

**Foreword**

Thank you for purchasing the HW210 Reader/Writer Unit.

This manual describes basic precautions and basic handling procedures for the HW210 Reader/Writer Unit.

Read this manual thoroughly before using the Reader/Writer Unit, and make sure that you use the unit correctly.

**CAUTION!**

Please be forewarned that this company will not accept any responsibility whatsoever for any financial damage, lost revenue, or any claims from a third party arising from the use of this product or included products.

The specifications of this product may change without notice due to improvements to the product.

This product is extremely sensitive to static electricity. Take care because contact with static electricity that has built-up on your clothing or your person may damage the product.

Before touching this product, touch a metal object or take other measures to discharge any static electricity.

Alternatively, use a neutralization tool (earth strap, etc.) whenever you are handling the product.

**Names and Functions of Component Parts**

**Security Unit**

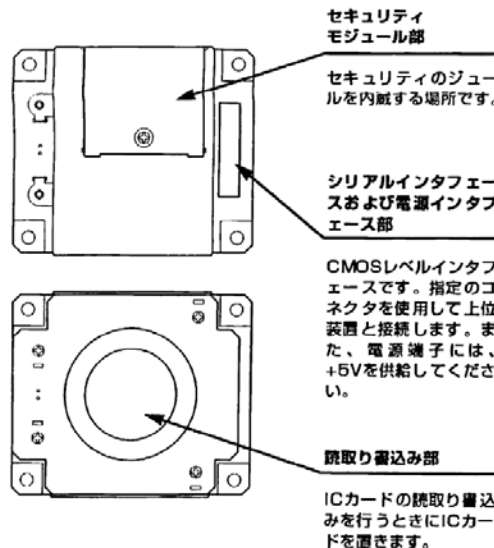
This is the location where the security module is built in.

**Serial Interface and Power Interface Unit**

This is a CMOS level interface. Use the specified connector to connect to the higher-level device. Supply +5V power to the power terminals.

**Reading and Writing Unit**

Place the IC card on this unit when reading from and



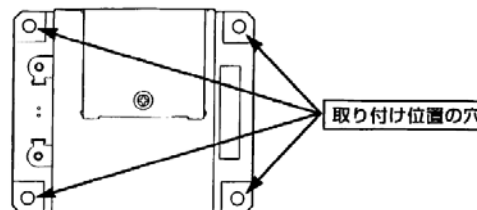
writing to the IC card.

## Handling Procedures

### ■ Attaching the Base Plate

Securely tighten the screws to affix the HW210 Reader/Writer Unit to the mounting area (chassis, etc.).

1) Attachment location holes



### ■ Installation Cautions

- Make the cable that connects the HW210 Reader/Writer Unit to the higher-level device as short as possible.
- Do not install any metal on the upper surface of the antenna of the HW210 Reader/Writer Unit.
- If there is any metal next to the HW210 Reader/Writer Unit, communication properties may be degraded.
- Do not install the Reader/Writer Unit in an environment where there are large amounts of noise, such as near a switching power supply.
- Because the antenna unit and shield case of the HW210 Reader/Writer Unit generate heat, you will need to take heat dissipation into account.
- When you are attaching a bracket, make sure you attach it so that it does not protrude past the attachment guide line.

## Before you Decide the Unit is Malfunctioning

If you cannot get the HW210 Reader/Writer Unit to operate at all, or if the unit occasionally malfunctions, check again that the base plate, etc. are properly connected before contacting your supplier.

## Specifications

Outer Dimensions:           Approx. 55 mm (W) × 65 mm (D) × 18 mm (H), (excluding protrusions)

### **Serial Interface Unit**

- Signal Level:           CMOS Level
- Synchronization:       Asynchronous Communication
- Transmission Speeds:   9600/19200/38400/115200 bps
- Connector:             DF3-10P-2V (51)  
                              Manufactured by Hirose Electric Co. Ltd. (Gold-Plated Contacts)

Weight:                     Approx. 60 g

Power Supply:             DC5V ± 5% / 300 mA

Operating Temperature/Humidity: -20°C to +60°C, 35% to 85% (non-condensing)

This product, designed for use in Japan, is a strategic product regulated under Japanese Law. If you plan to export or take this product out of Japan, please obtain permission from the Japanese Government.

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**FCC Part 15 and RSS-210:**

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.

**FCC WARNING**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Following statement is applicable for final product(Game Machine), which mount the Reader/Writer Unit(HW210) inside.

**FCC Part 15 Subpart B Class A:**

**NOTICE**

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 or her own expense.

**ICES-003**

This class A digital apparatus complies with Canadian ICES-003.

Cet appareil numerique de la classe A est conforme a la norme NMB-003 du Canada.

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