

***Star* RFL200** ***iPASS* IP-RFL200**

Proximity Access Controller



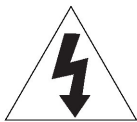
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Safety Information

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CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.



This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

WARNING

1. Be sure to use only the standard adapter that is specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.

3. Do not connect multiple controllers to a single adapter. Exceeding the capacity may cause abnormal heat generation or fire.
4. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
5. When installing the controller, fasten it securely and firmly. The fall of controller may cause personal injury.
6. Do not place conductive objects (e.g. screwdrivers, coins, metal parts, etc.) or containers filled with water on top of the controller. Doing so may cause personal injury due to fire, electric shock, or falling objects.
7. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.
8. If any unusual smells or smoke come from the unit, stop using the product. In such case, immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock.
9. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way. (SAMSUNG is not liable for problems caused by unauthorized modifications or attempted repair.)
10. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock.

CAUTION

1. Do not drop objects on the product or apply strong blows to it. Keep away from a location subject to excessive vibration or magnetic interference.
2. Do not install in a location subject to high temperature (over 50°C), low temperature (below -30°C), or high humidity. Doing so may cause fire or electric shock.
3. If you want to relocate the already installed product, be sure to turn off the power and then move or reinstall it.
4. Remove the power plug from the outlet when there is a lightning storm. Neglecting to do so may cause fire or damage to the product.
5. Keep out of direct sunlight and heat radiation sources. It may cause fire.
6. Install it in a place with good ventilation.
7. Avoid aiming the controller directly towards extremely bright objects such as sun.
8. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
9. The Mains plug is used as a disconnect device and shall stay readily operable at any time.

1 IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.
13. Unplug this apparatus when a card is used. Use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

The **Star RFL200 / iPASS IP-RFL200** is an elegant looking and an attractive 4" read range proximity reader built-in Proximity Single Door Access Controller which can be mounted to a metal door frame (mullion) or to any flat wall surface. The

Star RFL200 / iPASS IP-RFL200 is epoxy potted that ensure you a successful operation even in harsh environments. Using 512 key tag, not only controlling door but also convenient registration or deletion.

When losing a key tag, it is easy to reset. Therefore it is the safest controlling door device.

Two-color LED of green and red, internal Piezo buzzer sound will guarantee you an accurate and reliable Door Access Operations.

Features

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- 125KHz Standalone Proximity Access Controller
- Star RFL200: PSK Modulation
iPASS IP-RFL200: ASK[EM] Format
- 512 Users including One Master Card
- Standalone (No need application software)
- Direct Control of Door Lock
- Power Fail Safe or Power Fail Secure Locks selectable
- Solid Epoxy Potted
- Waterproof
- Warranty: Life Time

Identifying Supplied Parts

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Please unpack and check the contents of the box.



Main Module

(1 Unit)



RFL200 (IP-RFL200) Bezel

(1 PC)



**IDK50 (RFL200)
IPK50 (IP-RFL200)**

(5 Key Tags + 1 Master Card)



User's Manual

(1 Copy)



**3.5*40 Screw
(2 PCS)**



**3.5*25 Screw
(2 PCS)**



**6*30 Anchor Bolt
(2 PCS)**

Specification

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Model		RFL200	IP-RFL200
CPU		Dual 8bit Microprocessor	
Memory	Program Memory	64KByte Flash ROM	
	Data Memory	4KByte EEPROM	
User		512 Users (Including 1 Master Card)	
Range		IDC80 / IDC170: Up to 4 inches (10cm)	IPC80 / IPC170: Up to 4 inches (10cm)
Reading Time (Card)		30ms	
Door Open Time		5 sec (fixed)	
Power / Current		DC 12V / Max.150mA	
Input Port		3 Ports (Exit Button, Door Contact, Door Lock Type (Power Fail Safe / Power Fail Secure))	
Output Port		2 Ports (TR Output / Open Collector Output Rating Max 300mA Alarm Output, 1A Lock Output	
LED Indicator / Beeper		9 Array LED Indicators (Red and Green) / Piezo Buzzer	
Operating Temperature	Controller	-35 to +60C (-31 to +140F)	
	RF Reader	-35 to +65C (-31 to +149F)	
Operating Humidity		10% to 90% relative humidity non-condensing	
Color / Material		Dark Pearl Gray / Polycarbonate	
Dimension (W x H x T) / Weight		1.8" x 4.9" x 0.8" (45mm x 124mm x 19.64mm) / 80g (0.18 lbs)	

Warranty

Life Time

CertificationFCC, CE, KC



Reading of key fob-type tags may not work properly at temperatures below 0°C or 32°F

Installation

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1. Drill one 0.5" (12.7mm) hole at the central of the RFL200 / IP-RFL200 on mullion or wall mount.

Route the cable of reader module through the central hole.

2. Drill one 0.39" (10mm) in right horizontal and 1.74" (44.4mm) in upper vertical through the central hole.

And drill the other 0.33" (8.5mm) in left horizontal and 1.59" (40.6mm) in under vertical through the central hole.

3. Push reader module on mullion or wall mount then install the main unit using two 6-32 or M3 screws.
4. Put the bezel on the reader module and then pushes it to fix up.

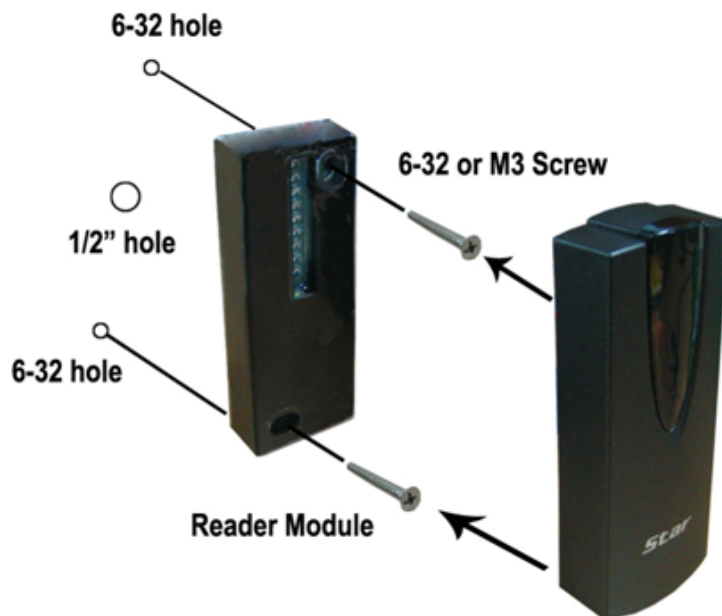
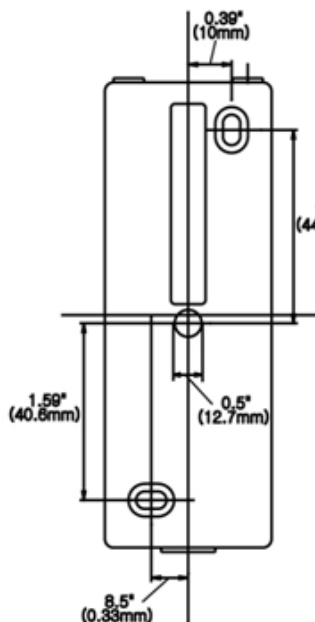


Figure: Installation Layout

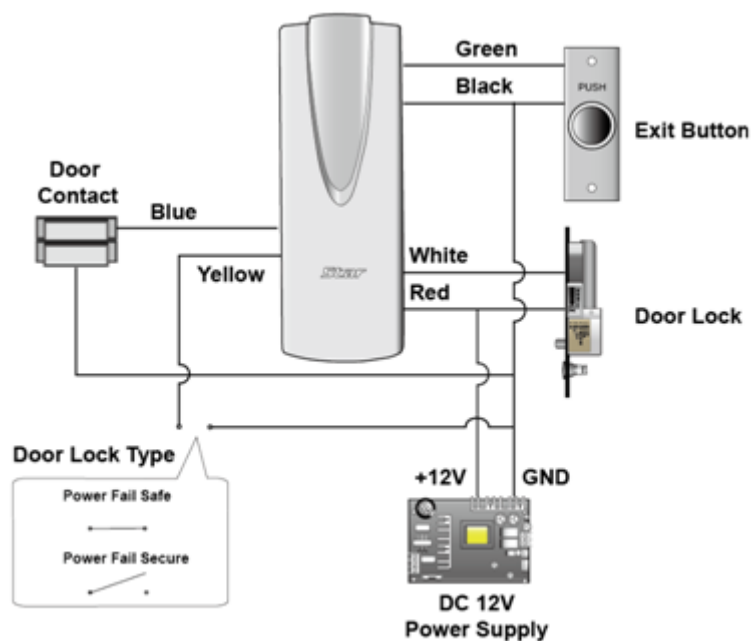
Color Coded & Wiring Table

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SIGNAL	COLOR
Main Power (+12V)	Red
Power Ground (GND)	Black
Door Lock Type	Yellow
Door Contact In	Blue
Exit Button In	Green
Alarm Out	Purple
Door Lock Out	White
Not Connect	Gray
Not Connect	Orange
Not Connect	Brown
* Please cut out tail connector before installation.	

Wire Connection to Controller

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Select lock type as shown below.

- ☒ Power Fail Safe Mode (Always open at power off)
: Connect lock type of Yellow with Black wire.
- ☒ Power Fail Secure Mode (Always close at power off)
: Disconnect lock type of Yellow wire.

1 Connecting a power supply

- Connect +12V of power supply to Red wire.
- Connect GND of power supply to Black wire.

2 Connecting a door lock

- Connect (+) wire of door lock to +12V wire of power supply.
- Connect (-) wire of door lock to white wire of reader module.

3 Connecting an exit button

- Connect Green wire of exit button input to one wire between wires of exit button.
- Connect GND wire of power supply to the other wire.

4 Connecting a door contact

- Connect COM terminal of door contact to Blue wire of door contact input.
- Connect NO terminal of door contact to GND (-) of power supply.

5 Connecting a door lock depending on the lock type

- In a power fail safe, connect GND (-) wire of power supply to Yellow wire of door lock type input.
- In a power fail secure, put a floating state on Yellow wire of door lock type input.

1 When power is supplied

1. All LEDs display red or green. Then they repeat on/off twice and become off.
2. As LED off, red LED turns on from the under to the top in order. And all LEDs turn red.
3. RFL200 / IP-RFL200's buzzer sounds one time

2 When registered key tag is read on RFL200 / IP-RFL200 or an exit button is pressed.

1. All LEDs turn from red to green. From the top to the under, they are off and on in order. When all LEDs are on, they turn red.
2. At this time, the door is opened by definite time.
And the upper of two LEDs turn green. This means that open the door
3. RFL200 / IP-RFL200's buzzer sounds one time.

3 When unregistered key tag is read on RFL200 / IP-RFL200

1. All LEDs turn red. Then they repeat on/off twice and become on.
2. RFL200 / IP-RFL200's buzzer sounds twice.

4 If key tag is approached by RFL200 / IP-RFL200 when the door is opened.

1. The upper of two LEDs still display green color. It means that open the door.
With the rest of LEDs, they indicate whether authentication or not (refer to 9.2 and 9.3).

5 When a key tag is deleted or registered

1. If master card nears the product, buzzer sounds one time and the upper of 3 LEDs turn green.
2. If a key tag that wish to register new is read by the product, buzzer sounds one time.
And the rests except the upper of 3 LEDs turn green. From the top to the under, they are off in order. When all LEDs are off, LEDs turn red again. At this time, a key tag is registered.
3. If a key tag is already registered, buzzer sounds twice.
The rests except the upper of 3 LEDs turn red. They repeat on/off twice and become on.
At this time, a key tag is deleted.
4. After finishing to register or delete a key tag, if reading a master card again, the upper of 3 LEDs turn red with beeping one time. And all LEDs turn red.



Note: On the master mode, if user card isn't read within 7 sec., the unit is automatically on general mode.

6 When a master card is deleted or registered again



the lost or the change of a master card.

1. As power off, they make purple and blue wire close.
2. As power on, all LEDs turn red color with beeping twice.
Then they repeat twice and become on. At this time, a master card is deleted.
3. Upon deletion of Master Card, you will hear beep sound once and all LED indicators to
ogle between green and red twice and then turning off. In this condition; they turn red
from bottom up in sequence.
4. After finishing deleting a master card, turn off the power.
Connect again purple and blue wire to a device which has been connected basically.
5. As power on, RFL200 / IP-RFL200 operates normally.
At this time, a card which had been first read on RFL200 / IP-RFL200 is registered as a m
aster card. If you make already registered user card read, it will be deleted and then regi
stered as master card.



After registering a master card, the unit is automatically on master mode.

7 When a product is initialized by using a master card

1. If master card is read on the unit, buzzer sounds one time, upper three LEDs change gr
een.
2. On master mode, if you make master card read again, upper green three LEDs flicker.
That means on initialization mode of product.
3. On initialization mode, if you make master card read again, the buzzer sounds four tim
es and all LEDs are changed to red and then Initialization starts.
4. If you make power on, RFL200 / IP-RFL200 operates normally.
At this time, registered card earlier on the RFL200 / IP-RFL200 is registered as master car
d.



- ☒ If user card is read on initialization mode of product, the unit is general mode.
User card isn't registered or deleted.
- ☒ After registering a master card, the unit is automatically master mode.

8 When a product is initialized by wiring the cable

1. As power off, make white, green and yellow wire are close.
2. As power on, all LEDs turn red or green color. After repeating on/off twice, they become off.
3. As the LED off, only green LED turn on from the under to the top. All LEDs become green.
4. RFL200 / IP-RFL200's buzzer sounds four times. It indicates to complete initialization.
5. After finishing to initialize, connect again white, green and yellow wire to a device which had been basically connected as power off.
6. If turn on power, RFL200 / IP-RFL200 operates normally.
At this time, a card which had been first read on RFL200 / IP-RFL200 is registered as a master card.



After registering a master card, the unit is automatically master mode.

FCC REGISTRATION INFORMATION

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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.

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.

RMA Request

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

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