 N/C (GREEN) POWER IN 17. POWER GND (BLACK) 18. COM (BLACK) **RELAY 1** 15\_ SENSOR 1 (BROWN) 16\_ N/O (BROWN) 13, SENSOR 2 (YELLOW) 14 N/C (GREEN) SENSOR 1 - 4 11. SENSOR 3 (BLUE) 12. COM (BLACK) RELAY 2 SENSOR 4 (WHITE) 10. N/O (BROWN) CD1 TXD (WHITE) 8, CD2 TXD (GREEN) CD2 RS232 CD1 RS232 CD1 RXD (PURPLE) T VCC 5V (GREY) T VCC T VCC SIGNAL GND (BLACK) 2, GND (BLACK) GROUND GROUND 19 19. VCC 12V (RED) 20. DATAO (GREEN) POWER OUT1 17. GND OV (BLACK) 18. DATA1 (WHITE) **READER 2** 15, VCC 5V (RED) 16. L/C (BLUE) POWER OUT2 13. GND OV (BLACK) 14 DATAO (GREEN) 11. TXD\_PR (YELLOW) 12. DATA1 (WHITE) **READER 1** RS-232 PRINTER 9, RXD\_PR (GREEN) 10<sub>e</sub> L/C (BULE) 7. WDATA0 (GREEN) 8, RS422 RX+ (GREY) WIEGAND OUT 5. WDATA1 (WHITE) 6. RS422 RX- (BLUE) RS422(PC) 3, RXD\_PC (GREEN) 4. RS422 TX+ (BROWN) RS-232 (PC) 1. TXD\_PC (YELLOW) 2. RS-422 TX- (GREEN



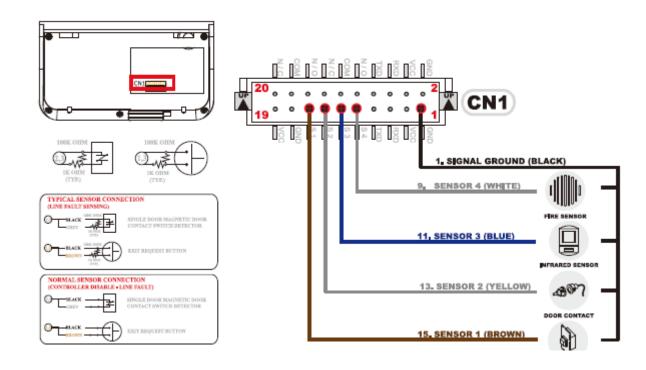
## **POWER CONNECTOR**







## **SENSOR CONNECTOR**

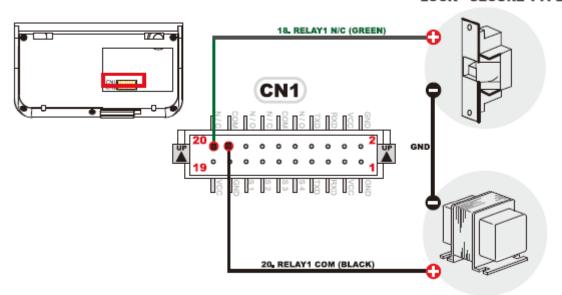




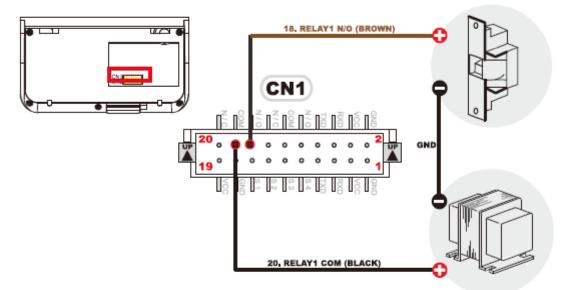


## **RELAY (LOCK) CONNECTOR**

#### **LOCK - SECURE TYPE**



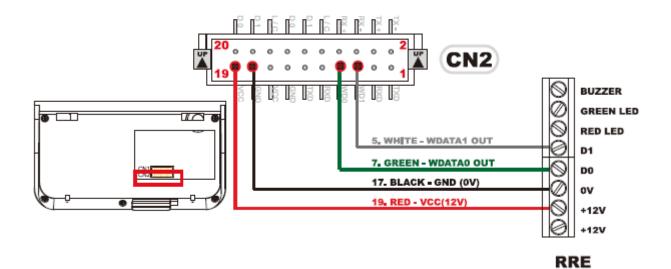
#### POWER DC 12V /2A LOCK - SAFE TYPE







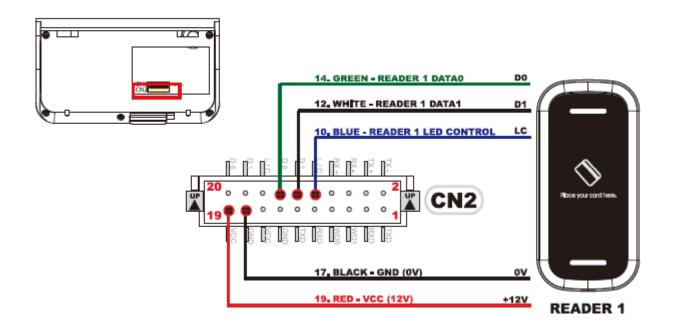
## **RRE CONNECTOR**







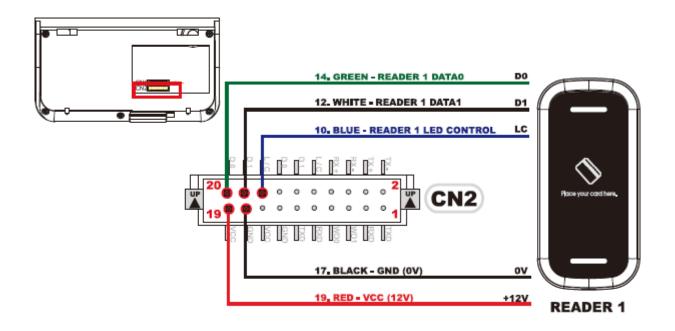
## **Card Reader 1 Connection**







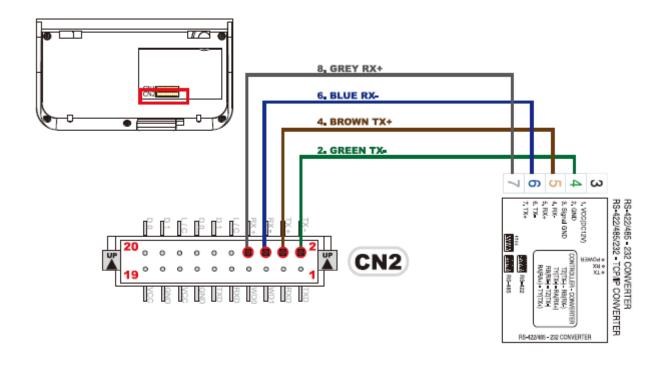
## **Card Reader 2 Connection**







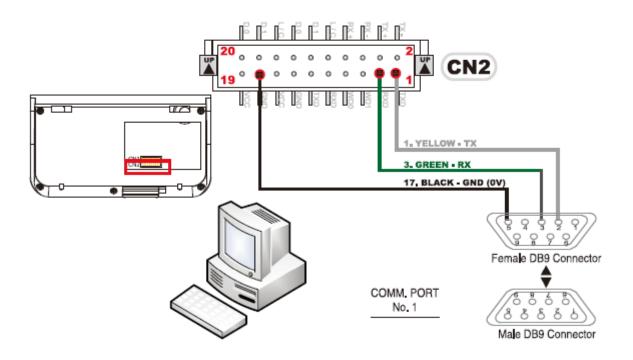
## **RS422 NETWORK DIAGRAM**







## **RS-232 CONNECTOR**







## **INSTALLATION DIAGRAM**

