

**OPERATING AND**  
**INSTALLATION MANUAL**  
**RF-Tiny**

Proximity Reader



Date : November 16, 2001

**ID TECK Co. Ltd.**

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## 1. Introduction

The STAR RF-Tiny is an elegant looking and an attractive 4" read range proximity reader which can be mounted to metal door frame(mullion) or any flat wall surface. The RF-Tiny use the electronics module in epoxy potting that ensure you successful operation even in harsh environments. Two color LED of green and red, inside Piezo buzzer sound will guarantee you an accurate and reliable system operations.

## 2. Identifying supplied parts

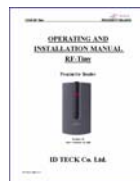
Please unpack and check the contents of the box.



**Reader Module**  
(1 ea)



**Reader Module**  
(1 ea)



**Instruction**  
(1 ea)

## 3. Specification

<b>Read Range/Time</b>	<b>Up to 4"(10cm) / 30ms</b>
<b>Input Voltage/Current</b>	<b>DC 12V, Max. 150mA</b>
<b>Output Format</b>	<b>26 bit Wiegand, ABA Track II, RS232C</b>
<b>External Buzzer control Input</b>	<b>Low Active, DC 0 ~ 12V, Max. 50 mA</b>
<b>External LED control Input</b>	<b>Low Active, DC 0 ~ 12V, Max. 50 mA</b>
<b>LED/Buzzer</b>	<b>2 Color LED(Red and Green) / Piezo Buzzer</b>
<b>Color</b>	<b>Dark Gray</b>
<b>Operating Environment</b>	<b>-31° ~ 149°(-35° ~ +65°), 0~90% Humidity</b>
<b>Overall Size(WxHxD)</b>	<b>1.77"x3.35"x0.65"(45x85x16.5mm)</b>
<b>Weight</b>	<b>0.157lb(71.5g)</b>

**STAR RF-Tiny**

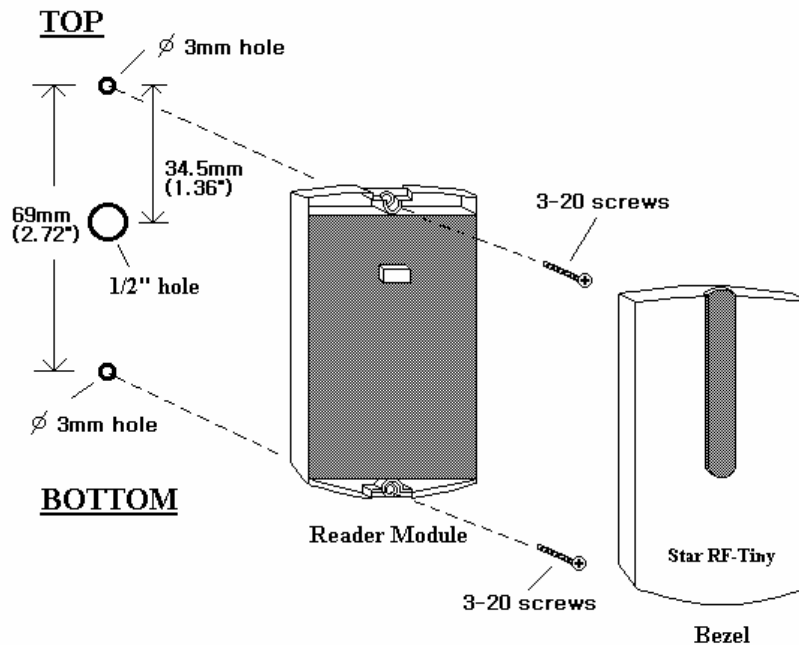
## 4. Installation

### 4-1. Mullion/Wall Mount

Drill two 3mm holes 2.72"(69mm) apart in vertical and drill one 1/2" hole for the controller cable 1.36"(34.5mm) apart from the top hole.

4-2. Put controller cable into the center hole and install the controller module by using two 3-20 screws.

4-3. Put bezel into the controller module then push bezel until you hear the locking sound.



### Mullion Mount / Wall Mount

## 5. Wire Color Table of the Reader

### POWER

Power(DC +5V~+12V)	DC(+)	Red wire
Power(DC Ground)	DC(-)(GND)	Black wire

### INPUT

Buzzer control input	BUZZER	Blue wire
LED control input	LED	Yellow wire

### OUTPUT(Wiegand Format)

Wiegand Data-0	Data-0	Green wire
Wiegand Data-1	Data-1	White wire

### OUTPUT(ABA Track II Format)

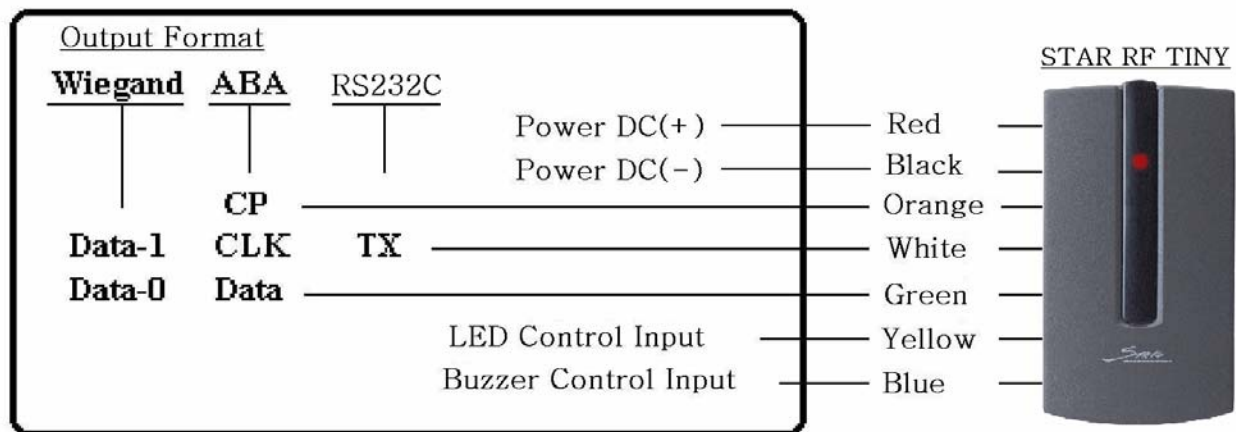
ABA(Card Present)	CP	Orange wire
ABA(Clock)	CLK	White wire
ABA(DATA)	Data	Green wire

### OUTPUT(RS232C Format)

RS232C(TX)	TX	White wire
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## 6. Wire Connection to Controller

### Access Controller



### Wire Connection to Controller

## **7. Operation**

**7-1. Apply power and you can see Red LED is on indicating the reader is in standby.**

**7-2. Present proximity card to the reader until you hear beep sound and the LED is changing the color to Green simultaneously and the reader send RF card data to the controller then LED changes the color to Red again for next reading.**

**7-3. LED Control;**

**To change the LED colors, you may connect LED Control Input(Yellow wire) to power ground then the Green LED is on indicating the reader is in standby.**

**Present proximity card then the LED changes the color to Red simultaneously then Green again for next reading.**

**7-4. Buzzer Control;**

**When the reader reads proximity card, only one beep sound generates in normal operating mode but you can generate more beep sounds to distinguish whether the access is granted or denied.**

**To generate more beeps, you may control the Buzzer Control Input(Blue wire) to power ground then you can turn beeper on while you hold Buzzer Control Input to power ground.**

## **8. 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 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.**

## **9. Warranty and Service**

The following warranty and service information applies only to the United States of America and Republic of Korea. For the 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, CA95054  
Tel.: (408) 980-0001  
Fax.: (408) 980-8060  
E-mail: rflogics@rflogics.com  
Web-site: www.rflogics.com

### **OUTSIDE OF THE UNITED STATES**

ID TECK CO., LTD. Service Center  
5F Ace Techno Tower Bldg.,  
684-1 Deungchon-dong, Gangsuh-gu,  
SEOUL 157-030, KOREA  
Tel.: +82 (2) 659-0055  
Fax.: +82 (2) 659-0086  
E-mail: webmaster@idteck.com  
Web-site: www.idteck.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 contact.
6. Reason for return and description of the problem.

**NOTE:** Damage occurring during shipment is deemed the responsibility of the carrier, and claims should be made directly to the carrier.