Annex 2.1 Best Parking
Exit and Entrance System

Table Of CONTENTS

1.System General Information

If you want taking in and out,

permission and disapprobation for taking in and out may be achieved by this system.

First, computer for administration may examine your card number.

When is registered card thereafter,

permission and disapprobation for taking in and out are achieved.

System composition

Computer	Vehicle's Card ID administration . Pedestrian's Card ID administration ,Gate Access control
Card Reader for Vehicle	When visit, by computer for administration after read card transmission .
Card Reader For Pedestrian	When visit, by computer for administration after read card transmission .
Gate	When is registered card, through PIO baud from administration computer Gate OPEN
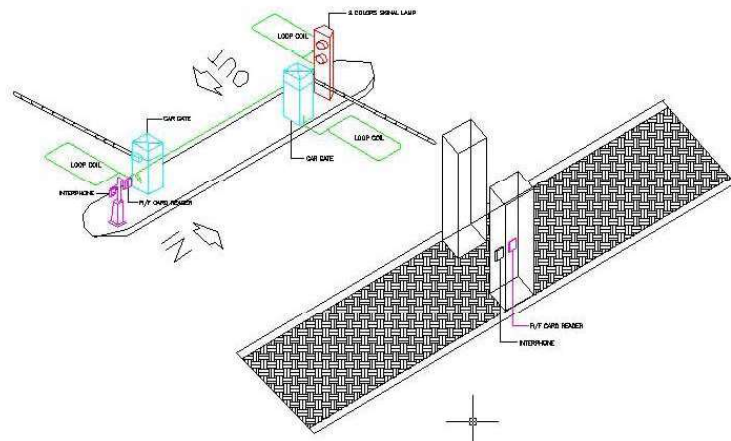
2. System Operation

▶ **When visit**

- Card possession vehicles : use Card Reader
- Vehicles that there is no card : use Intercom

procedure

Driver are CARD READING at vehicles entry

→ CARD ID that become READING transmits by administration computer

Whether transmitted card ID is card that is registered in administration computer, examination.

N

Y

Save Data Base

Use Intercom

Using PIO board Gate Open

Using Remote Control Gate Open

Vehicles entry to parking lot

▶ **When go out**

LOOP COIL PERCEPTION

Gate's OPEN signal control in Detector

→ When enter, gate automatic open because is vehicles that is searched

GATE OPEN

Go out vehicles

GATE DOWN Automatically

System For Pedestrian

▶ **When visit**

- ➲ Card possession Pedestrians : use Card Reader
- ➲ Pedestrians that there is no card : use Intercom
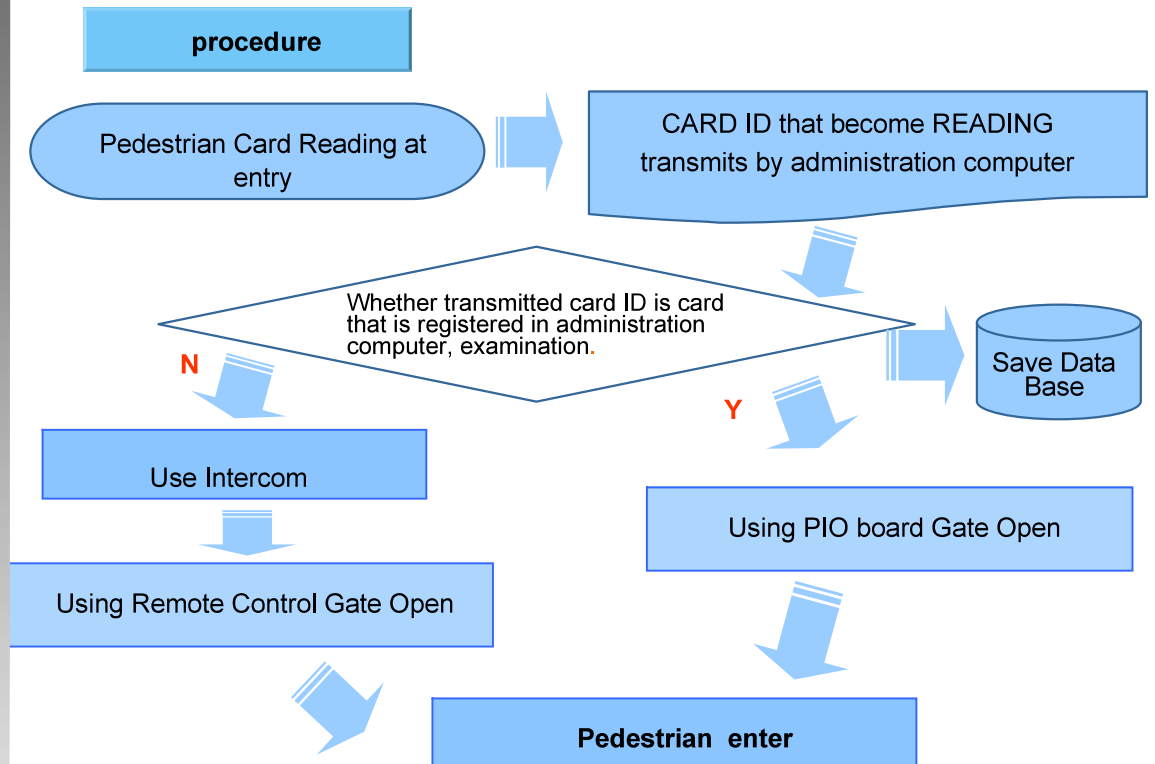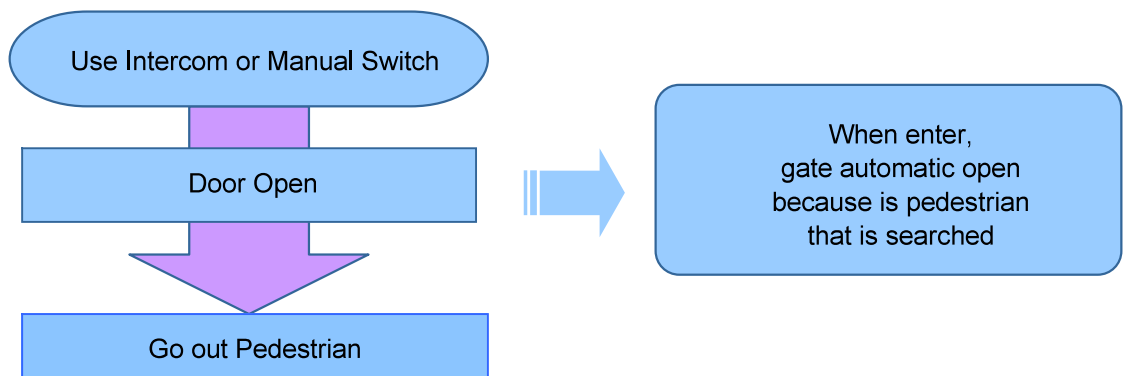
procedure

Pedestrian Card Reading at entry → CARD ID that become READING transmits by administration computer

Whether transmitted card ID is card that is registered in administration computer, examination.

N → Use Intercom

Y → Save Data Base

Use Intercom → Using Remote Control Gate Open

Using PIO board Gate Open

Pedestrian enter

▶ **When go out**

Use Intercom or Manual Switch

Door Open → When enter, gate automatic open because is pedestrian that is searched

Go out Pedestrian

3.System Introduction

Features

❖ Stand-alone automatic weather-proof type operator, constructed of heavy duty stainless steel housing

❖ The gate opens automatically as the electronic controller of the barrier gate recognizes the signal which integrated to the gate. And as the vehicle passes over the loop-coil embedded pavement area, the gate closes automatically.

❖ The barrier gate operates at the speed of within two seconds.

❖ The main panel of the cabinet constructed with a beveled edge for the areas with narrow lanes, and with a side accessed door removable only with key for ease of installation and servicing.

❖ The barrier gate is designed to be operated manually in the event of power failure or system malfunction.

❖ The barrier gate is integrated with 'Accu Count' function. If another car enter the loop area while the initial car is still over the loop, a second count pulse will be generated. This provides an excellent tool for detecting tailgaters or possible theft of money by allowing multiple vehicles.

Technical Specifications

➢ ELECTRICAL

Input power: 120/220 V   60 Hz

Power consumption: Stand-by 1 W, Operation 90 W

➢ GEAR MOTOR

Output : Reversible 90W

Speed Reduction Ratio: 75 : 1

Heavy-duty 3-tier cam gear type

Direct-driven gear type

➢ ENVIRONMENT

Ambient temperature range: -30℃ to +60℃

Humidity: 10% - 90%

➢ CABINET

Heavy-duty 14-gauge all-weather stainless steel construction with powder coated paint

Dimensions: 350 × 400 × 1120mm (14" × 16" × 44"h)

Weight: 65 Kg

➢ Finish: Yellow (body) and grey (top cover) with powder coat paint for anti-corrosion treatment

➢ GATE ARM Maximum length: 3 meters (Articulated arm optional)

➢ Gate opening speed: 90 in approximately 2 seconds

➢ The production company : BestParking (Korea)

Computer

❖ CPU : Pentium 4 2.93 GHz .

❖ RAM : DDR 256MB PC3200

❖ HDD : 160GB SATA(7200rpm)

❖ CD-RW drive : DVD/CD-RW Combo(48X32X48X16X)

❖ Lan : 10/100 Base-T

❖ Video graphic : ATI Radeon X300ES 128MB DDR memory

❖ Keyboard : HP PS/2 multimedia keyboard

❖ Mouse : HP PS/2 Optical Mouse

❖ All extension slot : 3PCI, 2DIMM

❖ OS : Microsoft Windows XP Home Edition

❖ The production company : HP (Korea)

Monitor

❖ Size : 19" (45.8cm)

❖ CRT Type : DynaFlat

❖ Dot Pitch : 0.20mm(H)

❖ Horizontal Frequency : 30-96 kHz

❖ Max. Resolution: 1920 x 1440 @ 64Hz

❖ Emissions: TCO 03

❖ Available Color(s): Ivory

❖ The production company : SamSung (Korea)

Color Inkjet Printer

❖ Print speed : 30/20 ppm (black/color)

❖ Print resolution : 1,200 DPI

❖ Printer memory : 32 MB

❖ Processor : 133MHz

❖ Pages/month : 5,000

❖ Paper capacity : 150 sheets

❖ Connectivity : USB

❖ The production company : HP (Korea)

Turnstile Barrier for Pedestrian

CONFIGRATION AND SPECIFICATIONS

• CASE

• SUPPORT PLATE (INCLUDING 3 ARMS)

• CONTROL PCB (INCLUDING SENSOR PLATE)

  – TYPE : TURNSTILE

   - DIMENSION : TYPE A, 1020 X 260 X 1020 mm

   - AC INPUT : AC 220V±10%, 60Hz±2%

   - POWER CONSUMPTION : STANDBY 1.3VA, TYPICAL 2.0VA

   - WEIGHT   : 80㎏

   - ENTRY, EXIT SELECTION IN ONE UNIT

   - COUNTS TRANSIT PERSONS

   - INPUT SIGNALS : DC 5V - 24V, CONTACT PULSE SIGNAL

CONTROL PCB FUNCTION

- C0NTROLLS THE SYSTEM DURING THE SETTING TIME BY CONVERTING

  CLOSE(OPEN) MODE THROGH THE EXTERNAL CONTACT SIGNAL OR DC5V-24V

  SIGNAL AT THE OPEN(CLOSE) MODE WITH NORMAL STATUS.

- (1) OPEN MODE: LAMP = GREEN

  - CLOSES THE GATE BY THE ENTRY/EXIT PROINHIBITON SIGNAL IS DETECTED

    WHEN THE GATE IS OPENED WITH THE NORMAL STATUS AND AUTOMATICALLY

    RETURNS BACK TO THE OPEN MODE AFTER THE DELAY TIME.

(2) CLOSE MODE: LAMP = RED

  - OPENS THE GATE FOR ONLY ONE PERSON BY THE ENTRY/EXIT PERMITTION

    SIGNAL IS DETECTED WHEN THE GATE IS CLOSED WITH THE NORMAL STATUS

    AND   AUTOMATICALLY RETURNS BACK TO THE CLOSE MODE AFTER THE

    ENTRY/EXIT PERMISSION.

(3) FREE MODE

  - OPENS THE GATE THE SINGLE OR BIDIRECTIONAL ENTRY OR EXIT WITHOUT

   ANY EXTERNAL SIGNAL.
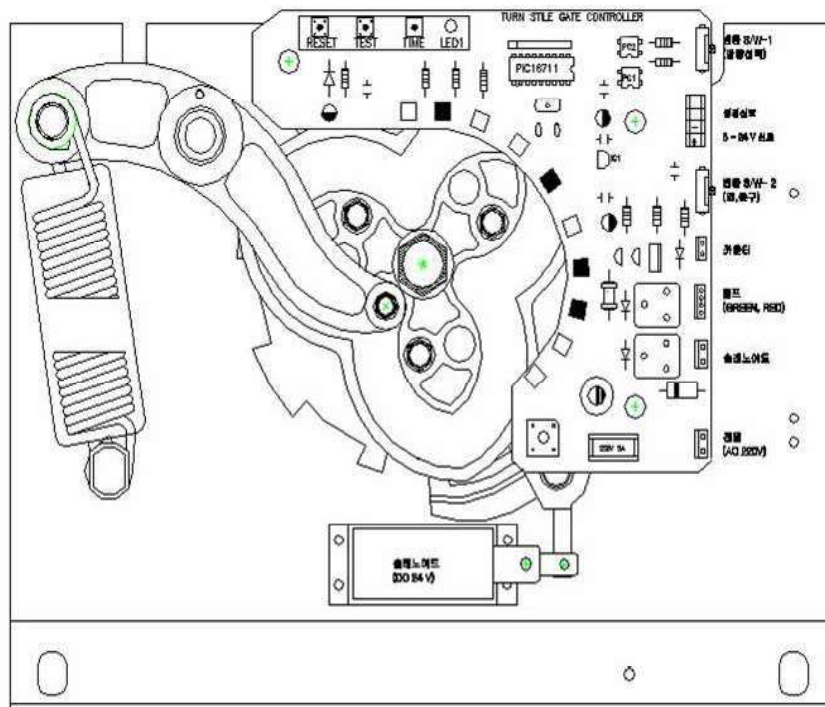
MECHANISM LAYOUT

FLOOR PLAN
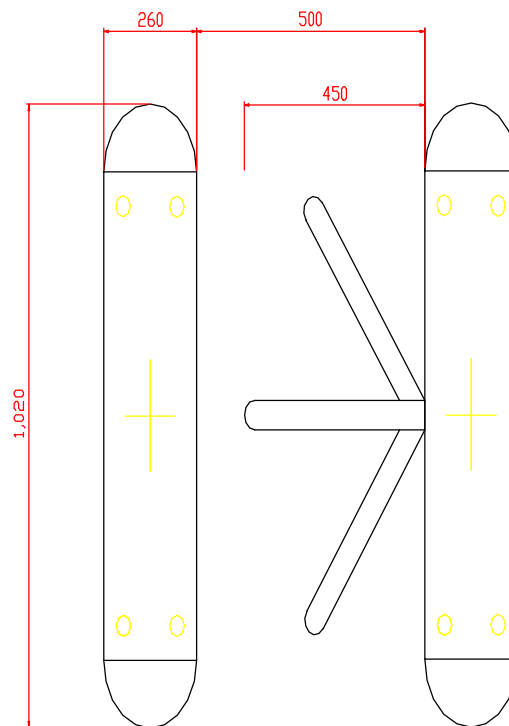
RF card reader and Intercom

FEATURES

- Proximity Radio Frequency reader (Reading range : 45cm ~ 2.1m)
- As use the proximity card reader, can b entering parking area
- Perfect recognition RF/ID card (Recognition speed 0.2sec)
- Dual reading tech reader/Active and passive
- Also can be use access control system (One card solution)
- Reader and antenna are single body
  (As operation the card reading, a led on)

PRODUCT IMAGE
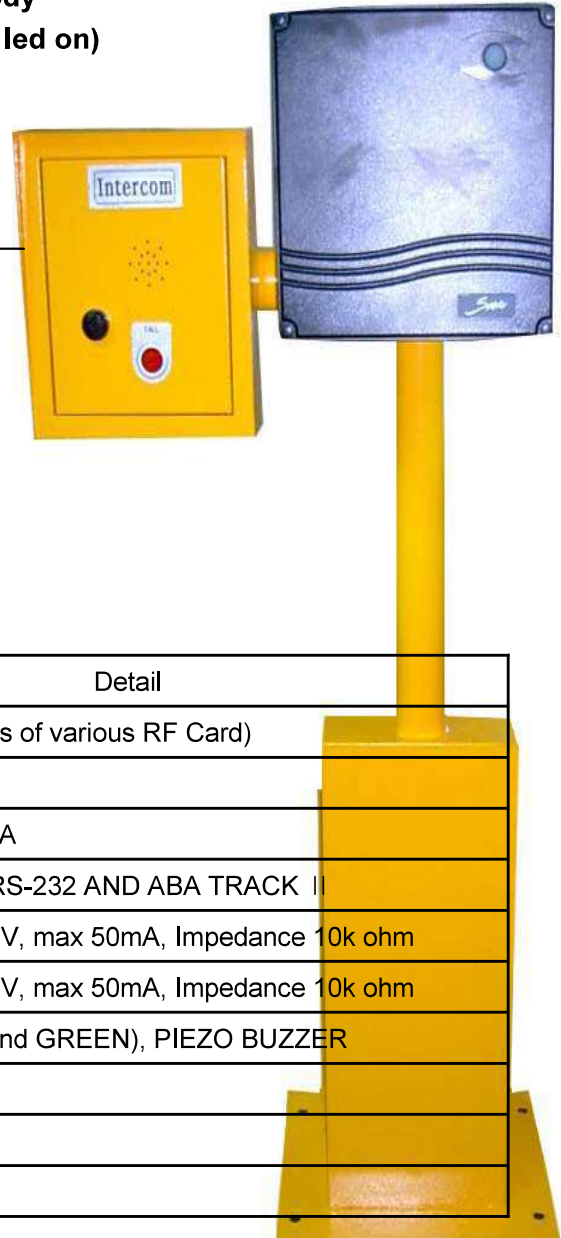
SPECIFICATION

Section	Detail
READING RANGE	45cm~2.1m(as kinds of various RF Card)
READING TIME	30ms
INPUT VOLTAGE	DC 12V. Max 600mA
OUTPUT FORMAT	26BIT WIEGAND, RS-232 AND ABA TRACK II
EXTERNAL BUZZER	Low Active, DC 0~5V, max 50mA, Impedance 10k ohm
EXTERNAL LED	Low Active, DC 0~5V, max 50mA, Impedance 10k ohm
LED/BUZZER	2Color LED (RED and GREEN), PIEZO BUZZER
OPERATIONG TEMP	-35~65℃
COLOR	Yellow
WEIGHT	1.4Kg(3 lbs)

Proximity, Keypad & Proximity Card Reader

RF10
RF20
RF TINY
RF30
RFK101

RF10   RF20   RF TINY

Key Features

RF10/20/TINY
- Read Range : Up to 4"(10cm)
- Wiegand, RS232, ABA Track II magstripe(Optional) format available
- Metal door frame, mullion (RF10, TINY) and wall mount (RF20)
- PSK modulation
- 100% Weather Proof
- Dual reading tech reader / Active and Passive
- Solid Epoxy potted
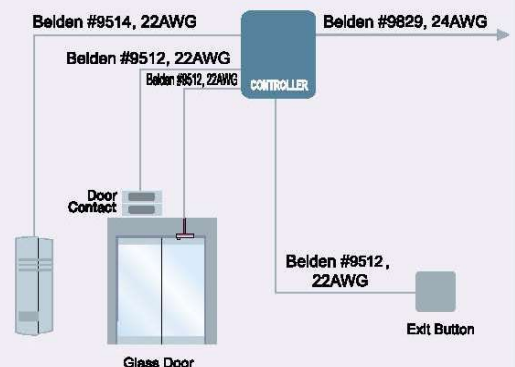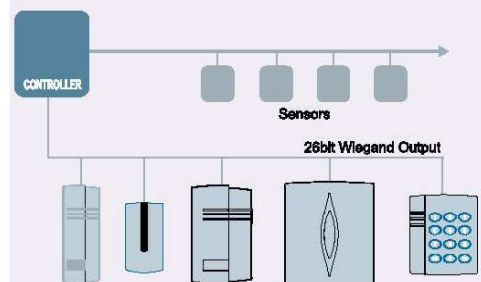- Reverse power polarity protection
- User format available

RF30
- Up to 12"(30cm) read range
- User format available
- Wiegand, RS232, ABA track II magstripe(Optional) format available
- PSK modulation
- Solid Epoxy potted
- 100% Weather Proof

RFK101
- Up to 4"(10cm) Read Range
- Built in 12 numeric keypads
- User format available
- 26 bit Wiegand, RS232, ABA Track II magstripe format and 8bit burst or 3 x 4 matrix output available
- PSK modulation
- Back lighting on keypad
- 3 LED indicators
- Dual Beep Tones
- High durability and reliability

RF10/20/TINY/30/RFK101

CONTROLLER — Sensors — 26bit Wiegand Output

Belden #9514, 22AWG   Belden #9829, 24AWG
Belden #9512, 22AWG
Belden #9512, 22AWG
CONTROLLER
Door Contact
Belden #9512, 22AWG
Exit Button
Glass Door

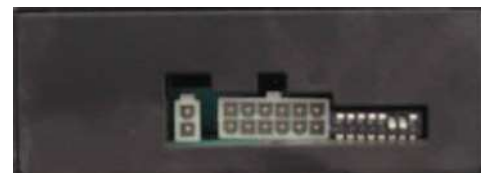# Etc….System Introduction

Features

- ❖ RS232C communication
- ❖ 2 Relay controls.
- ❖ signal 2 input , 2 output.
- ❖ Receive communication from computer and do barrier gate control.

Technical Specifications

- ❖ ELECTRICAL
  Input power: 220 V   60 Hz
- ❖ Relay
  Output : 2
  Input   : 2
- ❖ communication
  Rs232C
- ❖ CABINET
  steel
  Dimensions: 120 × 75 × 45mm (4.72" × 2.95" × 1.78"h)
  Weight: 800g
- ❖ The production company : BestParking (Korea)

E tc….System Introduction

Features

❖ RS232C signal and RS485 signal electrical insulation .

❖ 10MHz high speed photocoupler use .

❖ Surge protection circuit use.

❖ Can communicate by TXD, RXD, GND signal without bucky bits control by TX Enable automatic creation.

Technical Specifications

❖ ELECTRICAL

Input power: DC 7 ~ 12 V

❖ External from size

Dimensions: 114 x 78mm (4.72" × 2.95" × 1.78"h)

❖ The production company : Realsys (Korea)

Features

❖ 4 Serial extension device (USB port use) .

❖ Hot Plug & Play support

❖ USB 1.1 and USB 2.0

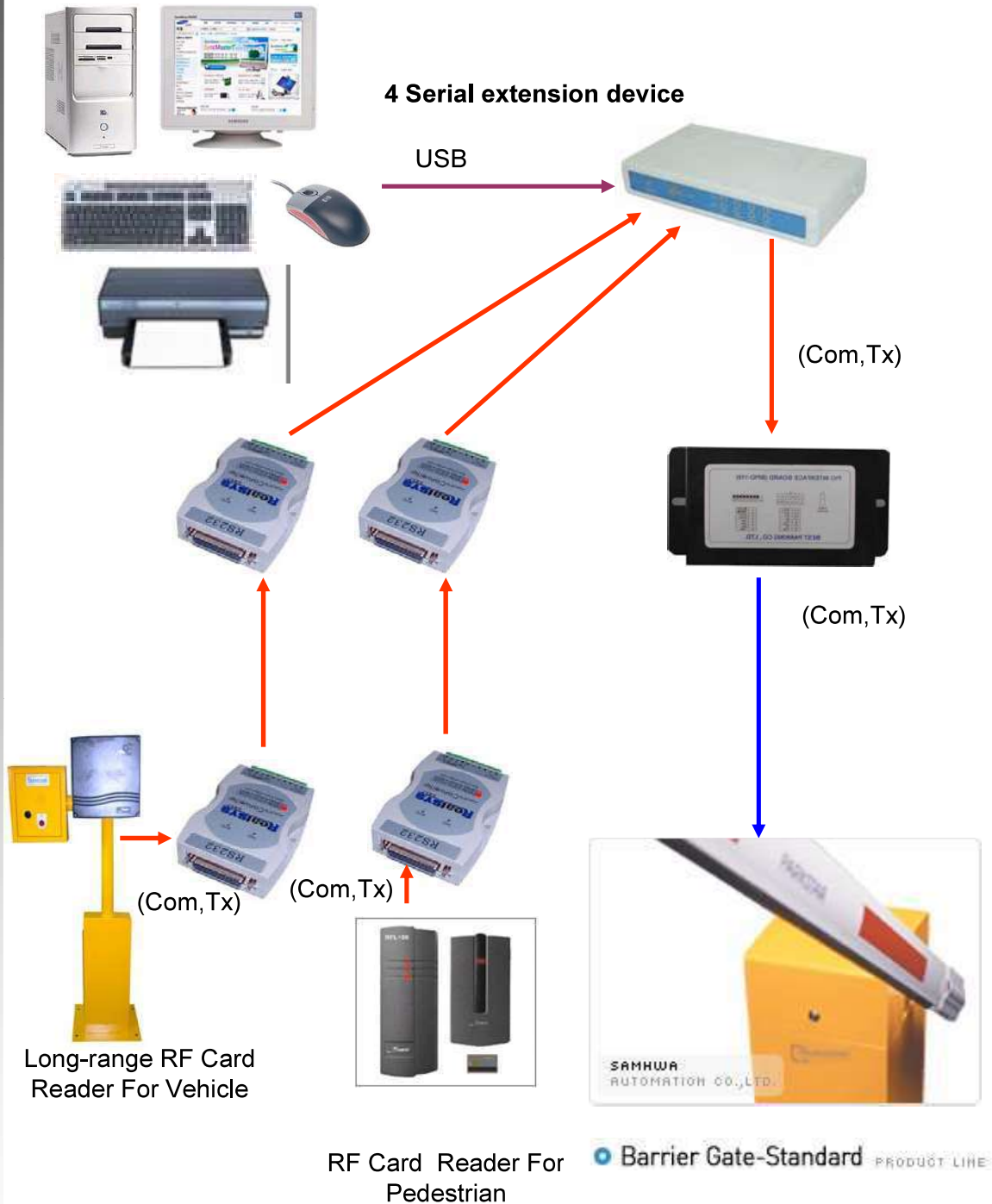❖ The production company : wiseware (Korea)

Etc…System Introduction

4 Serial extension device

USB

(Com,Tx)

(Com,Tx)

(Com,Tx)

(Com,Tx)

(Com,Tx)

Long-range RF Card Reader For Vehicle

RF Card Reader For Pedestrian

Barrier Gate-Standard PRODUCT LINE

SAMHWA AUTOMATION CO.,LTD.

Line kind

❖　　Power Line ： 300 V VCTF 1.25 mm² × 3C

❖　　**Communication Line :** electron shield data cable　24AWG × 4C

Etc…System Introduction

Loop Coil Setting

❖ concrete cutting (saw cut) depth 5㎝.

❖ Must become width 0.2㎝ of saw blade.

❖ Roof coil must use standard VCT 0.75×2×1core wire (#18AWG).

❖ If use Roof coil 1.6m×0.8m , must be 3 Turn

❖ when push roof coil in concrete , must not use Sharp-pointed metal
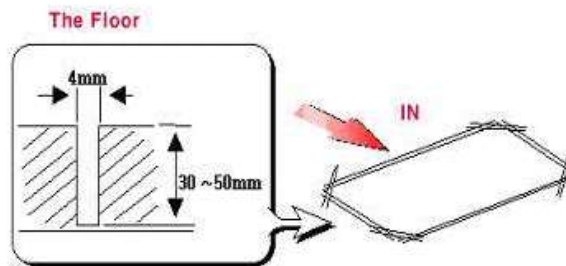
Intercom

BE-R300

❖ Gentle electronic sound

❖ **KDP-601D:Used DC12V**

(4Piece of 1.5V batteries into housing, lasts 10months)

❖ Communication range : Ø 0.65mm wire, 300mm line

❖ Easily mounted on wall, desk

❖ The production company : Commax (Korea)

Master Station(CM-204)   Sub Station(CM-200)

This product is master-sub intercom system that can install four sub stations to one master station.

Rectifier (RF-1A)