

***Star* RF TINY**

Proximity Card Reader



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1. Important Safety Instructions

When using your **Proximity Card Reader**, 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

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 **Star RF TINY** uses the same electronics module in epoxy potting that ensures you successful operation even in harsh environments. The different bezels allow you to interchange the bezel for different applications or wall conditions.

3. Features

- 125KHz Proximity Card Reader
- PSK Modulation (IDTECK Format)
- Read Range: Up to 4 inches (10 cm)
- User Format Available
- 26bit Wiegand and RS232 (Default), ABA Track II (Optional) Output Format
- Dual Reading Technology Reader (Active and Passive Cards)
- Easy to Install on Metal Door Frame or Mullion
- External LED Control and External Buzzer Control
- Solid Epoxy Potted
- Waterproof (IP65/IP66)
- Reverse Polarity Protection
- Lifetime Warranty
- Options: Supervisory Signal
- Compatible Controllers: iCON100, iTDC, Standalone Controllers, Third-Party Controllers

4. Specification

Model		RF TINY
CPU		8bit Microprocessor
Read Range	Passive Type	IDK50 / IMC125: Up to 2 inches (5 cm)
		IDC80: Up to 2.8 inches (7 cm)
		IDC170: Up to 4 inches (10 cm)
	Active Type	IDA150 / IDA200 Compatible
Reading Time (Card)		30ms
Power / Current		DC 12V / Max.180mA
Input Port		2 Ports (External LED Control, External Buzzer Control)
Output Format		26bit Wiegand (Default), RS232 and ABA Track II (Optional)
LED Indicator / Beeper		2 Color LED (Red and Green) / 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
Weight / Dimension (W x H x T)		80g (0.18lbs) / 45mm x 85mm x 15.5mm (1.77" x 3.35" x 0.6")
Certification		FCC, CE, MIC(KCC)

5. Identifying Supplied Parts

Please unpack and check the contents of the box.



**Reader Module
(1ea)**



**RF TINY Bezel
(1ea)**



**User's Manual
(1copy)**



**3.0*40 Screw
(2ea)**



**3.0*12 Screw
(2ea)**



**Anchor Bolt
(2ea)**

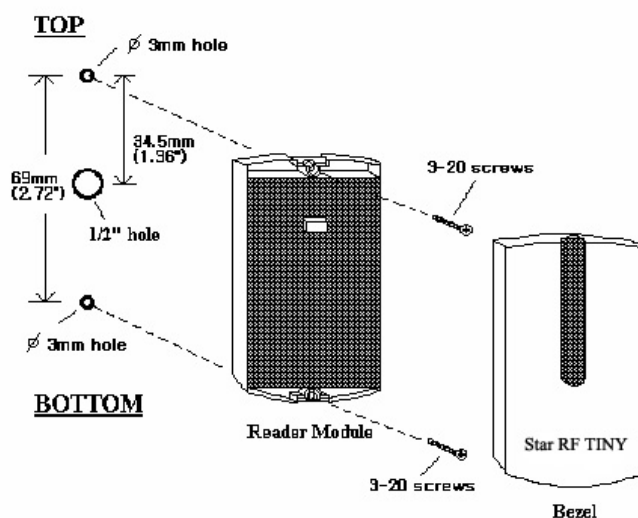
6. Installation

6-1. 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.

6-2. Put reader cable into the center hole and install the reader module by using two 3-20 screws.

6-3. Put bezel into the reader module then push bezel until you hear the locking sound.

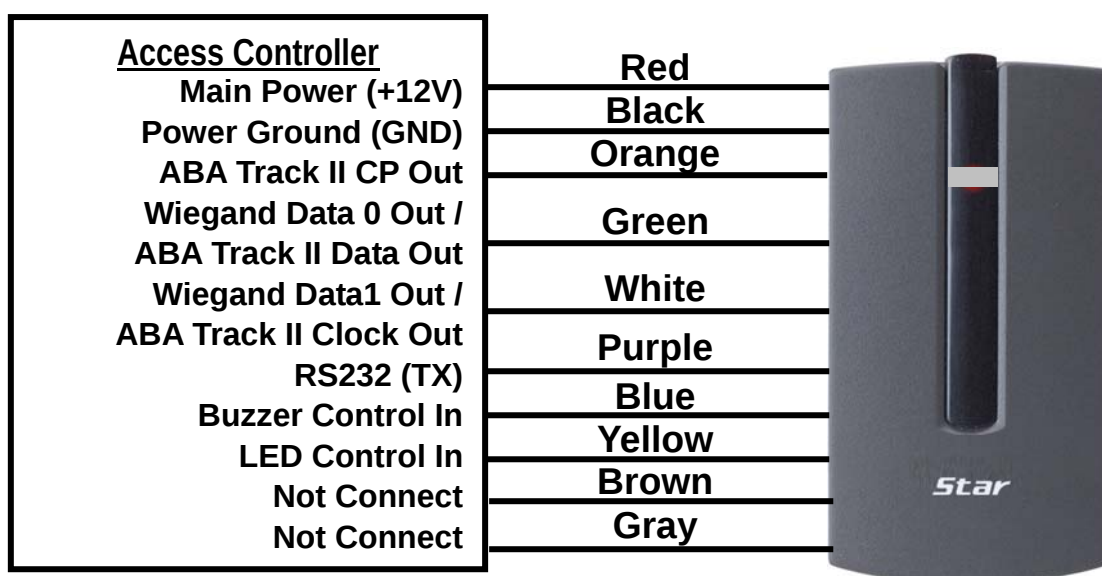


Mullion Mount / Wall Mount

7. Wire Color Table of the RF TINY

SIGNAL	COLOR
Main Power (+12V)	Red
Power Ground (GND)	Black
ABA Track II CP Out	Orange
Wiegand Data 0 Out / ABA Track II Data Out	Green
Wiegand Data 1 Out / ABA Track II Clock Out	White
Buzzer Control In	Blue
LED Control In	Yellow
RS232 (TX)	Purple
Not Connect	Brown
Not Connect	Gray
* Please cut out tail connector before installation.	

8. Wire Connection to Controller



9. Operation

9-1. If power is supplied to the RF TINY, it displays red color that indicates in standby reader.

9-2. Present RF card to the product until you hear beep sound.

The LED of RF TINY changes color to green simultaneously.

If the product sends RF card data to the controller, LED changes color to red again for next reading.

9-3. LED Control

To change the LED colors, you may connect LED Control Input (Yellow wire) to GND.

The next LED displays green color that indicates in standby reader.

If you make RF card present, the LED of product changes color to red simultaneously.

And then it turns green again for next reading.

9-4. Buzzer Control

When the product reads RF card, only one beeping sounds in normal operating mode.

Whether the access is granted or denied, the product sounds more beeping to distinguish.

To sound more beeping, you may control the Buzzer Control Input (Blue wire) to GND.

Then you can turn beeper on while you connect Buzzer Control Input to GND.

10. 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.

11. Warranty Policy and Limitation of Liability

IDTECK warrants this product against defects in material and workmanship for the period specified 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

	Product Category	Warranty Period
1	RF CARDS (ACTIVE TYPE)	1 year
	FINGERPRINT MODULE / SENSOR	
2	RF READERS (WITHOUT EPOXY POTTING)	2 years
3	STANDALONE CONTROLLERS	
4	CONTROL PANELS	
5	FINGERPRINT READERS	
6	RF READERS (WITH EPOXY POTTING)	Lifetime
7	RF CARDS (PASSIVE TYPE)	

12. How to Make RMA Request (After Sales Service)

To make the RMA request, the product must be initially registered on IDTECK webpage. Please attach the RMA request form on the product and send it to IDTECK RMA Center.

Please follow the instructions below:

1. Please register the RMA request via IDTECK webpage.
: www.idteck.com → "Support & Download" → "Online RMA" → "RMA REQUEST"
(Please refer to the IDTECK webpage for more details.)
2. RMA Code will be issued after the RMA Center reviews the RMA request form.
3. Fill out the A/S request form (included in the product package) and attach it to the product using the aluminum string.
4. Enclose the product along with the RMA Code and send it to IDTECK RMA Center.
(Product without RMA Code is not accepted.)

If you have any questions or problems regarding the RMA services, please contact us using the following contact information below. Friendly representatives at IDTECK are always standing by to provide the best after sales services.

IDTECK Headquarter

5F, Ace Techno Tower B/D, 684-1, Deungchon-Dong,
Gangseo-Gu, Seoul, 157-030, Korea

Tel: +82 2 2659 0055

Fax: +82 2 2659 0086

E-mail: webmaster@idteck.com

Website: www.idteck.com

E-Training Center: <http://www.idtecktraining.com>

IDTECK Production Facility and RMA Center

3F, 10/10-1/10-2, Dodang-Dong,
Weonmi-Gu, Bucheon-Si, Gyeonggi-Do 420-130, Korea

Tel: +82 2 2659 0055

Fax: +82 2 2659 0086

E-mail: webmaster@idteck.com

Website: www.idteck.com

E-Training Center: <http://www.idtecktraining.com>

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The specifications contained in this manual are subject to be changed without notice.

**5F, Ace Techno Tower B/D, 684-1, Deungchon-Dong,
Gangseo-Gu, Seoul, 157-030, Korea**
Tel : +82-2-2659-0055
Fax : +82-2-2659-0086
E-mail : webmaster@idteck.com