E50 Installation Guide

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伟龙电子工程（马）有限公司

WEI LONG ELECTRONIC ENGINEERING (M) SDN BHD,

Iskandar Puteri, Johor, Malaysia.

Target Audience

Dealer, Agent, System Integrator, Buyer, Installer, Contractor.

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The document for general information only, in subject to any prior revise from time to time and will be without prior notice. Wei Long hold no responsibility on any errors or inaccuracies that may appear in this manual.

Safety Declaration

Wei Long declines any responsibility on failure, injury or death due to improper use or use other than the use of what product is intended or due to negligence on Good Workmanship when installing or handling this product.

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Contents

Introduction

- This guide is intended for the installation team on-site. It serves as a basis for the execution/processing of the installation of one/multiple terminal(s) E50.
- All the steps for installation must be done before operating the kiosk.
- Wei Long Electronics Engineering technical support can be reached on:

    wlmy.support@weilongelectronics.com or XXX-XXXXXXX

Site prerequisite

Reasonable location must be selected to install E55 Plus kiosk:

- The installation site must have the space for the E55 Plus Kiosk enclosure. Dimensions are: 305 mm x 338 mm x 1413 mm (W x L x H) with weight of XX kg.
- The installation of E50 require a lane construction which follow the standard parking requirement (see Figure 1.2) .
- Visible location from parking customer. If not possible, must aid customer with sign pointing to the terminal.
- Must not near any hazard and water source (eg: High Voltage, Flammable material, Bomba water hose, Water dispenser, etc)
- If E50 to be installed outside, Wei Long recommend installing an awning or roof over the terminal to protect it from inclement weather and to aid screen visibility in direct sun light.
- Must have conduit stub-ups that provide:
    - Incoming local LAN network coverage (CAT5e or CAT6) with minimum speed of 100Mbps.

- Incoming AC power (240VAC 50/60Hz) from local sub-board with supply isolators (e.g. MCBs or fuses)
- Incoming loop coil cable
- Incoming barrier open signal cable
- An incoming intercom system connection if required.

- The stub-ups and terminal must be positioned as Figure 1.1.

- Recess required between terminal to wall and terminal to road as per Figure 1.1 for operation and maintenance of terminal.
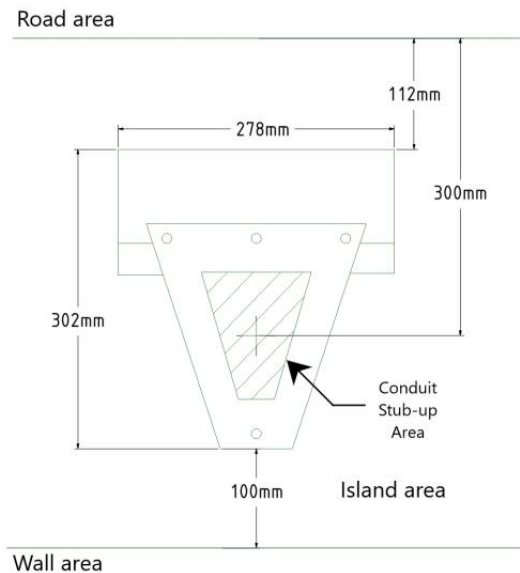
Figure 1.1: E50 terminal footprint.

> **IMPORTANT!**
>
> Please refer single diagram for the parking system cabling. The diagram can be request from the Dealer/Agent/System Integrator.
>
> Always confirm with Professional Civil and Structure engineer or appointed building consultant before proceeding with beam hacking or any civil and electrical work.
>
> Wei Long recommend having spare LAN network cable when installing underground cable.
>
> After the assessment and evaluation of the structural conditions on-site, the installation must be conducted by a trained professional (minimum 2 person).

Lane Layout Requirement

To install the E70 terminal, parking lane layout must be built first and follow the standard requirement. Figure 1.2 shows the typical lane layout diagram. Standard requirement of the parking lane :

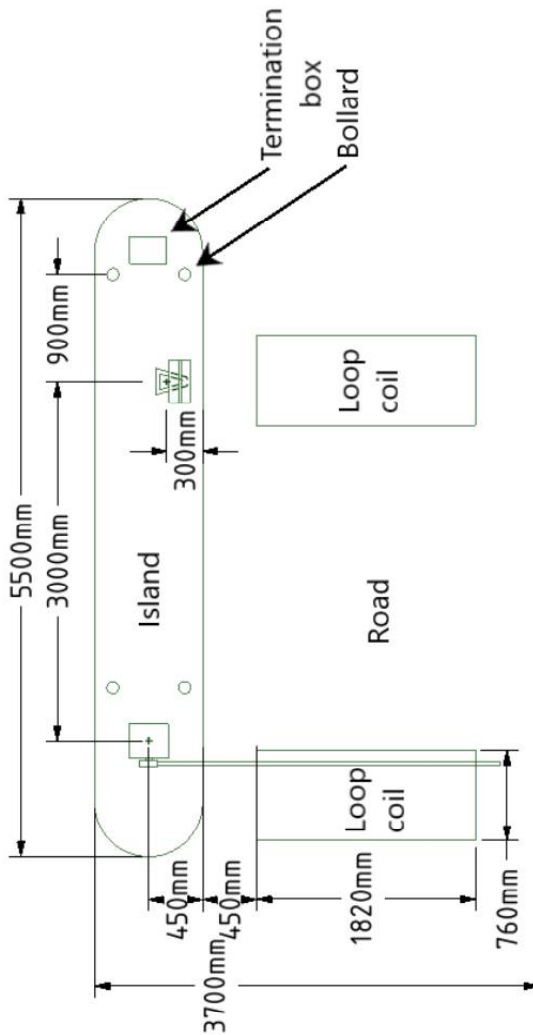- Loop coils
- Barrier gate
- Island/Concrete pad

Figure 1.2: Typical parking lane layout diagram

NOTICE:

Lane layout may vary for each site. Please refer to the Dealer/Agent/System Integrator for layout recommendation.

Loop coils

Loop coils is used to detect presence of the vehicle by using electromagnetic force. Loop coils is an important in the parking system. The stability of loop coil will influence the performance of parking system. Therefore, these points need to consider before building the loop coils:

1. No metal parts within 50 cm radius
2. No power supply circuit within 1m radius
3. If need to build more than 1 loop, distance must be more than 2m.

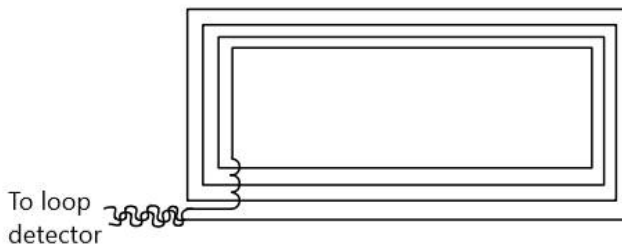Please refer with Dealer/Agent/System Integrator for loop coils construction guide.

Figure 1.3: 4-turn loop coils

Barrier Gate

Barrier gate allows access block to any vehicle from passing through. Barrier gate must have appropriate distance with E70 terminal to operate (Figure 1.2) .

Please refer to the respective barrier supplier for more information and installation guide for barrier gate.
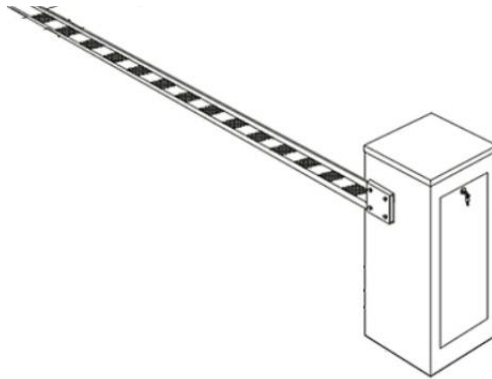

Figure 1.4: Barrier gate.

Island/Concrete Pad

Island provide protection to the equipment and cable, also, it provides lane guidance to the vehicle.

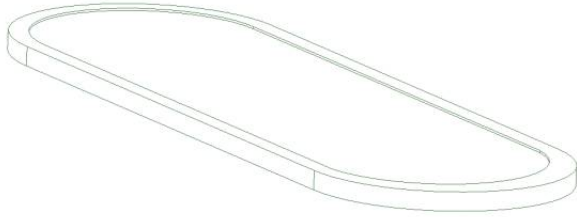Please refer with Dealer/Agent/System Integrator for island construction guide.

Figure 1.5: Island/Concrete Pad

Physical Installation

Tool list

In addition to the standard tools, the following tools are required to setup the E50 terminal:

- Hammer drill with stone drill XX,
- Bolt wrench XX mm (for the body mounting)
- Network cable tester
- RJ45 Crimper

List of Enclosed Accessories

Here is the list of accessories together in the packaging:
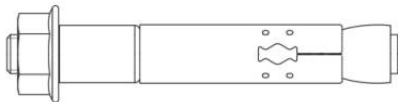

Figure 2.1 Steel Masonry Anchor bolt set

1. 4 x Steel Masonry Anchor bolt set (XX mm drill hole / XX mm deep)
2. 1 x Base mount template
3. 4 x Double sided tape
4. 2 x E50 Terminal key

Install the Terminal

Follow this procedure to install the E50 terminal:

1. Remove the packaging from the kiosk.
2. Look for the mini package containing manual, accessories and key enclosed together with the terminal packaging.
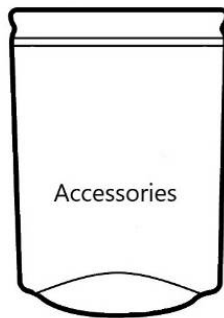

Figure 2.2: Mini package

3. Take base mount template and stick it by using double sided tape on the concrete slab. Make sure the side position of terminal and stub-up is correct.
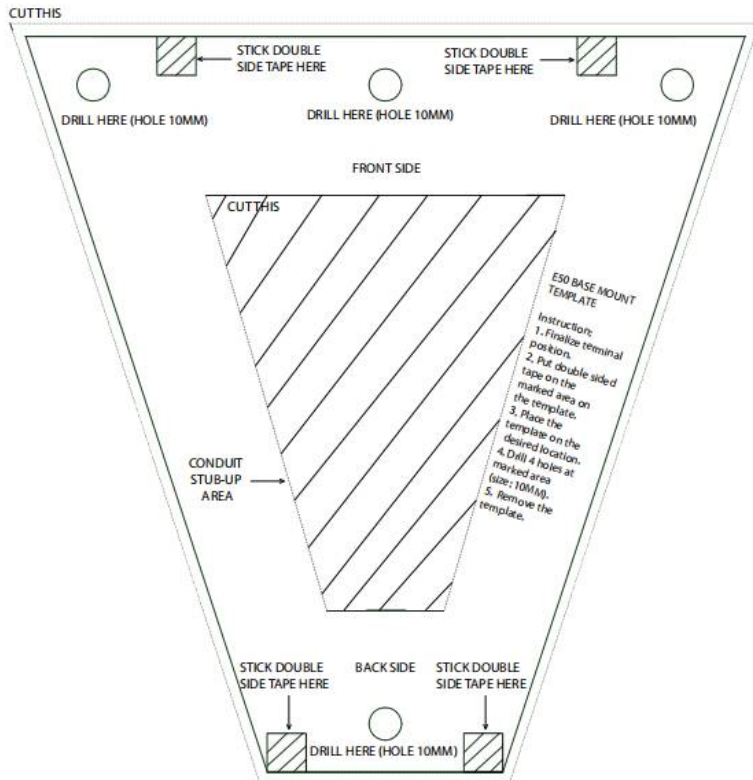
CUTTHIS

STICK DOUBLE SIDE TAPE HERE
STICK DOUBLE SIDE TAPE HERE

DRILL HERE (HOLE 10MM)
DRILL HERE (HOLE 10MM)
DRILL HERE (HOLE 10MM)

FRONT SIDE

CUTTHIS

E50 BASE MOUNT TEMPLATE

Instruction:
1. Finalize terminal position.
2. Put double sided tape on the marked area on the template.
3. Place the template on the desired location.
4. Drill 4 holes at marked area (size: 10MM).
5. Remove the template.

CONDUIT STUB-UP AREA

STICK DOUBLE SIDE TAPE HERE
BACK SIDE
STICK DOUBLE SIDE TAPE HERE

DRILL HERE (HOLE 10MM)

Figure 2.3: E50 base mount template.

4. Mark the location for the holes on the concrete slab by following the base mount template. 4 fastening points required. Remove the template after done marking.
5. Create the drill holes and install the steel anchor.
6. Place the kiosk on top of the concrete slab, align the bolts up through the base holes of the kiosk.

SAFETY WARNING!

Heavy item. Must use lift aid and proper lifting techniques while moving the kiosk!

Always lift the kiosk by the main body only!

Failure to follow instruction may cause injury to personal and damage to the product.

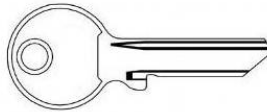7. By using key provided, open the terminal door.

Figure 2.4: Terminal key

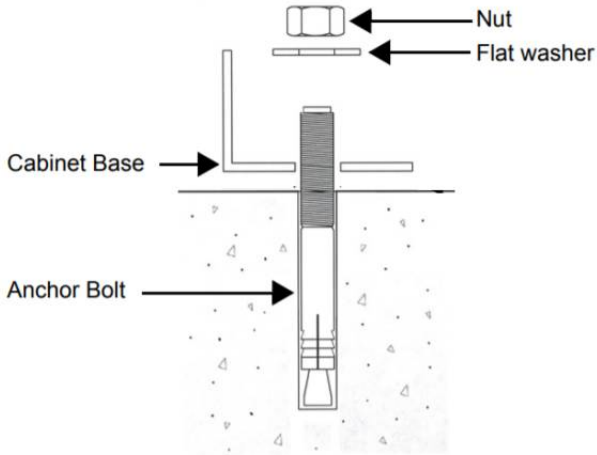8. Fasten the kiosk by using nuts and washers provided.

Figure 2.5: Bolt attached to terminal base

Attaching AC Power

SAFETY WARNING!

To avoid electrocution, shut down the incoming AC power to the kiosk while doing installation!

E50 terminal require live wire, ground wire and earth wire from incoming AC power. To attach incoming AC power:

1. Guide the AC power cable to the power connector through pillar into the cable entry inside E50 terminal.
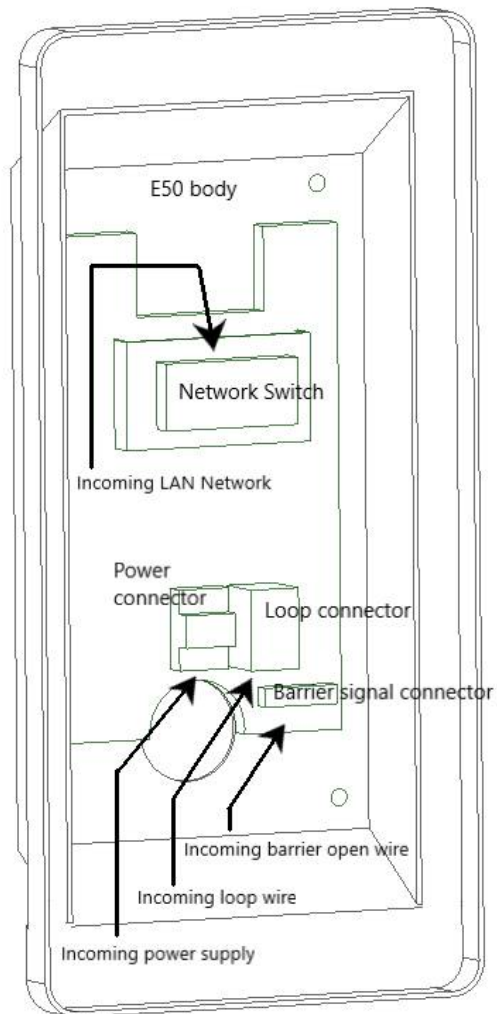
Figure 2.6: Picture of power connector, loop connector and barrier signal connector position.

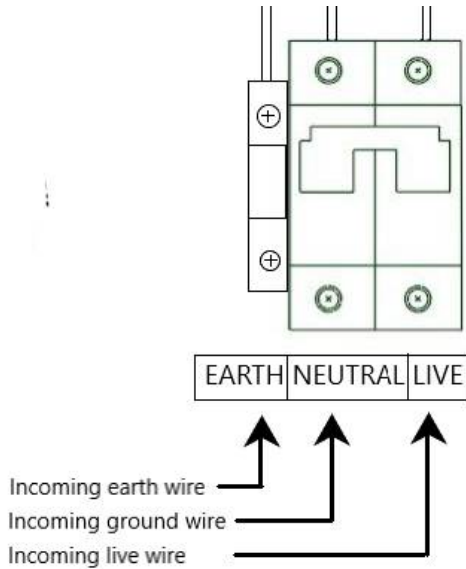2. Insert the power supply cable in accordance with the markings.

Figure 2.7: Power connector markings.

INFO:

Please refer block diagram for more information on the kiosk cable connection.

Attaching LAN Network

LAN network cable will be attached to the network switch inside the kiosk. To attach LAN network:

1. Guide the LAN network cable to the network switch. Use the cable conduit passage until reach the network switch (see Figure 2.6).
2. Clamp the network cable head. Must use the 8P8C Way Male Modular Plug Head.
3. Plug-in the network cable into available port at the network switch.

> **IMPORTANT:**
>
> Make sure to check the network connection by using network cable tester.

Attaching Loop coil

Loop coil will be attached with loop detector inside the E70. To attach loop coil:

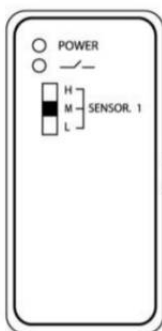1. Remove the loop detector from the loop detector socket.

Figure 2.9: Loop detector

2. Insert loop coil in accordance at the loop detector base socket markings (Figure 2.10).

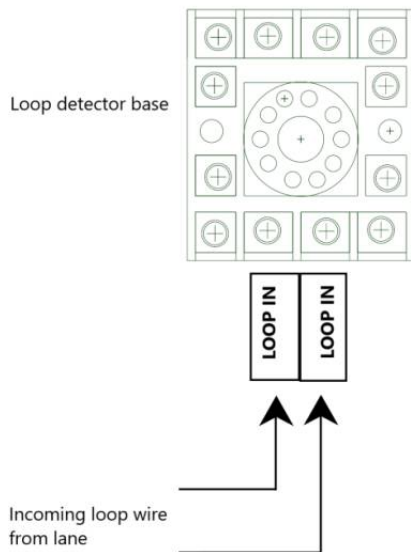3. Connect back the loop detector into loop detector base socket.

Figure 2.10: Loop coil markings.

Attaching Barrier Open Signal

Barrier open signal wire is wire connected from barrier gate. It will be attached to barrier open connector in E50. To attach barrier open signal wire:

1. Guide barrier open signal wire to the barrier signal connector (Figure 2.6)

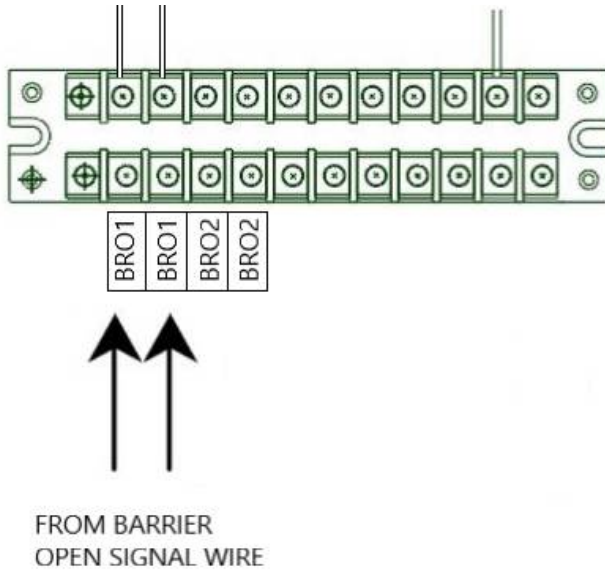2. Insert barrier open signal wire in accordance to the markings.

Figure 2.11: Barrier open signal markings.

Connect the intercom

Depending on the specification of the E70 terminal, intercom in the E50 can be either analog type or digital type. For digital intercom, no extra installation required. Please refer to the seller/distributor for the product verification.

Analogue intercom connection

For analog intercom system, E50 will be equipped with analog slave intercom. To connect the analog slave intercom:

1. Guide the analog intercom cable from base to the slave intercom. Use the cable conduit passage until reach the slave intercom.

E50 Door

E50 Body

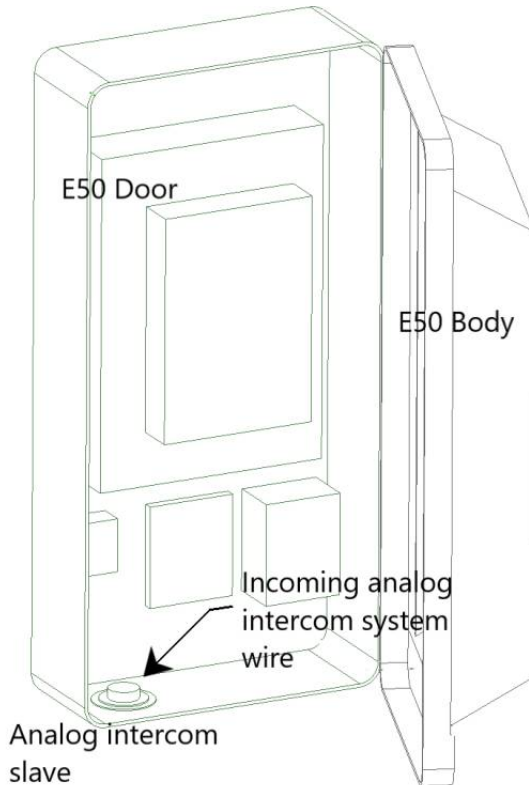Incoming analog intercom system wire

Analog intercom slave

Figure 2.12: Slave analog intercom position.

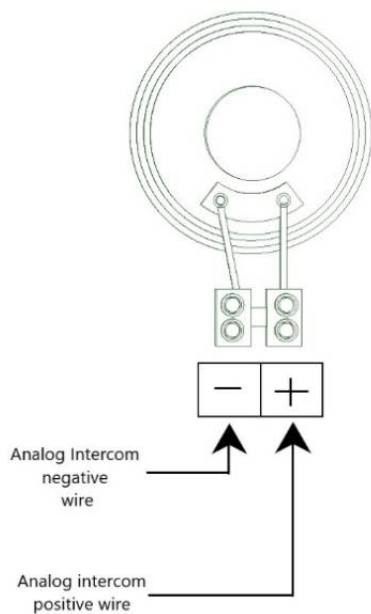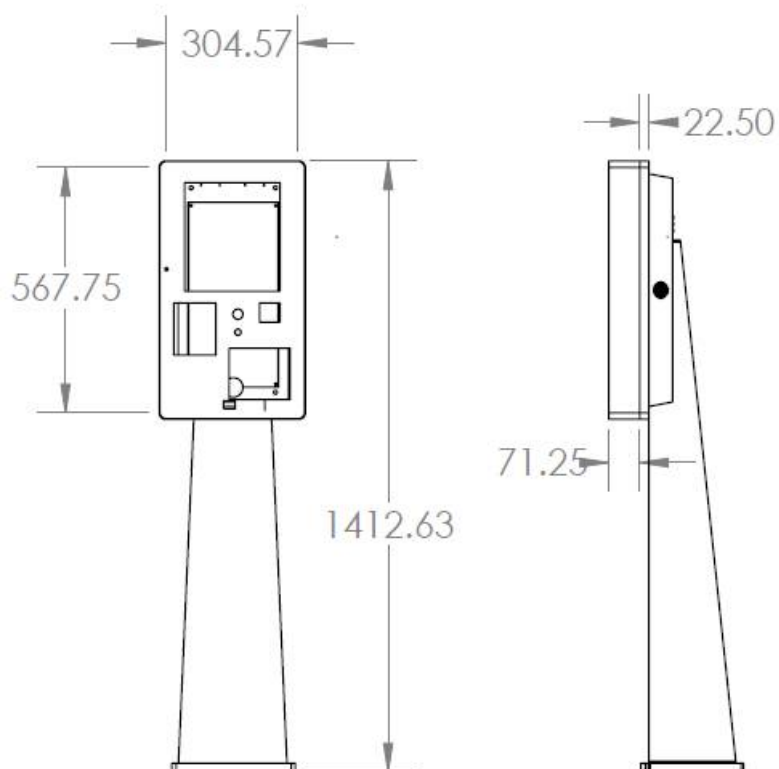2. Connect analogue intercom cable in accordance with the markings.

Figure 2.13: Slave analog intercom connection markings.
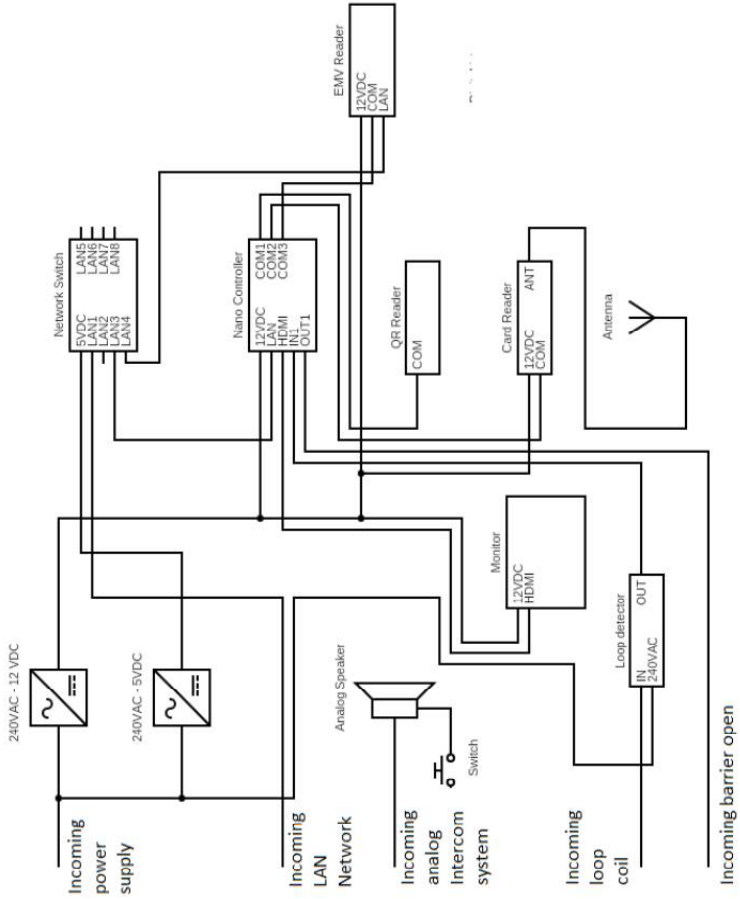
Dimension

Block Diagram
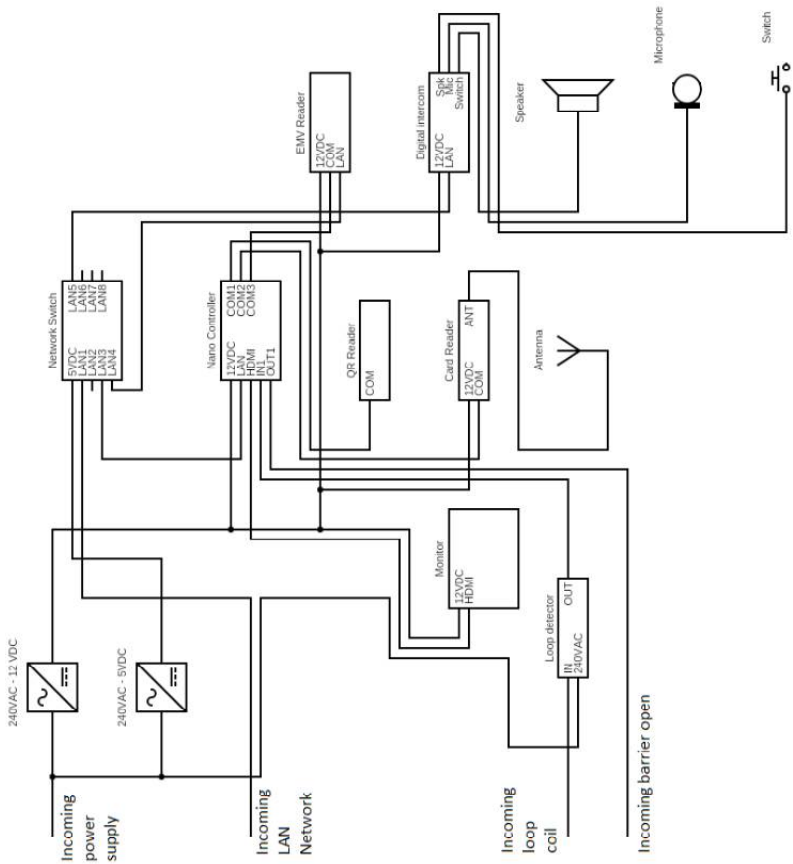

Figure 3.1: E50 block diagram with analog intercom

Figure 3.2: E50 block diagram with digital intercom

Technical data

Dimension	305 mm x 338 mm x 1413 mm
Weight	XX KG
Operating Voltage	220 - 240VAC / 50-60 Hz
Rated Current	XX A
Ambient temperature	5° C – 65° C
Protection Class	IPXX
Card reader	Mifare, EMV, TnGo
Display	10 Inch Full Color LCD
Warranty	1-year part warranty

Remarks