

# **Access Master Card Reader (CDR-10013) Manual**

Date : 2017. 5.

**S1 Coporation**

**※ For UL compliance, the product was tested only to UL 294 Standard for Access Control System Units and not to a Burglary Standard.**

## ☞ Cautions for Safety

### ⚠Warning Failure to follow this instruction may lead to death or fatal injuries.



#### Do not move or reinstall the product on your own.

- It may cause breakdown, electric shock or fire.
- Please contact S1 (1588-3112) to move or reinstall the product.
- Additional expenses will be charged to relocate the product.



#### Do not disassemble, repair or alter the product on your own.

- It may cause breakdown, electric shock or fire.
- Please contact S1 (1588-3112) for repair services.



#### Do not keep the product close to inflammables.

- The product may melt down to cause electric shock or fire.

### ⚠Caution Failure to follow this instruction may lead to injuries or property damages.



#### Do not impact or shake the product.

- It may cause breakdown.



#### Do not keep the product close to magnets.

- It may cause breakdown or malfunction.



#### Do not install the product in places with dust or high humidity.

- It may cause electric shock or breakdown.



#### Do not clean the product with benzene, thinner or alcohol.

- It may cause breakdown, malfunction or fire.



#### Do not use fingerprints for purposes other than access control, arming or disarming.

- It may damage the product causing breakdown.



#### Do not use sharp things such as needles and pencils to press buttons.

- It may cause breakdown.



#### Do not let children touch the product.

- It may cause safety accidents for children or breakdown.



#### Do not spray pesticides or combustible materials over the product.

- It may cause breakdown or fire.



#### Clean the product to remove dust on it.

- Be careful not to damage buttons when cleaning it. It may cause degraded functionality or malfunction.



#### Do not keep the product close to sharp things such as knife.

- It may damage the surface of the product.



**Do not scribble or keep cards and wireless devices dirty.**

- It may damage the surface of the product.



**Please contact S1 (1588-3112) first when you experience breakdowns or other problems of the product.**



**Be careful not to lose cards and wireless devices and contact S1 (1588-3112) when you lost them.**



**Do not keep cards within children's reach such as Televisions, refrigerators, magnets or heaters.**



**Be careful not to get hurt by sharp edges of the card when using them.**



**DO not bend cards, make holes on them or cut them.**

# 1. Overview

Access Master Card Reader is a machine controlling access management and making block change in Access Master Controller. Power is supplied by auxiliary Access Master Power Supply or Access Master Controller.

## 2. Standard Specifications

### 2.1 Outlines

- 1)Form : Used in indoor installation
- 2)Size : (W)100 × (H)110 × (D)24 [mm]
- 3)Weight : about 260g

### 2.2 Electrical Specifications

- 1)Input Voltage : DC 12V, 450mA
- 2)Current consumption : Power index 1.3 (less than DC 12V 500mA)

### 2.3 RF Specifications

This proximity cardreader shall produce an energizing RF field which couples to the card to transfer power and which shall be modulated for communication and follows ISO14443 standard.

- 1)Operating frequency : 13.56MHz
- 2)Channel : 1 ch
- 3)Modulation type : ASK

### 2.4 Use Environment

- 1)Use temperature : -20°C ~ +60°C
- 2)Use humidity : 0% ~ 90% (relative humidity)
- 3)Installation requirements
  - Convenient place for manipulating machine.
  - Install on none-metal
  - Place which has not direct ray.
  - Place which is not affected by heat.
  - Place which has not vibration.
  - Install at the place that reading distance should be kept more than 3 cm.

### 3. Components

NO	Names	Q'ty	Remarks
1	CDR-10013	1EA	-
2	Cable ASS'Y	1EA	Communication & Power
3	Bracket	1EA	-
4	Wrapping vinyl	1EA	Include 1,2,3
5	Fixation bolt for bracket	4EA	Tapping 2ea, Screw 2ea
6	Fixation bolt for device	1EA	Fixation between bracket and device
7	Contraction tube for cable connecting	8EA	3Φ, 20mm
8	Wrapping vinyl	1EA	Include 5,6,7
9	Both side tape for fixing bracket	1EA	for fixing Bracket
10	Box	1EA	Include 1 ~ 9

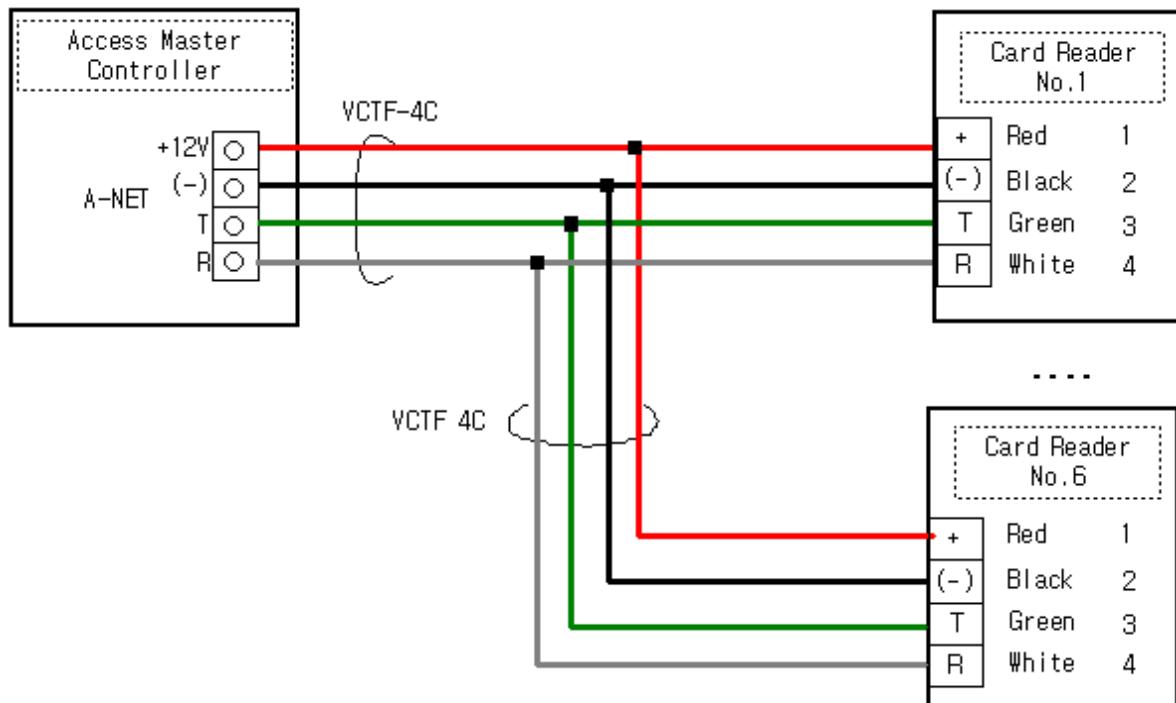
## 4. Input/Output

### 4.1 Structure

No	Names	Input/ Output	Specification	Cable Color
1	+12V	Input	Power input	Red
2	(-)	Input		Black
3	T	Input	A-NET Input	Green
4	R	Output	A-NET Output	White

## 5. Connection Diagram

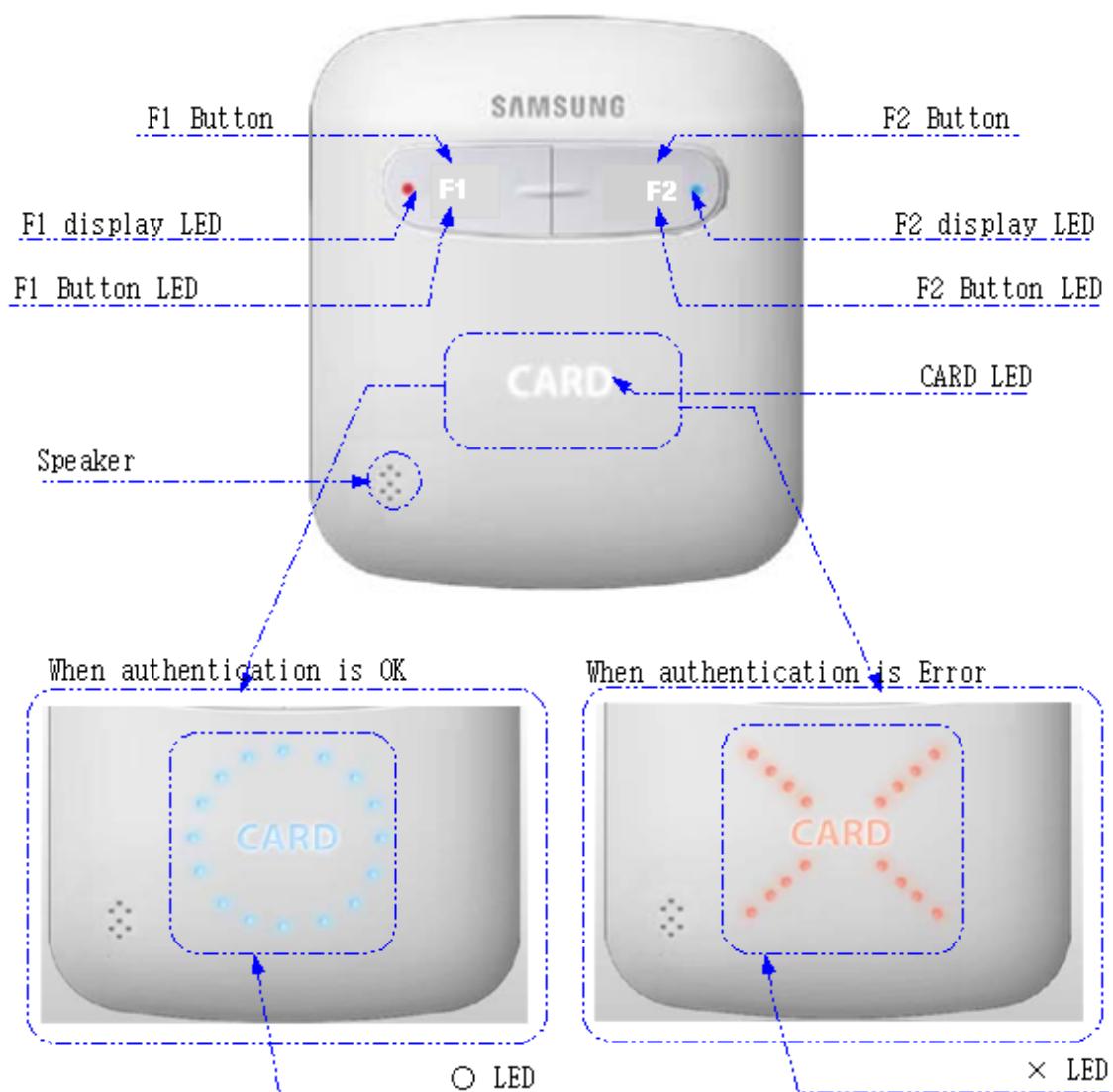
### 5.1 External Input/Output to connect with Controller



※ Maximum 6 machine extension possible

## 6. Functions

### 6.1 Names and Functions



## 6.2 LED display function

No	Name	Color	Q'ty	Remarks	
1	F1 Button LED	White	2EA	OFF	Power OFF
				Blink	During booting
				ON	Standby
2	F1 display LED	Red	1EA	ON	ARM Mode
				OFF	Other Mode (except ARM)
3	F2 Button LED	White	2EA	OFF	Power OFF
				Blink	During booting
				ON	Standby
4	F2 display LED	Blue	1EA	ON	DISARM Mode
				OFF	Other Mode (except DISARM)
5	CARD LED	White	4EA	ON	Standby
				Blink	operate Button (500ms 3times)
				OFF	Power OFF or when CARD(Blue) LED blinks
		Blue	2EA	Blink	operate valid Card (with ○ LED) (500ms 1time))
		OFF	except blink		
6	○ LED	Blue	18EA	Blink	operate valid card (500ms 1time)
				OFF	except blink
7	× LED	Red	16EA	Blink	operate invalid card (500ms 2time)
				OFF	except blink

## 6.3 Access Management function

It transmits the data to Access Master Controller as it reads recorded data in card by the method of making customer or traverse card approach to card reader. Access Master Controller makes access available by controlling lock/auto door of entrance door after checking whether received data is registered or not.

## 6.4 Beep sound & Guiding voice

By using buzzer, beep sound is occurred as followings. By using speaker, guiding voice is made as followings.

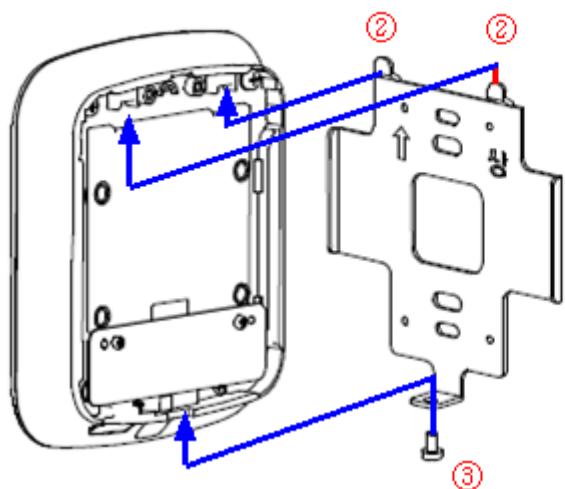
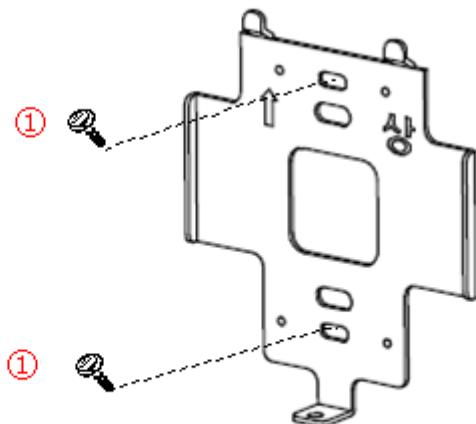
### 1) Working Condition

No	Working Type	Working Condition	note
1	Beep sound	<ul style="list-style-type: none"><li>- At normal input of card data, one time working(On for 100ms)</li><li>- pushing button</li></ul>	
2	Guiding voice	<ul style="list-style-type: none"><li>- At card operating</li><li>- At Alarm occurrence</li></ul>	No guiding voice at normal access approval

### 2) Guiding Voice

No	Content	note
1	Hello! This is S one corporation.	when card reader finishes initialization
2	Your card is not registered.	try operation with unregistered card

# CDR-10013 Installation Manual



## [Installation Process]

1. Fix top/bottom of Bracket by using 2 Screw(①)
2. Connect wires
3. Fix top of reader body (②)
4. Fix bottom of Bracket by using 1 Screw(③)
5. Check normal operation

## 7. Other Information

### 7.1 Cautions and Inquiries

It is not allowed to reproduce this user manual without consent of S1. Product specification may change without notice for improved quality or changed functionality.

Please contact S1 with the following information for any questions related details about the product.

- Contact : 1588-3112
- Website : [www.s1.co.kr](http://www.s1.co.kr)
- Address : S1 Bldg., 25, Sejong-daero 7-gil, Jung-gu, Seoul, 100-773, Korea

### 7.2 Declaration of Conformity

- Safety : EN 60950-1:2006+ A11:2009+ A1:2010+ A12:2011+ A2:2013  
EN 62311:2008
- EMG : EN 301 489-1 V2.1.1:2017-06  
EN 301 489-1 V2.1.1:2017-06
- RF : EN 300 330 V2.1.1

The Product herewith Complies with the requirements of Low Voltage Directive 2014/35/EU, the EMC Directive 2014/30/EU, and the RED Directive 2014/53/EU (Annex VI) and carries the CE-Markintg Accordingly.

## Regulatory Compliance



FCC ID : Q54CDR10013

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Change or modification not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment

### **WARNING:**

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