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# GENERAL

This installation manual is written for people who are involved with the preparation, installation and configuring the PaSS gateway system in the parking facility.

During the preparation phase of the project, the physical components and installation are defined is defined.(Rack, cameras, displays, cabling plan ...)

During the installation phase everything will be physically installed. An external party will most often mount the devices and install the required cabling. A Qpark or PMS technical person will connect the different features, such as "barrier open" , loop detectors etc, to the IO controllerl in the gate way rack.

During the configuration phase, the installation will be checked and accepted. The rack will be powered and the system will be configured with the correct configuration files. Also the cameras will be adjusted. Displays are loaded with the correct application and configured with the correct IP. At the end of the configuration the system is operational and ready to be put in service.

## Video test

# PREPARATION

## PROJECT DEFINITION

Definition of the PaSS project setup, how many entries/exits, displays, pinpads, redundant or not etc.

# PRE-INSTALLATION VISIT & CHECKLIST

Check practical implementation.

Where to place cameras?

Where to place rack? Is there power and network connection(s) available?

What is the distance between devices and rack?

How to connect to barriers? Type of barrier? Kind of contacts etc…

Connecting to loops and barrier feedback.

Where to place pinpad? Should it open a door? Via pinpad or IO module in rack?

Where to mount displays, how (type)?

There is a pre-installation check list document.

# NETWORK

Prepare the following router and firewall configurations to be done by QPark network

## Configuration Server

https://accenv-cluster.westeurope.cloudapp.azure.com:19081/QPark.Cloud.Access/WebApi/swagger/ SSL must be enabled

**IPv4 Address Port**

## Resin

| Port | Detail |
|---|---|
| 443 (TCP) | used to connect to the VPN and the web terminal, and many web endpoints using TLS (https://.) |
| 123 (UDP) | NTP time synchronisation |
| 53 (UDP) | DNS name resolution |

| Domain to whitelist | Port |
|---|---|
| *.resin.io | 80, 443 |
| *.pubnub.com | 80, 443 |

Additionally make an outgoing connection to **mixpanel.com**, but this is not a functional requirement, but rather allows us to track useful metrics

Source: https://docs.resin.io/deployment/network/2.x/#network-requirements

## Azure

| Protocol | Port |
|---|---|
| MQTT | 8883 |
| MQTT over WebSockets | 443 |
| AMQP | 5671 |
| AMQP over WebSockets | 443 |
| HTTPS | 443 |

## Logging

| IPv4 Address | Port |
|---|---|
| 10.16.45.214 | 5044 |

## CCV

| IPv4 Address Description | Description | Ports |
|---|---|---|
| 193.172.166.19 | CCV TMS Server | 6600 |
| | | 6900 |
| | | 10040 |

| | |
|---|---|
| | 9996 |
| | 9997 |
| | 9998 |
| | 9999 |

## Displays

The IPs used by the displays should have a connection to Azure.

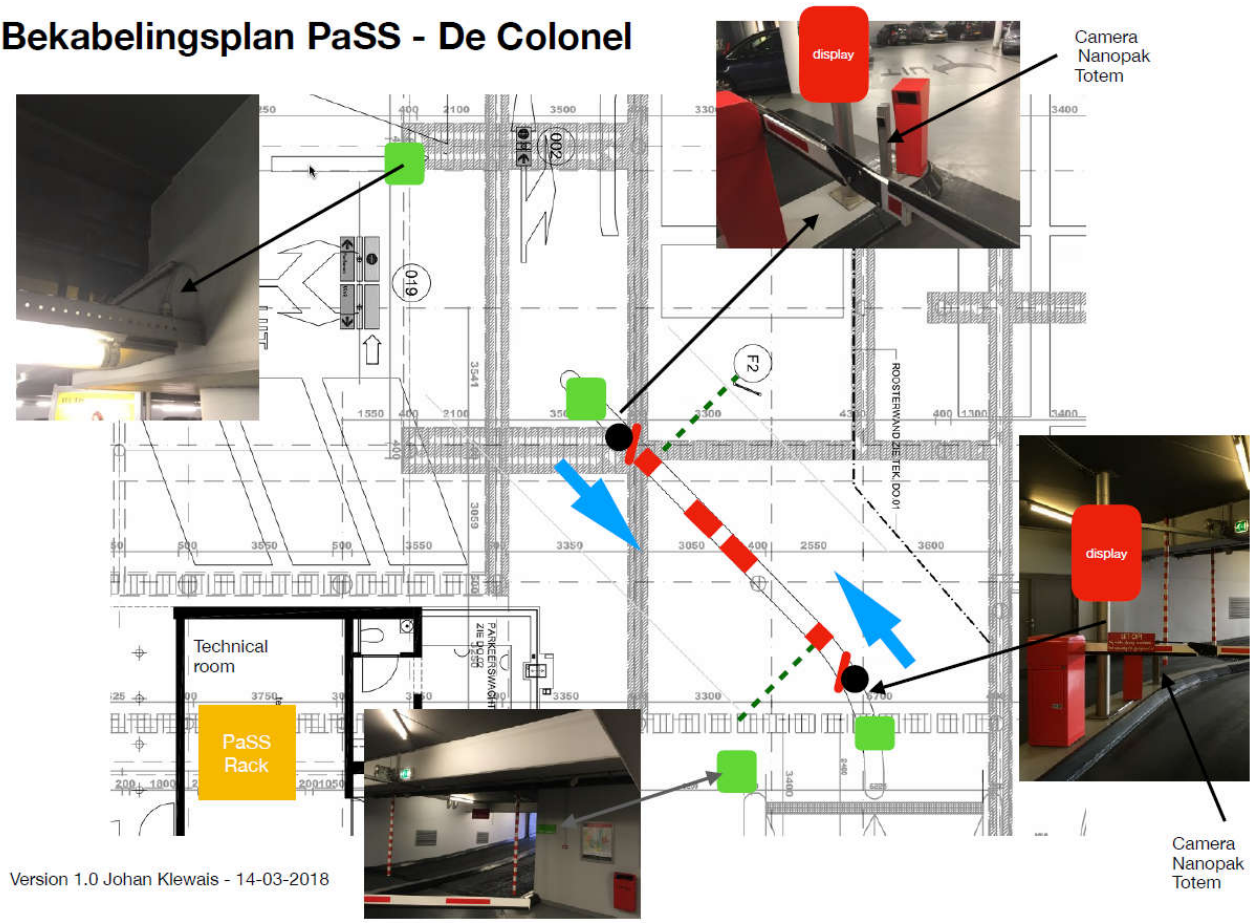
# CABLING DIAGRAM

Make Floorplan + cable specifications

Take floorplan from Qpark real estate if available and draw cable connections, with devices and type of cables.

Use pictures to clarify the exact position of the camera, displays, pinpads… and the PaSS gateway rack.

Example De Colonel Maastricht NL




Cable specifications

| | |
|---|---|
| Power cable from mains for rack | 2x2.5mm2 + 2.5mm2 (or what is standard in your country) |
| Power cable from mains to Displays | 2x2.5mm2 + 2.5mm2 (or what is standard in your country)with female mains plug |
| Ethernet | CAT6 Connected.<br><br>Rack side: to female RJ45 in patch panel<br><br>Client side: female RJ45 adapter |
| Power cable 24V from rack to cameras: | 2 x 2.5mm2 |

| | |
|---|---|
| Signal cable from terminal to rack | 8 x 0.8mm2 (multicore) signal cable or more depending on connections (loops, barrier control, barrier feedback ..) |

# INSTALLATION

## UPS Installation

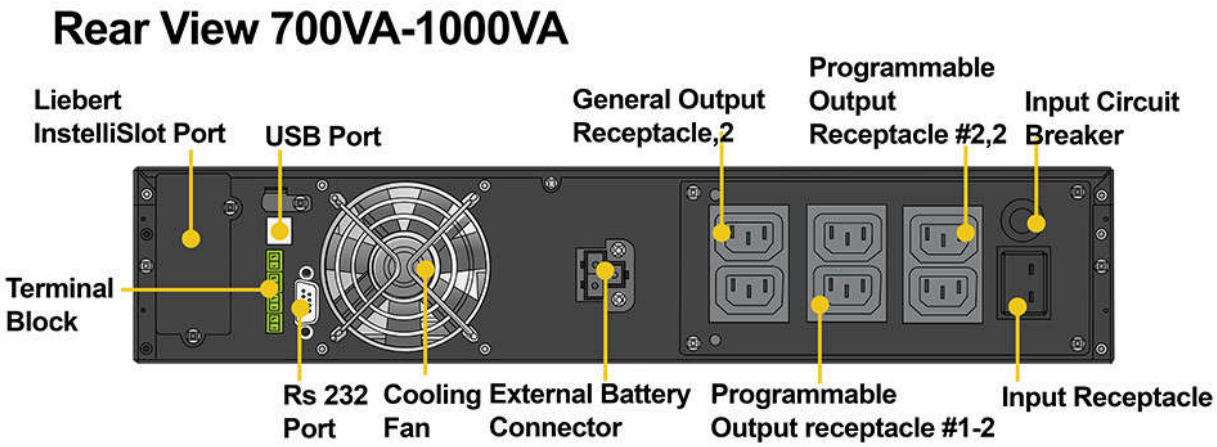
NOTE: When installing the UPS or making input and output connections, comply with all relevant safety codes and standards

Rack Installation

The Liebert UPS will be mounted in the rack by the rack provider. When installed in a rack enclosure, the GXT4 UPS must be supported by a shelf or rack-mount rails. The GXT4 units ship with all required hardware for rack-mount installation. Because different rack-mount options install differently, refer to the installation instructions provided with the rack mount kit being used.

Connecting Cables

The GXT4 rear panel has an input cable and plug, output receptacles and output cable(s)




Connecting to AC Mains and Loads

Ensure that all the loads are turned Off. Prepare an input power supply that is properly protected by a circuit breaker in accordance with national and local electrical codes. The wall receptacle must be grounded. We recommend installing an upstream circuit breaker of the same series as the input circuit breaker of the GXT4.

The specifications of the input circuit breaker on the rear panel of the UPS are listed in the following table

GXT4-700RT120 10A

500 – 2000-VA models have 3 groups of outlets:

- One group is not controlled (always On).
- Two groups are controlled with programmed responses or an SNMP network

Verify that the equipment is plugged into the appropriate outlets if any of the outlets will be controlled.

NOTE: Do not overload any output receptacle. Output cable length should not exceed 10 m (32.8 ft).

To connect equipment and input power:

1. Plug equipment into the appropriate output receptacles on the rear of the GXT4.
2. Plug the input plug of the GXT4 into the input power connection.

NOTE: If the input plug is to serve as the disconnecting device, the wall socket/outlet must be near the UPS and must be easily accessible.

# CABLING

# PASS GATEWAY RACK PLACEMENT

The rack has a footprint of 60cm x 60cm and is about 1.30m high and weight between 40 – 80kg

It can be placed on the floor and there are adjustable feet foreseen.

An optional platform is required to mount the rack to the wall. Do not mount the rack directly to the wall.

# DISPLAYS PLACEMENT

**Mounting on a pole**

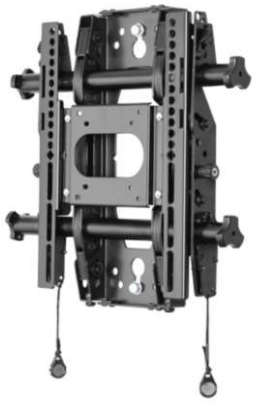
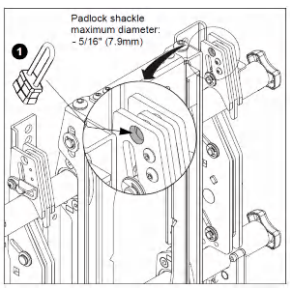


figure 1 Display mount
De Colonel

These display holders have the possibility to protect the display against theft by a padlock through the mount.




More info:

https://www.milestone.com/Products/Chief/Mounts/Display/Wall-Tilting/Fusion%20Wall-Tilt/STMS1U

Precondition:

Foresee a CAT6 ethernet cable and a mains power connection.

Display 42BDL5057P Specifications:

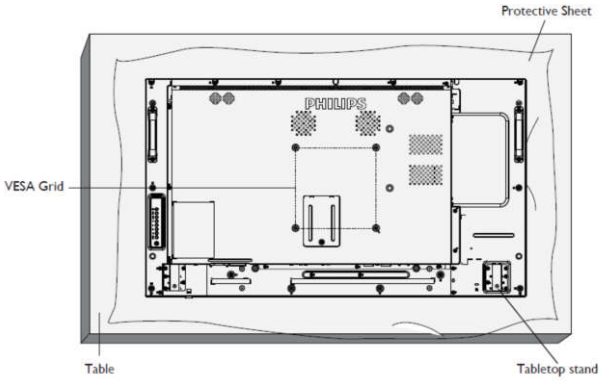
Power input: 100 - 240V~, 50 - 60Hz, 5.5A max 215W typ 85W

Weight: 15.5W

Dimensions: 950 x 541 x 71 mm

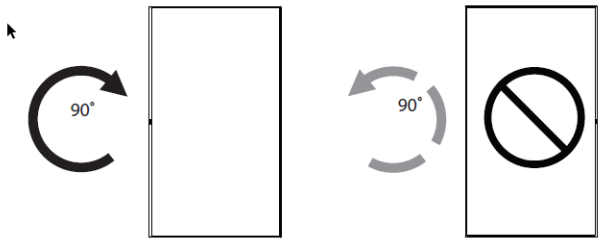
**Mounting on a Wall**

To mount this display to a wall, you will have to obtain a standard wall-mounting kit




**Mounting in Portrait Position**

This display can be installed in portrait position.




1. Remove the table stand, if attached.
2. Rotate 90 degrees clockwise. The " " logo should be on the LEFT side when facing the display.

# CAMERA PLACEMENT

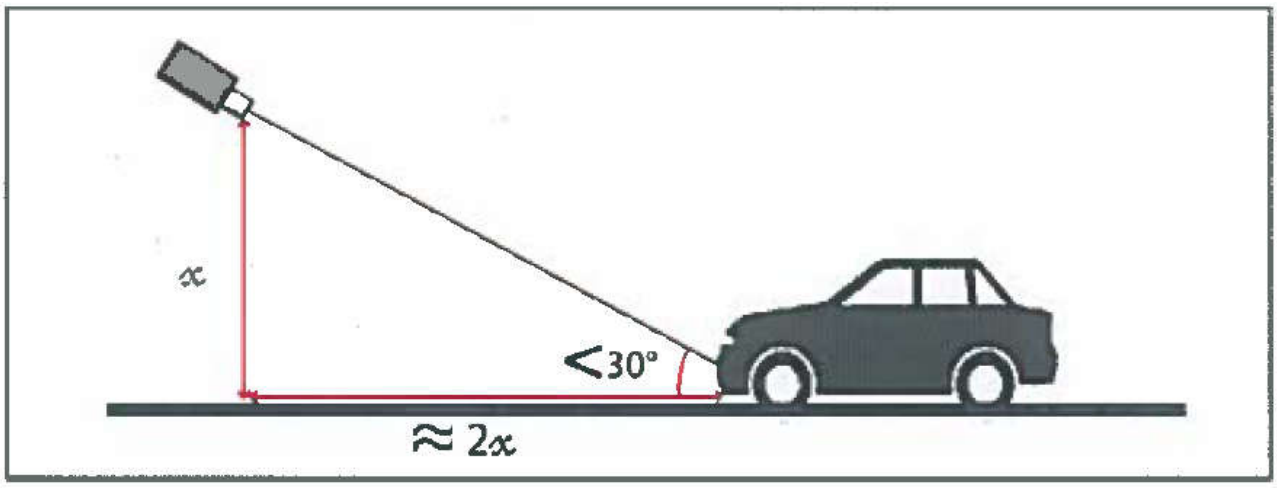
The camera position is directly linked to the performance and user experience of the system. It is important that the below conditions are respected:

## Distance restrictions

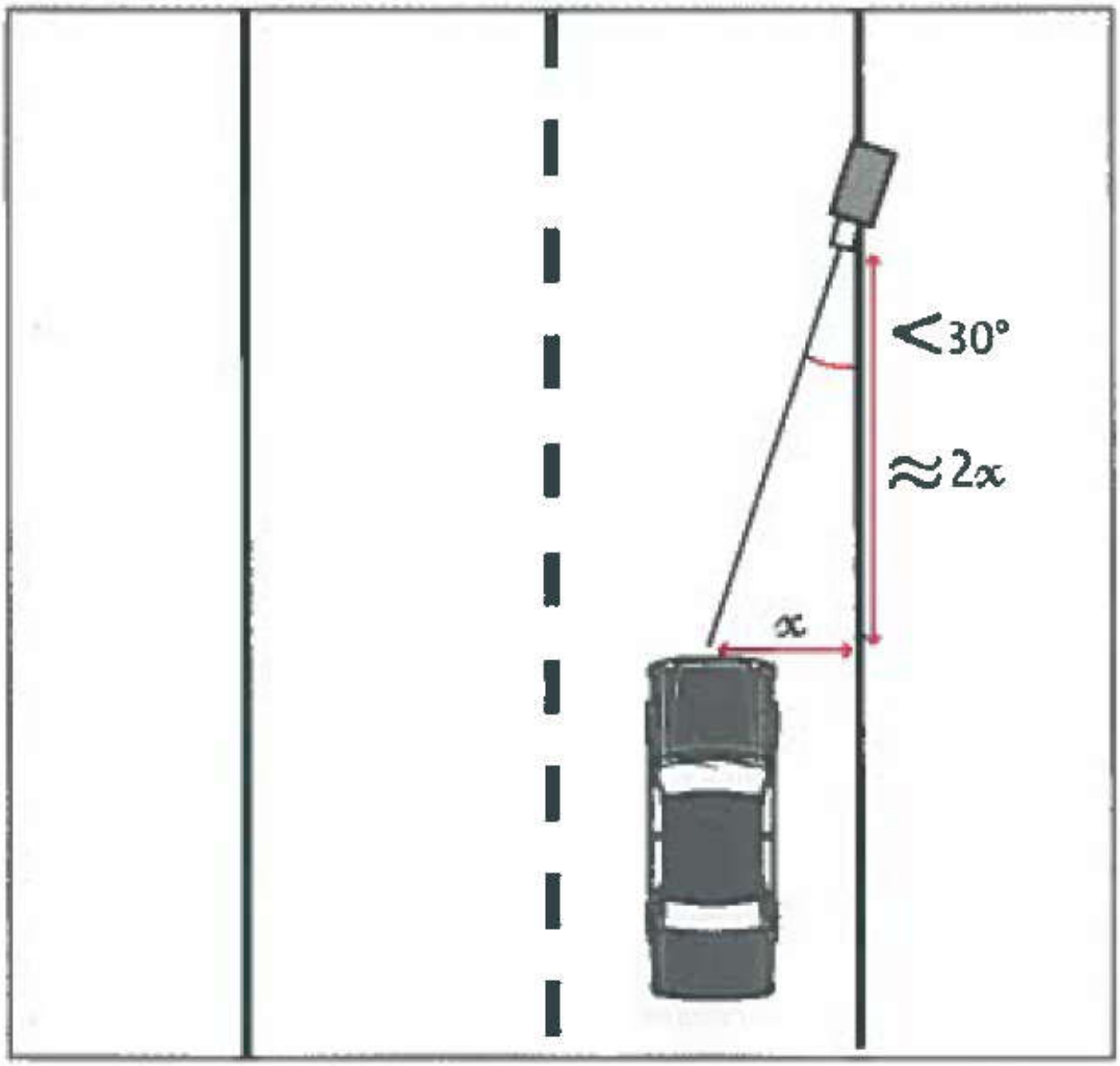
| Sensor | Min. distance | Max. distance | Max. distance for small plates (bikes) | Max. width of lane covered | Max. width of lane covered for small plates |
|---|---|---|---|---|---|
| Nanopak | 2m | 8M | 5M | 2.8m | 1.8m |
| Micropak | 2m | 20m | 13m | 2.8m | 1.8m |

## Angle restrictions

The addition of vertical and lateral angles between the road and the boresight axis should not exceed 30 degrees.




For optimal functioning, the camera should have at least a slight vertical angle to avoid direct illumination from the sun.




| Distance * | Height or max. side distance for 30 degrees |
|---|---|
| 2m | 1m |
| 5m | 2.5m |
| 10m | 5m |
| 15m | 7.5m |
| 20m and above | 10m |

Distance on the ground between the sensor and the plate position for sensor adjustment

To adjust the sensors, please consult the VSS user tutorial (camera setting tool)

If the cameras are installed before being connected to the power supply and network, it is essential to protect the connectors against water entry.

# CONNECTING

## CONNECTING RACK

### To Mains Power

The mains power of the rack should be connected to a power outlet supplying (2200W? / 10A)

(to be reviewed)

### To Camera's

The power cables from the cameras will be connected to the DIN terminals in the rack. They are connected via an individual fuse to the 24V supply rail.

### To Network

A network cable will arrived at a terminal of the patch panel in the rack. There it will be connected to a network switch (in a Basic configuration connected to the network switch or in a Redundant configuration to a Red module)

### To Displays

The mains power of the displays are connected to DIN rail terminals. These are connected to the fused mains power input. (The displays are not connected to the UPS)

# CONNECTION TO LEGACY PMS & BARRIERS

# CONNECTION BARRIERS

## WPS

Connect the relay NO output of the IO module to the "External Open" connection of the WPS access terminal. Same as the Command module (same as the open function via the QCR)

There is a contact available CLOSED. Now it is a opto input to the + 24V and a switch in the barrier.

If we need to read it in our IO module it should be connected to a opto connected to +24V and not to GND.

# LOOPS

A QPARK field technician or a PMS technician should connect the barriers and loops of the existing PMS to the cables. In the rack these cables are connected to the DIN rail terminals and there they are routed to the input/output module.

# POWER-UP & CONFIGURATION

## ACCEPTANCE INSTALLATION

All cables and connections will be visually checked and cameras and dislays must be disconnected.

# ACCEPTANCE CABLING & EXTERNAL CONNECTIONS

**Scenario:**

**start conditions:**

- UPS OFF

- Mains automatic fuse OFF

- mains power connected to displays (Singage screens)

- Mains automatic fuse ON

- Check power of displays (Singage screens)

- power up UPS

- check if network equipment has started

- check power supplies (+24V) adjust voltage level if needed

- check voltage and polarity on the power connectors at the camera side.

- connect power to the camera

- connect network cable to camera.

- connect pc to the camera network plug in the patch panel.

.... gaan we zo alle stappen oplijsten?? dat gaat een lange lijst worden met verschillende items voor bvb cameras, displays, pinpads, rack etc ....

# RACK

# I/O MODULE

## Configuration

EK6420 module

Network: IP address, WEB port, TCP Binary port,

Redundant config: basic and redundant setup

64 inputs

20 outputs

## I/O Connection Table

Rack IO

| No | Rack IO | | |
|---|---|---|---|
| 0 | UPS | On Battery | RACK INFO |
| 1 | UPS | Low Battery | RACK INFO |
| 2 | Power Supply 1 | Ready | RACK INFO |
| 3 | Power Supply 2 | Ready | RACK INFO |
| 4 | Network switch | Fault | RACK INFO |
| 5 | Network switch | Fault | RACK INFO |
| 6 | RED module 1 | Status | RACK INFO |
| 7 | RED module 2 | Status | RACK INFO |
| 8 | RED module 3 | Status | RACK INFO |
| 9 | RED module 4 | Status | RACK INFO |
| 10 | RED module 5 | Status | RACK INFO |
| 11 | RED module 6 | Status | RACK INFO |
| 12 | …. | | |
| 13 | …. | | |
| 14 | Camera fuse 1 | Power supply behind fuse | RACK INFO |
| 15 | Camera fuse 2 | Power supply behind fuse | RACK INFO |
| 16 | Camera fuse 3 | Power supply behind fuse | RACK INFO |
| 17 | Camera fuse 4 | Power supply behind fuse | RACK INFO |
| 18 | …. | | |
| 19 | …. | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |

Entry terminal IO

| No | **Entry** | |
|---|---|---|
| 1 | Loop Terminal | Status loop detector |
| 2 | Loop Barreer | Status loop detector |

| | | | |
|---|---|---|---|
| 3 | Feedback Barreer | Status Open/Close feedback | |
| 4 | Slagboom "Permanent Open" | HW switch | QBE |
| 5 | Slagboom "Automatisch Open" | HW switch | QBE |
| 6 | Verbinding verbroken | HW switch | QBE |
| 7 | Buiten bedrijf | HW switch | QBE |
| 8 | Kaarten bijna op | HW switch | QBE |
| 9 | Volzet | HW switch | QBE |
| 10 | CCV | Niet te zien op dit moment | QBE |
| 11 | Bedrijfmodus afdwingen actief | ?? | QBE |
| 12 | Herstarten CCV | (nu via PLC) | QBE |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |

Exit terminal IO

| No | **Exit** | | |
|---|---|---|---|
| 1 | Loop Terminal | Status loop detector | |
| 2 | Loop Barreer | Status loop detector | |
| 3 | Feedback Barreer | Status Open/Close feedback | |
| 4 | Barrier "Permanent Open" | HW switch | QBE |
| 5 | Barrier "Automatisch Open" | HW switch | QBE |
| 6 | Disconnected | HW switch | QBE |
| 7 | Out of Service | HW switch | QBE |
| 8 | Treintje rijden | HW switch | QBE |
| 9 | CCV | Niet te zien op dit moment | QBE |
| 10 | Restart CCV | (now via PLC) | QBE |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |

Pay station IO

| No | **Paystation** | | |
|---|---|---|---|
| 1 | Disconnected | HW switch | QBE |

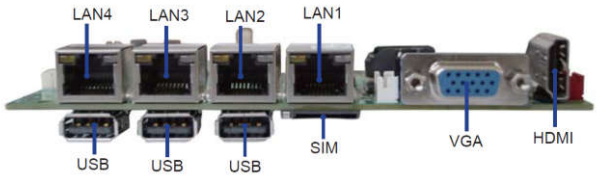
| | | | |
|---|---|---|---|
| 2 | Out of Service | HW switch | QBE |
| 3 | Onbevoegd geopend | HW switch | QBE |
| 4 | Kaarten bijna op | HW switch | QBE |
| 5 | CCV | Niet te zien op dit moment | QBE |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |

Parking facility IO

| No | **Parking facility** | | | |
|---|---|---|---|---|
| 1 | oppompinstallaties voor rioolwater | HW switch | QBE | pomp |
| 2 | rookafvoersystemen | HW switch | QBE | RWA |
| 3 | branddetectie | HW switch | QBE | brandcentrale |
| 4 | CO detectie | HW switch | QBE | Co Centrale |
| 5 | alarmcentrale | | QBE | Inbraak Centrale |
| 6 | elektriciteit | | QBE | Laagspanning bord |
| 7 | UPS | | QBE | UPS |
| 8 | sprinkler systemen | | QBE | sprinkler |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |

# NETWORK ACCESS

# PC




● RJ45 LAN Connector--- LED define Giga/100MB Connector

| SPEED | | 10 Mbps | | | 100 Mbps | | | 1000 Mbps | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Indicate | Side | Back | | Front | Back | | Front | Back | | Front |
| | LED | Link | ACT | ACT | Link | ACT | ACT | Link | ACT | ACT |
| LAN Light | | | Orange | Orange | Green | Orange | Orange | Red | Orange | Orange |

If a new factory reset PC is used:

**Enter Setup**

Power on the computer and press <Del> key immediately to enter Setup.

If the message disappears before your respond but you still wish to enter Setup,

restart the system by turning it OFF then ON or pressing the "RESET" button on the

system case. You may also restart the system by simultaneously pressing <Ctrl>,

<Alt> and <Delete> keys.

Plug in ID key

Plug in USB key with start image

Reboot

- The rest of the procedure

Install new resin image (dhcp or static IP?)

In a resin application, click the green "add device" button.

Click on "download ResinOS"

Extract the zip.

Flash the image on the usb drive using Etcher.

Plug in the power cable and ethernet cable in port LAN1.

Boot the device without the USB stick and go into the BIOS by holding Delete/Del.

Change the following boot settings:

These should only be temporary steps since the hardware supplier will do these later on.

SATA Controller => enabled

Chipset SATA Mode : AHCI (not IDE)

SATA Speed : Gen 2

Dual Boot Type

Quiet boot disabled

EFI Legacy device order : legacy first

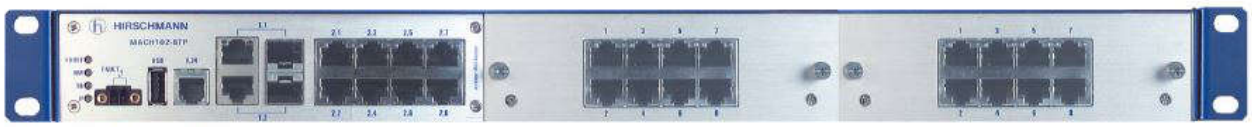
Plug the USB stick in, the device will boot into resin and it will reboot, the device will appear in resin under the application.

Once you see the device in resin.io, wait till the device is completely shutdown, unplug the USB stick and boot.

Remark: Is static IP configuration defined in configuration file on the USB stick?

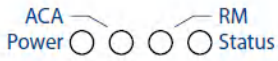
# NETWORK SWITCH

## MACH-102



MACH 102-24TP-F

Industrial ETHERNET (Gigabit) Switch.




## RED 25

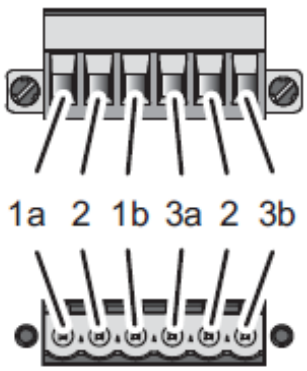
This module is only used in the redundant rack configuration and is needed to split single ended network users into two Ethernet access connections running PRP (Parallel Redundant Protocol)

| LED | Display | Color | Activity | Meaning |
|---|---|---|---|---|
| Power | Supply voltage | — | None | Supply voltage is too low |
| | | Yellow | Lights up | Device variants with redundant power supply:<br>Supply voltage 1 **or** 2 is on |
| | | | flashes 4 times a period | Software update is running. Maintain the power supply. |
| | | Green | Lights up | Device variants with redundant power supply:<br>Supply voltages 1 **and** 2 are on |
| | | | | Device variants with single power supply:<br>Supply voltage is on |
| Status | Device Status | — | None | Device is starting and/or is not ready for operation |
| | | Green | Lights up | Device is ready for operation.<br>Characteristics can be configured |
| | | Red | Lights up | Device is ready for operation.<br>Device has detected at least one error in the monitoring results |
| | | | Flashes 1 time a period | The boot parameters used when the device has been started differ from the boot parameters saved.<br>Start the device again. |
| | | | flashes 4 times a period | Device has detected a multiple IP address |

| LED | Display | Color | Activity | Meaning |
|---|---|---|---|---|
| RM | Ring Manager | — | None | No redundancy configured |
| | | Green | Lights up | Redundancy exists |
| | | | Flashes 1 time a period | Device is reporting an incorrect configuration of the RM function |
| | | Yellow | Lights up | No redundancy exists |
| ACA | Storage medium ACA21-USB/ACA22-USB | — | None | ACA storage medium not connected |
| | | Green | Lights up | ACA storage medium connected |
| | | | Flashes 3 times a period | Device writes to/reads from the storage medium |
| | | Yellow | Lights up | ACA storage medium inoperative |

| Display | Color | Activity | Meaning |
|---|---|---|---|
| Link status | — | None | Device detects an invalid or missing link |
| | Green | Lights up | Device detects a valid link |
| | | Flashes 1 time a period | Port is switched to stand-by |
| | | Flashes 3 times a period | Port is switched off |
| | Yellow | Lights up | Device detects a **non**-supported SFP transceiver or a **non**-supported data rate |
| | | Flashing | Device is transmitting and/or receiving data |
| | | Flashes 1 time a period | Device detects at least one unauthorized MAC address (Port Security Violation) |

Connector




| | | |
|---|---|---|
| 1 | Power supply connection 1 | |
| | 1a | 24 V |
| | 1b | 0 V |
| 2 | Connection for the signal contact | |
| 3 | Power supply connection 2 | |
| | 3a | 0 V |
| | 3b | 24 V |

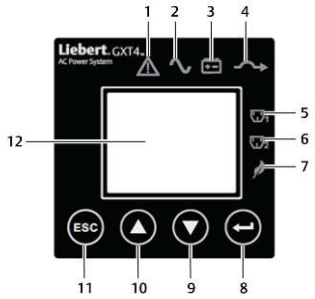
# UPS

GXT4 VERTIV 700VA Libert

Operation

The operation and display panel on the front of the GXT4 has control buttons, LED indicators and a

liquid-crystal display (LCD).




| | |
|---|---|
| 1 Fault indicator | 7 ECO mode indicator |
| 2 Inverter indicator | 8 Enter button |
| 3 Battery indicator | 9 Down button |
| 4 Bypass indicator | 10 Up button |
| 5 Programmable-outlet 1 indicator | 11 Escape button |
| 6 Programmable-outlet 2 indicator | 12 LCD panel |

LED Indicators

The LED indicators on the front of the operation and display panel are:

- Inverter
- Battery
- Bypass
- Programmable Outlet1
- Programmable Outlet2
- ECO Mode
- Fault

Inverter Green On when the inverter is supplying power

Bypass Amber On when the load is supplied by the mains through automatic/manual bypass

Battery Amber On when the load is supplied by the battery

Fault Red On when an error has occurred within the UPS

Programmable Outlet1 Green On when programmable Outlet1 is On

Programmable Outlet2 Green On when programmable Outlet2 is On

ECO Mode Green On when the UPS is in ECO Mode

Control Buttons

ESC Pressing this button returns to the previous menu or aborts any change in the input data field before confirming.

Up

Pressing this button can move the cursor up or increase the value displayed in the input data field. When a menu is displayed on several screens, pressing the button can scroll up.

Down

Pressing this button can move the cursor down or decrease the value displayed in the input data field. When a menu is displayed on several screens, pressing the button can scroll down.

Enter Pressing this button can enter the next level menu or confirm the parameter setting value.

## Operations & Display Panel

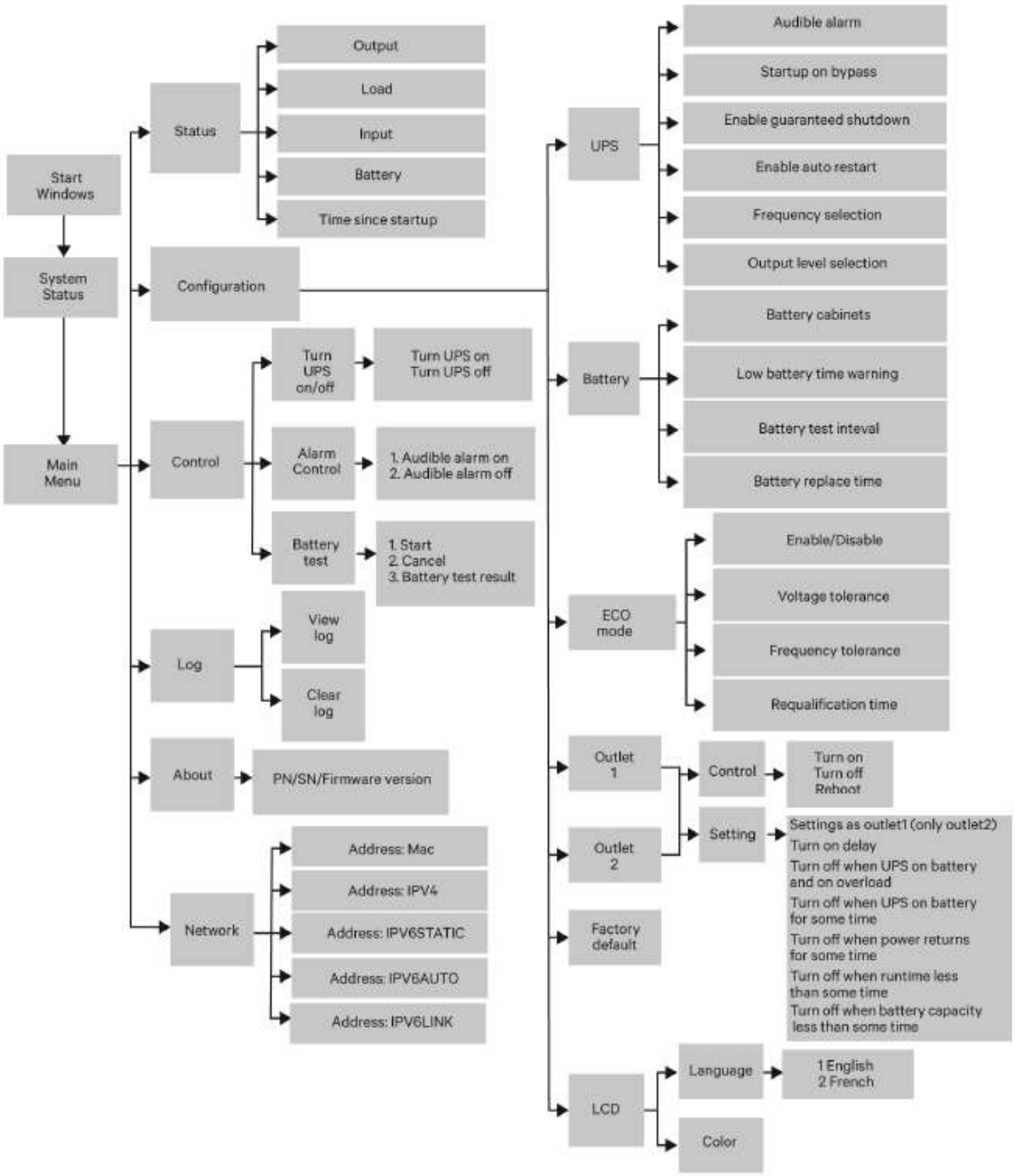
## LED Indicators

## Control Buttons

**Up**

**Down**

## Menu Structure



# KEYPAD

(to be defined ...)

# CAMERA'S SURVISION

Follow these 15 essential steps in order to have an optionally functioning camera.

For more details however, please consult the VSS User Guide and the Camera Installation Guide, both available on my.survision.fr

1.Download the VSS application from our site my.survision.fr. For this,

input the ID and password provided by SURVISION, and then go to

the “Software” tab.

If you do not know, or have lost your access details, please contact:

support@survision.fr.

2. Install VSS on your computer. The minimum required specification

is Windows XP.

3. Install your SURVISION equipment using the mechanical parts

provided.

4. Connect the power supply cable provided to the power supply unit.

The brown or red wire corresponds to the terminal, and the blue

or black wire to the terminal. The power supply may be either 12

or 24 volts (see the sticker on the back of the camera: polarity and

voltage indications must imperatively be complied with). The cabling should be completed as soon as the camera is installed, in

order to ensure that it will be waterproof.

5. Fit the Ethernet connector provided onto an Ethernet cable and

connect it all to the camera. See the “Ethernet Connector

Installation” sheet. The connector must be correctly fitted in order

to ensure waterproofness.

6. Connect the camera to your computer, either directly by means of

the Ethernet cable, or, if the camera is on a local network, by

connecting the computer to a switch of this network. Congure a

fixed IP address for your network card within the range 192.168.0.X.

7. Start the VSS. Each camera is represented by a line on the screen on

which you double click to connect to the camera.

8. Place a vehicle or plate at the center of the desired recognition

zone. Display the grill on the VSS and direct the camera in such a

way that the plate is both horizontal and at the center of the image.

9. Adjust the camera zoom (“Camera” tab) in such a way that the plate

measures a minimum of 130 pixels and a maximum of 170 pixels,

measured from the left side of the first character to the right side of

the last character.

10. Adjust the focus by clicking on “Detect focus” (“Camera” tab).

11. Adjust the power of the LEDs (“Camera” tab):

- 500 mA for a distance of less than 5 meters

- 1,000 mA for a distance between 5 and 10 meters

- 1,500 mA for a distance between 10 and 15 meters

- 2,000 mA for a distance of more than 15 meters

12. Choose the most appropriate enslavement for the situation

(“Settings” tab, “Enslavement” menu, “Edit”):

- Urban Free Flow: for an application in urban zones or in non-stop

toll lanes (<50 km/h)

- Free Flow: for a road application where the vehicles are unlikely to

stop in the image (> 50 km/h)

- Access Control: for an access control application (the vehicles stop

momentarily on the screen)

13. Select the geographic installation zone of the camera (“Settings”

tab, “ANPR” menu, “Edit”) and indicate whether you also want to

recognise foreign plates.

14. The camera adjustment is now complete. Save the conguration on

an XML le (“Settings” menu, “Save Conguration to File”) and save

a recognition image (“Detections” tab, click on “View” and then on

“Save”) and push these two elements onto our site my.survision.fr

by connecting them to the camera which has been adjusted

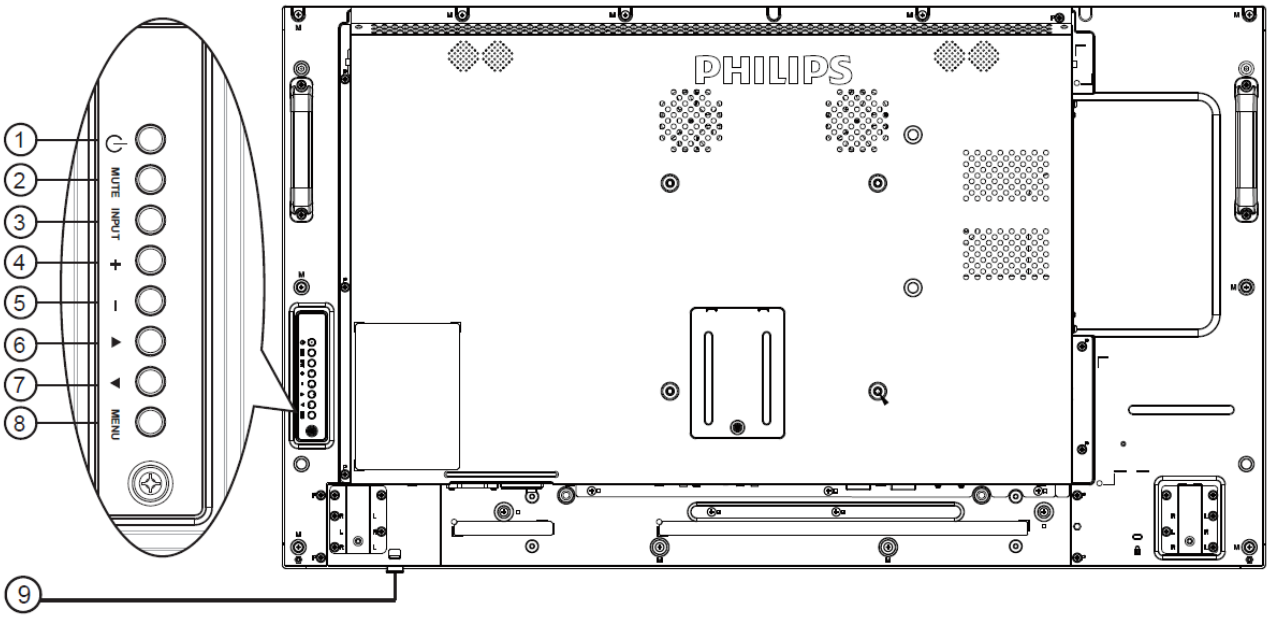
correspondingly

15. Close the VSS while waiting for the camera to disconnect

completely

# DISPLAYS

Philips Signage display 42BDL5057P




1 **[ ] button**

Use this button to turn the display on or put the display to standby.

2 **[MUTE] button**

Switch the audio mute ON/OFF.

3 **[INPUT] button**

Choose the input source.

4 **[ ] button**

Increase the adjustment while OSD menu is on, or increase the audio output level while OSD menu is off.

5 **[ ] button**

Decrease the adjustment while OSD menu is on, or decrease the audio output level while OSD menu is off.

6 **[ ] button**

Move the highlight bar up to adjust the selected item while OSD menu is on.

7 **[ ] button**

Move the highlight bar down to adjust the selected item while OSD menu is on.

8 **[MENU] button**

Return to previous menu while OSD menu is on, or to activate the OSD menu when OSD menu is off.

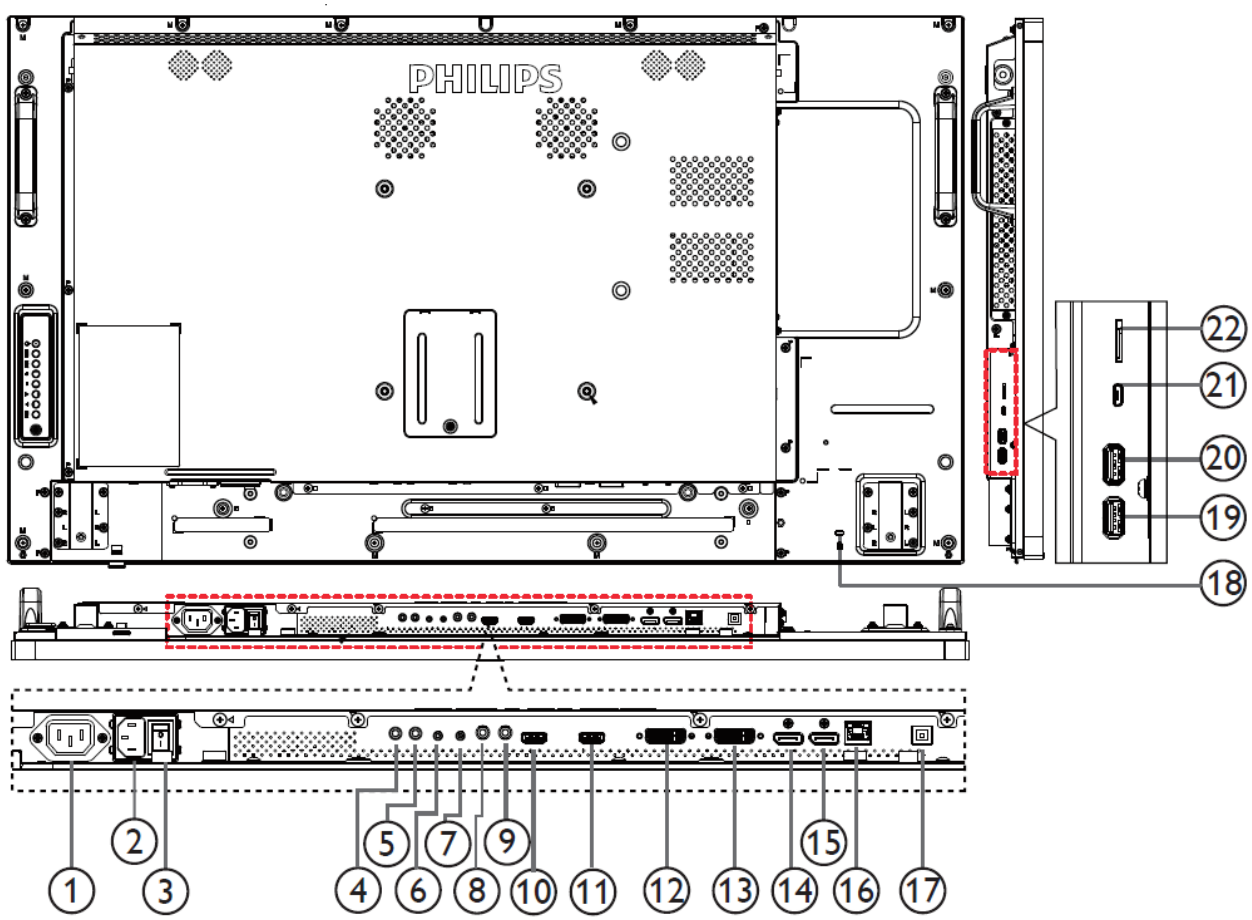
9 **Remote control sensor and power status indicator**

Receives command signals from the remote control

Indicates the operating status of the display without OPS: Lights green when the display is turned on Lights red when the display is in standby mode Lights amber when the display enters APM mode When {SCHEDULE} is enabled, the light blinks green and red If the light blinks red, it indicates that a failure has been detected

Lights off when the main power of the display is turned off

**Input/Output Terminals**




**AC OUT**

2 **AC IN**

AC power input from the wall outlet.

3 **MAIN POWER SWITCH**

Switch the main power on/off.

4 **IR IN** / 5 **IR OUT**

6 **RS232C IN** / 7 **RS232C OUT**.

8 **LINE IN**

9 **AUDIO OUT**

10 **HDMI1 IN** /11 **HDMI2 IN**

12 **DVI-I IN**

13 **DVI OUT / VGA OUT**

14 **DisplayPort IN** / 15 **DisplayPort OUT**

16 **RJ-45**

LAN control function for the use of remote control signal from control center.

17 **USB PORT**

Connect your USB storage device.

18 **SECURITY LOCK**

Used for security and theft prevention.

19 **USB PORT B**

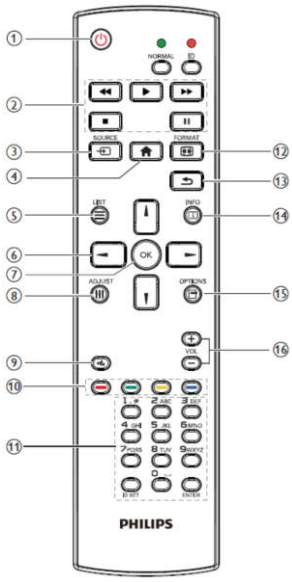
Connect your USB storage device.

20 **USB PORT A**

21 **MICRO USB**

22 **MICRO SD CARD**

**Remote Control**




1 **[ ] POWER button**

Power ON/OFF.

2 **[PLAY] buttons**

Control playback of media files.(for Media Input only)

Freeze feature

Pause: Freeze hot key for all inputs content.

Play: Unfreeze hot key for all input content.

3 **[ ] SOURCE button**

Root Menu: Go to Video source OSD.

4 **[ ] HOME button**

Root Menu: Go to Main Menu OSD.

Others: Exit OSD.

5 **[ ] LIST button**

No function.

6 **NAVIGATION buttons**

**[ ]**

Root Menu: Go to Smart picture OSD.

Main Menu: Move the highlight bar up to adjust the selected item.

IR Daisy Chain Menu: Increase controlled Group ID number.

**[ ]**

Root Menu: Go to Audio source OSD.

Main Menu: Move the highlight bar down to adjust the selected item.

IR Daisy Chain Menu: Decrease controlled Group ID number.

**[ ]**

Main Menu: go to previous level menu.

Source Menu: Exit source menu.

Volume Menu: Decrease Audio Volume.

**[ ]**

Main Menu: go to next level menu or set selected option.

Source Menu: Go to selected source.

Volume Menu: Increase Audio Volume.

7 **[ ] button**

Root Menu: Go to IR daisy chain OSD in Primary/Secondary mode.

Main Menu: Confirm an entry or selection.

8 **[ ] ADJUST button**

Go to Auto Adjust OSD for VGA only.

9 **[ ] MUTE button**

Toggle Audio Mute/Unmute.

10 **[ ] [ ] [ ] [ ] COLOR buttons**

Choose tasks or options.(for Media Input only)

**[ ]** Hot key for Window selection function.

11 **[Number/ ID SET/ ENTER] button**

Enter text for network setting.

Press to set the display ID..

12 **[ ] FORMAT button**

Change Image Zoom Mode [Full][4:3][1:1][16:9] [21:9][Custom].

13 **[ ] BACK button**

Return to the previous menu page or exit from the previous function.

14 **[ ] INFO button**

Show Information OSD

15 **[ ] OPTIONS button**

No function.

16 **[ ] [ ] VOLUME button**

Adjust volume.

## Connecting

• Keep the display out of direct sunlight and away from stoves or any other heat sources.

• Remove any object that could fall into the vents or prevent proper cooling of the display's electronics.

• Do not block the ventilation holes on the cabinet.

• Keep the display dry. To avoid electric shock, do not expose it to rain or excessive moisture.

• When turning off the display by detaching the power cable or DC power cord, wait for 6 seconds before re-attaching the power cable or DC power cord for normal operation.

• To avoid the risk of shock or permanent damage to the set do not expose the display to rain or excessive moisture.

• When positioning the display, make sure the power plug and outlet are easily accessible.

• IMPORTANT: Always activate a screen saver program during your application. If a still image in high contrast remains on the screen for an extended period of time, it may leave an 'after-image' or 'ghost image' on the front of the screen. This is a well-known phenomenon that is caused by the shortcomings inherent in LCD technology. In most cases the afterimage will disappear gradually over a period of time after the power has been switched off. Be aware that the after-image symptom cannot be repaired and is not covered under warranty.

## Configuring

**Setting**

Main items:

(1) Ethernet

(2) Proxy

(3) Data usage (Show up when 4G module connected)

(4) More (Show up when 4G module connected)

(5) Signage Display

(6) System Tools

(7) Display

(8) Storage

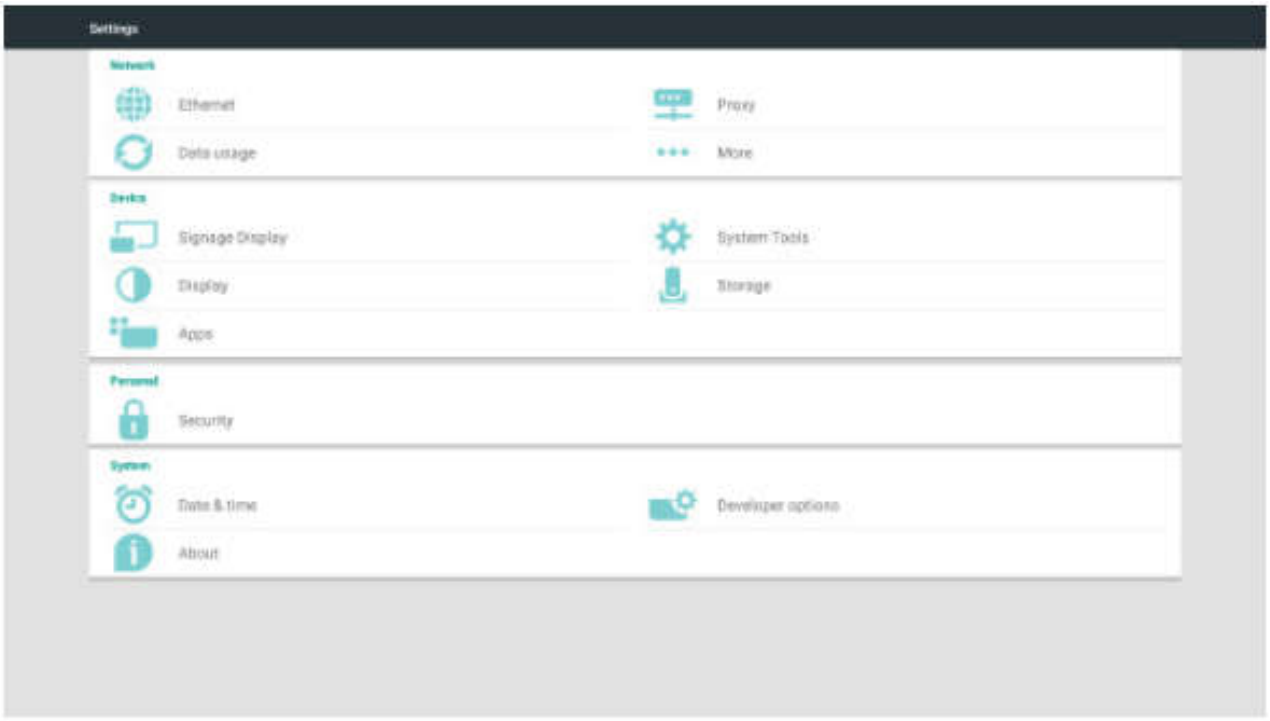
(9) Apps

(10) Security (Show up when 4G module connected)

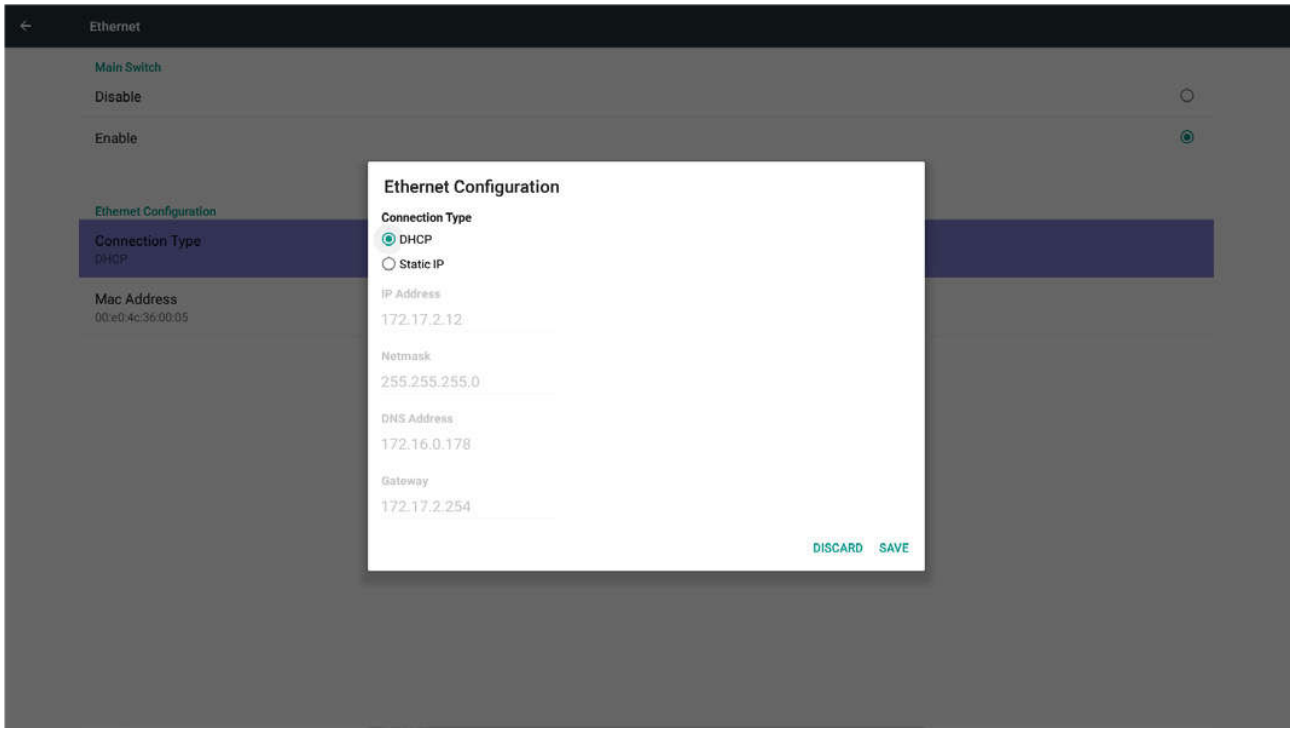
(11) Date & time

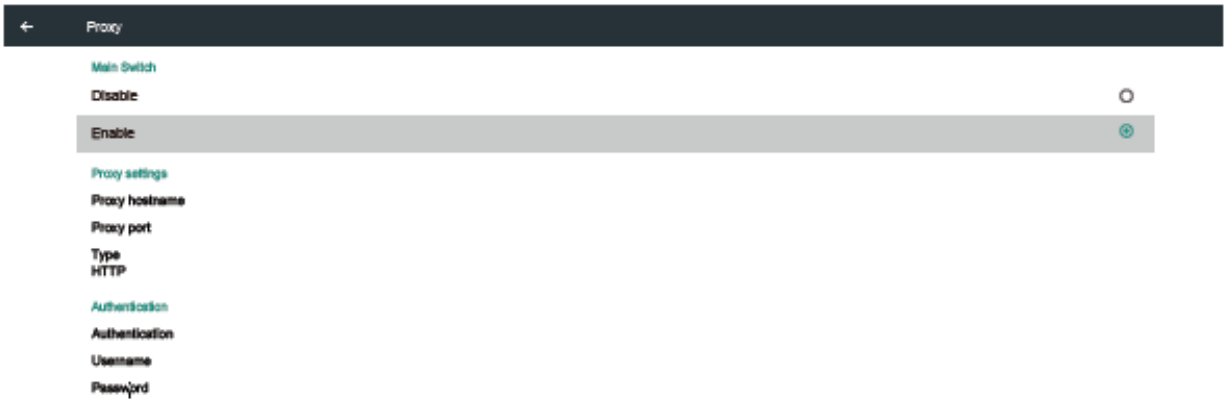
(12) Developer options

(13) About


Settings
Network
Ethernet
Proxy
Data usage
More
Device
Signage Display
System Tools
Display
Storage
Apps
Personal
Security
System
Date & time
Developer options
About


Ethernet
Main Switch
Disable
Enable
Ethernet Configuration
Connection Type
DHCP
Mac Address


Ethernet
Main Switch
Disable
Enable
Ethernet Configuration
Connection Type
DHCP
Mac Address
00:e0:4c:36:00:05
Ethernet Configuration
Connection Type
DHCP
Static IP
IP Address
172.17.2.12
Netmask
255.255.255.0
DNS Address
172.16.0.178
Gateway
172.17.2.254
DISCARD
SAVE


Proxy
Main Switch
Disable
Enable
Proxy settings
Proxy hostname
Proxy port
Type
HTTP
Authentication
Authentication
Username
Password

# ERROR SCENARIO'S

| ID | Description | Component | Remote monitoring impact | QCR impact | Technical team impact | Customer impact | First solution |
|---|---|---|---|---|---|---|---|
| | Gateway PC offline | Gateway PC | Gateway and components only connected to affected gateway are offline (down) – monitoring alert | Manual interaction for every customer | If needed: gateway PC replacement | Cannot enter or leave unless barrier is open | Reboot PC |
| | Gateway PC offline | PF Network | Every component in PF offline (down) – monitoring alert | Manual interaction for every customer | If needed: operations to local network component(s) | Cannot enter or leave unless barrier is open | Contact country HQ |
| | Gateway PC offline | Switch | Gateway PC monitoring alert (offline | Manual interaction for every customer | Check switch port – replace if necessary | Cannot enter or leave unless barrier is open | Check switch port – replace if necessary |
| | System voltage interrupt | Rack | None | None | | None | |
| | UPS out of power | Rack | Gateway and components only connected to affected gateway are offline (down) | Manual interaction for every customer | | Cannot enter or leave unless barrier is open | |
| | Incorrect LP scan | ANPR camera | None | Manual interaction for customer | If needed: modify camera configuration | Unable to enter or leave | Check camera configuration and customer license plate if frequent issue |
| | Multiple LP country codes identified | ANPR camera | None | Manual interaction for customer | If needed: modify camera configuration | Unable to enter or leave | Check camera configuration and customer |

| ID | Description | Component | Remote monitoring impact | QCR impact | Technical team impact | Customer impact | First solution<br><br>license plate if frequent issue |
|---|---|---|---|---|---|---|---|
| | Camera online but no incoming scans | ANPR camera - positioning | None | Manual interaction for customer | Re-position camera | Unable to enter or leave | Re-position camera |
| | Camera offline | ANPR camera - network | Camera monitoring alert (offline) | Manual interaction for customer | If needed: operations to local network component(s) | Unable to enter or leave | Contact country HQ |
| | Camera offline | ANPR camera - power | Camera monitoring alert (offline) | Manual interaction for customer | Check camera power | Unable to enter or leave | Check camera power |
| | Camera offline | ANPR camera - hardware | Camera monitoring alert (offline) | Manual interaction for customer | | Unable to enter or leave | Contact Survision |
| | Camera SW container offline | ANPR camera – gateway software | Camera monitoring alert (offline) | Manual interaction for customer | | Unable to enter or leave | Contact Cegeka |
| | Camera offline | Switch | Camera monitoring alert (offline) | Manual interaction for every customer | Check switch port – replace if necessary | Cannot enter or leave unless barrier is open | Check switch port – replace if necessary |
| | Barrier does not open | I/O module – Physical port or physical contact to barrier | Barrier monitoring alert | Customer call – unable to open barrier remotely | Check barrier physical contact and I/O output port | Unable to enter or leave | Check barrier physical contact and I/O output port |
| | Barrier does not open – I/O module offline | I/O module – network | Barrier monitoring alert | Customer call – unable to open barrier remotely | If needed: operations to local network component(s) | Unable to enter or leave | Contact country HQ |
| | Barrier does not open – I/O SW | I/O module – gateway software | Barrier monitoring alert (offline) | Customer call – unable to open | | Unable to enter or leave | Contact Cegeka |

| ID | Description | Component | Remote monitoring impact | QCR impact | Technical team impact | Customer impact | First solution |
|---|---|---|---|---|---|---|---|
| | container offline | | | barrier remotely | | | |
| | Barrier does not open | Switch | Barrier monitoring alert | Manual interaction for every customer | Check switch port – replace if necessary | Cannot enter or leave unless barrier is open | Check switch port – replace if necessary |
| | Pinpad offline | Pinpad - network | Pinpad monitoring alert (offline) | Manual interaction for customer if door not opened | If needed: operations to local network component(s) | Unable to enter door unless door open | Contact country HQ |
| | Pinpad offline | Pinpad - power | Pinpad monitoring alert (offline) | Manual interaction for customer if door not opened | Check camera power | Unable to enter door unless door open | Check pinpad power |
| | Pinpad offline | Pinpad - hardware | Pinpad monitoring alert (offline) | Manual interaction for customer if door not opened | | Unable to enter door unless door open | Contact Arclan |
| | Pinpad SW container offline | Pinpad – gateway software | Pinpad monitoring alert (offline) | Manual interaction for customer if door not opened | | Unable to enter door unless door open | Contact Cegeka |
| | Pinpad offline | Switch | Pinpad monitoring alert (offline) | Manual interaction for every customer | Check switch port – replace if necessary | Cannot enter or leave unless barrier is open | Check switch port – replace if necessary |

**Q-Park has assured a number of its activities under NEN-EN-ISO 9001.**

**Q-Park has received several ESPA and EPA awards.**

For more details and up-to-date information about Q-Park's products and services please visit: www.q-park.com.



Quality in parking

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