MODEL : STAR100R
ACCESS CONTROLLER

OWNER'S MANUAL
Please read this instruction manual carefully

Contents

1. IMPORTANT SAFETY INSTRUCTIONS

When using your door access controller, basing safety precautions should always be followed to reduce the risk of fire, electrical shock, and injury to persons including following:

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 a mild soap.
4. Do not use this product near water, for example near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a 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 supply to your home, consult your dealer or local power company.
6. Never push objects of any kind into this product though the cabinet slots as they may touch voltage points or short out parts that could result in a risk of 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, but take it to a qualified serviceman when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. incorrect reassembly can cause electric shock when the appliance is subsequently used.
8. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
  a. When the power supply cord or plug is damaged or frayed.
  b. If liquid has been spilled into the product
  c. If the product has exposed to rain or water.
  d. If the product doses not operate normally by following the operating instructions.
    Adjust only those controls, that are covered by the operating instructions. Improper
    adjustment of other controls in damage and will often require extensive work by a qualified
    technician to restore the to normal operation.
  e. If the product exhibit a distinct change in performance.

2. General

STAR100R is an intelligent one door Access Controller based on powerful 8 bit Microprocessor to meet a simple and cost-effective access control market requirement. User friendly device allows you to register max. 127 USER RFID and easy to add or delete USER RFID.

Built in Proximity reader gives you 2 different operating mode such as RF ONLY MODE or RF+PASSWORD MODE. There are 5 inputs to connect EXIT Button, door contact, PIR sensor , Fire sensor extra and you can program related output sources and activate timing from the front keypads. System will make alarm in case of number of times wrong entry and Temper switch opens and one TTL output can be connected to Auto-dialer (option) will make a call to the pre-defined phone numbers (max 4ch) and report the alarm to Police, Fire station and/or to your cellular phone by voice message. All event transaction report to the computer by RS232C communication.

The modern design and easy installation will provide you an accurate access control for single door and 3 LED indicators informs you all system operating at real time. STAR100R will give you field proven reliability and cost-effective solution anywhere the access controls and high security is required.

3. Features

- One door Access Controller
- Powerful 8 bit Microprocessor
- Built in 4 inch reading range Proximity Reader
- 128 USER Access RFID(including one Master RFID)
- RF ONLY MODE or RF+PASSWORD MODE
- User define 4 digits PASSWORD for RF+PASSWORD MODE
- Independent 5 inputs and 4 outputs including 2 output Relays
- All I/Os and activating Times user front programmable
- Door Lock and Unlock function
- Setting for Safe/Secure mode
- Numbers of Try error Alarm
- Optional 4ch Voice Auto-dialer
- 3 LEDs for system operation status
- Modern design and easy operation

4. Specification

.CPU   : 8 bit Microprocessor
.Memory   : 8 KB Program memory
          512 bytes Flash memory
.User RFID numbers : 128 User RFID including one Master RFID
.Proximity Reader : 125KHz PSK reader, 4 inch reading range
.Input/Output   : 5 Inputs and 4 Outputs including 2 Relays
.Communication   : One RS232C port, 9600 Baud Rate
.Keypads   : 12 Numeric Keypads
.LED   : 3 LEDs(RED, GREEN, YELLOW)
.Power   : DC 12V, 250mA
.Operating Environment : 0°C to +60°C, 10% to 90% Humidity
.Reset   : Power ON Reset

5. Connection
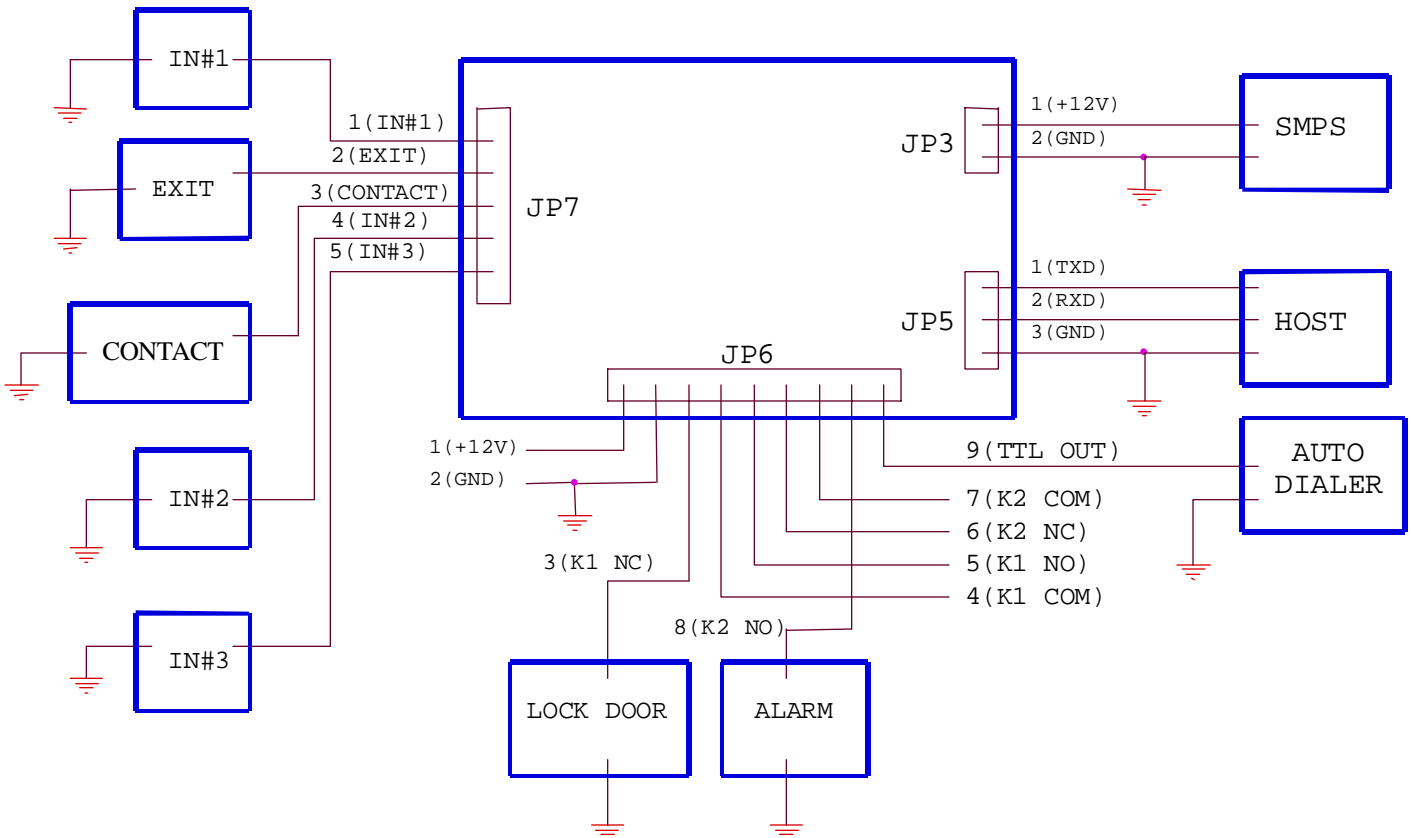
6. WIRE COLOR TABLE

< JP3 > POWER

NO	FUNCTION	COLOR
1	+12V	RED
2	GND	BLACK

< JP5 > RS232C

NO	FUNCTION	COLOR
1	TXD	YELLOW
2	RXD	BLUE
3	GND	GRAY

< JP6 > OUTPUT

NO	FUNCTION	COLOR
1	+12V	RED WITH WHITE LINE
2	GND	BLACK WITH WHITE LINE
3	K1 NC(DOOR)	BLUE WITH WHITE LINE
4	K1 COM(DOOR)	GRAY WITH RED LINE
5	K1 NO(DOOR)	WHITE WITH RED LINE
6	K2 NC(ALARM)	PURPLE WITH WHITE LINE
7	K2 COM(ALARM)	WHITE
8	K2 NO(ALARM)	PURPLE
9	TTL OUT	ORANGE WITH WHITE LINE

< JP7 > INPUT

NO	FUNCTION	COLOR
1	IN1	ORANGE
2	EXIT	YELLOW WITH RED LINE
3	CONTACT	GREEN
4	IN2	GREEN WITH WHITE LINE
5	IN3	BROWN

7. Operation

7.1 INITIAL SETTINGS:

STAR100R HAS COMPLETELY BLANK WHEN IT IS DELIVERED TO
CUSTOMER. THE UNIT AUTOMATICALLY ENTERS TO INITIAL SETTING
MODE WHEN IT IS POWERED ON.   (YOU MAY ALSO ERASE ALL MEMORY
BY CLOSING A JUMPER ON "JP3" OF MAIN P.C.BOARD)
PROGRAMMING SEQUENCE IS AS FOLLOWS;

- Connect 12V DC Power supply to RED(+) and BLACK(-) cable.
- Power switch on. (RED LED will lit and YELLOW LED is blinking every seconds).
- Press the keypads as follow.

"01"+(ENT)	RF only mode
Present Master RFID on the cabinet	Register Master RFID
Present User RFID	Register User RFID
...	"
...	"
...	"
…	"
Present Master RFID on the cabinet	Finish RFID registration
"xxxx"+(ENT)	Register 4 digits PASSWORD

Note: Master RFID can be used for setting changes and add/delete User RFID so you must keep
Master RFID to SECURE LOCATION.

THE UNIT NOW ENTERS TO NORMAL OPERATING MODE.

WITH ABOVE SEQUENCE YOU ALREADY REGISTERED "MASTER RFID" AND "USER
RFIDs" AND THE OTHER DEFAULT SETTINGS ARE AUTOMATICALLY SET AND STORED
INTO FLASH MEMORY.

THE DEFAULT SETTINGS ARE;
- When User RFID Granted:
  Output RELAY#1 activates for 3 seconds
  Green LED activates for 3 seconds
- Exit Input entered:
  Output RELAY#1 activates for 3 seconds
  Green LED activates for 3 seconds
- When User RFID denied:(within Try-out count, default 5 times)
  Output RELAY#2 activates for 1 second
- When Try-out error occures:(from 6th Try-out)
  Output RELAY2 activates for 5 second
- Numbers of Try-out counter set to 5 times
- Keypad input limit time set for 10 seconds
- Silent operation mode off

7.2 NORMAL OPERATION

RED LED always lit and YELLOW LED is blinking every seconds.

A) OPERATING OUTPUTS
   Present User RFID   ...If User RFID is granted, RELAY#1 activates.(SAFE MODE)
                                   ...If User RFID is denied, RELAY#2 activates.

B) EXIT INPUT ENTERED   ...RELAY#1 activates.(SAFE MODE)

C) "77"+(ENT)   …Enter to SECURE MODE

7.3 SETTING CHANGES

- ADD NEW USER ID:
  (Master RFID)+(12)+(ENT)+(New USER RFID)

- DELETE USER ID:
  (Master RFID)+(13)+(ENT)+(USER ID number to be deleted)+(ENT)

- OUTPUT RELAY#1 LATCH(unconditional ON):
  (Master RFID)+(41)+(ENT)

- OUTPUT RELAY#2 LATCH(unconditional ON):
  (Master RFID)+(42)+(ENT)

- GREEN LED LATCH(unconditional ON):
  (Master RFID)+(44)+(ENT)

- RELEASE ALL OUTPUTS(unconditional OFF, RESET all Outputs):
  (Master RFID)

- OUTPUT TEST when USER ID granted:
  (Master RFID)+(31)+(ENT)

- OUTPUT TEST when USER ID denied:
  (Master RFID)+(32)+(ENT)

 - OUTPUT TEST when TRY-OUT ERROR:
  (Master RFID)+(33)+(ENT)

 - OUTPUT TEST when CONTACT ERROR:
  (Master RFID)+(34)+(ENT)

- OUTPUT TEST when INPUT#1 ENTERED:
  (Master RFID)+(35)+(ENT)

- OUTPUT TEST when INPUT#2 ENTERED:
  (Master RFID)+(36)+(ENT)

- OUTPUT TEST when INPUT#3 ENTERED:
  (Master RFID)+(37)+(ENT)

- SILENT MODE SET:
  (Master RFID)+(51)+(ENT)

- SILENT MODE RESET:
  (Master RFID)+(52)+(ENT)

- CONTACT TIME SET:
  (Master RFID)+(81)+(ENT)+(time)+(ENT)   time = 00~99 (second)

- TRY-OUT COUNT SET:
  (Master RFID)+(82)+(ENT)+(number)+(ENT)   number = 00~99 (times)

- KEYPAD INPUT LIMIT TIME SET:
  (Master RFID)+(83)+(ENT)+(time)+(ENT)   time = 00~99 (second)

- ALARM PORT SET:
  (Master RFID)+(84)+(ENT)+(port)+(ENT)   port = 01~16 (port No.)

- CHANGE PASSWORD:
  (Master RFID)+(85)+(ENT)+(NEW PASSWORD)+(ENT)

- TEMPER ENABLE:
  (Master RFID)+(88)+(ENT)

- ERASE ALL MEMORY AND INITIALIZE SETTINGS:
  (Master RFID)+(99)+(ENT)

7.4 OUTPUT CONFIGURATION CHANGE

- OUTPUT CONFIGURATION CHANGE when User ID is granted
(Master RFID)+(21)+(ENT)+(oo)+(ENT)
+(t1)+(ENT)+(t2)+(ENT)+(t3)+(ENT)+(t4)+(ENT)+(t5)+(ENT)

oo = Output numbers
t1 = OUTPUT RELAY#1 activate time
t2 = OUTPUT RELAY#2 activate time
t3 = TTL OUTPUT activate time
t4 = GREEN LED activate time
t5 = BUZZER activate time

Note: Output numbers(add all numbers below which you want to activate)
     1   ...activate OUTPUT RELAY#1
     2   ...activate OUTPUT RELAY#2
     4   ...activate TTL OUTPUT
     8   ...activate BUZZER
    16 …activate GREEN LED
    50 …activate on SAFE MODE

EX) If you want RELAY#1 and GREEN LED activate then 1+8+50=59 as output numbers
      and you put "59" for (oo) format.

     Activate time for t1 through t4 is "00" to "99" seconds.

EX) If you put "03" for t1 then OUTPUT RELAY#1 will activates for 3 seconds.

- OUTPUT CONFIGURATION CHANGE when User ID is denied
(Master RFID)+(22)+(ENT)+(oo)+(ENT)
+(t1)+(ENT)+(t2)+(ENT)+(t3)+(ENT)+(t4)+(ENT)+(t5)+(ENT)

EX) If you want OUTPUT RELAY#2 activate then 2+50=52 as output numbers
      and you put "52" for (oo) format.

     Activate time for t1 through t4 is "00" to "99" seconds.

EX) If you put "05" for t2 then OUTPUT RELAY#2 will activates for 5 seconds.

- OUTPUT CONFIGURATION CHANGE when TRY-OUT ERROR occurs
   (Master RFID)+(23)+(ENT)+(oo)+(ENT)
   +(t1)+(ENT)+(t2)+(ENT)+(t3)+(ENT)+(t4)+(ENT)+(t5)+(ENT)

EX) If you want OUTPUT RELAY#2 and TTL Output activate in SECURE MODE then 2+4=06 as
   output numbers and you put "06" for (oo) format.

     Activate time for t1 through t4 is "00" to "99" seconds.

EX) If you put "05" for t2 and t3 then OUTPUT RELAY#2 and TTL Output will activates for
   5 seconds.

- OUTPUT CONFIGURATION CHANGE when CONTACT ERROR occurs
   (Master RFID)+(24)+(ENT)+(oo)+(ENT)
   +(t1)+(ENT)+(t2)+(ENT)+(t3)+(ENT)+(t4)+(ENT)+(t5)+(ENT)

EX) If you want OUTPUT RELAY#2 activate then 2+50=52 as output numbers
   and you put "52" for (oo) format.

     Activate time for t1 through t4 is "00" to "99" seconds.

EX) If you put "10" for t2 then OUTPUT RELAY#2 will activates for 10 seconds.

- OUTPUT CONFIGURATION CHANGE when INPUT#1 enters
   (Master RFID)+(25)+(ENT)+(oo)+(ENT)
   +(t1)+(ENT)+(t2)+(ENT)+(t3)+(ENT)+(t4)+(ENT)+(t5)+(ENT)

- OUTPUT CONFIGURATION CHANGE when INPUT#2 enters
   (Master RFID)+(26)+(ENT)+(oo)+(ENT)
   +(t1)+(ENT)+(t2)+(ENT)+(t3)+(ENT)+(t4)+(ENT)+(t5)+(ENT)

- OUTPUT CONFIGURATION CHANGE when INPUT#3 enters
   (Master RFID)+(27)+(ENT)+(oo)+(ENT)
   +(t1)+(ENT)+(t2)+(ENT)+(t3)+(ENT)+(t4)+(ENT)+(t5)+(ENT)

FCC REGISTRATION INFORMATION

FCC REQUIREMENTS PART 15

Caution: Any changes or modifications in construction of this device which are not expressly approved by the responsible for compliance cold 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 interference, and
2. This device must accept any interference received, including interference that may cause
   undesired operation.

Note : 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 provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARRANTY AND SERVICE

The following warranty and service information applies only to the U.S. For information in other countries, please contact your local distributor.
To obtain in or out of warranty service, please prepay shipment and return the unit to the appropriate facility listed below.

IN THE UNITED STATES

RF LOGICS, INC. Service center
3026 SCOTT BLVD,
SANTA CLARA, CA 95054
Tel. : (408) 980-0001
Fax.: (408) 980-8060
Email: webmaster@rflogics.com
Website : www.rflogics.com

OUTSIDE OF THE UNITED STATES

ID TECK CO., LTD. Service center
4F ACE TECHNOTOWER BLDG.
684-1 DUNGCHON-DONG, GANSUH-KU
SEOUL 157-030, KOREA
Tel. : 82-2-659-0055
Fax.: 82-2-659-0086
Email: webmaster@id-teck.com
Website : www.id-teck.com

Please use the original container, or pack the unit(s) in a sturdy carton with sufficient packing to prevent damage. Include the following information:
1. A proof-of-purchase indicating model number and date of purchase.
2. Bill-to address
3. Ship-to address
4. Number and description of units shipped
5. Name and telephone number of person to call, should contact be necessary
6. Reason for return and description of the problem.
  Damage occurring during shipment is deemed the responsibility of the carrier, and claims
  should be made directly with the carrier.