# Star 100R
# iPASS IP100R


IDTECK

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# 1. Important Safety Instructions

When using your Star 100R / iPASS IP100R, basic safety precautions should always be followed to reduce the risk of fire, electrical shock, and injury to persons.
In addition, the following should also be followed:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. If necessary, use mild soap.
4. Do not use this product near water, such as bath-tub, wash bowl, kitchen sink, laundry tub, in a wet basement, or swimming pool.
5. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your installation site, consult your dealer or local power company.
6. Never push objects of any kind into this product or through the cabinet slots as they may touch voltage points or short out parts that could result in fire or electric shock. Never spill liquid of any kind on the product.
7. To reduce the risk of electric shock, do not disassemble this product by yourself, but take it to qualified service whenever service or repair is required. Opening or removing the covers may expose you to dangerous voltages or other risks. Also, incorrect reassembly can cause electric shock when the unit is subsequently used.
8. Unplug this product from the Direct Current (DC) power source and refer to qualified service personnel under these conditions:
   a. When the power supply cord or plug is damaged or frayed.
   b. If liquid has been spilled on the product.
   c. If the product does not operate normally after following the operating instructions in this manual. Adjust only those controls that are covered by the operating instructions in this manual. Improper adjustment of other controls that are not covered by this manual may damage the unit and will often require extensive work by a qualified technician to restore normal operation.
   d. If the product exhibits a distinct change in performance.

## 2. General

A properly configured Star 100R / iPASS IP100R is an intelligent PIN & Proximity and PINPAD Single Door Controller that combines the convenience of wireless entry with the security of an alarm system. Also, the Star 100R / iPASS IP100R system will give you field proven reliability and cost-effective solution anywhere access controls and high security are required. Each standard unit can store up to 512 users or card IDs. The task of assigning cards and managing a user's database is so simple, user friendly, and can be accomplished in many ways; it could be as simple as presenting each card to the unit or as descriptive as a user's database with an easy to use Graphical User Interface.

The Star 100R / iPASS IP100R can interface and operate with these accessories: Request for EXIT button, Door-Contact sensor, PIR sensor, Fire sensor and other sensors via 5 independent input ports. Also, output ports which include 2 Relays and 2 TTL outputs can be used to control the operation of other accessories such as Electric/Magnetic Door Lock, Alarm, Chime Bell, and Auto-Dialer. Moreover, the status or behaviors of these input and output accessories are configurable to provide the system administrator with complete customized control of the system. Besides the above configurable I/O interfaced behaviors, many of the Star 100R / iPASS IP100R internal behaviors are programmable as well. The internal operating parameters include the number of incorrect access attempts before alarm condition is triggered, tampering protection from mounting removal, and timers. Furthermore, every event or transaction can be captured and time stamped by the Star 100R / iPASS IP100R application software via the provided RS-232 wires.

## 3. Features

- 125KHz Standalone Proximity /PIN Single Door Access Controller
- 100R: PSK modulation / IP100R: ASK [EM] Format
- Basic Time & Attendance Function
- 512 Users including One Master Card
- 1 External Reader Port for Exit: 26bit Wiegand
- Standalone / Network Communication via RS232
- All I/Os and Operation Time Programmable by Keypad
- Independent 5 Inputs and 4 Outputs Including 2 Form-C Relay Outputs
- Keypad Lock by Try-out Error Alarm Function
- Duress Mode Function
- Toggle Mode for Door Opening / Closing
- Lock Control by Door Contact Switch
- Safe (Default) / Secure Mode Available
- Dual Tamper Switches
- Chime Bell Output
- Mode Selection: RF Only / PIN (4~6 digit) Only / RF+ P/W (4 digit) / RF or PIN
- Options:
  4ch Voice Auto-dialer
- Compatible Software: STAR 100R PRO

* Comparison Table

| | |
|---|---|
| 100R | 125KHz PSK modulation |
| IP100R | 125KHz ASK[EM] Format |

## 4. Specification

| Model | | 100R | IP100R |
|---|---|---|---|
| CPU | | Dual 8bit Microprocessor | |
| Memory | Program Memory | 20KByte ROM | |
| | Data Memory | 2KByte EEPROM | |
| User | | 512 Users | |
| Read Range | Passive Type | IDK50 / IMC125: Up to 2 inches (5cm) IDC80 / IDC170: Up to 4 inches (10cm) | IPK50: Up to 2 inches (5cm) IPC170 / IPC180: Up to 4 inches (10cm) |
| | Active Type | IDA150 / IDA200 Compatible | N/A |
| Reading Time (Card) | | 30ms | |
| Power / Current | | DC 12V / Max.200mA | |
| External Reader Port | | 1ea (26bit Wiegand) | |
| Communication | | RS232 | |
| Input Port | | 5 ports (Exit Button, Door Contact, Aux #1, Aux #2, Aux #3) | |
| Output Port | | 2 ports (Form-C Relay Output (COM, NO, NC) / DC12~18V, Rating Max.2A) | |
| | | 1 port (Chime Bell Output / DC5V, Rating Max. 500mA) | |
| | | 1 port (TTL Output / DC5V, Rating Max.20mA) | |
| Keypad | | 12 Key Numeric Keypad with Back Lighting | |
| LED Indicator | | 3 Array LED Indicators (Red, Green and Yellow) | |
| Beeper | | Piezo Buzzer | |
| Operating Temperature | | -35° to +65°C ( -31° to +149°F ) | |
| Operating Humidity | | 10% to 90% relative humidity non-condensing | |
| Color / Material | | Dark Pearl Gray / Polycarbonate | |
| Dimension (W x H x T) | | 87mm x 100mm x 31mm (3.4” x 3.94” x 1.22”) | |
| Weight | | 210g (0.46lbs) | |
| Certification | | UL, FCC, CE, MIC | |

## 5. Front Panel Description

Main Unit of Star 100R / iPASS 100R


## 6. Identifying Supplied Parts

Please unpack and check the contents of the box.


Main Unit
(1ea)

Wall Mount
(1ea)

O-Ring
(5ea)


User's Manual
(1copy)

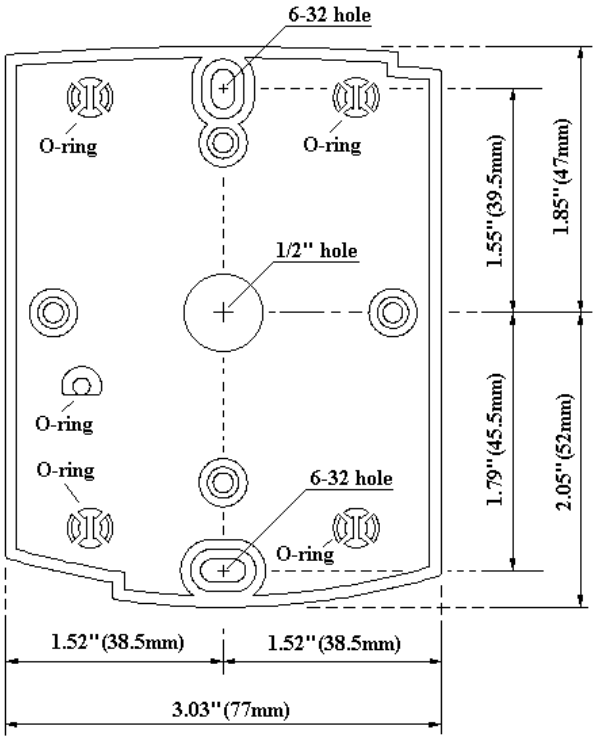
3.5*40 Screw
(4ea)

3.5*12 Screw
(4ea)

Anchor Bolt
(4ea)

## 7. Installation

7-1. Tear off page 38 and use the provided template to drill two 6-32 holes and one 1/2" hole on the proper location of the wall to mount the Wall Mount bracket as shown below.
(If the gang box is already installed on the wall then skip this step.)



7-2. Using 2 screws, install wall mount to the wall.

※CAUTIONS

Before mounting the STAR 100R unit to the Wall Mount bracket, operational testing of the unit should be completed, as the locking pins will lock the unit to the Wall Mount. Removing the unit from the Wall Mount bracket after they have been installed together may cause damages to the bracket and render its effectiveness.

7-3. Insert 5 O-rings to the wall mount as indicated, then route the cable of the main unit through the center hole and push the main unit to wall mount to lock the main unit and make sure that the main unit is locked with wall mount.

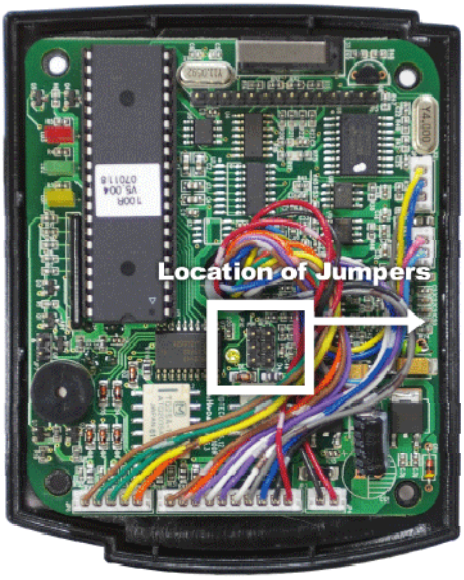
## 8. Wiring Color Table

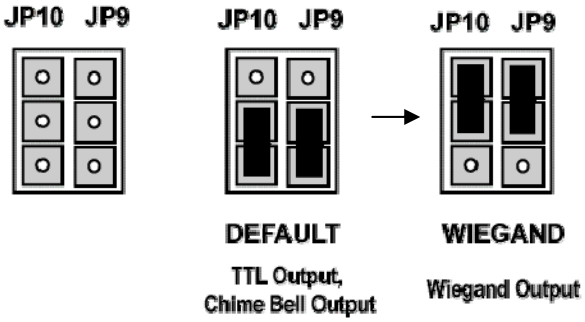
| SIGNAL | COLOR |
|---|---|
| Main Power (+12V) | Red |
| Power Ground (GND) | Black |
| Door Relay Out (COM) | Gray with Red stripe |
| Door Relay Out (NC) | Blue with White stripe |
| Door Relay Out (NO) | White with Red stripe |
| Alarm Relay Out (COM) | White |
| Alarm Relay Out (NC) | Purple with White stripe |
| Alarm Relay Out (NO) | Purple |
| TTL Out | Orange with White stripe |
| Chime Bell Out | Brown with White stripe |
| Wiegand Data 0 In | Pink |
| Wiegand Data 1 In | Cyan |
| Exit Button In | Yellow with Red stripe |
| Door Contact In | Green |
| Aux In 1 | Orange |
| Aux In 2 | Green with White stripe |
| Aux In 3 | Brown |
| RS232 (TX) | Gray |
| RS232 (RX) | Blue |
| RS232 (GND) | Yellow |
| * Please cut out tail connector before installation. | |

## OPTIONAL: Wiegand Output Function

Applicable to: v5.2.0 of the 100R
v2.2.0 of the IP100R

You can configure the 100R to generate output in Wiegand format and use it like a reader.
(The 100R can output data from card reading, but doesn't output data from keypad input.)



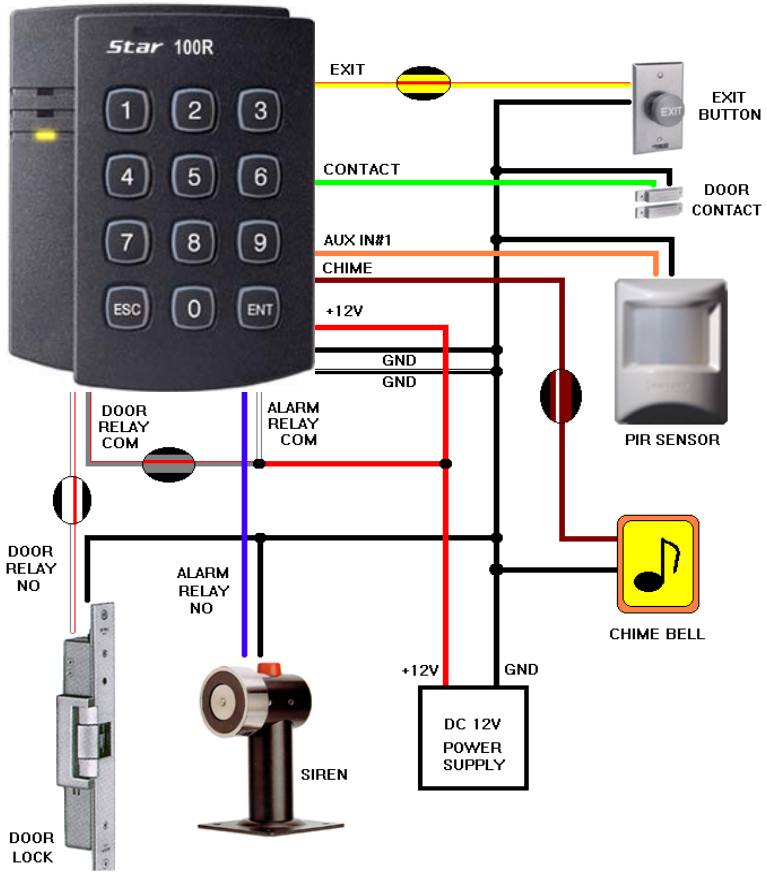

- ✓ JP9, JP10 : Short PIN1 and PIN2 --> Wiegand Output
- ✓ JP9, JP10 : Short PIN2 and PIN3 --> Default(TTL Output, Chime Bell Output)

In order to configure the 100R to output in Wiegand format, you need to set the jumpers as shown above.

Changes when Wiegand Output Mode is applied;
TTL Output(Orange wire with White stripe) -> Wiegand Data0 Output
Chime Bell Output(Brown wire with White stripe) -> Wiegand Data1 Output

When the Wiegand Output function is used, TTL Output wire and Chime Bell Output wire are changed to Wiegand Data 0 Output wire and Wiegand Data 1 Output wire and, therefore, you can't use those functions. In addition, because TTL Output wire is changed to Wiegand Data 0 Output, you can't initialize the 100R using the wires.
(You can use those functions again by setting JP9 and JP10 back to the default state.)

# 9. System Wiring for Typical Application




## 9-1. Power Connection

- Connect (+) wire of DC +12V power to Red wire and Red/White banded wire.
- Connect Power GND (-) wire of DC +12V to Black wire and Black/White banded wire.

## 9-2. Door Lock Connection

### 9-2-1 Connection of POWER FAIL SAFE: Door Lock

- Connect Door RELAY (NC), Blue/White banded wire to DC +12V (be sure that the existing power supply has enough capacity to support this accessory or upgrade to a sufficient one.)
- Connect (+) wire of Door Lock to Door RELAY (COM), Grey/Red banded wire.
- Connect (-) wire of Door Lock to Power GND (-) wire.

### 9-2-2 Connection of POWER FAIL SECURE: Door Lock

- Connect Door RELAY (COM), Grey/Red banded wire to DC +12V (be sure that the existing power supply has enough capacity to support this accessory or upgrade to a sufficient one.)
- Connect (+) wire of Door Lock to Door RELAY (NO), White/Red banded wire.
- Connect (-) wire of Door Lock to Power GND (-) wire.

## 9-3. Alarm Device Connection

- Connect Alarm RELAY (COM), White wire to DC +12V (be sure that the existing power supply has enough capacity to support this accessory or upgrade to a sufficient one.)
- Connect (+) wire of Alarm Device to Alarm RELAY (NO), Purple wire.
- Connect (-) wire of Alarm Device to Power GND (-) wire.

9-4. Exit Button Connection

- Connect one of the wires of Exit Button to Exit Button Input, Yellow/Red banded wire.
- Connect the other wire of Exit Button to Power GND (-) wire.

*(If a normally closed Exit button is used, then see section 12-67 to change the detection scheme from the defaulted setting)*

9-5. Door Contact Sensor Connection

- Connect Door Contact sensor (COM) wire to Door Contact Input, Green wire.
- Connect Door Contact sensor (NO) wire to Power GND (-) wire.

*(If a normally closed Door Contact sensor is used, then see section 12-69 to change the detection scheme from the defaulted setting.)*

9-6. Auxiliary Input Device Connection (Applied to AUX Input #1, #2, #3)

- Connect one wire of the Auxiliary Input Device to the AUX Input wire (Input #1 Orange, Input #2 Green/White banded, Input #3 Brown wire).
- Connect the other wire of Auxiliary Input Device to Power GND (-) wire.

*(If a normally closed input device is used, then see section 12-61,63 & 65 to change the detection schemes from the defaulted settings.)*

9-7. Auto-Dialer Connection (Separate purchase required)

The Auto-dialer function of this unit has not been evaluated by UL.

- Connect the input wire of Auto-Dialer to TTL output, Orange/White banded wire.
- Connect (+) wire of Auto-Dialer to DC +12V (be sure that the existing power supply has enough capacity to support this accessory or upgrade to a sufficient one.)
- Connect (-) wire of Auto-Dialer to Power GND (-) wire.
- Connect Telephone Line plug (RJ-14) to Auto-Dialer.

*(If an active High Auto-Dialer is used, then see section 12-71 to change the TTL output level from the defaulted setting.)*

9-8. Wiegand Input Connection From Another Compatible Wiegand Reader (Separate purchase required)

- Connect (+) wire of Reader to DC +12V (be sure that the existing power supply has enough capacity to support this accessory or upgrade to a sufficient one.)
- Connect (-) wire of Reader to Power GND (-) wire.
- Connect Wiegand output DATA0 wire of the additional Reader to DATA0, Pink wire.
- Connect Wiegand output DATA1 wire of the additional Reader to DATA1, Cyan wire.

9-9. RS-232 Communication Port Connection

9-pin connector (COM Port, female) is required to connect serial communication RS-232 between Main Unit and Personal Computer.

- Connect RS-232-TX, Grey wire of Main Unit to pin number 2 of 9-pin connector.

- Connect RS-232-RX, Blue wire of Main Unit to pin number 3 of 9-pin connector.
- Connect RS-232-GND, Yellow wire of Main Unit to pin number 5 of 9-pin connector.
- Plug in 9-pin connector to COM1 or COM2 Port of Personal Computer.
- Install and run STAR 100R Application Software.

9-10. Chime Bell Connection (Separate purchase required)

- Connect (+) wire of Chime Bell unit to Bell Output, Brown/White wire of Main Unit.
- Connect (-) wire of Chime Bell unit to Power GND (-) wire.

## 10. Initial Setup

The Flash memory of each shipped STAR 100R contains a minimum set of defaulted values, but it does not have any other preprogrammed values or user's data in it, therefore, Initial Setup is required upon the first time the unit is powered-up in order to operate the unit properly.

### 10-1. Registration of RF Cards for RF CARD ONLY MODE

(1) Apply 12VDC to the unit.
All 3 LEDs will be flashing along with a powered-up melody (do mi sol me do..do mi sol do~).

(2) Press [0] [1] [ENT] from the keypad. (RF CARD ONLY MODE )

(3) Present RF Cards as follow to register Configuration Card and User Access Cards.


Configuration Card


User Access Cards

.....


Configuration Card again to end task

※ NOTE: The user may choose to register the 8 digit card numbers via the keypad instead of presenting the cards to the unit; this implies that the user must know the 8 digit representation of each card.

(4) The first card read becomes the Configuration Card and the following RF Cards are registered as User Access Cards. Once all User Access Cards have been registered, present the Configuration Card again to complete the registration. (Please keep the Configuration Card in a secure location for future changes.)

(5) Now, the Main Unit is entered into the normal operation mode with factory defaulted settings.

### 10-2. Registration of RF Cards with PINs for RF CARD + PIN MODE

(1) Apply 12VDC to the unit.
All 3 LEDs will be flashing along with a powered-up melody (do mi sol me do..do mi sol do~).

(2) Press [0] [2] [ENT] from the keypad. (RF CARD + PIN MODE )

(3) Present RF Cards as follow to register Configuration Card and User Access Cards + 4~6 digit

Personal Identification Number (PIN) for each User Access Card.



4~6 digit PIN ENT .....


Configuration Card  User Access Cards + PINs  Configuration Card again to end task

(4) The first card read becomes the Configuration Card and the following RF Cards + PINs are registered as User Access Cards with assigned PINs. Once all User Access Cards and PINs have been registered, present the Configuration Card again to complete the registration. (Please keep the Configuration Card in a secure location for future changes.)

(5) Now, the Main Unit is entered into the normal operation mode with factory defaulted settings.

### 10-3. Registration of PIN ONLY MODE

(1) Apply 12VDC to the unit.
All 3 LEDs will be flashing along with a powered-up melody (do mi sol me do..do mi sol do~).

(2) Press 0 3 ENT from the keypad. (PIN ONLY MODE)

(3) Enter 4~6 digit PIN ENT to register Configuration PIN then 4~6 digit PIN ENT to register for each subsequent User Access PIN at a time and then enter the 4~6 digit PIN ENT (Configuration PIN) to complete the registration.

4~6 digit PIN ENT  4~6 digit PIN ENT  ……..  4~6 digit PIN ENT

Configuration PIN  User Access PIN .Configuration PIN again to complete the registration.

(4) The first 4~6 digit PIN becomes the Configuration PIN and the subsequent 4~6 digit PINs are registered as User Access PINs. Once all User Access PINs have been registered, enter the Configuration PIN again to complete the registration. (Please store the Configuration PIN for future changes.)

(5) Now, the Main Unit is entered into the normal operation mode with factory defaulted settings.

### 10-4. Registration of RF/PIN Combination MODE

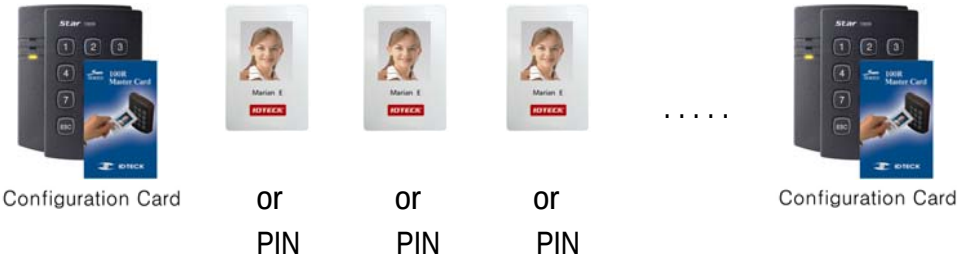
(1) Apply 12V DC to the unit.
All 3 LEDs will be flashing with a power-up melody.

(2) Press 0 5 ENT from the keypad. (RF/PIN Combination Mode)

(3) Present Configuration Card to register Configuration Card to the unit.

(4) Present RF Card or enter 4~6 digit PIN number to register user access card or PIN.

(5) Present Configuration Card to complete the registration




## 10-5. Factory Defaulted Setting Values

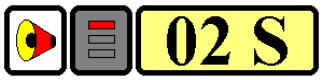
After the Initial Setup, the Main Unit uses the factory defaulted setting values below to execute the normal operation mode. You may want to change these factory setting values or modify your User Access list; refer to section 12 for instructions on how to customize the operation of your unit.

(1) When User Access Card (or PIN) is granted

- Door RELAY activates for 3sec.
- Green LED lights on for 3sec.


(2) When User Access Card (or PIN) is not recognized

- Alarm RELAY activates for 2sec.
- Red LED lights on for 2sec.




(3) Duress Password = 00, Duress Alarm to TTL output port for 03 sec.
(4) QUICK ACCESS MODE = Disable
(5) Chime Bell output = Enable, Chime Bell activation time = 05 sec.
(6) Melody sound = Enable
(7) Keypad lock-out time when Try-Out error detected = 01 min.
(8) Detect all inputs from 'H' to 'L'
(9) Activate TTL output to 'L'
(10) Delay time to activate SECURE MODE = 00 min.
(11) Door Open time-out for Door Contact sensor = 00 sec.
(12) Number of times of Try-out = 05 times
(13) Input keypress time-out time = 20 sec.
(14) Tamper Alarm = Disable, Tamper Alarm output port = 02 (Alarm Relay)
(15) Toggle Mode: Disable
(16) Unlock followed by Door Contact: Disable

# 11. Operation

## 11-1. Normal Operation Mode (Safe Mode)

When the Main Unit operates in normal mode, the yellow LED is flashing every second.

## 11-2. Open the Door

Registered Card (or PIN)

When a registered Card (or PIN) is read, the Door will open for 3 seconds along with the"do-mi-sol-do" melody.

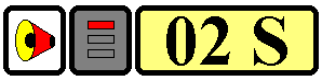

## 11-3. Exit (Open the Door)


Exit Button

To request for exit from the inside, an Exit Button can be used to open the door for the same duration as in 11-2.


## 11-4. Action and Alarm Caused by Unregistered Card (or PIN)

When an unregistered Card (or PIN) is read, thus, access is denied and the Alarm can be activated for 2 seconds along with "sol-do-sol-do" melody.




Unregistered Card (or PIN)

(If you do not want to activate the Alarm in case of unregistered access attempt, then you can change this setting as shown in section 12.)

## 11-5. Secure Mode

The last person to exit can change the operation of the unit from Normal Mode to Secure Mode by entering the Secure Code of 7 7 ENT onto the keypad.

7 7 ENT ⟶ Change to Secure Mode.

The Secure Mode will revert back to the normal mode when a registered card (or PIN) is presented / entered.

## 11-6. DURESS Alarm

In case of Duress, enter the 2 digit Duress Password P W ENT and the door will open as usual; however, the Duress Alarm (TTL Output) will activate an external Auto-Dialer to notify the appropriate personnel. See section 9.7 and 12.29 for more instructions on this feature.

11-7. Chime Bell Operation

The ESC BELL key can be used to activate an external Chime Bell for 5 seconds, the defaulted value.

## 12. Setting Changes

Configuration Card/PIN is required to change existing or defaulted setting values or to manage user's access. First, present the Configuration Card (or enter the Configuration PIN) and enter the 2-digit command code.

RF Only Mode or RF + PIN Mode

Configuration Card

\+ ? ? ENT

Command Code

or

PIN Only Mode

4~6 digit PIN ENT + ? ? ENT

Configuration PIN Command Code

## Summary Table of Commands

| Command | Action/Change setting values |
|---|---|
| 11 | Add User Access Cards (RF CARD ONLY MODE) |
| 12 | Add User Access Cards and PIN (RF CARD + PIN MODE) |
| 13 | Add User Access PIN numbers (PIN ONLY MODE) |
| 14 | Delete User Access Cards (or PIN) |
| 15 | Add User Access Card/PIN (RF/PIN Combination Mode) |
| 21 | Change Door open time when User Access Card (or PIN) is granted |
| 22 | Change Alarm time when User Access Card (or PIN) is denied |
| 23 | Change Alarm time when Try-Out error detected |
| 24 | Change Alarm time when Door-Contact error detected |
| 25 | Change Alarm time when Aux Input #1 detected |
| 26 | Change Alarm time when Aux Input #2 detected |
| 27 | Change Alarm time when Aux Input #3 detected |
| 28 | Change Alarm time when magnet detected |
| 29 | Register 2 digits Duress Alarm password |
| 30 | Change Alarm time when Duress Alarm detected |
| 31 | Test Door open time set by command "21" |
| 32 | Test Alarm time set by command "22" |
| 33 | Test Alarm time set by command "23" |
| 34 | Test Alarm time set by command "24" |
| 35 | Test Alarm time set by command "25" |

| | |
|---|---|
| 36 | Test Alarm time set by command "26" |
| 37 | Test Alarm time set by command "27" |
| 39 | Change Chime Bell activating time |
| 41 | Open door unconditionally |
| 42 | Close door unconditionally |
| 43 | Enable QUICK ACCESS MODE |
| 44 | Disable QUICK ACCESS MODE |
| 45 | Enable Toggle Mode for Lock control |
| 46 | Disable Toggle Mode for Lock control |
| 47 | Enable Unlock followed by Door Contact |
| 48 | Disable Unlock followed by Door Contact |
| 51 | Disable Melody sound (turning off both the melody & keypress audio feedback) |
| 52 | Enable Melody sound |
| 60 | Change keypad lock-out time when Try-Out error detected |
| 61 | Set Aux Input #1 Detection from ‘L’ to ‘H’ |
| 62 | Set Aux Input #1 Detection from ‘H’ to ‘L’ |
| 63 | Set Aux Input #2 Detection from ‘L’ to ‘H’ |
| 64 | Set Aux Input #2 Detection from ‘H’ to ‘L’ |
| 65 | Set Aux Input #3 Detection from ‘L’ to ‘H’ |
| 66 | Set Aux Input #3 Detection from ‘H’ to ‘L’ |
| 67 | Set Exit Button Input Detection from ‘L’ to ‘H’ |
| 68 | Set Exit Button Input Detection from ‘H’ to ‘L’ |
| 69 | Set Door-Contact sensor Input Detection from ‘L’ to ‘H’ |
| 70 | Set Door-Contact sensor Input Detection from ‘H’ to ‘L’ |
| 71 | Activate TTL output to ‘H’ |
| 72 | Activate TTL output to ‘L’ |
| 73 | Enable Keypad Input To Enter ID Number |
| 74 | Disable Keypad Input To Enter ID Number |
| 77 | Enable Chime Bell Output |
| 78 | Disable Chime Bell Output |
| 80 | Set delay time to activate SECURE MODE |
| 81 | Set Door Open time-out for Door-Contact sensor |
| 82 | Set number of times of Try-Out |
| 83 | Set input key press time-out time |
| 84 | Set Tamper Alarm output port |
| 88 | Enable Tamper Alarm |
| 89 | Disable Tamper Alarm |
| 99 | Re-Initialize and erase all setup data |

## 12-11. Add User Access Cards (RF CARD ONLY MODE)


Configuration Card

1 1 ENT
Command



Cards to be registered

…..


Configuration Card

## 12-12. Add User Access Cards (RF CARD + PIN MODE)


Configuration Card

1 2 ENT
Command



Cards to be registered ....

…..


Configuration Card

## 12-13. Add User Access PIN (PIN ONLY MODE)

4~6 digit PIN ENT
Configuration PIN

1 3 ENT
Command

4~6 digit PIN ENT
PINs to be registered

…..

4~6 digit PIN ENT
Configuration PIN

## 12-14.1. Delete User Access Cards (RF CARD ONLY MODE & RF CARD + PIN MODE)


Configuration Card

1 4 ENT
Command



Cards to be deleted

…..


Configuration Card

## 12-14.2. Delete User Access PIN (PIN ONLY MODE)

4~6 digit PIN ENT
Configuration PIN

1 4 ENT
Command

4~6 digit PIN ENT
PINs to be deleted ....

…..

4~6 digit PIN ENT
Configuration PIN

## 12-15. Add User Access Card/PIN (RF/PIN Combination Mode)


Configuration Card

1 5 ENT
Command


Or
PIN


Or
PIN

……

…….


Configuration Card

<TABLE 1> SETTINGS FOR COMMAND

| Symbol | Setting Values | Examples/Remarks |
|---|---|---|
| Output Mode (OM) | (You must add value ① and ②)<br><br>Setting value for activating time<br>① Activate Mode — Value<br>Activate only in Secure Mode : ***00***<br>Activate in Safe & Secure Mode : ***50***<br><br>Setting Value for activating Output Port<br>② Activate Output Port — Value<br>Activate only Door Relay : ***01***<br>Activate only Alarm Relay : ***02***<br>Activate only TTL Output : ***04***<br>Activate Door Relay & TTL : ***05***<br>Activate Alarm Relay & TTL : ***06*** | EX1)Activate Door Relay<br>In Safe & Secure Mode<br>① Safe & Secure Mode ***50***<br>② Door Relay ***01***<br>OM = ***51***<br><br>EX2)Activate Alarm Relay<br>& TTL only in Secure mode<br>① Secure Mode ***00***<br>② Alarm Relay & TTL ***06***<br>OM = ***06*** |
| tt | tt is the activating time value (seconds) from 01sec. to 99sec. | tt value 00sec. means no operation. |
| PW | PW is the 2 digits Password for Duress Alarm. | Do not use '77' for PW as it is used for Secure Mode |
| mm | mm is activating time value (minutes) from 01min. to 99min. | mm value 00min. means no operation. |

## 12-21. Change Door Open Time When User Access Card (or PIN) Is Granted

(tt=00~99 sec., Defaulted Door Open time = 03 sec.)

Configuration Card /Configuration PIN

2 1 ENT — Command

t t ENT — Door open time

t t ENT — TTL time

## 12-22. Change Alarm Time When User Access Card (or PIN) Is Denied

(Refer to Table 1 for OM, tt=00~99 sec., Defaulted Alarm time = 02 sec.)

Configuration Card /Configuration PIN

2 2 ENT — Command

O M ENT — Output Mode

t t ENT — Door time

t t ENT — Alarm Time

t t ENT — TTL time

## 12-23. Change Alarm Time When Try-Out Error Detected

(Refer to Table 1 for OM, tt=00~99 sec., Defaulted Alarm time = 10 sec.)

2 3 ENT | O M ENT | t t ENT | t t ENT | t t ENT

Configuration Card /Configuration PIN | Command | Output Mode | Door time | Alarm Time | TTL time

## 12-24. Change Alarm Time When Door Contact Error Detected

(Refer to Table 1 for OM, tt=00~99 sec.)
Door Open Time-out setting is required for activating, refer to 12.81.

2 4 ENT | O M ENT | t t ENT | t t ENT | t t ENT

Configuration Card /Configuration PIN | Command | Output Mode | Door time | Alarm Time | TTL time

## 12-25. Change Alarm Time When AUX Input #1 Detected

## 12-26. Change Alarm Time When AUX Input #2 Detected

## 12-27. Change Alarm Time When AUX Input #3 Detected

(Refer to Table 1 for OM, tt=00~99 sec.)

2 5 ENT
2 6 ENT
2 7 ENT

O M ENT | t t ENT | t t ENT | t t ENT

Configuration Card /Configuration PIN | Command | Output Mode | Door time | Alarm Time | TTL time

## 12-28. Change Alarm Time When Magnet Detected

(Refer to Table 1 for OM, tt=00~99 sec.)

2 8 ENT | O M ENT | t t ENT | t t ENT | t t ENT

Configuration Card /Configuration PIN | Command | Output Mode | Door time | Alarm Time | TTL time

## 12-29. Register 2 Digit Duress Alarm Password

(PW=00~99, Defaulted PW= 00, Do not use 7 7 ENT )

2 9 ENT | P W ENT

Configuration Card /Configuration PIN | Command | Password

Note: '00' is registered as defaulted Password.

## 12-30. Change Alarm Time When Duress Alarm Detected

(tt=00~99 sec., Defaulted TTL time= 03 sec.)

Configuration Card /Configuration PIN

3 0 ENT — Command

t t ENT — TTL time

## 12-31. Test Door Open Time Set By Command "21"

## 12-32. Test Alarm Time Set By Command "22"

## 12-33. Test Alarm Time Set By Command "23"

## 12-34. Test Alarm Time Set By Command "24"

## 12-35. Test Alarm Time Set By Command "25"

## 12-36. Test Alarm Time Set By Command "26"

## 12-37. Test Alarm Time Set By Command "27"

Outputs set by command will be tested.

Configuration Card /Configuration PIN

3 1 ENT ~ 3 7 ENT — Command

## 12-39. Change Chime Bell Activating Time

(tt=00~99 sec., Defaulted Chime Bell time= 05 sec.)

Configuration Card /Configuration PIN

3 0 ENT — Command

t t ENT — Chime Bell time

## 12-41. Open Door Unconditional

Configuration Card /Configuration PIN

4 1 ENT

## 12-42. Close Door Unconditional

Configuration Card /Configuration PIN

4 2 ENT

## 12-43. Enable QUICK ACCESS MODE

When QUICK ACCESS MODE is enabled, Door will open simply by press ENT key.

Configuration Card /Configuration PIN

4 3 ENT

## 12-44. Disable QUICK ACCESS MODE

Configuration Card /Configuration PIN [4] [4] [ENT] (Defaulted setting=Disable)

## 12-45. Enable Toggle Mode for Lock Control


Configuration Card

[4] [5] [ENT]

If you set Enable Toggle Mode, Door will be toggled open and close function when the registered card or PIN entered. You may use this function for Arm/Disarm for buglar alarm system.

## 12-46. Disable Toggle Mode for Lock Control


Configuration Card

[4] [6] [ENT]

## 12-47. Enable Lock followed by Door Contact


Configuration Card

[4] [7] [ENT]

If you set Enable Lock followed by Door Contact, Door only be locked followed by Door Contact so the door will remain open until the door is completely closed.

## 12-48. Disable Lock followed by Door Contact


Configuration Card

[4] [8] [ENT]

## 12-51. Disable Melody Sound

Configuration Card /Configuration PIN [5] [1] [ENT]

## 12-52. Enable Melody Sound

Configuration Card /Configuration PIN [5] [2] [ENT] (Defaulted setting=Enable)

## 12-60. Change Keypad Lock-out Time When Try-Out Error Detected

(mm=00~99 min., Defaulted Keypad Lock-out time= 01 min.)

| Configuration Card /Configuration PIN | Command | Keypad Lock-out time |
|---|---|---|
| | 6 0 ENT | m m ENT |

## 12-61. Set AUX Input #1 Detection from 'L' to 'H'

AUX#1 input is detected on the raising edge of AUX#1 input

Configuration Card /Configuration PIN → 6 1 ENT

## 12-62. Set AUX Input #1 Detection from 'H' to 'L'

AUX#1 input is detected on the falling edge of AUX#1 input (Defaulted setting)

Configuration Card /Configuration PIN → 6 2 ENT

## 12-63. Set AUX#2 Input Detection from 'L' to 'H'

AUX#2 input is detected on the raising edge of AUX#2 input

Configuration Card /Configuration PIN → 6 3 ENT

## 12-64. Set AUX#2 Input Detection from 'H' to 'L'

AUX#2 input is detected on the falling edge of AUX#2 input (Defaulted setting)

Configuration Card /Configuration PIN → 6 4 ENT

## 12-65. Set AUX#3 Input Detection from 'L' to 'H'

AUX#3 input is detected on the raising edge of AUX#3 input

Configuration Card /Configuration PIN → 6 5 ENT

## 12-66. Set AUX#3 Input Detection from 'H' to 'L'

AUX#3 input is detected on the falling edge of AUX#3 input (Defaulted setting)

Configuration Card /Configuration PIN → 6 6 ENT

## 12-67. Set Exit Button Input Detection from 'L' to 'H'

Exit Button input is detected on the raising edge of Exit Button input

Configuration Card /Configuration PIN → 6 7 ENT

## 12-68. Set Exit Button Input Detection from 'H' to 'L'

Exit Button input is detected on the falling edge of Exit Button input (Defaulted setting)

Configuration Card /Configuration PIN → 6 8 ENT

## 12-69. Set Door Contact Sensor Input Detection from 'L' to 'H'

Door Contact input is detected on the raising edge of Door Contact input

Configuration Card /Configuration PIN → 6 9 ENT

## 12-70. Set Door Contact Sensor Input Detection from 'H' to 'L'

Door Contact input is detected on the falling edge of Door Contact input (Defaulted setting)

Configuration Card /Configuration PIN → 7 0 ENT

## 12-71. Activate TTL Output to 'H'

TTL output changes the state from logic '0' to logic '1' when it activates.

Configuration Card /Configuration PIN → 7 1 ENT

## 12-72. Activate TTL Output to 'L'

TTL output changes the state from logic '1' to logic '0' when it activates. (Defaulted setting)

Configuration Card /Configuration PIN → 7 2 ENT

## 12-73. Enable Keypad Input To Enter ID Number

Keypad input is enabled to enter the ID numbers through keypads.

Configuration Card /Configuration PIN → 7 3 ENT

## 12-74. Disable Keypad Input To Enter ID Number

Keypad input is disabled to enter the ID numbers through keypads. (Defaulted setting)

Configuration Card /Configuration PIN → 7 4 ENT

## 12-77. Enable Chime Bell Output

Configuration Card /Configuration PIN → 7 7 ENT (Defaulted setting=Enable)

## 12-78. Disable Chime Bell Output

Configuration Card /Configuration PIN → 7 8 ENT

## 12-80. Set Delay Time to Activate SECURE MODE

(mm=00~99 min., Defaulted Delay time= 00 min.)

Configuration Card /Configuration PIN] → 8 0 ENT (Command) → m m ENT (Delay time)

## 12-81. Set Door Open Time-out for Door Contact Sensor

(tt=00~99 sec., Defaulted value = 00 sec. means no detect Door Contact Sensor, refer to 12.24 for Alarm time settings)

| Configuration Card /Configuration PIN | Command | Door Open time-out |
|---|---|---|
| | 8 1 ENT | t t ENT |

## 12-82. Set Number of Times of Try-Out

(NN=00~99 times, Defaulted Try-out numbers= 05 times)

| Configuration Card /Configuration PIN | Command | Try-out numbers |
|---|---|---|
| | 8 2 ENT | N N ENT |

## 12-83. Set Input Keypress Time-out Time

(tt=10~99 sec., Defaulted Keypress time-out= 20 sec.,

Minimum tt = 10 sec.)

| Configuration Card /Configuration PIN | Command | Keypress time-out time |
|---|---|---|
| | 8 3 ENT | t t ENT |

## 12-84. Set Tamper Alarm Output Port

(Refer to Table 1 for OM, Defaulted Output port= 02 Alarm Relay)

| Configuration Card /Configuration PIN | Command | Alarm Output Port |
|---|---|---|
| | 8 4 ENT | O M ENT |

## 12-88. Enable Tamper Alarm

To comply with UL 294, the Standard for Access Control System Units, the Tamper Alarm must be enabled.

Configuration Card /Configuration PIN: 8 8 ENT

## 12-89. Disable Tamper Alarm

Configuration Card /Configuration PIN: 8 9 ENT (Defaulted setting)

## 12-99. Re-Initialize and Erase All Setup Data

Please use this command when you really want to erase all data and start the unit from the beginning.

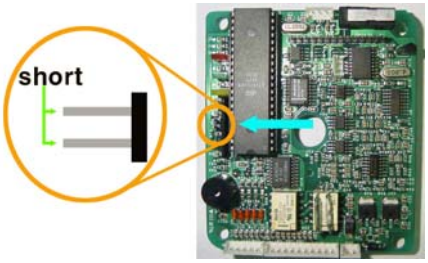
Configuration Card /Configuration PIN: 9 9 ENT

# 13. Initialization

When you lost the Configuration Card or forgot the Master PIN number, you may need to re-initialize the unit for new setup. There is a hard-wired Initialize function on the unit.

※ WARNING: You may lose all setup data after execute Initialize.

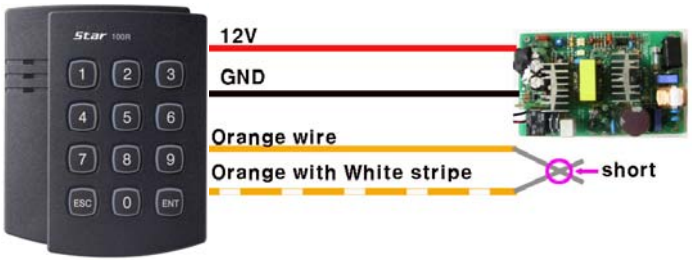
## 13-1. Hardware Initialization (When the master card or ID is lost)



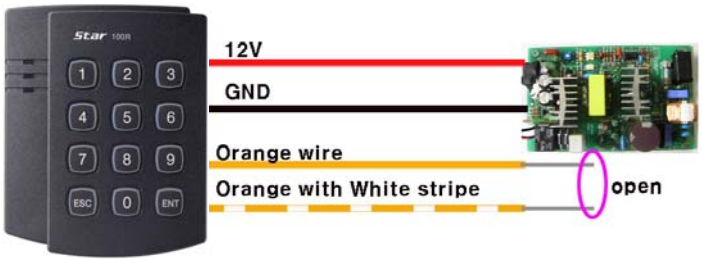

1) Open the top case taking out four bolts on the back.
2) As the left picture, make two jumpers short in state of being on power
3) 3-color LED blinking with beep sound indicates success of initialization

## 13-2. Wire Initialization

(When the master card or ID is lost, 100R: Over V5.0.0 / IP100R: Over V2.0.0)




1) Main power off.
2) Connect the orange and orange with white stripe wire together and power on.
3) 3 color LED blinking with beep sound indicates the success of initialization.




100R: Over V5.0.4 / IP100R: Over V2.0.2

4) Disconnect those two wires and wire them as shown above(normal connection diagram).

100R: V5.0.0 ~ V5.0.3 / IP100R: V2.0.0 ~ V2.0.1

4) Main power off again.
5) Disconnect orange wire and orange with white stripe wire as shown above (normal connection diagram) and power on.

# 14. FCC Registration Information

## FCC REQUIREMENTS PART 15

Caution: Any changes or modifications in construction of this device which are not expressly approved by the manufacturer for compliance could void the user's authority to operate the equipment.

NOTE: 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 interface, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to this equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the radio or television off and on, the user is encouraged to try to correct interference by one or more of the following measures.

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on another circuit.
4. Consult the dealer or an experienced radio/TV technician for help.

# 15. Troubleshooting

If a problem occurs during the use of this product, do not attempt to disassemble the product by yourself.
Please check the following suggestions. If your problem still persists, contact our customer service center.

[Operation]

● Problem

When power is first supplied, 3 LEDs of 100R blinks only and an RF card doesn't recognize.

● Cause

▶ System initialization Status (Unregistered Master Card (or PIN))

▶ System malfunction/data damaged or lost due to an external noise or a short circuit.

▶ Internal circuit element damaged or malfunctioning

● Solution

▶ Make sure that installation and operation are normal.

☞ When installing the 100R first or When finishing system initialization.
Because system is the status of initialization, register mode selection, master card (or PIN) and user.

1. 100R Mode Selection: Mode Number + ENT

| | |
|---|---|
| RF Only | 01 + ENT |
| RF + P/W | 02 + ENT |
| PIN Only | 03 + ENT |
| RF or PIN | 05 + ENT |

2. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
3. By modes, enter the master card, PIN and password.
4. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).

Caution — See "Initial Setting[#2)]" to register master or user.

☞ When problem occurs while 100R operates normally.
It is caused by system malfunctions.
1. Turn on the 100R when it's off. (OFF ➔ ON).

● If this does not solve the problem, initialize the product[#1)].

Caution — Upon initialization, all data default value will be restored.

● If the problem still persists, contact our customer service center.

[#1)] System Initialization: See page 24 of this manual.
[#2)] Initial Setting: See page 10 of this manual.

● Problem

The 100R operates suddenly on general mode during setting or registering a user on mode selection.

● Cause

▶ Over standby time on mode selection

● Solution

▶ If not entering a key or a card within 20 sec. on mode selection, the product operates on general mode automatically.

[Registering or Deletion]

● Problem

User Card or PIN cannot be registered additionally.

● Cause

▶ An error in using a product or in system settings

▶ Over permissible register person

● Solution

▶ Make sure that installation and operation are normal.

☞ When installing the 100R first or When finishing system initialization[#1)].

Because system is the status of initialization, register mode selection, master card (or PIN) and user.

1. 100R Mode Selection: Mode Number + ENT

| | |
|---|---|
| RF Only | 01 + ENT |
| RF + P/W | 02 + ENT |
| PIN Only | 03 + ENT |
| RF or PIN | 05 + ENT |

2. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
3. By modes, enter the master card, PIN and password.
4. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).

Caution — See “Initial Setting[#2)]” to register master or user.

☞ When registering a user card additionally while using a product.

Register a user card only because master card is registered.

1. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
2. By modes, enter “Mode Number + ENT” to add user access cards.

| | |
|---|---|
| RF Only | 11 + ENT |
| RF + P/W | 12 + ENT |
| PIN Only | 13 + ENT |
| RF or PIN | 15 + ENT |

3. By modes, enter a user card, PIN and password.
4. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).

Caution — See “Initial Setting[#2)]” to register master or user.

● If the problem still persists, contact our customer service center.

[#1)] System Initialization: See page 24 of this manual.
[#2)] Initial Setting: See page 10 of this manual.

● Problem

User card or PIN cannot be deleted.

● Cause

▶ An error in using a product or in system settings

▶ System malfunction/data damaged or lost due to an external noise or a short circuit.

● Solution

▶ Make sure that installation and operation are normal.

☞ When the product operates normally

- Having a master card or PIN

1. Having a user card that wish to delete
   a. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
   b. Enter “mode 14 + ENT” to delete user access cards.
   c. Enter a user card to delete. If there have enough user cards that wish to delete, enter them in order continuously.
   d. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
2. Loosing a user card that wish to delete (But knowing PIN of user card)
   a. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
   b. Enter “mode 73 + ENT” to “Enable Keypad Input To Enter ID Number”.
   c. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
   d. Enter “4 + ENT” to delete user access cards.
   e. Enter “PIN + ENT”. If there have enough user cards that wish to delete, enter them in order continuously.
   f. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).

Caution — See “Setting Changes[#3)]” to delete master or user.

- Loosing a master card or PIN

1. When loosing a master card, this cannot register/delete a user and use setting changes.
2. Initialize the product[#1)].

Caution — See “Initial Setting[#2)]” to register master or user.

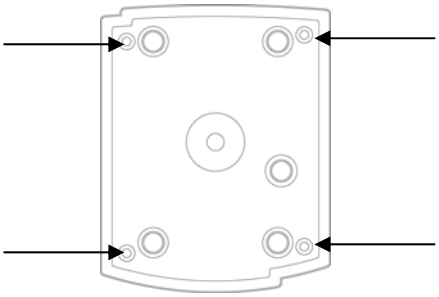
Caution — Upon initialization, all data default value will be restored.

● If the problem still persists, contact our customer service center.

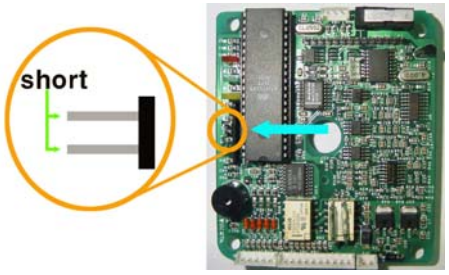
[System Initialization]

[#1)] System Initialization: See page 24 of this manual.
[#2)] Initial Setting: See page 10 of this manual.
[#3)] Setting Changes: See page 14 of this manual.

- Problem
  Registering/deleting a card and setting change cannot be used because of loosing a master card or PIN.
- Cause
  ▶ A user carelessness
- Solution
  ▶ When loosing a master card or PIN, if you change product's settings, you should initialize the product.
  ☞ In system initialization, master, user and system settings are changed by initials.
  ☞ System Initialization by product's versions
  - 100R V5.0.0 under or IP100R V2.0.0 under
  1. After power is off, separate product from wall.
  2. Separate enclosure slicing four screws off the rear of product.



  3. Turn on product as step 2 stands.
     For initializing, connect jumper switches which are located by LEDs bottom of PCB.




  4. Make sure of system initialization.
     At this time, 3 LEDs should be blinked simultaneously.
  5. After power is off, assemble the rear of product fixing four screws.
     Finishing assembly, fix the product all right again on wall.

  - 100R V5.0.0 over or IP100R V2.0.0 over
  1. After power is off, separate product from wall.
  2. Connect orange wire to orange with white stripe wire.
  3. After power is on, make sure of system initialization[#1)].
     At this time, bell grows in sound and LEDs blink.
  4. After slicing two short wires off the product, make off the power.
  5. Use it installing the product all right again.

Caution — See "System Initialization[#1)]" to register master or user.

[#1)] System Initialization: See page 24 of this Manual.

Caution

Make sure to consult a technician before separating or initializing a product.

● If the problem still persists, contact our customer service center.

[Communication]

● Problem

Although the 100R connects with PC, communication was not at all.

● Cause

▶ Setup malfunction of communication environment

▶ Connection malfunction of communication cable

▶ System malfunction/data damaged or lost due to an external noise or a short circuit.

● Solution

▶ Make sure that communication environment is set and cables are connected.

☞ Make sure of set up between controller and PC.

1. Make sure that each COM Port is same. COM Port is connected with PC and its settings should be identically set on application software.
2. Baud rate is fixed by 9600bps. Make sure that communication environment of application
software is set up as shown below.

| Item | Setting |
|---|---|
| Parity bit | None |
| Data bit | 8 bits |
| Stop bit | 1 bit |

☞ Make sure of connecting communication cables.

1. Make sure that connecting communication cables between the 100R and the PC.
2. Make sure of cable's maximum distance.
   - RS232: Max.15m

Caution

The max transmission range for each communication type is greatly affected by the communication environment. Eliminate any electrical noise around the communication cable or disconnect it from other cables.

● If the problem still persists, contact our customer service center.

[Keypad]

● Problem

An RF card works properly but the 100R will not recognize the RF card number when it is entered in the keypad.

● Cause

▶ An error in system settings

▶ Connection malfunction of communication cable

▶ System malfunction/data damaged or lost due to an external noise or a short circuit.

● Solution

▶ Check if any buzzer goes off when the keypad is pressed.

☞ If the buzzer goes off:

1. Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
2. Enter “73 + ENT” to “Enable Keypad Input To Enter ID Number”.

> Caution — See “Setting Changes[#4)]” to “Enable / Disable Keypad Input To Enter ID Number”.

☞ If the buzzer does not go off:

1. After going on definite time, buzzer makes a sound again.
   a. If entering unregistered ID 5 times continuously, entering a keypad is interrupted for 1 min.
   b. “Set Number of Times of Try-Out” is below.
      - Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
      - Enter “82 + ENT” to “Set Number of Times of Try-Out”.
      - Enter “2 digit of Try-Out Times + ENT”.
        e.g. 10 + ENT (10 ➔ Set number of try-out times when unregistered ID)

> Caution — See “Setting Changes[#4)]” to “Set Number of Try-Out”.

   c. “Change Keypad Lock-out Time When Try-Out Error Detected” is below.
      - Enter the master card (or PIN: 4 to 6digit (mode 03 or 05) + ENT).
      - Enter “60 + ENT” to “Change”.
      - Enter “2 digit of Try-Out Times + ENT”.
        e.g. 10 + ENT (10 ➔ Interrupt entering a keypad for 10 min.)
2. Although it goes on definite time, buzzer doesn’t go off continuously.
   Initialize the product[#1)].

> Caution — Upon initialization, all data default value will be restored.

● If the problem still persists, contact our customer service center.

[External Device]

● Problem

An exit button will not work.

● Cause

▶ An error in connection between the exit button and the 100R

▶ An exit button error

▶ Internal circuit element damaged or malfunctioning

● Solution

▶ Make sure of connection between the exit button and the 100R and of operation of exit button.

☞ Check the connection between the exit button and the 100R.

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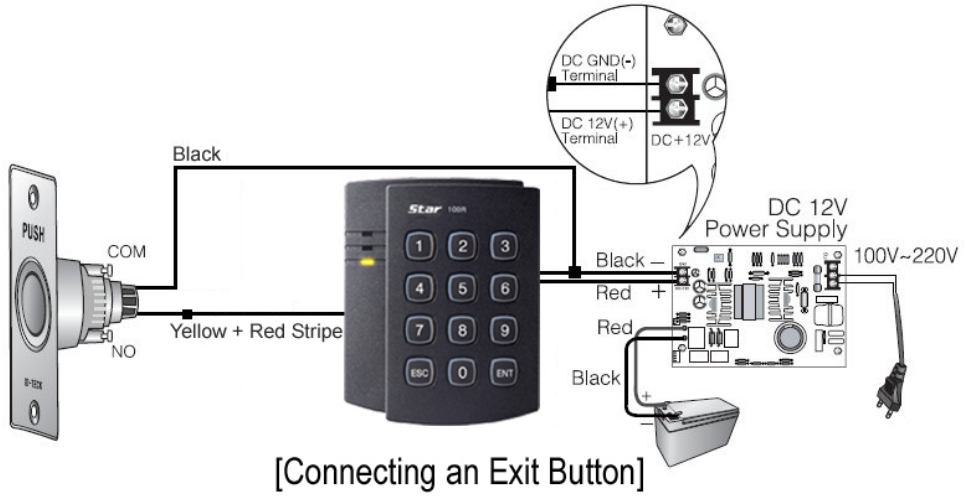
[#1)] System Initialization: See page 24 of this Manual.
[#2)] Initial Setting: See page 10 of this Manual.
[#3)] Setting Change: See page 14 of this Manual.




[Connecting an Exit Button]

**Caution** Make sure to use a NO (Normal Open)-type exit button.

☞ Check the exit button operation.

1. Check the condition of the connection cable (a short circuit or cut) between and the 100R.
2. Connect two wires from the exit button.
   - If the FACE007 operates when the exit button is pressed.
     Replace the exit button.
   - If the FACE007 does not respond.
     Initialize the product[#1)].

**Caution** Upon initialization, all data default value will be restored.

**Caution** See "Installation[#5)]" to connect the exit button.

● If the problem still persists, contact our customer service center.

● Problem

Your RF card is successfully recognized by an exit reader, but the RF card data is not transferred to a computer or other data is transferred.

● Cause

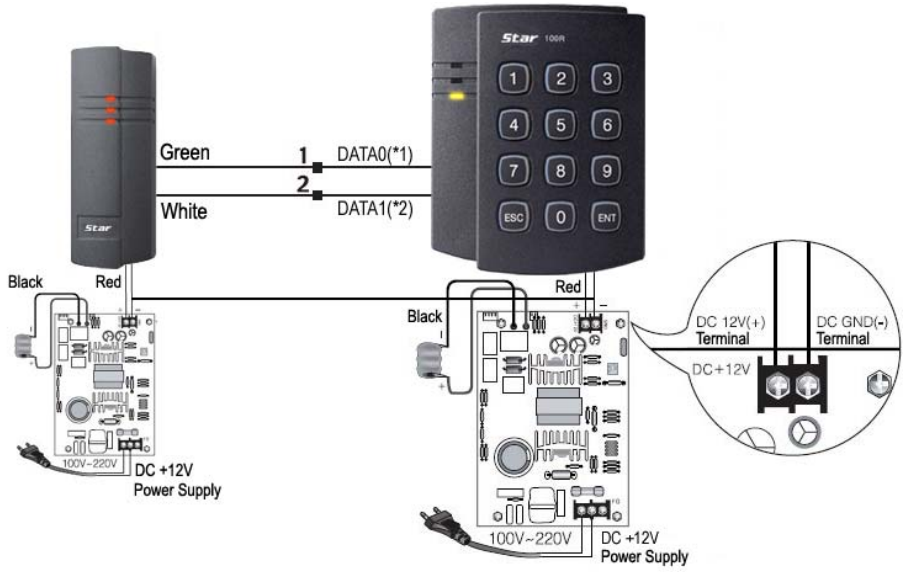
▶ A connectivity error between the exit reader and the 100R
▶ A communication error between the exit reader and the 100R
▶ An exit reader error
▶ System malfunction/data damaged or lost due to an external noise or a short circuit

[#1)] System Initialization: See page 24 of this manual.
[#2)] Initial Setting: See page 10 of this manual.
[#3)] Setting Changes: See page 14 of this manual.
[#5)] Installation: See page 6 of this manual.

● Solution

▶ Make sure of connection between the exit button and the 100R and of operation of exit reader.

☞ Check the connection between the exit button and the 100R.




[Connecting a External Reader]

☞ Check the exit reader operation.

1. Check the condition of the connection cable (a short circuit or cut) between the exit reader
   and the 100R.
2. Check if any noise occurs in the communication cable between the exit reader and the
   100R.

| Caution | When using a measurement device such as an oscilloscope or multimeter, make sure to consult with technician. |
|---|---|

- Check the exit reader output by checking the Wiegand communication cable with a measuring instrument.

| Note | Check the Wiegand output by consulting the Exit Reader's Manual. If the Wiegand is not normal, replace the exit reader. |
|---|---|

- Check if any noise comes from the Wiegand communication cable with a measuring instrument.
  If a noise exists in the Wiegand communication cable, enhance the GND signal by using the shield wire and a spare wire of the cable as GND.

| Recommendation | : Do not try to extend the max transmission range for a Wiegand communication cable or stabilize signals by using a repeater. |
|---|---|

Caution 2

See “Installation[#5)]” to connect the exit reader.

● If the problem still persists, contact our customer service center.

● Problem

A door lock will not work.

● Cause

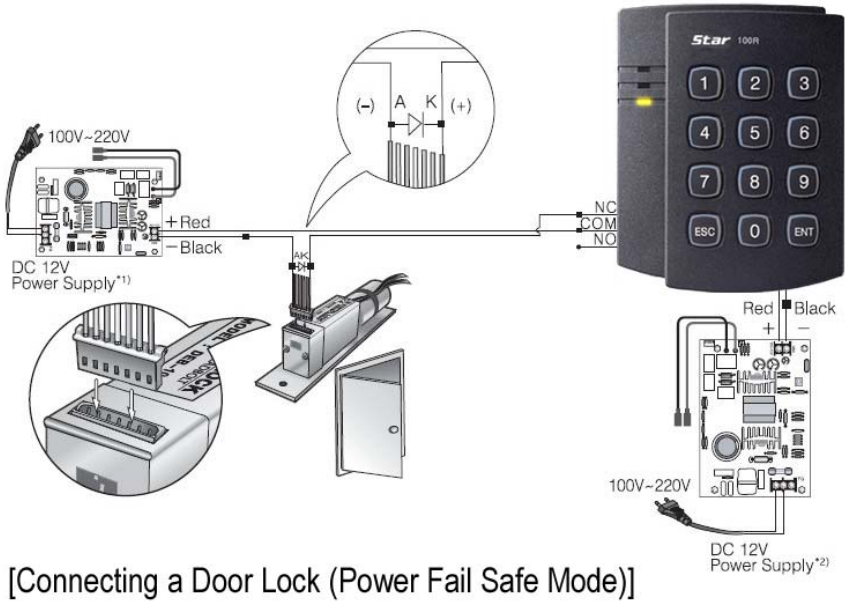
▶ An error in connection between the door lock and the 100R

▶ A door lock error

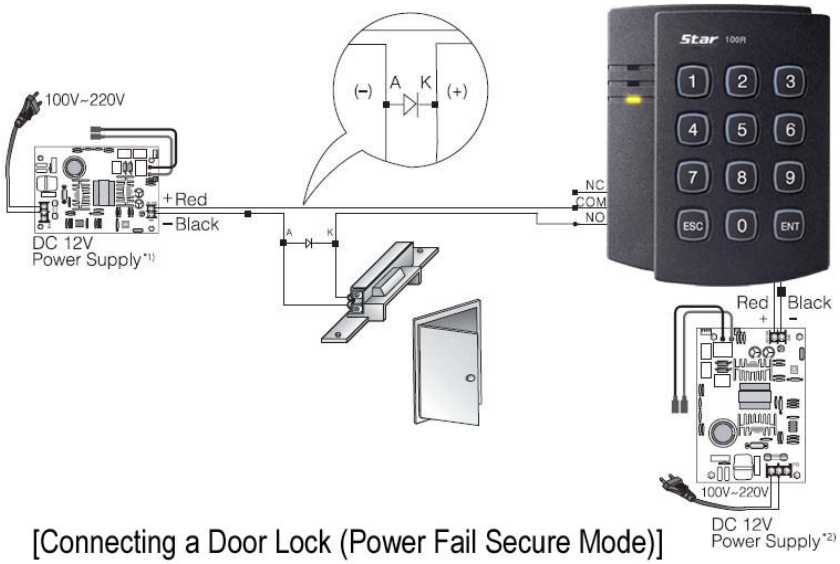
▶ System malfunction/data damaged or lost due to an external noise or a short circuit

● Solution

▶ Check the connection between the door lock and the 100R.




[Connecting a Door Lock (Power Fail Safe Mode)]




[Connecting a Door Lock (Power Fail Secure Mode)]

#5) Installation: See page 6 of this manual.

Caution — The connection between a door lock and the 100R may vary depending on the door lock type and its operation type (Normal Open, Normal Close).

● If this does not solve the problem, proceed with the following steps.

☞ Check the door lock operation and the connection between the door lock and the 100R.

1. Check the condition of the connection cable (a short circuit or cut) between the door lock and the 100R.
2. Check the door lock operation.

Caution — When using a measurement device such as an oscilloscope or multi-meter, make sure to consult with technician.
Remove the door lock from the 100R and check the relay output from the 100R with a measuring instrument.

Note — When the relay output from the 100R is normal, replace the door lock.

Caution — See "Installation[#5)]" to connect the door lock.

● If the problem still persists, contact our customer service center.

[#5)] Installation: See page 6 of this manual.

# 16. Warranty Policy and Limitation of Liability

IDTECK warrants this product against defects in material and workmanship for the period specified in the table below from the date of purchase under normal customer use. This Warranty doesn't apply: 1) to any product which has been dismantled without authorization of IDTECK or/and has a damaged or detached QC label on its back side; 2) to any losses, defects, or damages caused by improper testing, operation, installation, maintenance, modification, alteration, or adjustment; 3) to any product with a damaged or faded serial number on it; or 4) to any losses, defects, or damages caused by lightning or other electrical discharge, natural disaster, misuse, accident or neglect.

This Limited Warranty is in lieu of all other warranties, obligations, or liabilities on the part of IDTECK, and IDTECK DISCLAIMS ANY AND ALL WARRANTY, WHETHER EXPRESS OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.IDTECK does not, and cannot, know who is present, what property is located, where this product will be used; it would be extremely difficult to determine the actual damages that may result from a failure of the product to perform as anticipated; and the low price of this product is based upon the nature of the product provided and the limited liability that IDTECK assumes. IDTECK IS NOT RESPONSIBLE FOR ANY PERSONAL INJURY, PROPERTY DAMAGE OR LOSS, DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR OTHER LOSS, AND IDTECK'S MAXIMUM LIABILITY SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT.

To obtain repair or replacement under the terms of this warranty, visit IDTECK's Website (http://www.idteck.com) and place an online RMA request. After an RMA code is issued, return the product along with the authorization RMA code.

>> Warranty Period

>> Warranty Period

| | Product Category | Warranty Period |
|---|---|---|
| 1 | RF CARD (Active type) | 1 year |
| 2 | RF READER / FINGERPRINT READER | 3 years |
| 3 | STANDALONE CONTROLLER | |
| 4 | CONTROL PANEL | |
| 5 | FINGERPRINT CONTROLLER | |
| 6 | MOLDED RF READER (RF10, RF20, RF30, RF TINY, IP10, IP20, IP30, SR10E, SR10UE, SR10SE, SR10RWE, SR10BE) | Lifetime |
| 7 | RF CARD (Passive type) (IDC80, IDC170, IDK50, IMC125, LXK50, IPC80, IPC170, IPK50, ISC80, ISC80S, ISK50, IMC135, IHC80, IP100, IP200) | |

# RMA REQUEST FORM

IDTECK accepts only on-line RMA requests on our Website (www.idteck.com). Please provide us with basic information in the below form so that we can understand your problems better. Send us back this form with your products after an RMA code is issued on our Website. This form is not compulsory.

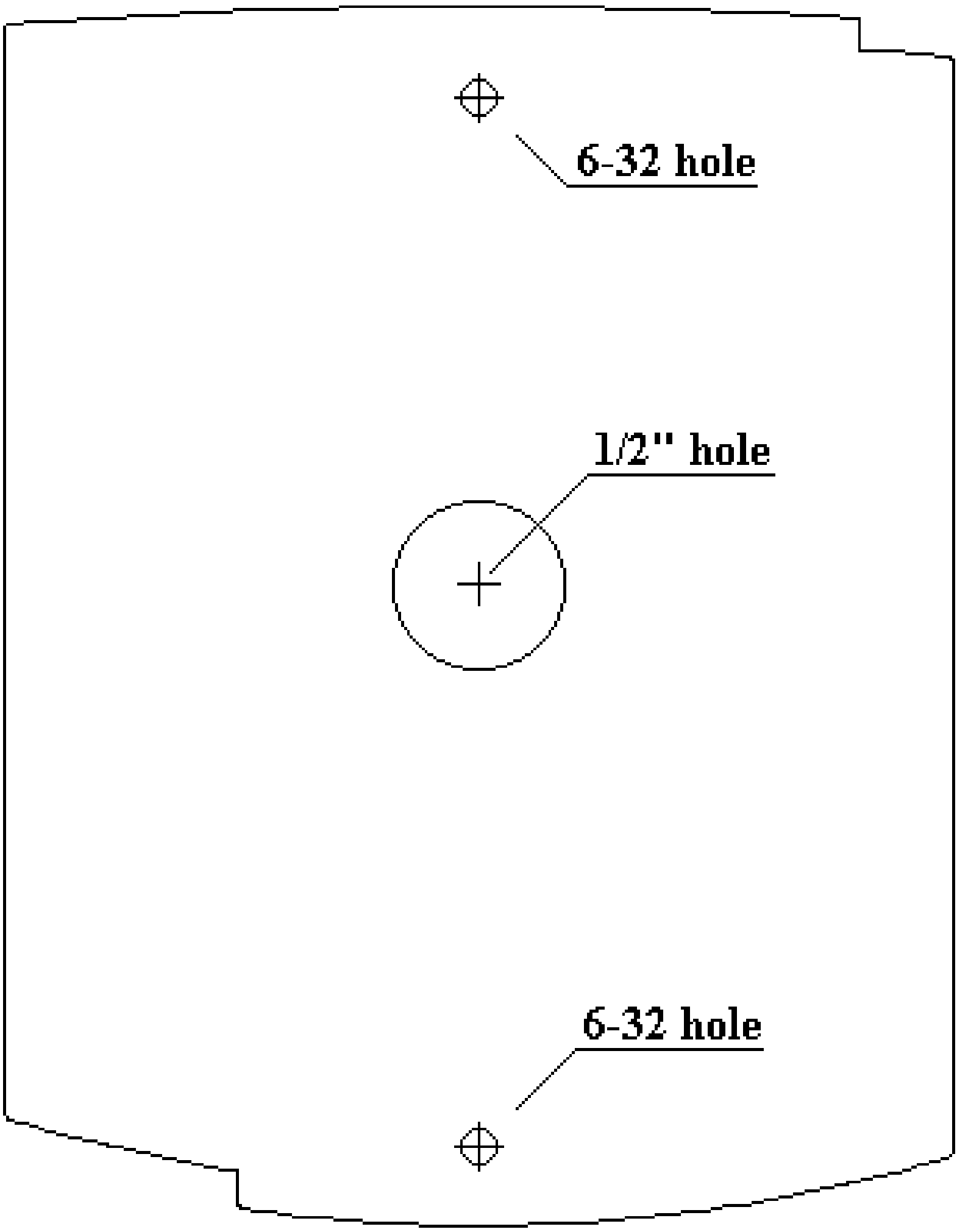
| RMA Authorization Code : | |
|---|---|
| 1. Company Name | |
| 2. Model Name | |
| 3. Serial No. | |
| 4. Original Invoice No. | |
| 5. Distributor | |
| 6. Purchasing Date | |
| 7. RMA Request Date | |

Please check your problems.

| | | |
|---|---|---|
| □ Card Reading | □ Power | □ Keypad |
| □ Communication | □ Relay | □ LCD |
| □ LED & Buzzer | □ Registration | |
| □ Others : | | |

IDTECK RMA Center >>

3F, 10/10-1/10-2, Dodang-Dong, Weonmi-Gu, Bucheon-Si, Gyeonggi-Do 157-030, Korea
Telephone: 82.2.2659.0055 (HQ) / 82.32.671.5642 (RMA Center)
Fax: 82.2.2659.0086 (HQ) / 82.32.671.5641 (RMA Center )
Website: www.idteck.com
e-Training Center: www.idtecktraining.com


6-32 hole
1/2" hole
6-32 hole

The specifications contained in this manual are subject to change without notice at any time.

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