

# **Specifications**

for

**Park Count System**

**&**

**Parking lot Signal System**



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## **Specific Item**

- 1. Vehicle Detector**
- 2. Loop Coil**
- 3. Internal Alarm Lamp**
- 4. Vehicle Guidance Lamp (1 side / 2 side)**
- 5. Exit Warning Lamp**
- 6. Floor Full Display Lamp**
- 7. Entrance Full Display Board**
- 8. Parking Counter**

## 1) Vehicle Detector

### 1. General Function

1.1- Detector has the function as following: compare and check the importance signal from loop coil and drive the relay.

### 2. Technique Specification

2.1- Detect Method: detect by going through

2.2- Detect Speed: 1Km/h ~ 180Km/h

2.3- Detect Range: detects vehicles more than 2 wheels

2.4- Length of Read part: Maximal 150m

2.5- Output of timer: Output relay drive timer should be appointed of one's own accord with 0~60 seconds and the lamp which can recognize when detector works, should stick to the front side.

2.6- Detector Output: Pulse-100ms, Presence

2.7- A.T.C Function: It should be adjusted automatically even though the fickle temperature and humid environment.

2.8- Select of Sensitivity: Sensitivity select switch and frequency select switch should have over 3 levels. If the detection remains activated for certain amount of time (30 minutes), it has to be reset automatically.

2.9- Select of Frequency: 2 stages

2.10- Operating Temps: -30°C ~ +60°C

2.11- Main Power: AC 220V, 60Hz (Connecting to third one)

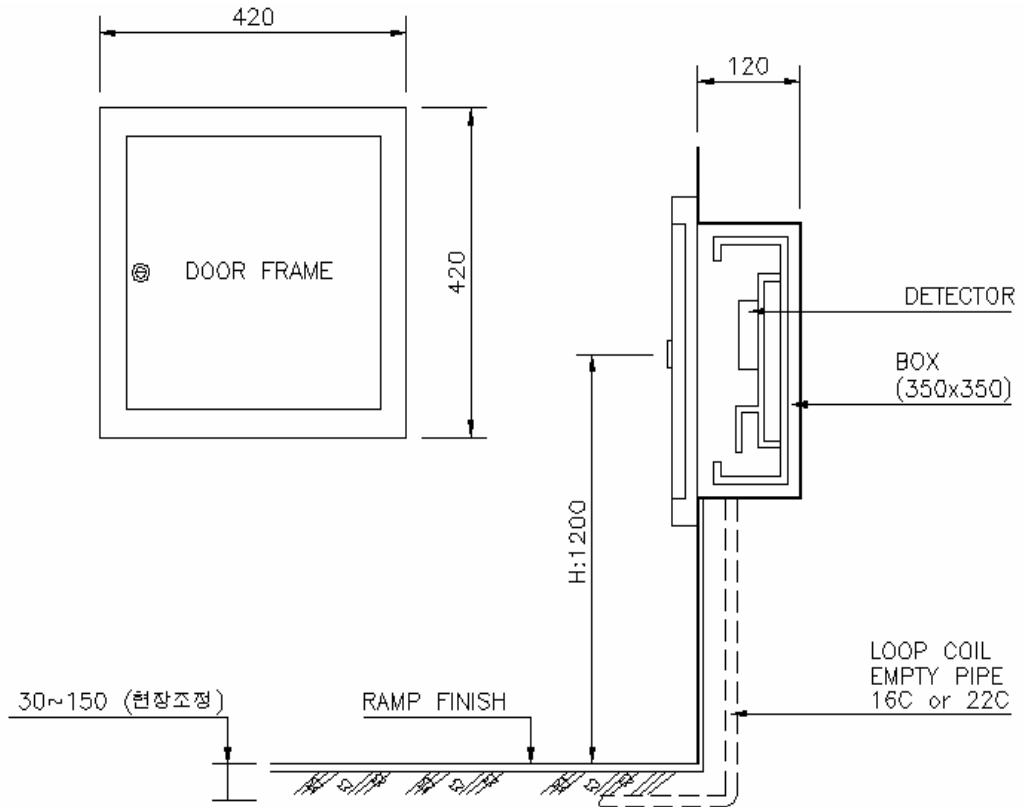
2.12- Power Consumption: Maximal 3 W

2.13- Configuration: Wall mounted

2.14- Material of buried box: Steel 1.2t (Color: ivory)

2.15- Material of Door: Steel 1.2t (Color: Ivory)

**3. Exterior Drawing**



[Exterior]



[Interior]

## 2) LOOP COIL

### 1. General Function

1.1- Loop coil has a function of receive high frequency signal from vehicle detector and make magnetic field around the loop coil. It transmits the change of impedance which is caused by the vehicle's passage to the detector.

### 2. Technique Specification

2.1- Material of Coil: Plastic Cable

2.2- Life cycle of Coil: Semi permanent

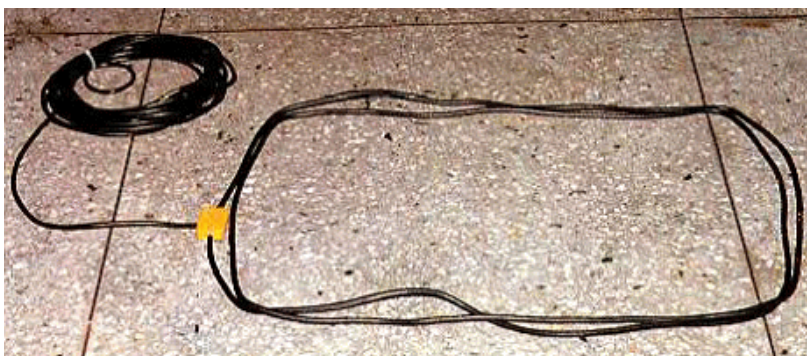
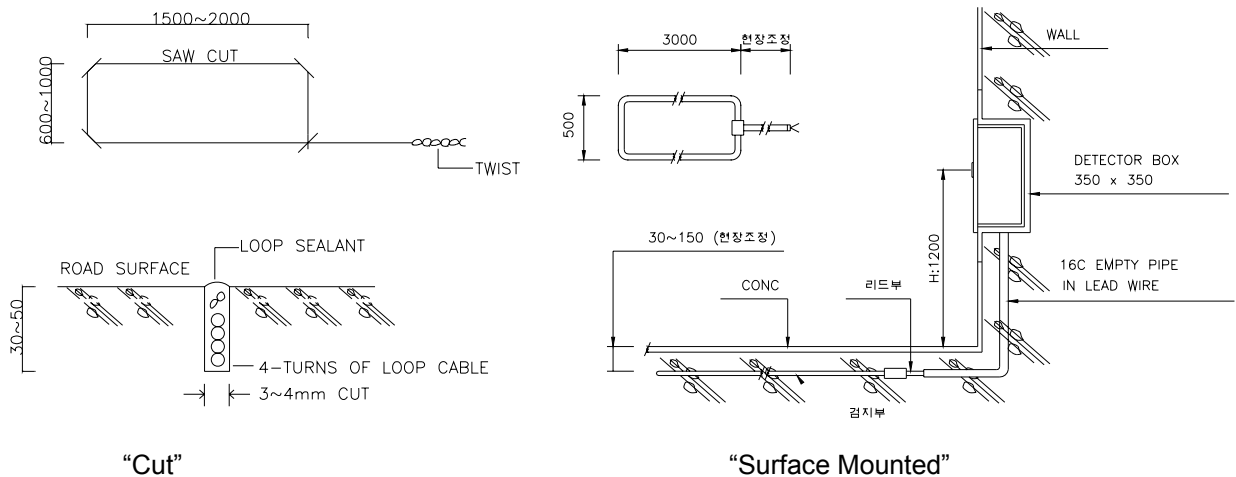
2.3- Cycles: 4 LC

2.4- Distance from coil to land: 30~150mm (could be revised in site)

2.5- Distance from slab iron bar to coil: nothing to do

2.6- Length of Read part: 6 ~50m (could be rectified in site)

### 3. Exterior Drawing



### 3) Internal Alarm Lamp

#### 1. General Function

1.1- If there's vehicle that drives into the parking lot, BUZZER and whirl alarm lamp is activated to prevent accident from opposite side entering car and to make sure the traffic flow.

1.2- It works by receiving signal from vehicle detector and could be adjusted by timer.

#### 2. Technical Specification

2.1- Alarm Sound : It sounds shortly to minimize the noise and to arouse attention around.

2.2- Whirl Alarm Lamp : It lights together with alarm sound

2.3- Configuration : - AC 12V, 15W LAMP

- Helical gear Speed Control Volume : 0~150RPM

- Cover : Yellow or Red

- Buzzer : small size panel type high-strength buzzer

2.4- Power Supply : AC 220V - 1P / AC 12V

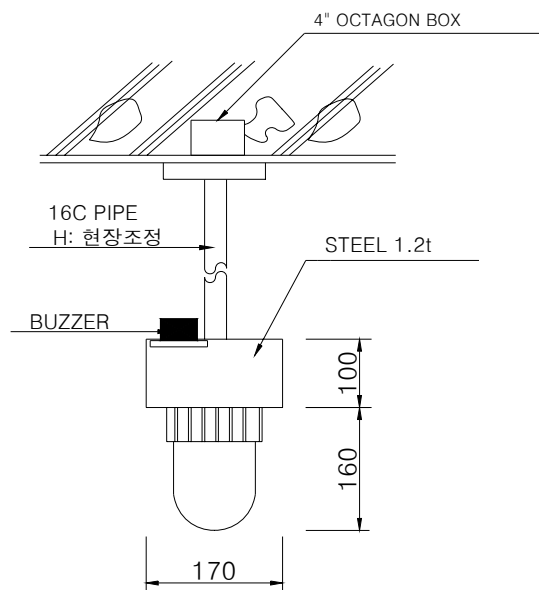
2.5- Power Consumption : 20W

2.6- Housing Configuration : Ceiling Type and stand-alone type, and the length could be adjusted in site.

2.7- Housing Material : ceiling - Steel 1.2t (painting : ivory)

stand-alone - Stainless Steel 1.2t

#### 3. Exterior Drawing



## 4) Vehicle Guidance Lamp (1 side/2 side)

### 1. General Function

1-1. It is guidance equipment, which is installed on the path of entrance/exit to make sure the safety in passing by and normal traffic flow.

### 2. Technical Specification

2.1- Built-in : 20W/32W/40W Type Fluorescent Lamp

2.2- Display : silk-print on milky acrylic

2.3- Main Power : AC 220V, 60Hz

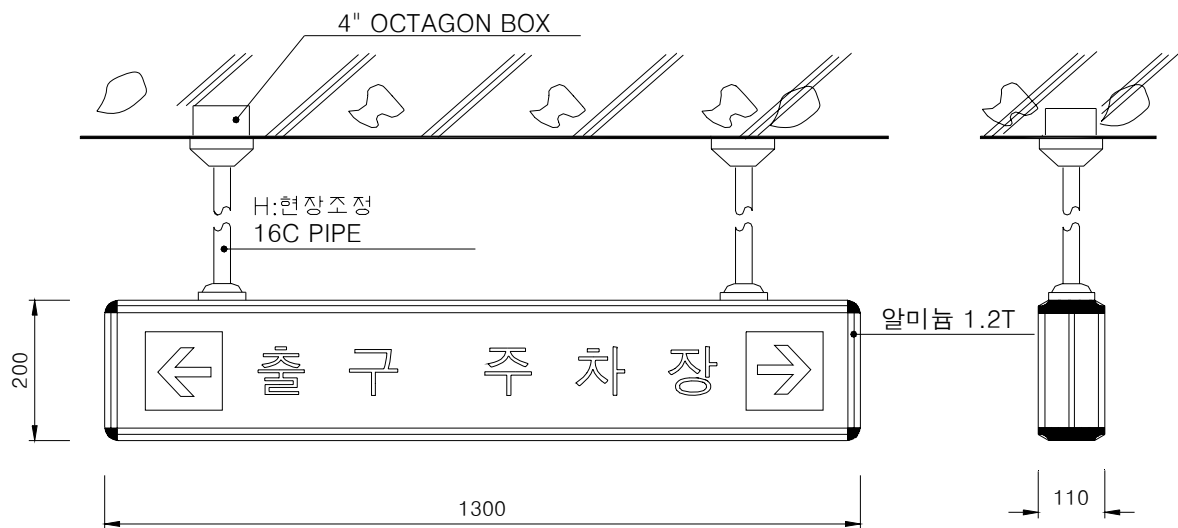
2.4- Power Consumption: 20W/32W/40W

2.5- Housing Configuration: ceiling type and the length can be adjusted in site.

2.6- Housing Material : Al 1.2t

2.7- Painting : ivory

### 3. Exterior Drawing



## 5) Exit Warning Lamp

### 1. General Function

1.1- When a vehicle comes forward out of the parking lot, it activates alarm to avoid accident and to make sure the traffic flow.

### 2. Technical Specification

2.1- Alarm Sound : It sounds shortly to minimize the noise and to arouse attention around.

2.2- Whirl Alarm Lamp : It lights together with alarm sound

2.3- Working Status : It works when it receives signal from vehicle detector

2.4- Display : It shows "Warning" with white letters on the milky acrylic blue background and inner lamp lights when alarm sound rings.

2.5- Device Composition : Helical Gear lamp(AC 12V, 15W Lamp) 3mm Yellow plastic cover  
Speed Control Volume(Range 0~150 PRM)

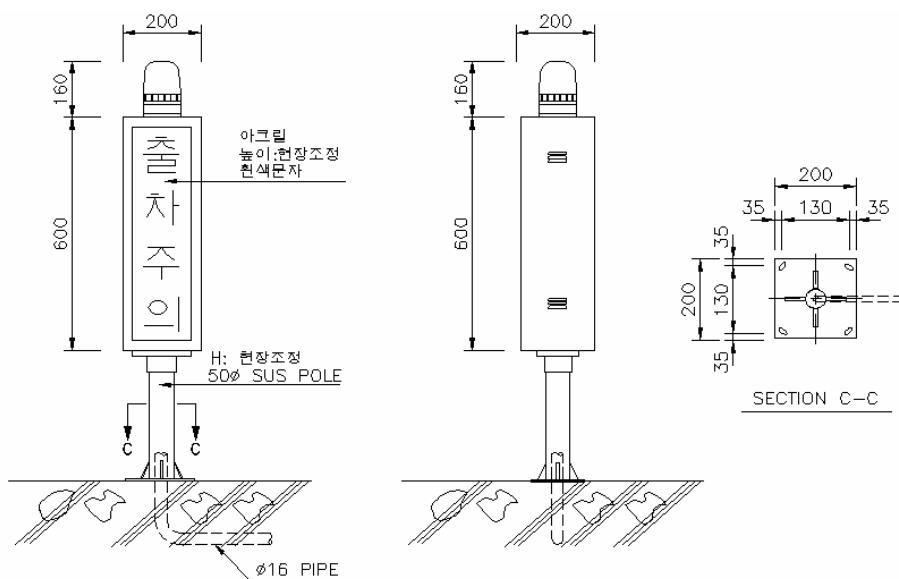
2.6- Main Power : AC 220V-1P / AC 12V

2.7- Power Consumption: 75 W

2.8-Housing Configuration: stand-alone type, and the standard length of the pole should be 500mm, and the height of the pole could be adjusted in site.

2.9- Housing Material : Stainless Steel 1.2t

### 3. Exterior Drawing





## 6) Floor Full Display Lamp

### 1. General Function

1.1-It displays number of vehicles on each floor of parking lot by receiving data from parking counter for drivers to be aware of parking information. It will be helpful in automatic parking guidance.

### 2. Technical Specification

#### 2.1- Control Board

- Hardware Cell : MICRO PROCESSOR 8BIT
- Memory : ROM - 8KB, RAM - 2KB
- Protocol : RS - 485

#### 2.2- Digital Display Part

- Hardware Cell : 7SEGMENT
- Size : more than 70mm(width)×100mm(length)
- Display : 3 digits (999)
- Sign of full occupancy : FULL / 2mm Acryl board for front panel for signage

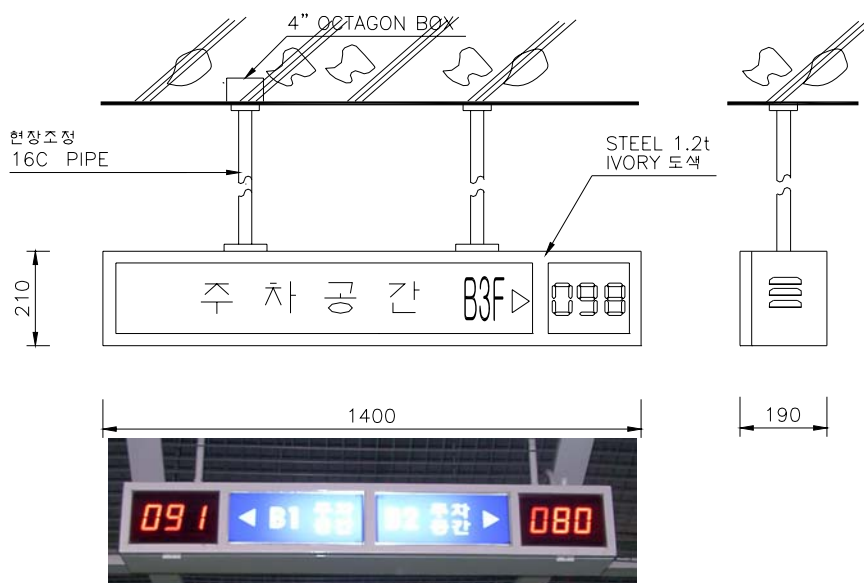
2.3- Use Electricity : AC 220V, 60Hz

2.4- Power Consumption: 32W

2.5- Housing Configuration: ceiling type and the length can be adjusted in site.

2.6- Housing Material : Steel 1.2t

### 3. Exterior Drawing



## 7) Entrance Full Display Board

### 1. General Function

1.1-It should display entrance guide of parking lot and receive data from parking counter for drivers to be aware of parking information. It should be great helpful in automatic parking guidance.

### 2. Technical Specification

#### 2.1- Control Board

- Hardware Cell : MICRO PROCESSOR 8BIT
- Memory : ROM - 9KB, RAM - 2KB
- transaction method: RS - 485

#### 2.2- Digital Display Part

- Hardware Cell : 7SEGMENT
- Size : more than 70mm(width)×100mm(length)
- Display Cipher : 3 digits (999)
- Sign of full occupancy : FULL

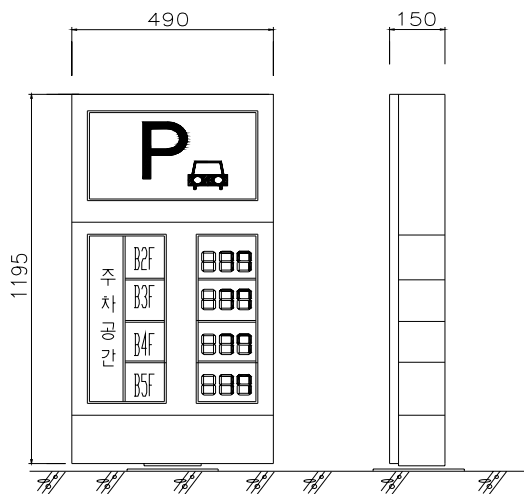
2.3- Use Electricity : AC 220V, 60Hz

2.4- Power Consumption: 120W

2.5- Housing Configuration: stand-alone

2.6- Housing Material : Stainless Steel 1.2t

### 3. Exterior Drawing



\*The floors to be adjusted by number of floors.

## 8) Parking Counter

### 1. General Function

1.1- It is installed in parking control room or emergency room to display occupied spaces of each floor and total No. of vehicles that drive in/out.

1.2- It can set parking spaces of each floor randomly and when all the spaces are occupied, it will output full signal. If necessary, output full signal manually to control the vehicles in/out artificially.

### 2. Technical Specification

#### 2.1-Control Board

- Control Device : MICRO PROCESSOR 8BIT
- Power Failure Compensation : NI-CAD battery that can store data for eight days.
- Automatic Calculation : Reset count value automatically every midnight or on the last day of every month.

#### 2.2- Digital Display

- Content of Digital display : digital Clock (6 lines)
- total No. of vehicles that drive in (6 lines)
- total No. of vehicles that drive out (4 lines)
- occupied spaces by each floor (3 lines)

#### 2.3-Input/Output terminal

- Input signal line : Inserted from vehicle detector that installed on the each floor. (non-voltage contact)
- Output : Output relay of the whole occupied spaces (non-voltage contact, 5A)  
Output relay of occupied spaces by each floor (non-voltage contact, 5A)  
output full signal manually
- Data transmission : transmission method - RS 485  
transmission form - Async, Serial Port  
transmission distance - maximal 1KM

#### 2.4-Main software

- Set full-occupancy : Set full-occupancy spaces by each floor (3 lines)
- Clock Part : month/date and hour / minute / second, 00 second minute Setting
- Set No. of occupied spaces randomly : Set No. of occupied spaces by each floor randomly

- Restore automatically : Program should restore the system automatically within seconds if the system fails cause of the inflow of the noise from outside or cause of drop of electric pressure.  
→ Restore time : approx. 8 seconds (can be changed)
- Set equipment's serial No.: When operate the system for the first time or when you do not use the system for a long time, there's no need to set equipment's serial No.(Cipher of serial No.: 4 lines)

2.5- Temperature : 0 °C~+45 °C

2.6- Main Power Supply : AC 220V, 60Hz (grounding of third kind)

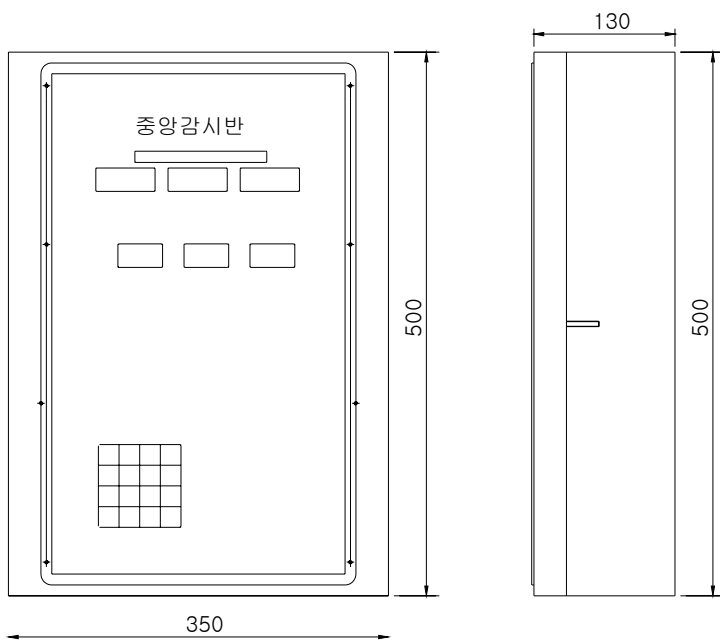
2.7- Power Consumption : maximal 80W

2.8- Housing Configuration : wall – mounted

2.9- Housing Material : Steel 1.2t

2.10- Painting : Ivory

### 3. Exterior Drawing



\*Floor indicator to be changed by site.

[ Count system basic Diagram ]

