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## IPerCom Hardware installation guide



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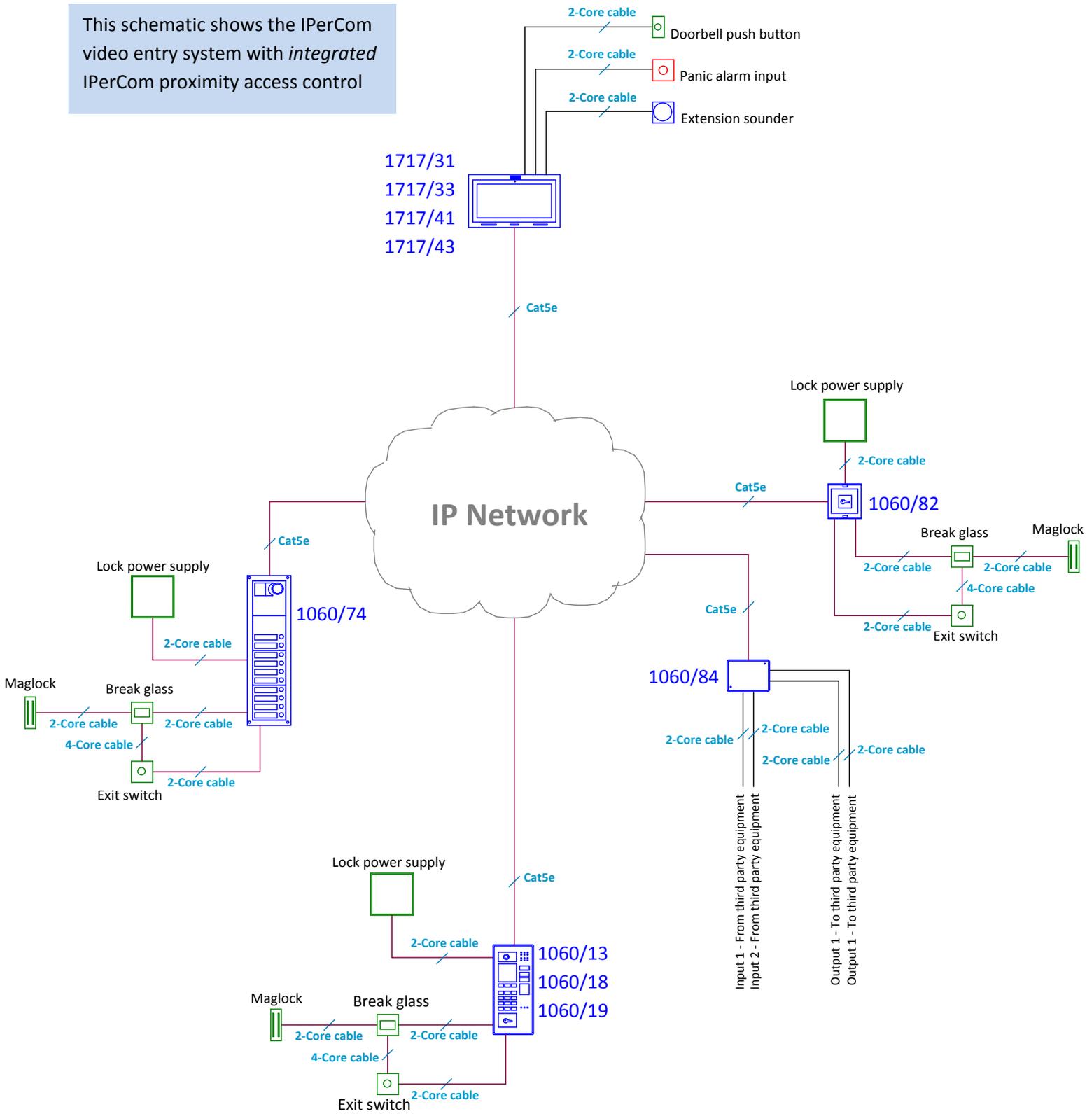
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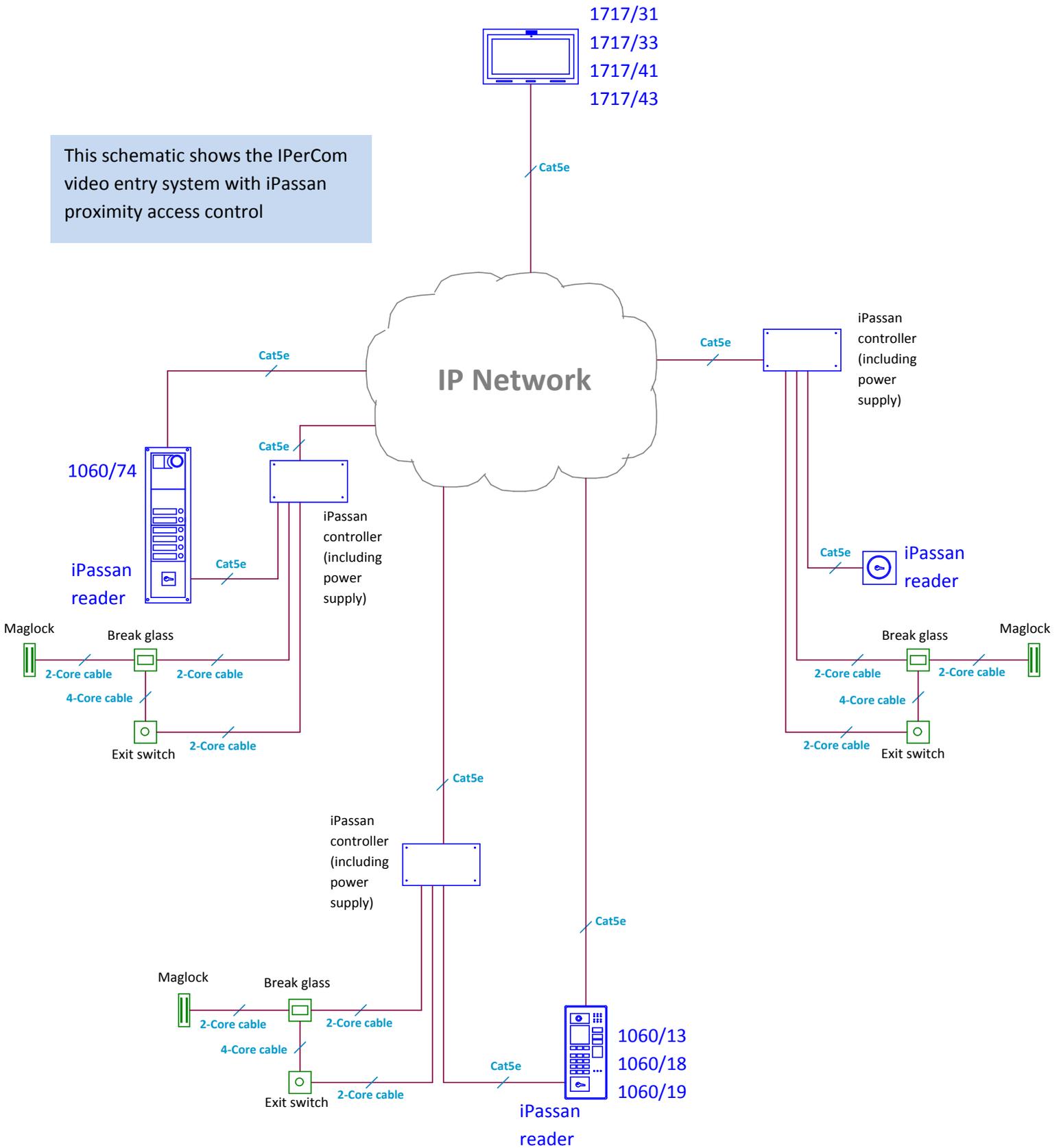
# IPerCom schematic

This schematic shows the IPerCom video entry system with *integrated* IPerCom proximity access control



# IPerCom with iPassan schematic

This schematic shows the IPerCom video entry system with iPassan proximity access control



## Network installation and configuration requirements

The installation should be installed, tested and documented as per the following standards –

### European Committee for Electrotechnical Standardisation (CENELEC)

EN 50173 Information Technology – Generic Cabling Systems

EN 50173-1:2011	General requirements
EN 50173-2:2007 + A1:2010	Office Premises
EN 50173-3:2007 + A1:2010	Industrial Premises
EN 50173-4:2007 + A1:2010	Residential Premises
EN 50173-5:2007 + A1:2010	Data Centers
EN50173-6:	Distributed Building Services

CENELEC also produce the EN50174 series of standards that are concerned with the way in which cabling systems are designed and installed –

EN 50174-1:2009 + A2:2004	Specification and Quality Assurance
EN 50174-2:2009 + A2:2004	Installation planning & practices inside buildings
EN 50174-3:2013	Installation planning & practices outside buildings

Another relevant CENELEC standard is –

EN 50310:2010	Application of equipotential bonding and earthing in buildings with information technology equipment
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### British Standards Institute (BSI)

BSI adopts all CENELEC standards and prefix them with their authority code, i.e. EN 50174-1:2009 + A2:2004 becomes BS EN 50174-1:2009 + A2:2004

BSI also produces its own national standards –

BS 6701:2010	Telecommunications equipment and telecommunications cabling. Specification for installation, operation and maintenance.
BS 7671	Requirements for Electrical Installations. IET Wiring Regulations (18 <sup>th</sup> Edition).

BS6701:2010 states: All telecommunications cabling and telecommunications equipment shall meet the requirements of the BS EN 50174 series of standards. This relates to both owners of premises (Clause 4) and installers of telecommunications cabling and telecommunications equipment (Clause 5). Note that the use of the word 'shall' is prescriptive and as such, a legal requirement.

Urmet recommends adherence to the BS EN 50173 and BS 50174 series of standards, together with the relevant parts of BS 6701 and BS7671 to ensure a fully compliant installation that conforms to UK legal requirements. It is the responsibility of the installer to ensure that their practices are in accordance with the latest published editions of the relevant standards.

Specific network requirements for IPerCom are as follows –

**IGMPv2 or IGMPv3 Multicast Service** must be enabled.

The following ports must be open and not restricted –

TCP ports 2049, 51234, 5060, 50118, 3306, 13451 to 3460, 111, 80, 433, 41365, 22, 918 & 40279.

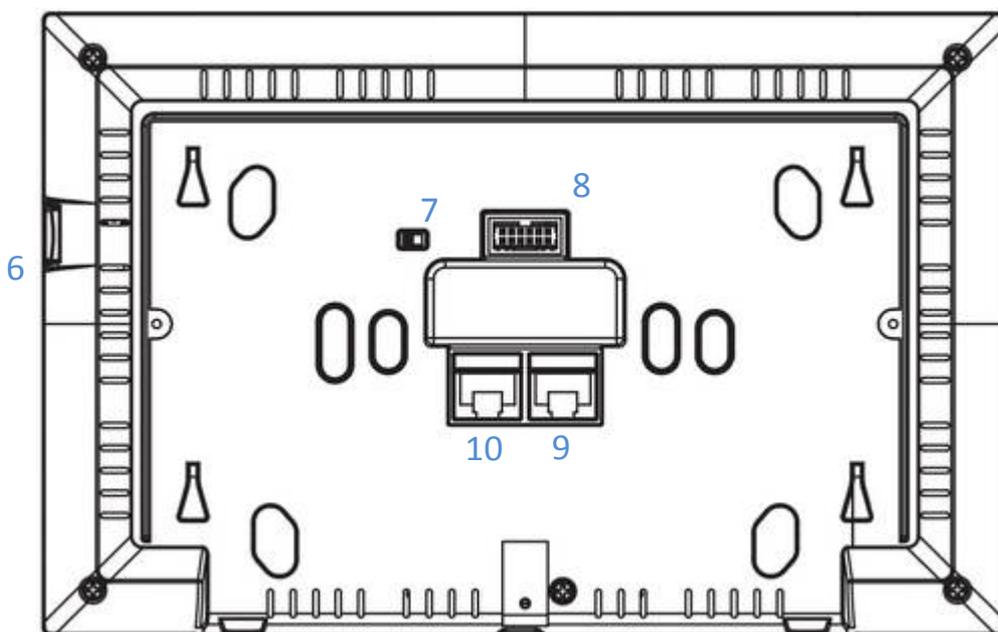
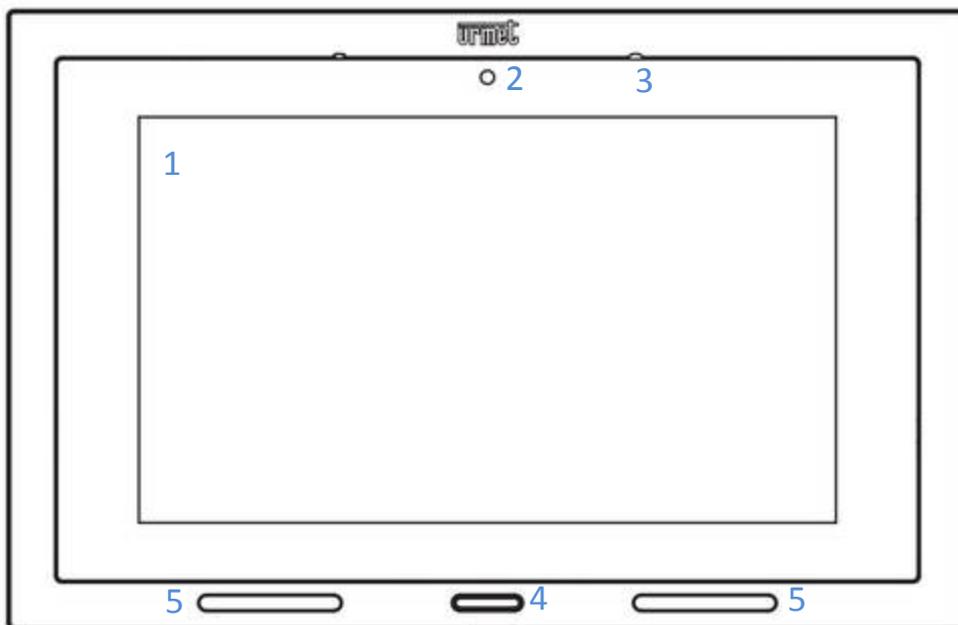
UDP ports 32768, 2049, 514, 32771, 34956, 917, 34839, 67, 5060, 69, 975, 111, 123.

Multicast must be enabled on 238.0.0.200:55000 and on 239.255.0.200 (all ports).

TCP/UDP ports used for Internet access (if any) TCP:5060,6060 UDP:5060,6060.

Bandwidth per end point (Kbps) 2500 for upload and 10000 for download.

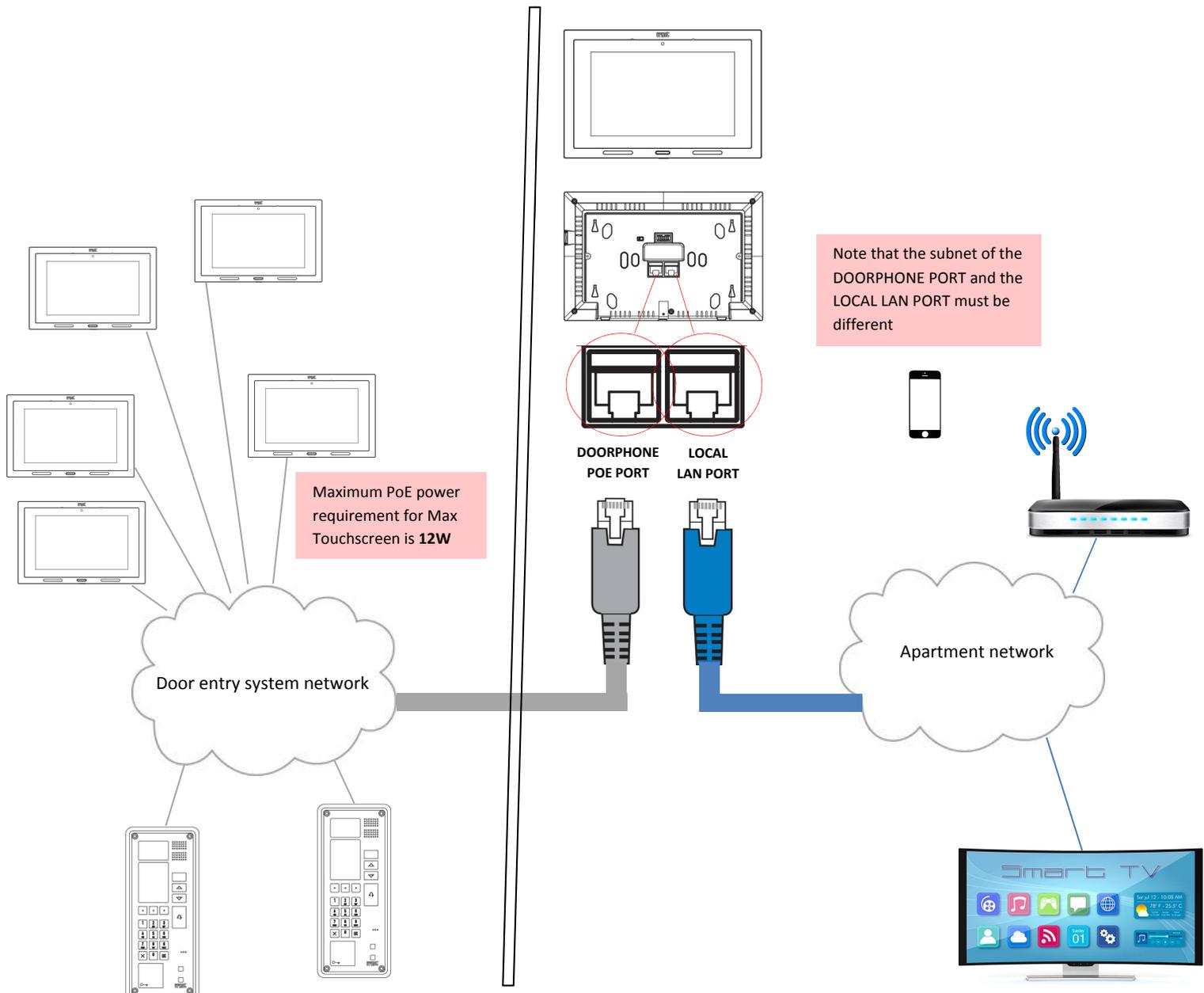
1717/31 or 1717/33 Max Pro Touchscreen Monitor



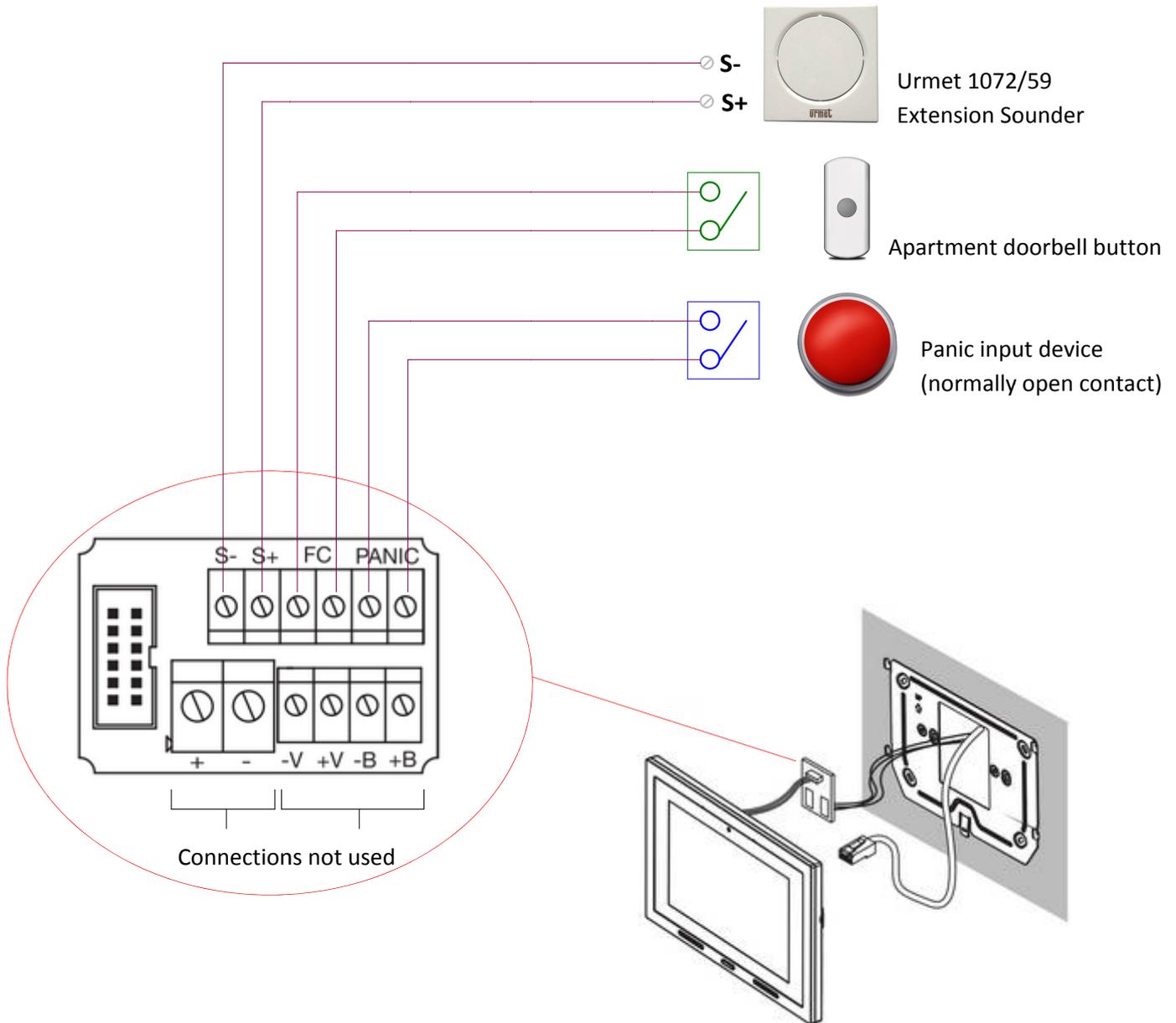
- |   |                          |    |  |
|---|--------------------------|----|--|
| 1 | 7" Touchscreen           | 6  | Micro SD card slot                             |
| 2 | 2MP webcam               | 7  | Switch NOT USED                                |
| 3 | Microphone               | 8  | 12-Way connector for external connections      |
| 4 | Blue backlit Home button | 9  | Secondary LAN connection for Home Area Network |
| 5 | Speakers                 | 10 | LAN connection to IPerCom network              |

## 1717/31 or 1717/33 Max Pro Touchscreen Monitor connections

The 1717/31 or 1717/33 Max Pro Touchscreen Monitor has two LAN connectors; one for connection to the IPerCom 'door entry network' and one for connection to the local apartment network (Home Area Network).



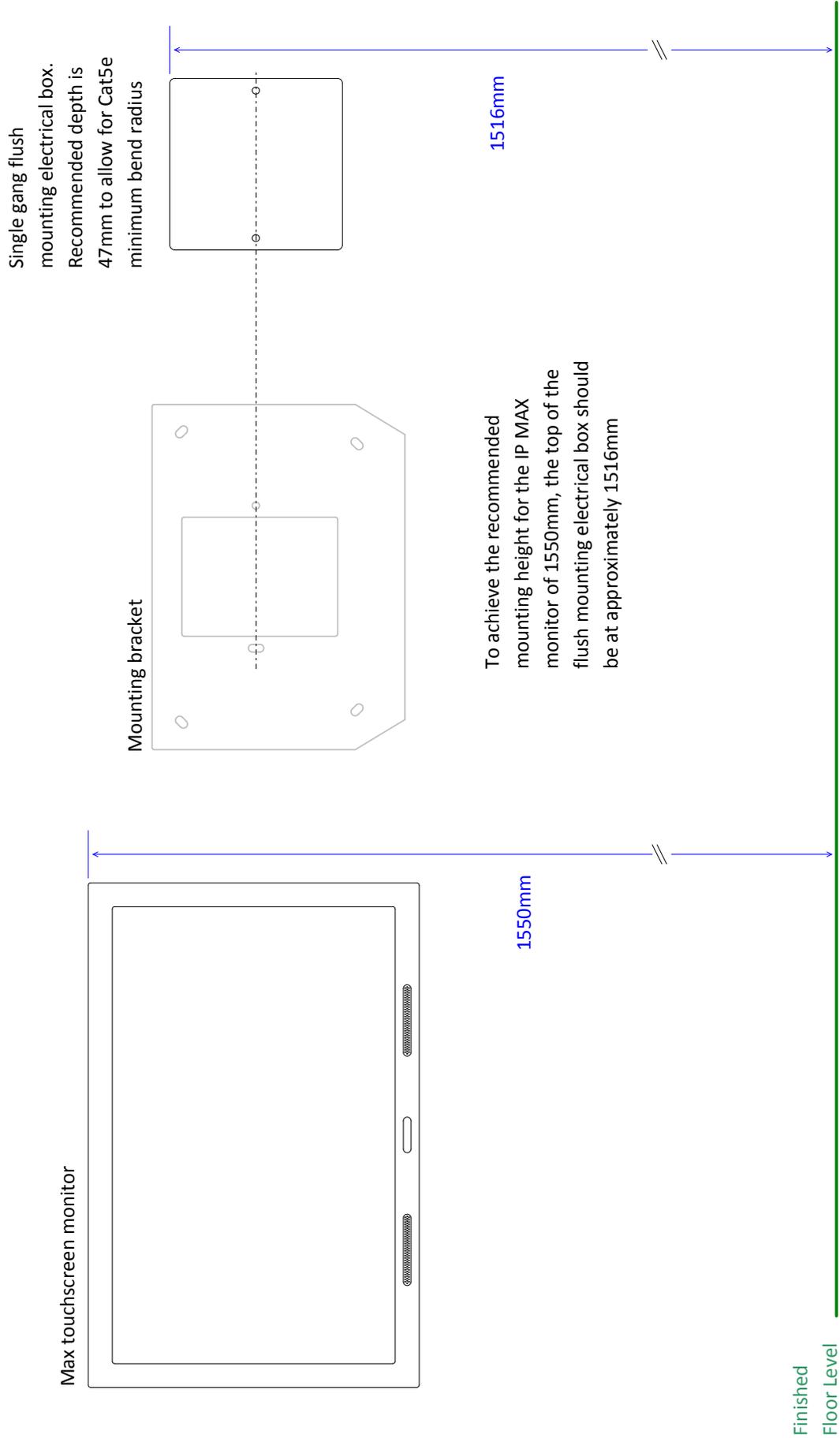
An additional terminal connector is supplied to allow a number of external connections to the Max touchscreen, namely panic alarm input (which sends an alert to the concierge switchboard), an apartment doorbell push button input and an output to the Urmet 1072/59 extension sounder –



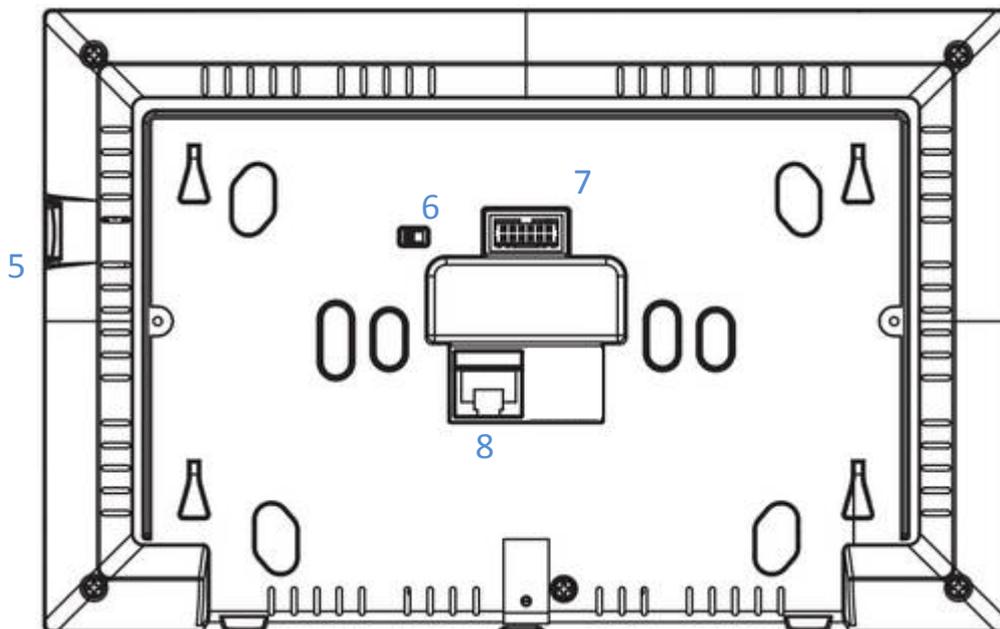
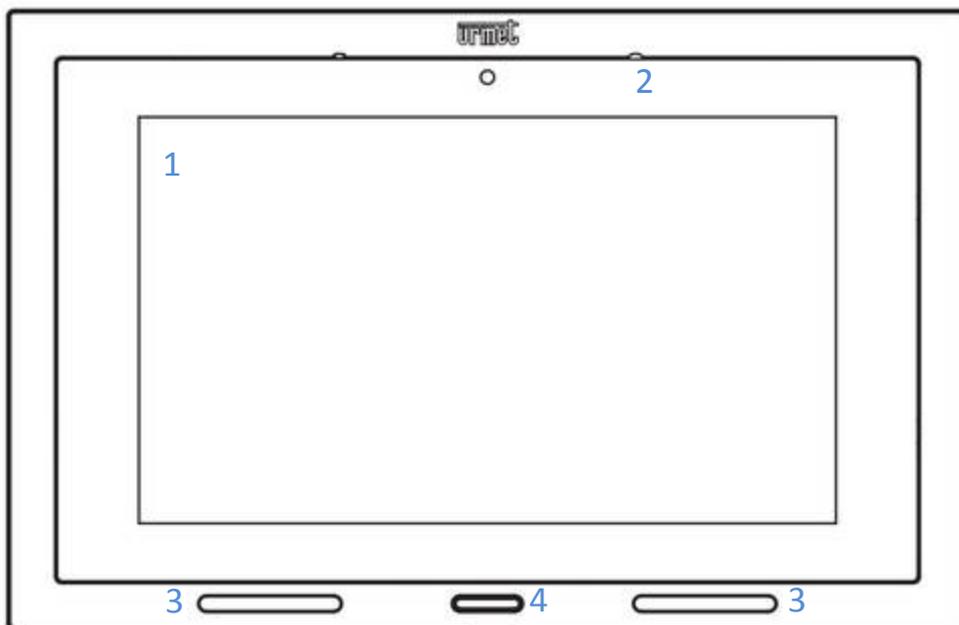
Type of connection	Maximum distance	Minimum cable cross section
Extension sounder	30M	0.5mm
Door bell	30M	0.5mm
Panic alarm	30M	0.5mm
LAN	100M	Cat5e*

\* Cat6 cable should not be used due to its bend radius requirements

# 1717/31 or 1717/33 Max Pro Touchscreen Monitor mounting height



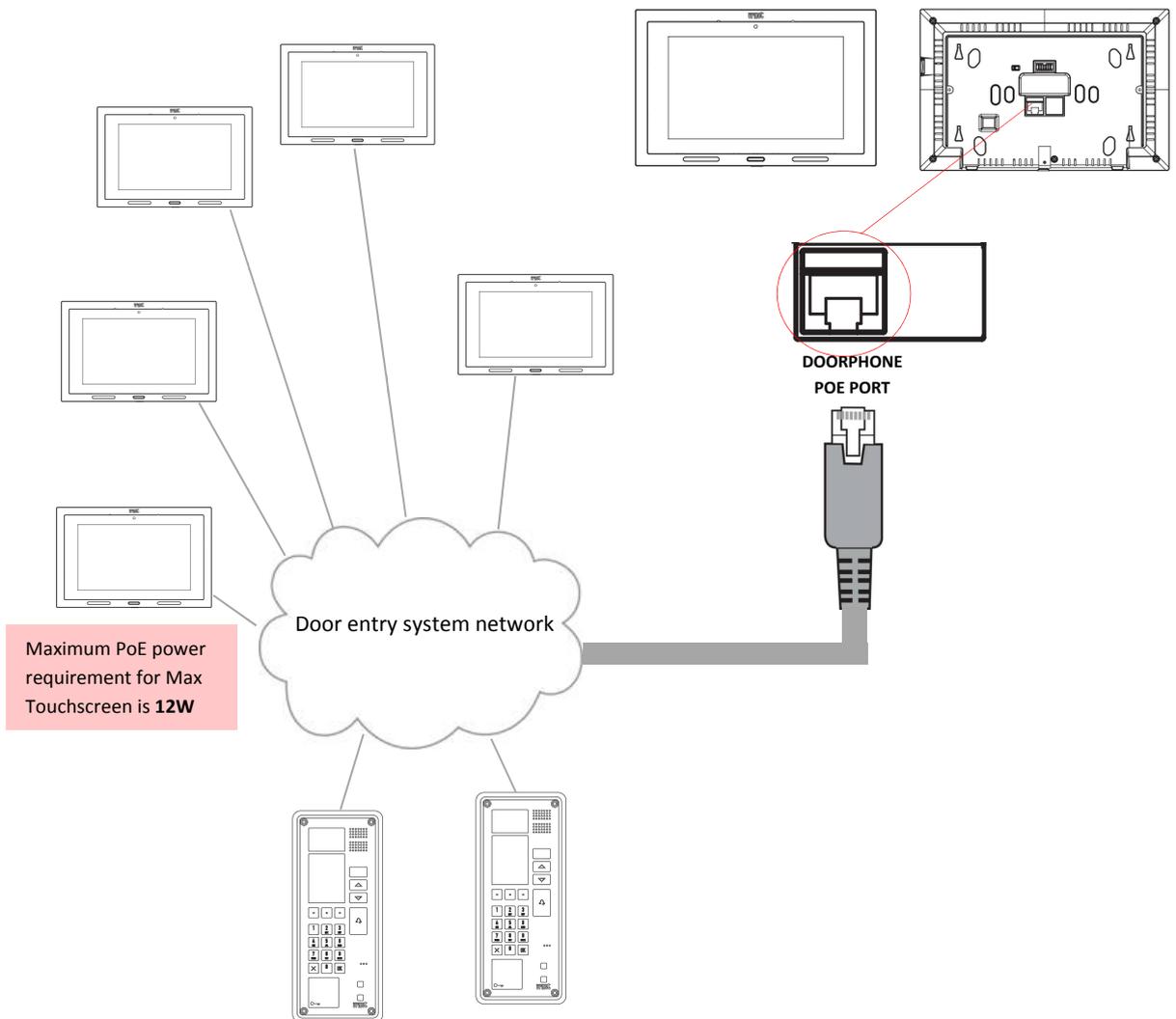
1717/41 or 1717/43 Max Lite Touchscreen Monitor



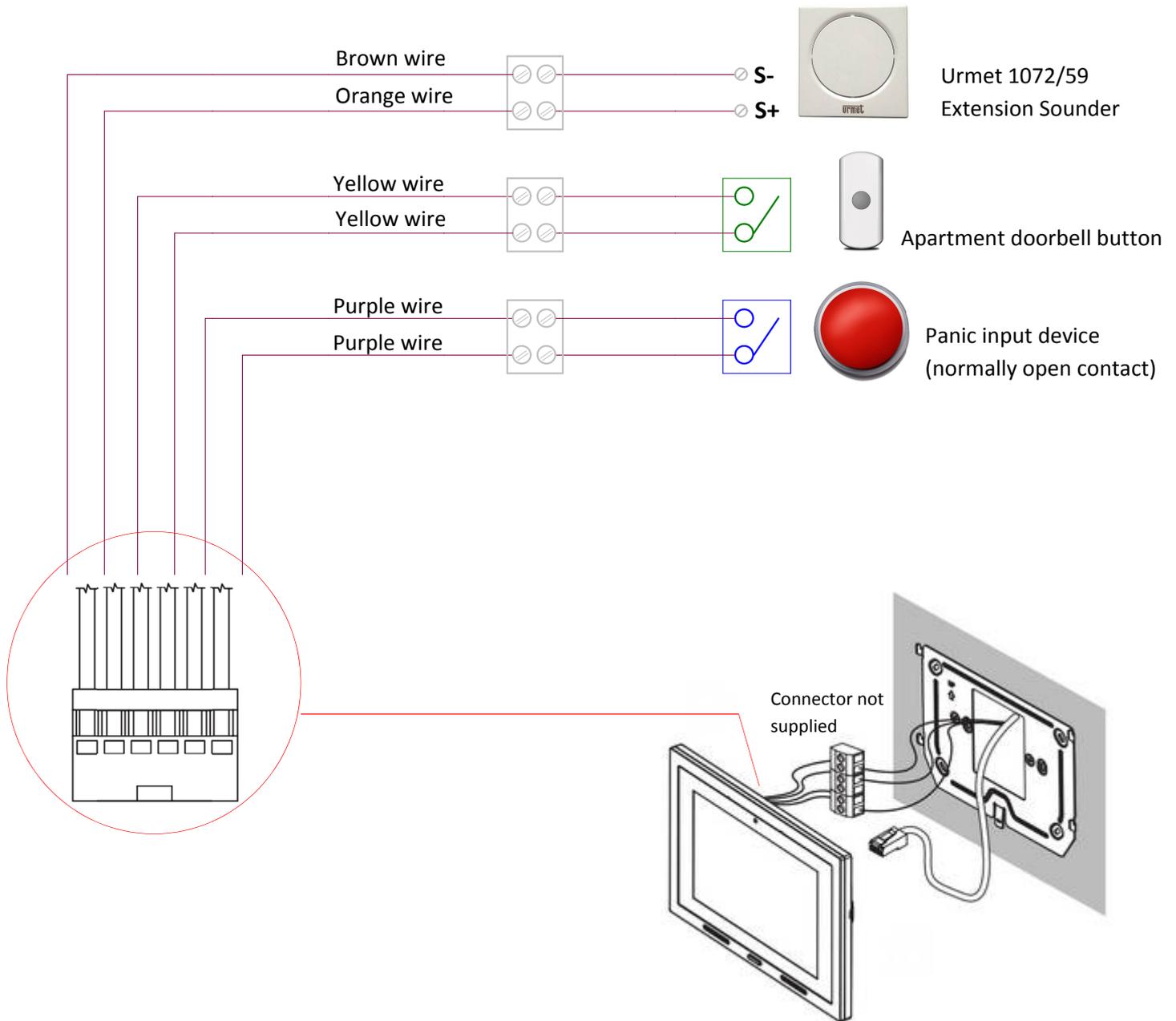
- |   |                          |   |   |
|---|--------------------------|---|---|
| 1 | 7" Touchscreen           | 6 | Switch NOT USED                           |
| 2 | Microphone               | 7 | 12-Way connector for external connections |
| 3 | Speakers                 | 8 | LAN connection to IPerCom network         |
| 4 | Blue backlit Home button |   |   |
| 5 | Micro SD card slot       |   |   |

## 1717/41 or 1717/43 Max Lite Touchscreen Monitor connections

The 1717/41 or 1717/43 Max Pro Touchscreen Monitor has one LAN connector for connection to the IPerCom 'door entry network'.



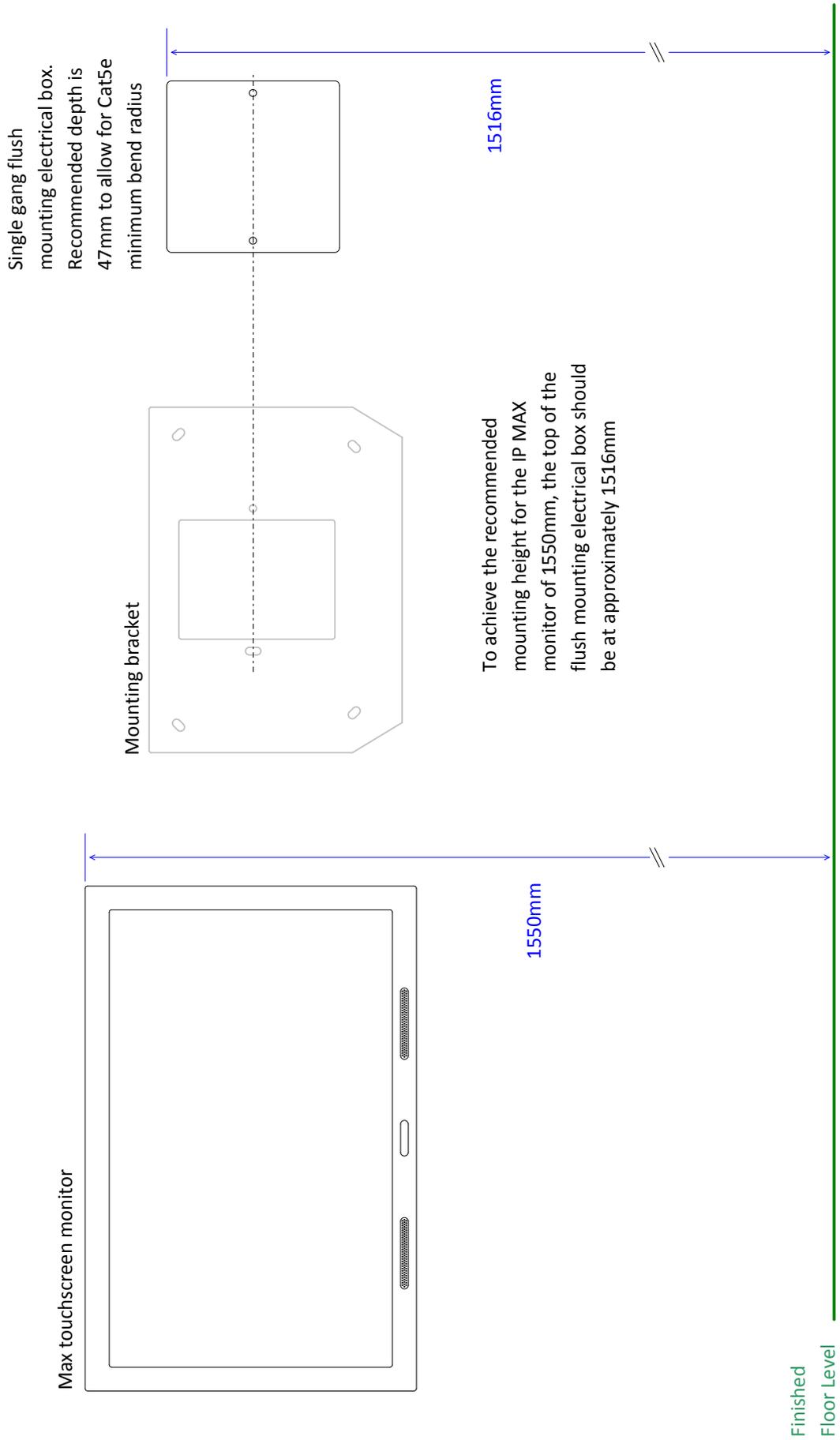
An additional cable is supplied to allow a number of external connections to the Max touchscreen, namely panic alarm input (which displays an alert on the concierge switchboard), an apartment doorbell push button input and an output to the Urmet 1072/59 extension sounder –



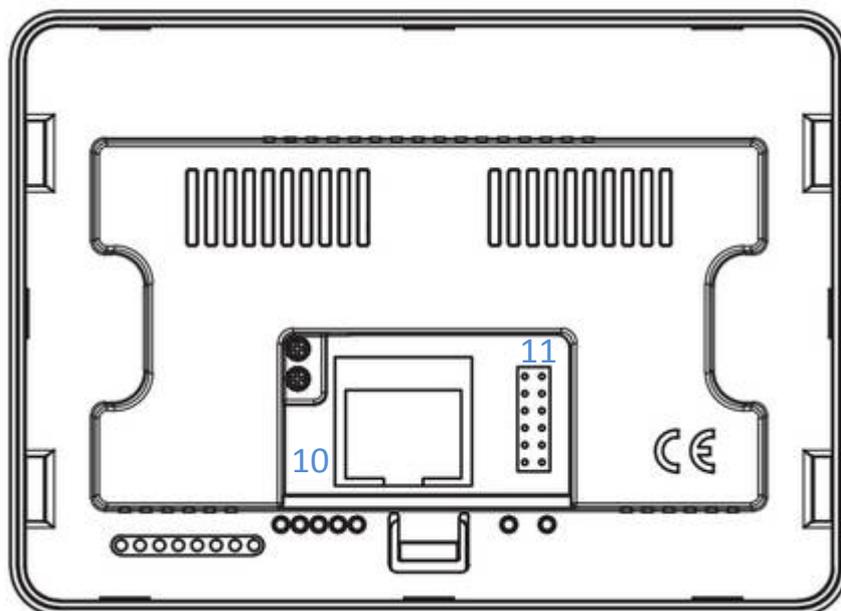
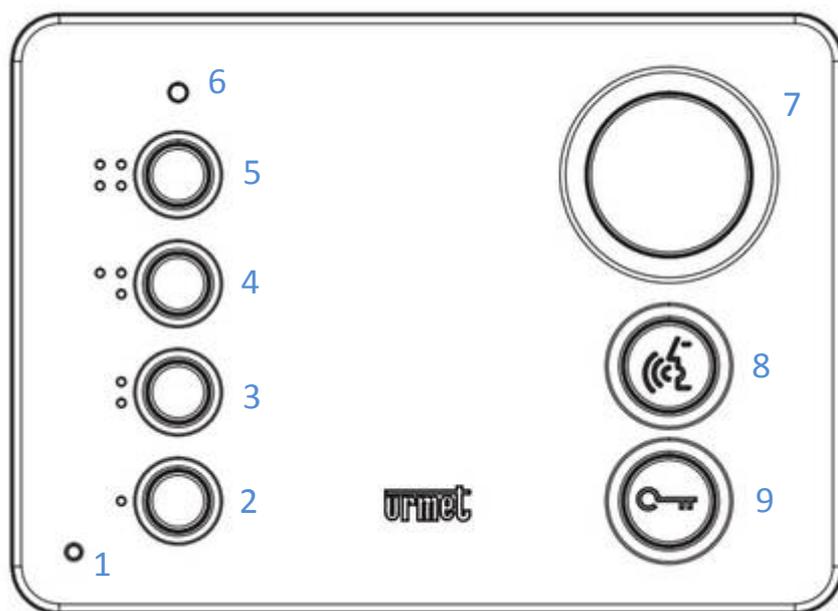
Type of connection	Maximum distance	Minimum cable cross section
Extension sounder	30M	0.5mm
Door bell	30M	0.5mm
Panic alarm	30M	0.5mm
LAN	100M	Cat5e*

\* Cat6 cable should not be used due to its bend radius requirements

# 1717/41 or 1717/43 Max Lite Touchscreen Monitor mounting height

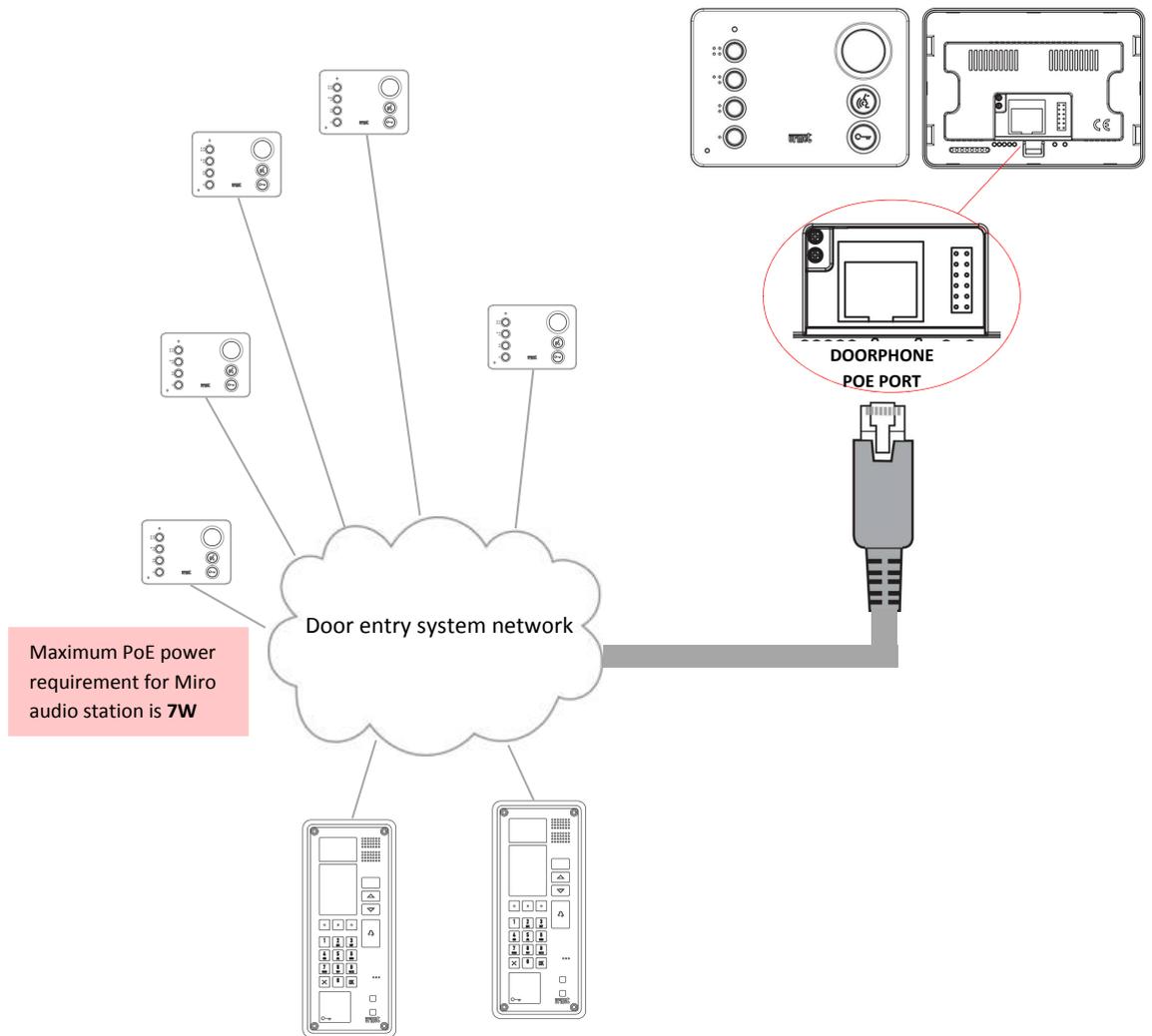


## 1160/3 Miro handsfree audio station

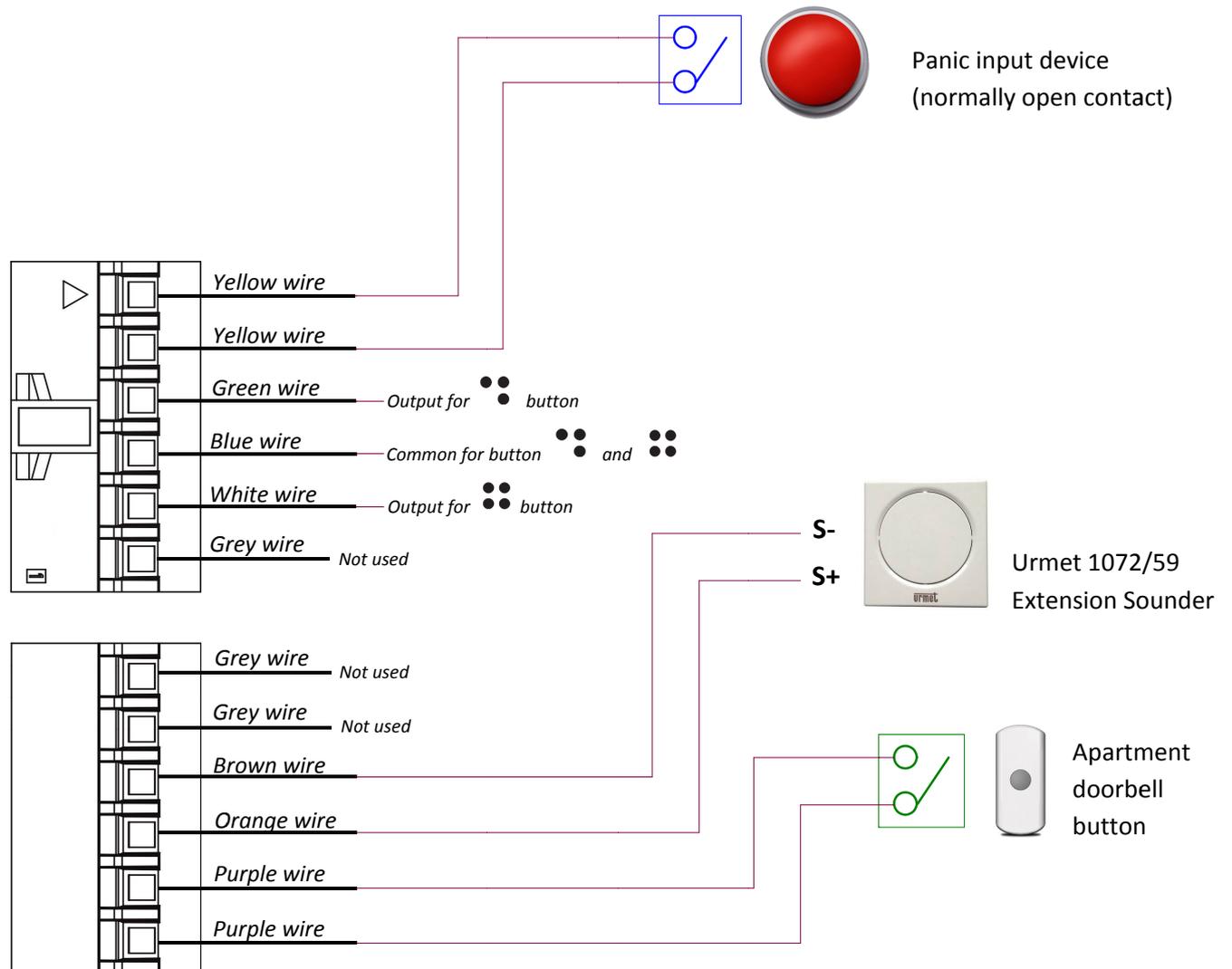


- |   |                            |    |   |
|---|----------------------------|----|---|
| 1 | Microphone                 | 6  | LED indicator                             |
| 2 | Additional function button | 7  | Speaker                                   |
| 3 | Additional function button | 8  | Push to talk button                       |
| 4 | Button for Yokis control   | 9  | Door open button                          |
| 5 | Button for Yokis control   | 10 | LAN connection to IPerCom network         |
|   |                            | 11 | 12-Way connector for external connections |

## 1160/3 Miro handsfree audio station connections



An additional cable is supplied to allow a number of external connections to the Miro audio station, namely panic alarm input (which displays an alert on the concierge switchboard), an apartment doorbell push button input, an output to the Urmet 1072/59 extension sounder and outputs to activate Yokis devices.

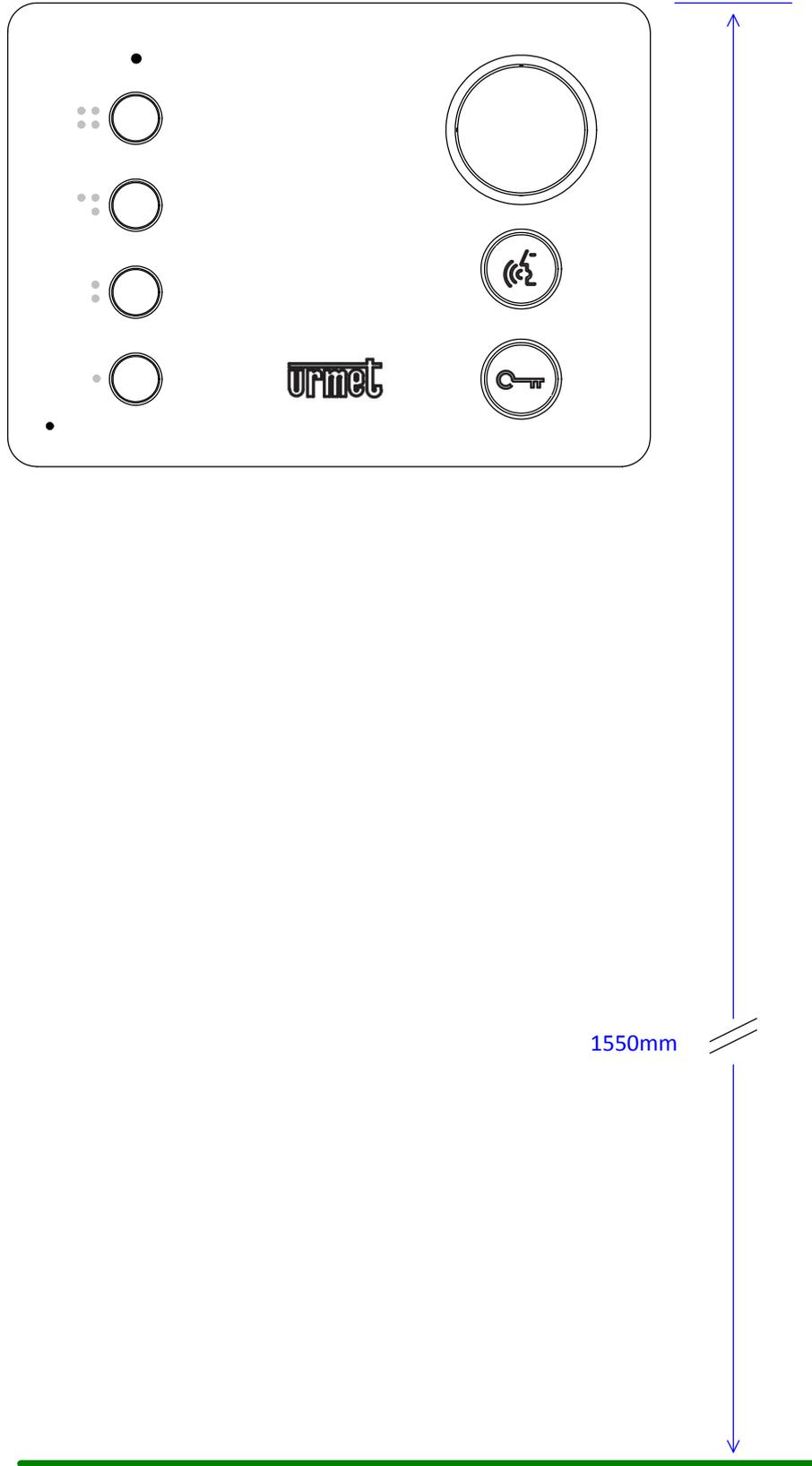


Type of connection	Maximum distance	Minimum cable cross section
Extension sounder	30M	0.5mm
Door bell	30M	0.5mm
Panic alarm	30M	0.5mm
LAN	100M	Cat5e*

\* Cat6 cable should not be used due to its bend radius requirements

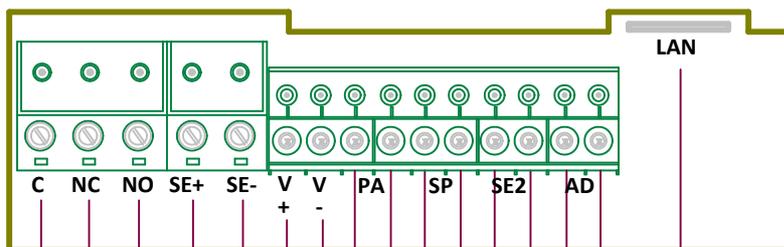
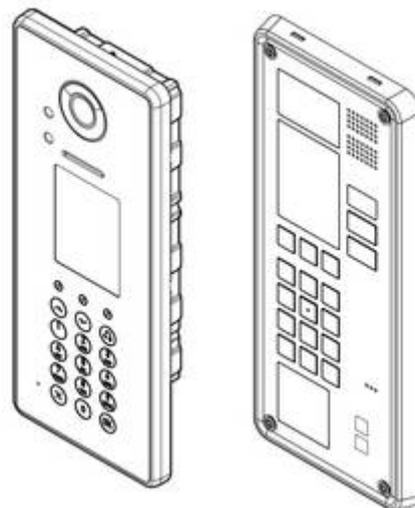
## 1160/3 Miro handsfree audio station mounting height

1160/3 Miro handsfree audio station



## 1060/13 Elekta, 1060/18 & 1060/19 Elekta Steel Call Modules

Connections for 1060/13 Elekta and 1060/18 & 1060/19 Elekta Steel entry panels are identical -



**LAN** – Network connection to PoE network switch port

**AD** - Input for hearing aid induction loop

**SE2** - Normally open voltage free relay output specifically for triggering vehicle automation systems. This output is triggered by a dedicated button on the Max monitor - [\[Icon\]](#)

**SP** - A normally closed door contact (going open when the door is opened) can be connected to this input and will report a 'Door open' message at the concierge switchboard (where fitted).

**PA** - Input for a normally open push to exit switch.

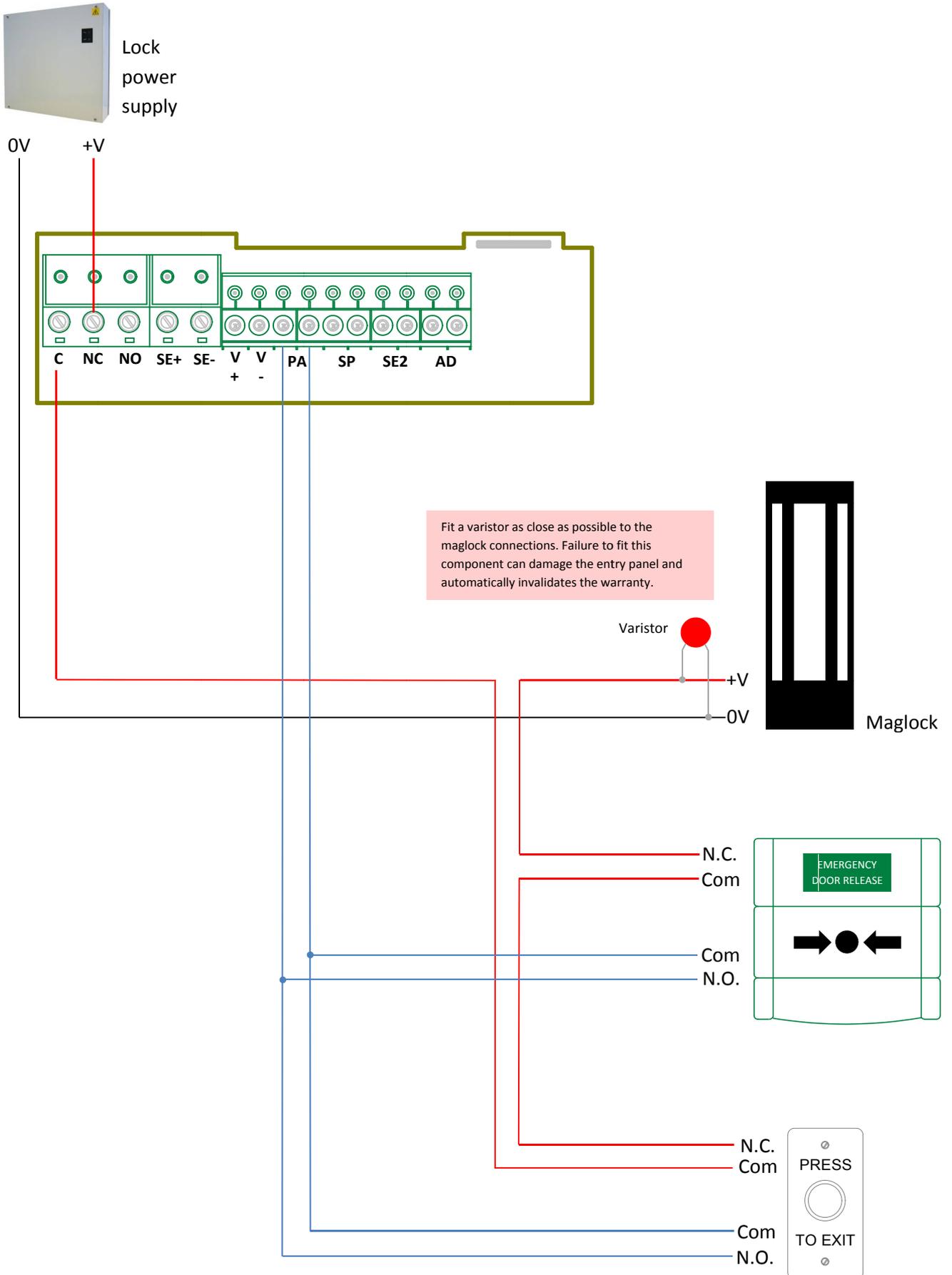
**V+ V-** Input for a local power supply, for use when PoE is not available. 44 – 57V DC @ 200mA

The two outputs below operate at the same time when the 'Door open' button is pressed.

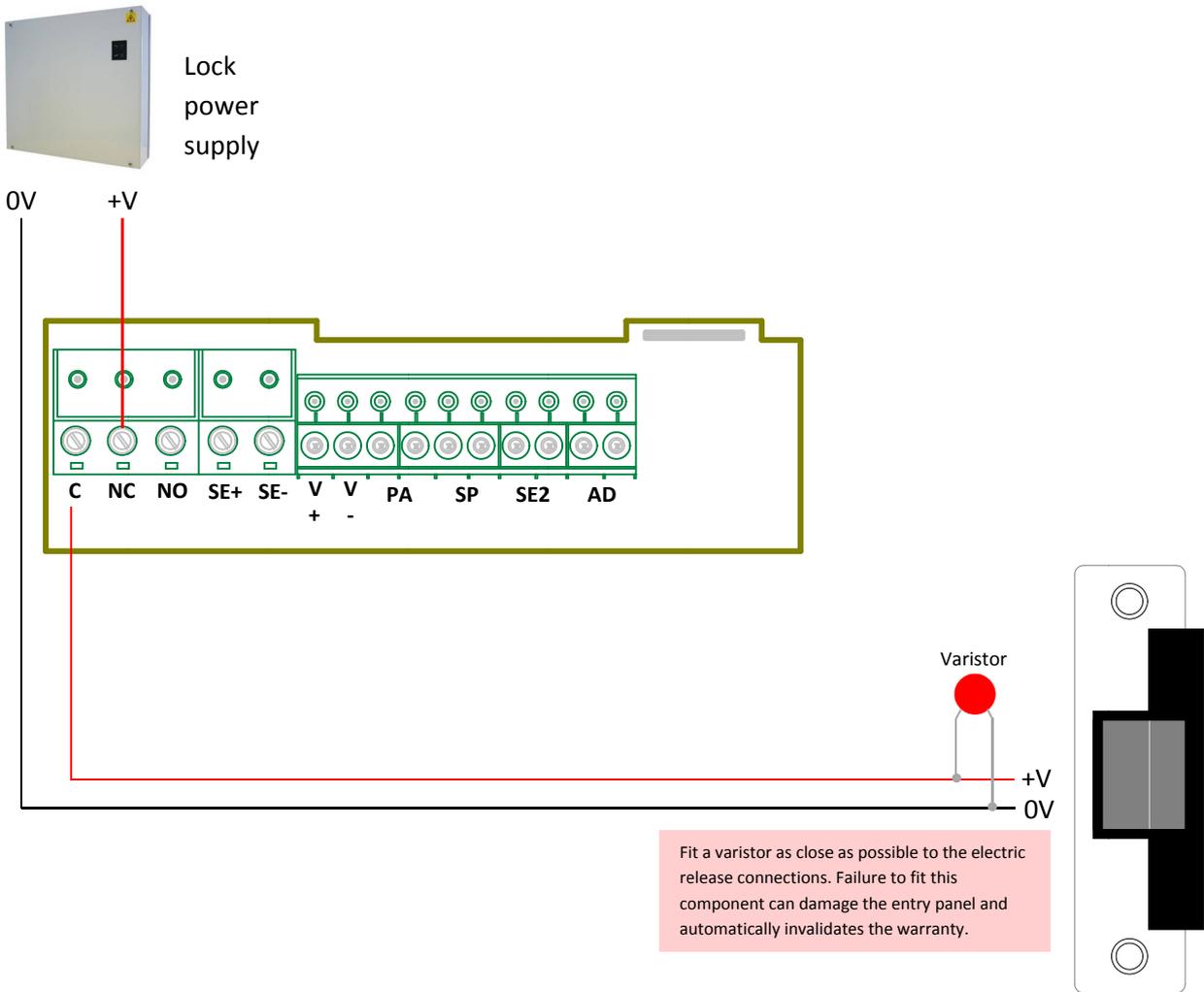
**SE+ SE-** Output for direct connection to a *fail secure (fail locked)* release.

**C NC NO** - Voltage free relay output. Use to control fail safe (fail open) releases, or maglocks. Also use to interface to third party access control systems and automatic door openers. Relay rated at 30V 3.5A

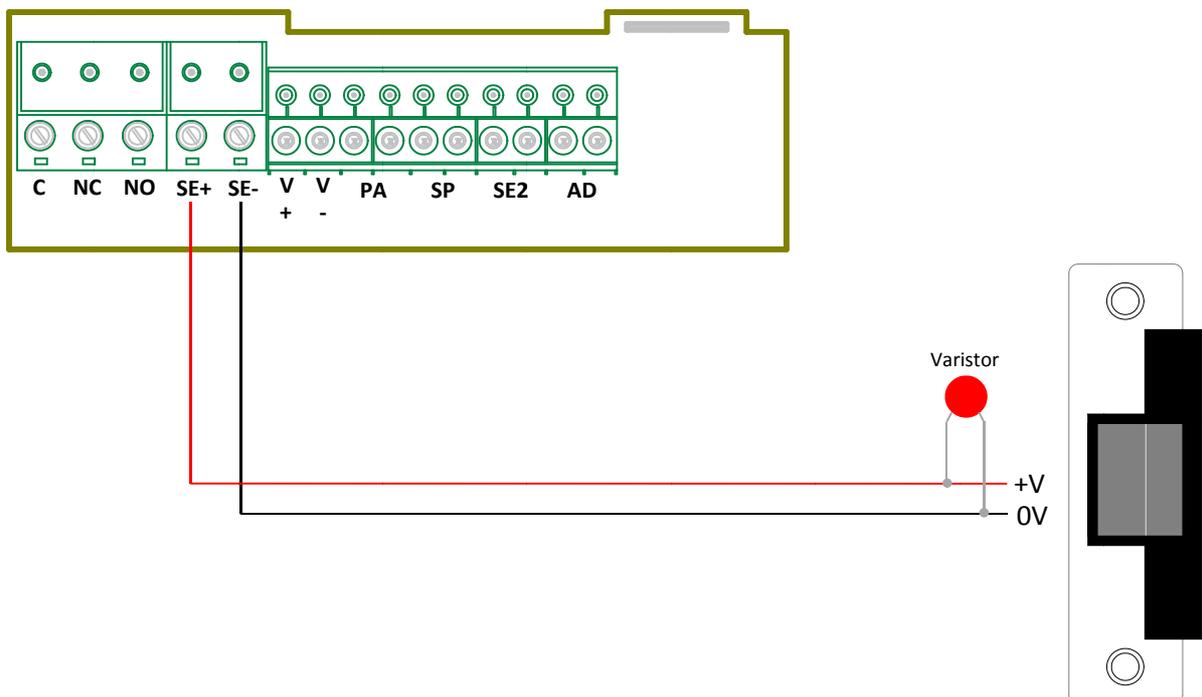
Typical connections for a maglock –



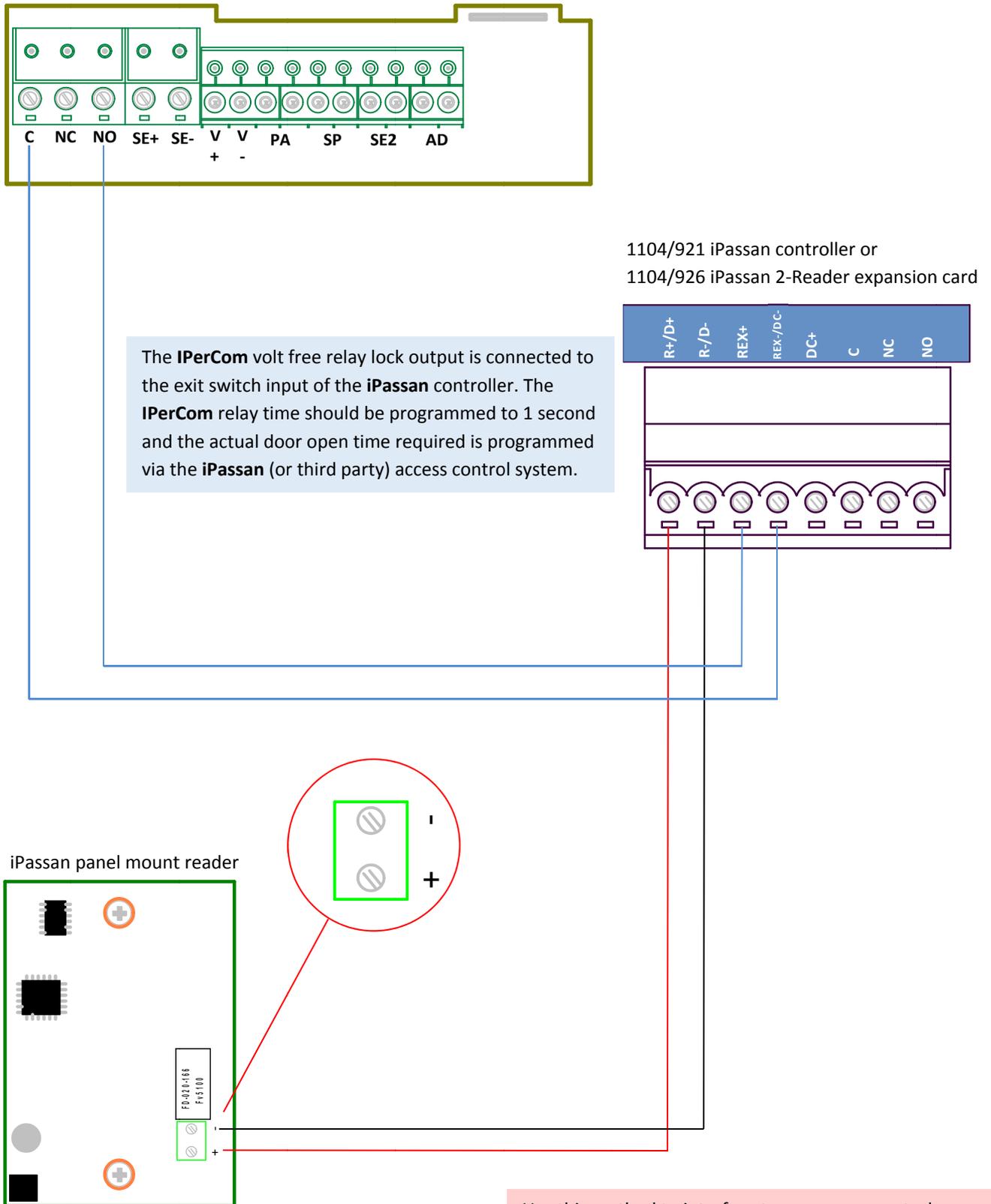
Typical connections for fail safe (fail open) electric release -



Typical connections for fail secure (fail locked) electric release -



Interfacing IPerCom lock output to iPassan access control system -



Use this method to interface to any access control system; use the C and NO connections of the IPerCom entry panel to trigger the exit switch input of the access control system. Use the access control system to control the release or maglock

## 1060/18 & 1060/19 mounting height

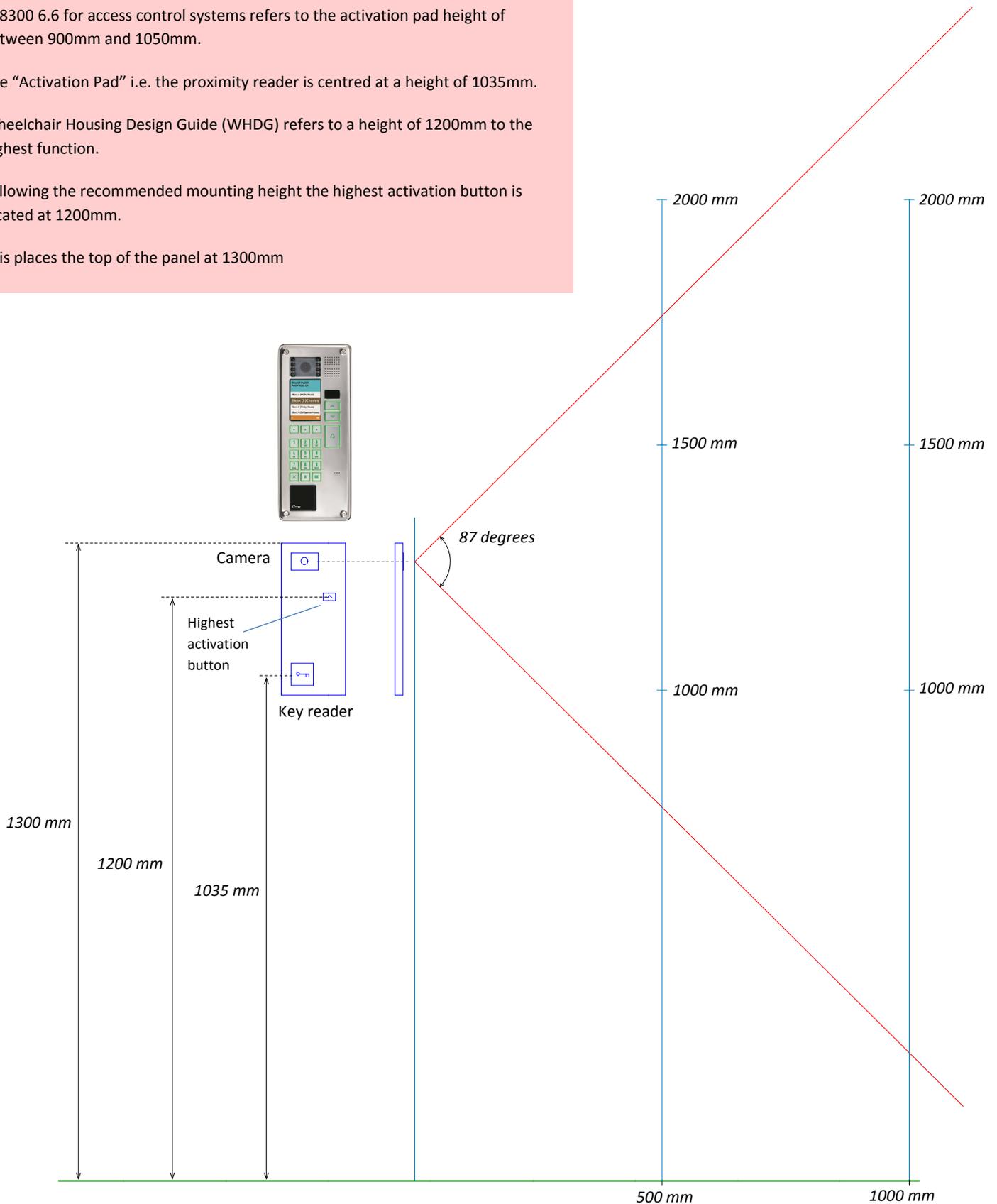
BS8300 6.6 for access control systems refers to the activation pad height of between 900mm and 1050mm.

The "Activation Pad" i.e. the proximity reader is centred at a height of 1035mm.

Wheelchair Housing Design Guide (WHDG) refers to a height of 1200mm to the highest function.

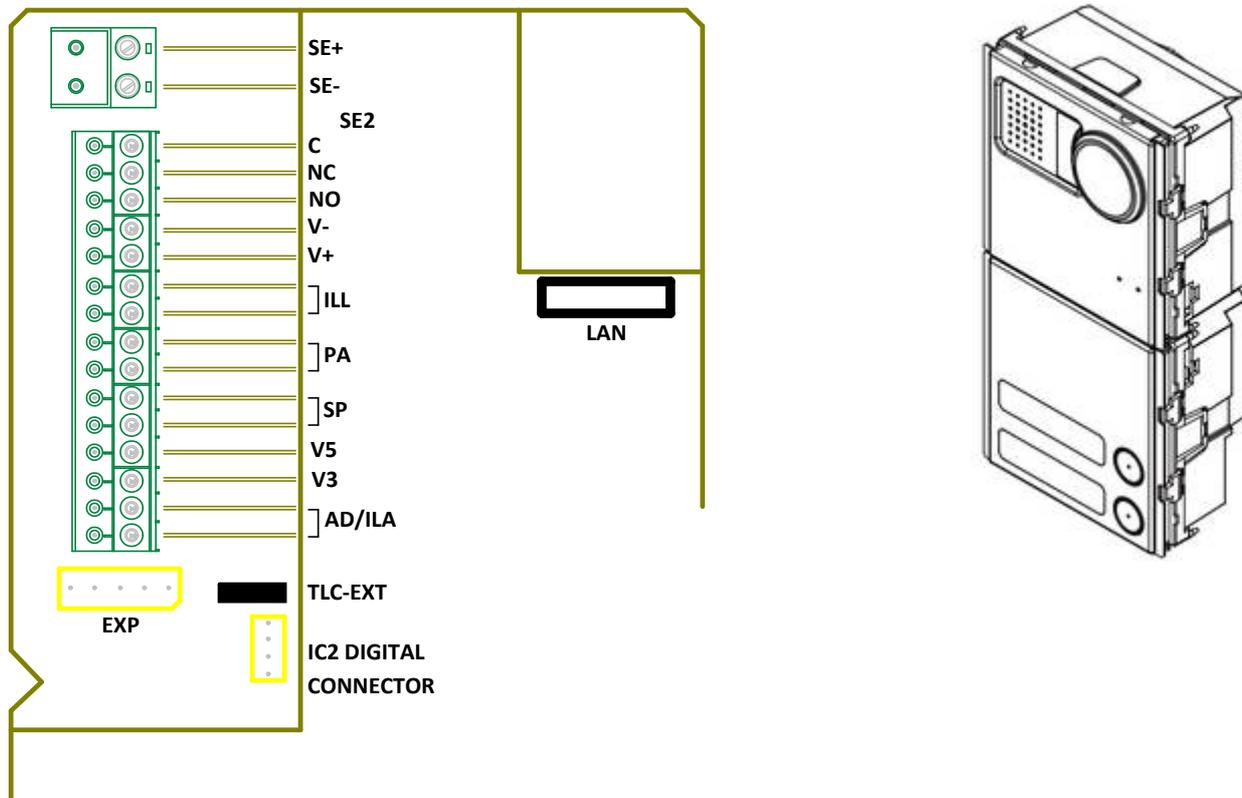
Following the recommended mounting height the highest activation button is located at 1200mm.

This places the top of the panel at 1300mm





## 1060/74 Synthesi Steel entry panel module



**LAN** – Network connection to PoE network switch port

**SE+ SE-** Output for direct connection to a *fail secure (fail locked)* release.

**SE2 - C NC NO** - Voltage free relay output specifically for triggering vehicle automation systems. This output is triggered by a dedicated button on the Max monitor - [📖](#)

**V+ V-** Input for a local power supply, for use when PoE is not available. 44 – 57V DC @ 200mA

**ILL** - Output to illuminate further button module nameplates

**PA** - Input for a normally open push to exit switch.

**SP** - A normally closed door contact (going open when the door is opened) can be connected to this input and will report a 'Door open' message at the concierge switchboard (where fitted).

**V5** – External CCTV camera input – Ground

**V3** – External CCTV camera input – Signal

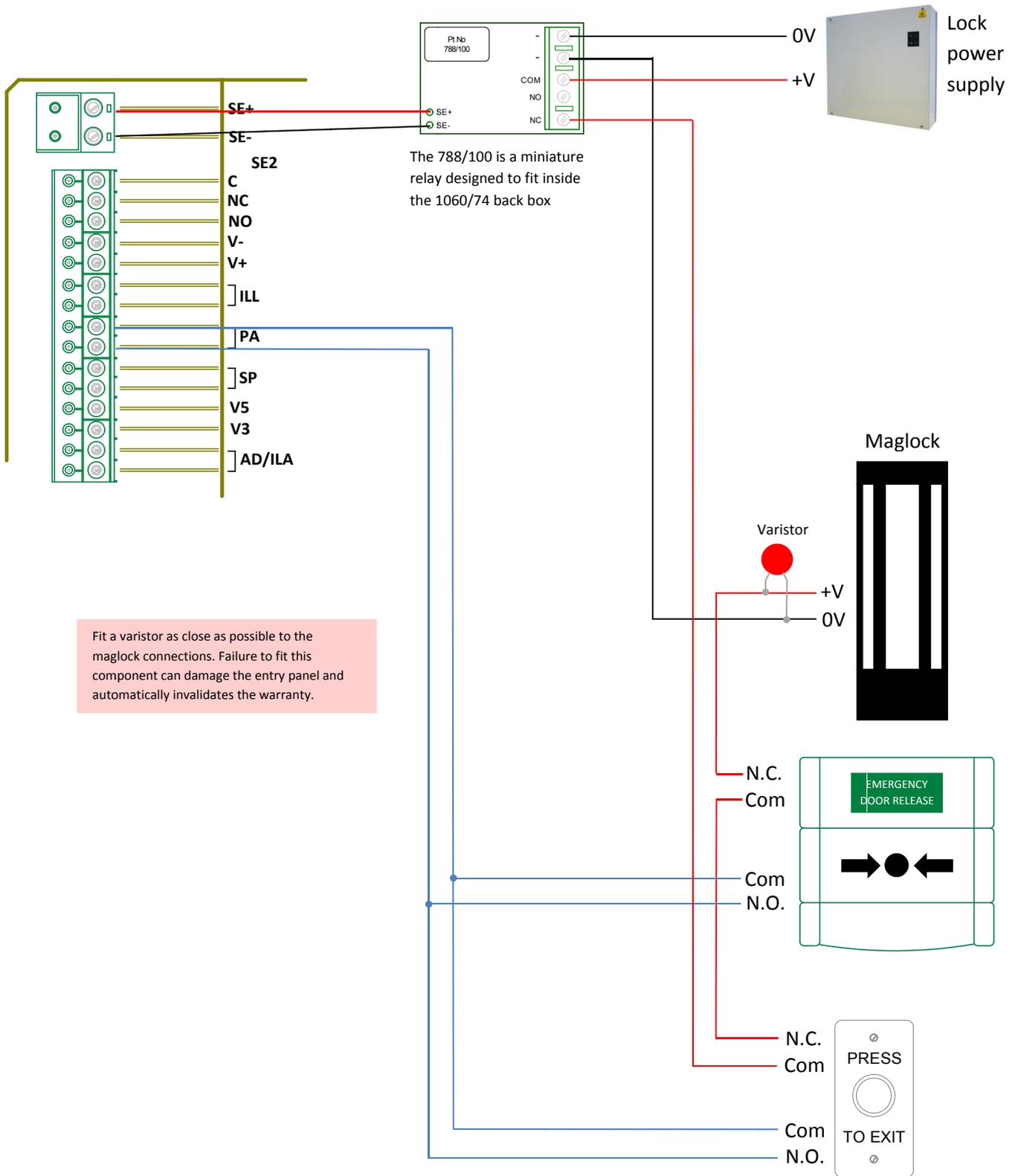
**AD/ILA** – Input for 1158/48 Hearing Aid Module

**EXP** Connector – Used to connect 1158/12 and 1158/14 Button modules. See the product manual supplied with the 1060/74.

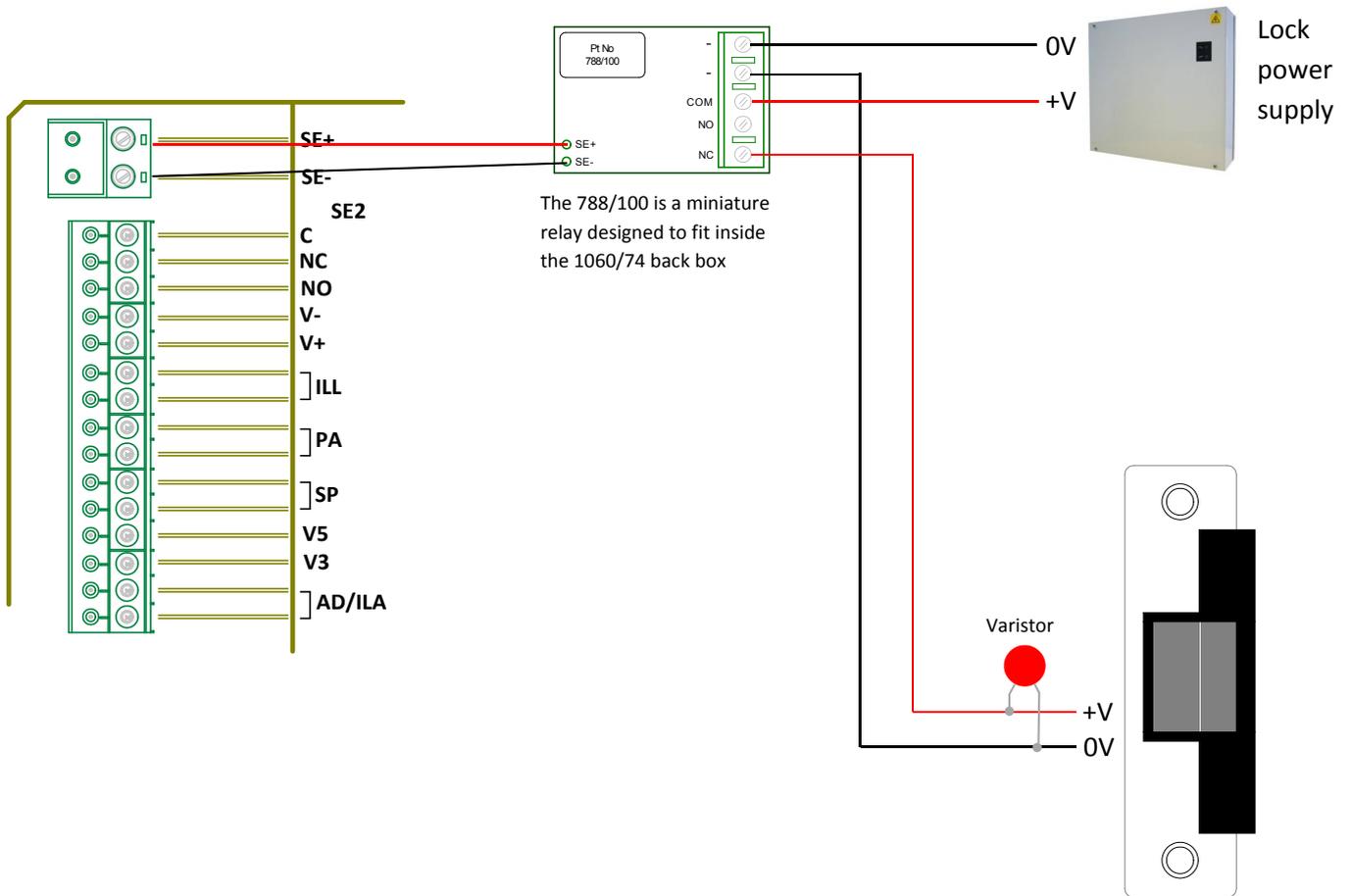
**IC2 DIGITAL CONNECTOR** – Used to connect 1158/47 DDA Module. See the product manual supplied with the 1158/47.

**TLC-EXT** – Jumper should be in the ON position if an external CCTV camera is connected to V3 & V5.

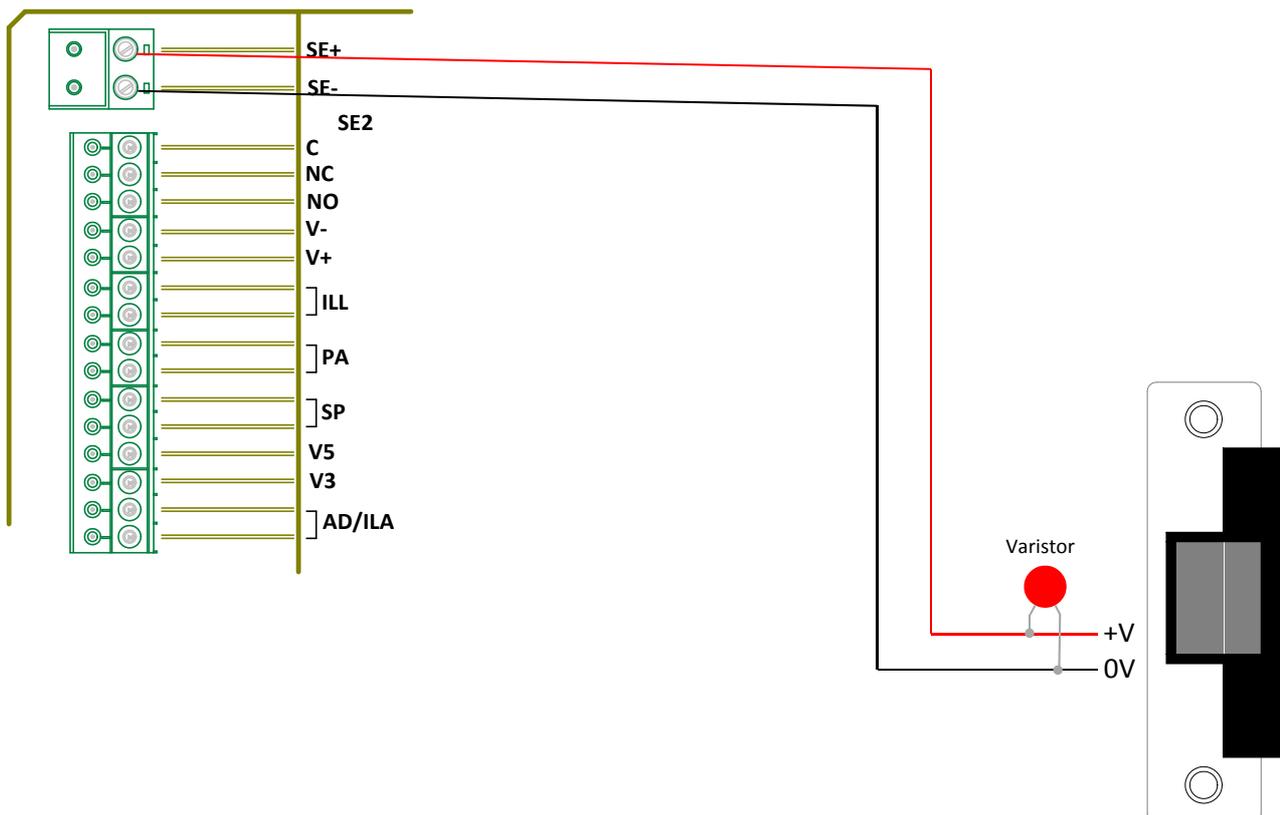
Typical connections for a maglock –



Typical connections for fail safe (fail open) electric release -



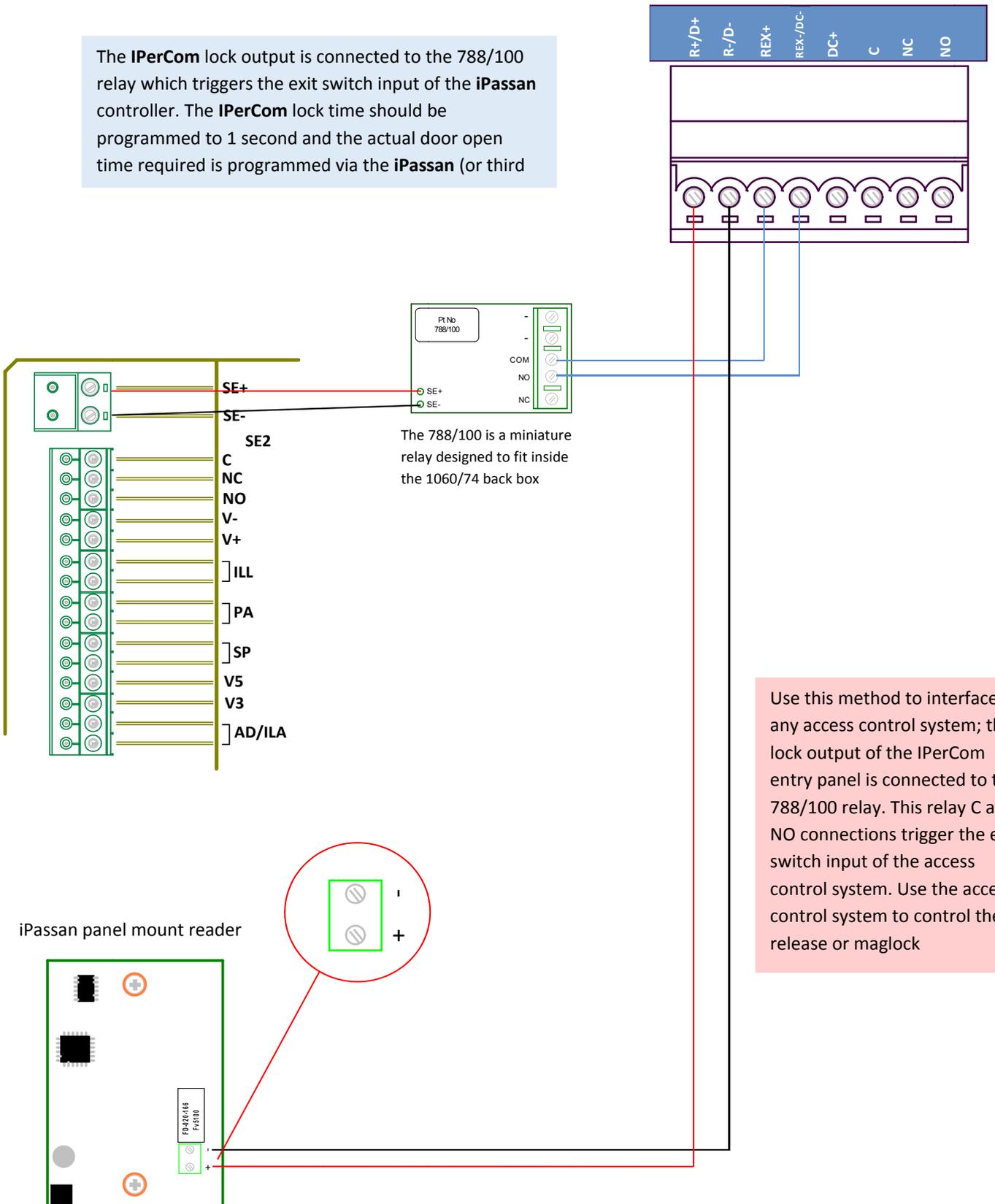
Typical connections for fail secure (fail locked) electric release -



# Interfacing IPerCom lock output to iPassan access control system –

1104/921 iPassan controller or  
1104/926 iPassan 2-Reader expansion card

The **IPerCom** lock output is connected to the 788/100 relay which triggers the exit switch input of the **iPassan** controller. The **IPerCom** lock time should be programmed to 1 second and the actual door open time required is programmed via the **iPassan** (or third



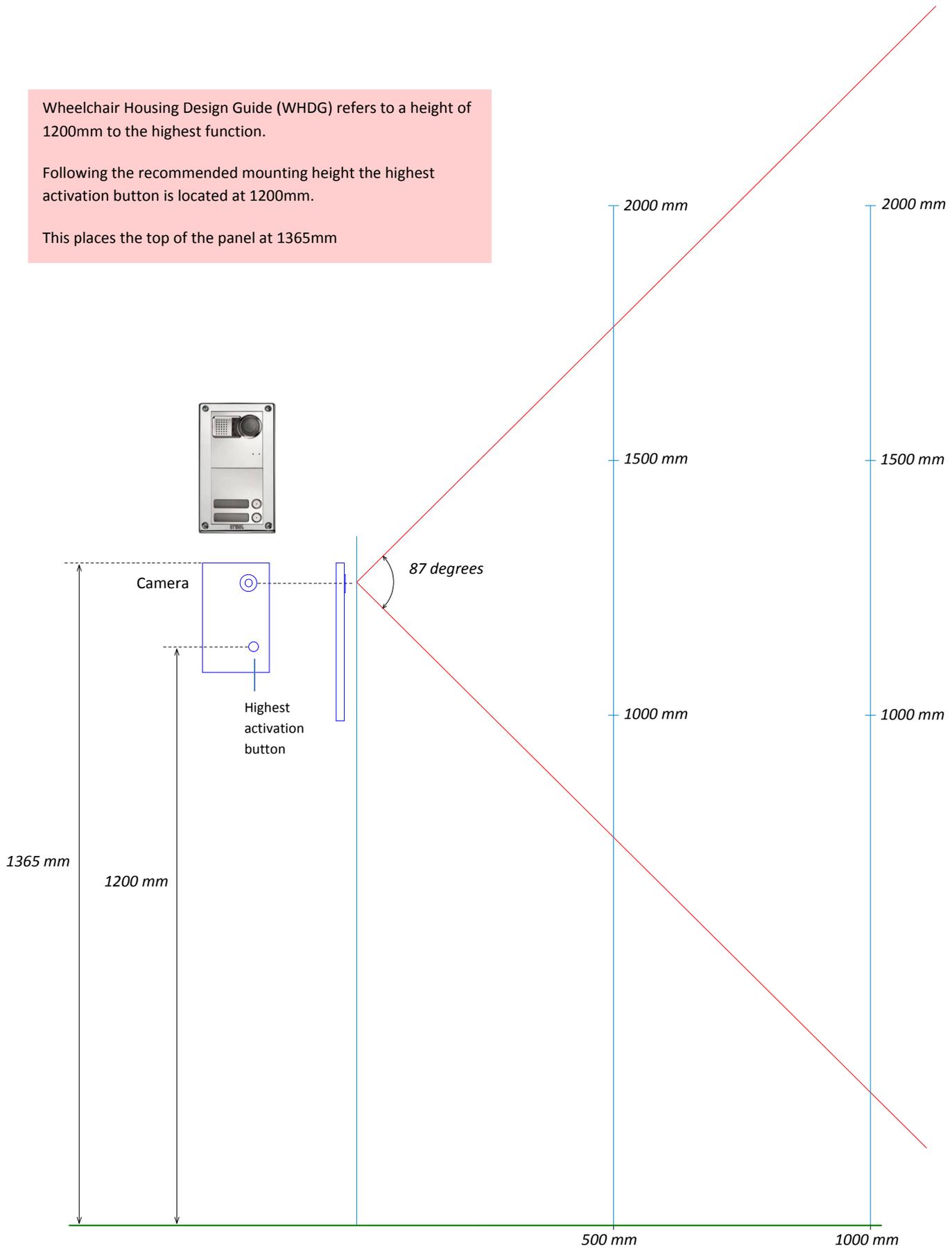
Use this method to interface to any access control system; the lock output of the IPerCom entry panel is connected to the 788/100 relay. This relay C and NO connections trigger the exit switch input of the access control system. Use the access control system to control the release or maglock

# 1060/74 mounting height

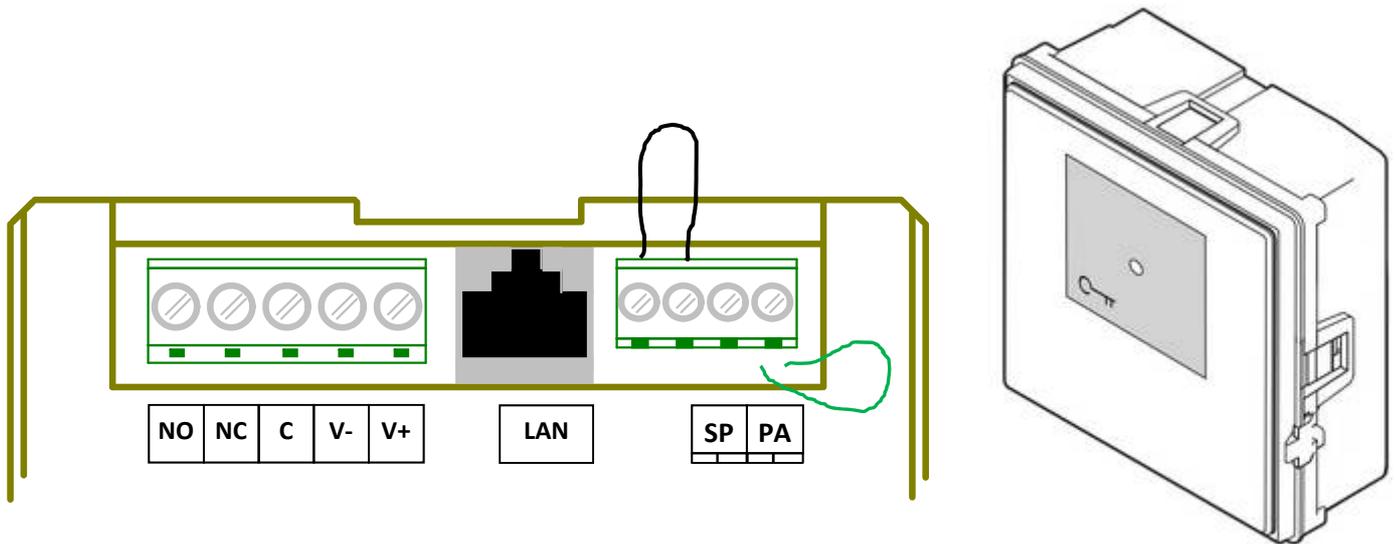
Wheelchair Housing Design Guide (WHDG) refers to a height of 1200mm to the highest function.

Following the recommended mounting height the highest activation button is located at 1200mm.

This places the top of the panel at 1365mm



## 1060/82 proximity key reader module



**NO NC C** – Voltage free clean contact lock release output rated at 30V @ 3.5A

**V+ V-** Input for a local power supply, for use when PoE is not available. 44 – 57V DC @ 200mA

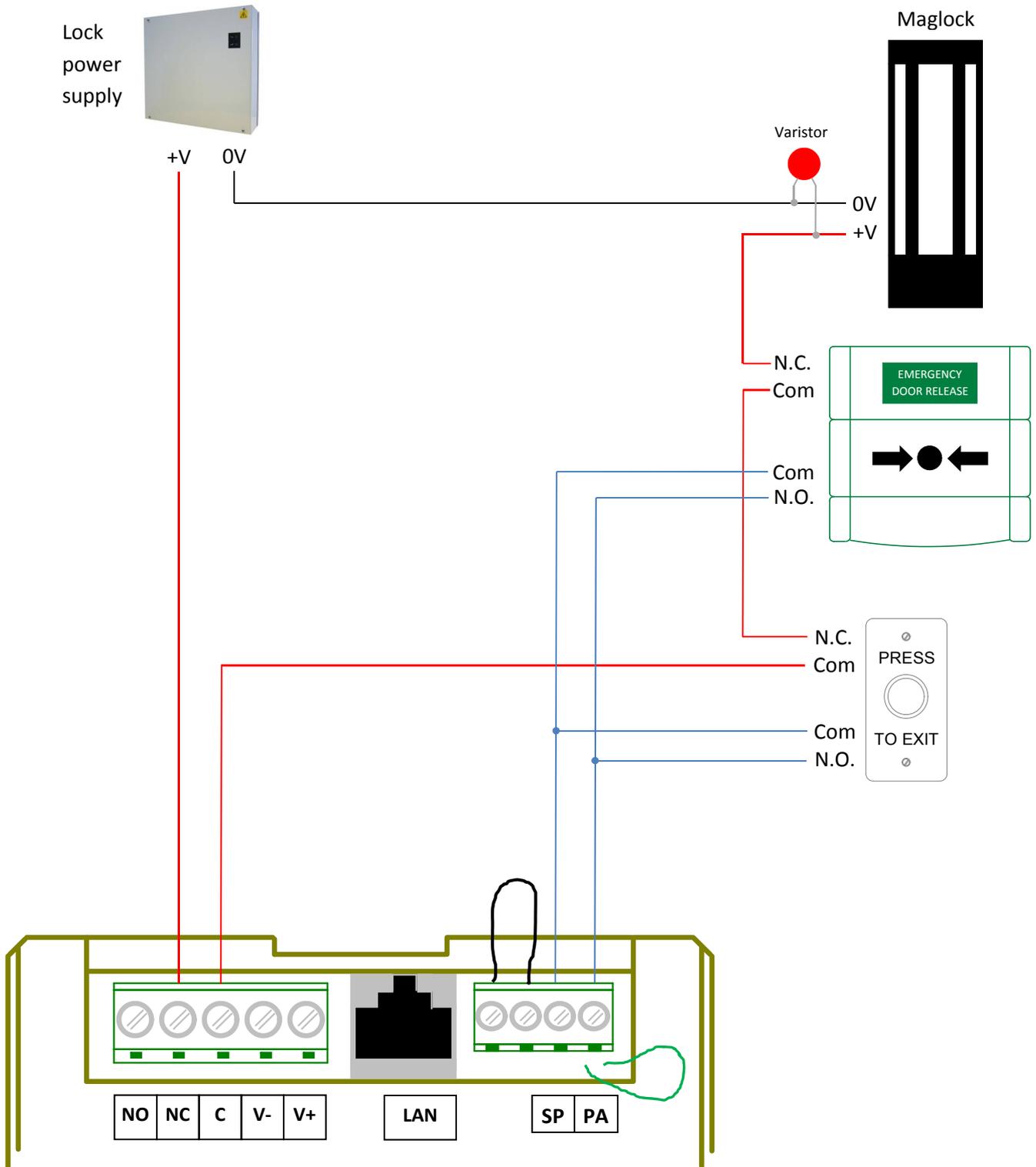
**LAN** – Network connection to PoE network switch port

**SP** - A normally closed door contact (going open when the door is opened) can be connected to this input and will report a 'Door open' message at the concierge switchboard (where fitted). By default the input is linked. This link must be removed if a door contact is being used.

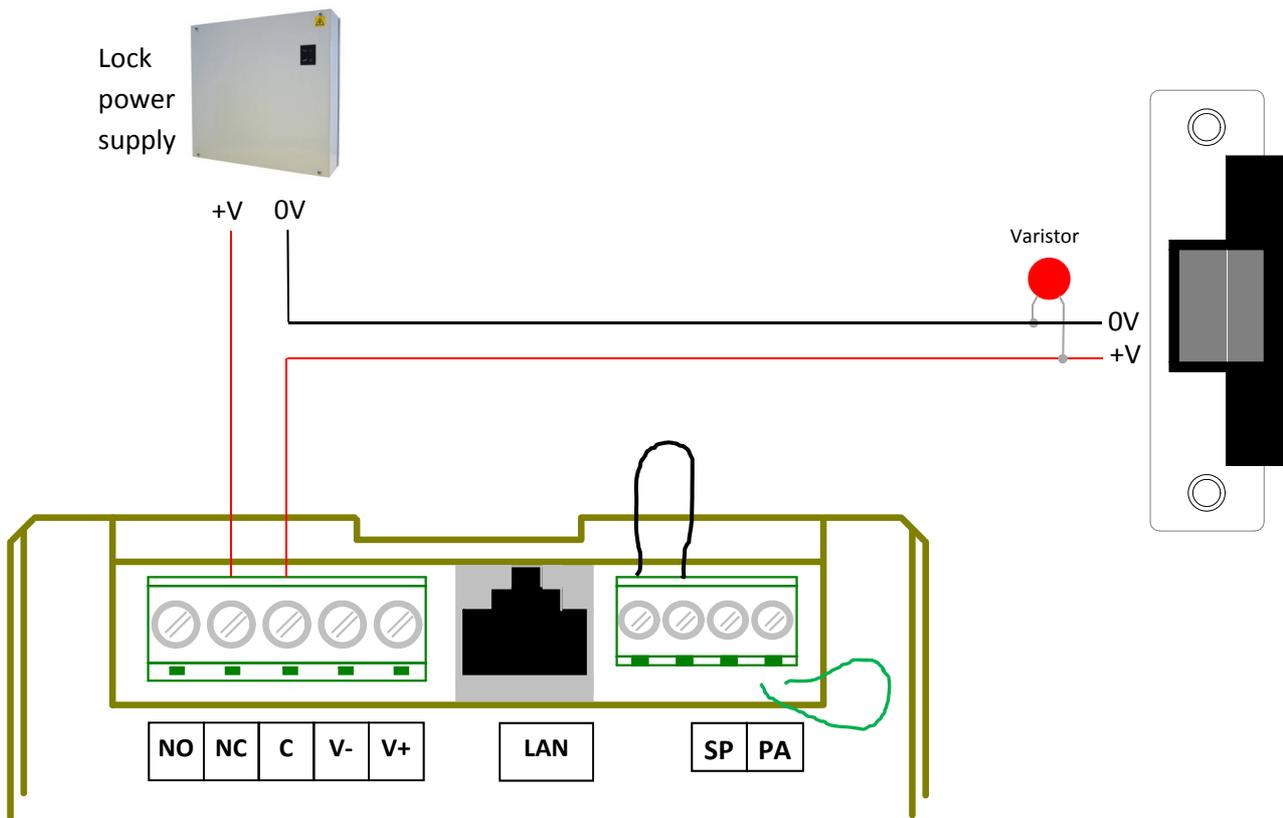
**PA** - Input for a normally open push to exit switch.

The green loop wire can be used to connect a normally closed tamper switch – see the manual supplied with the product.

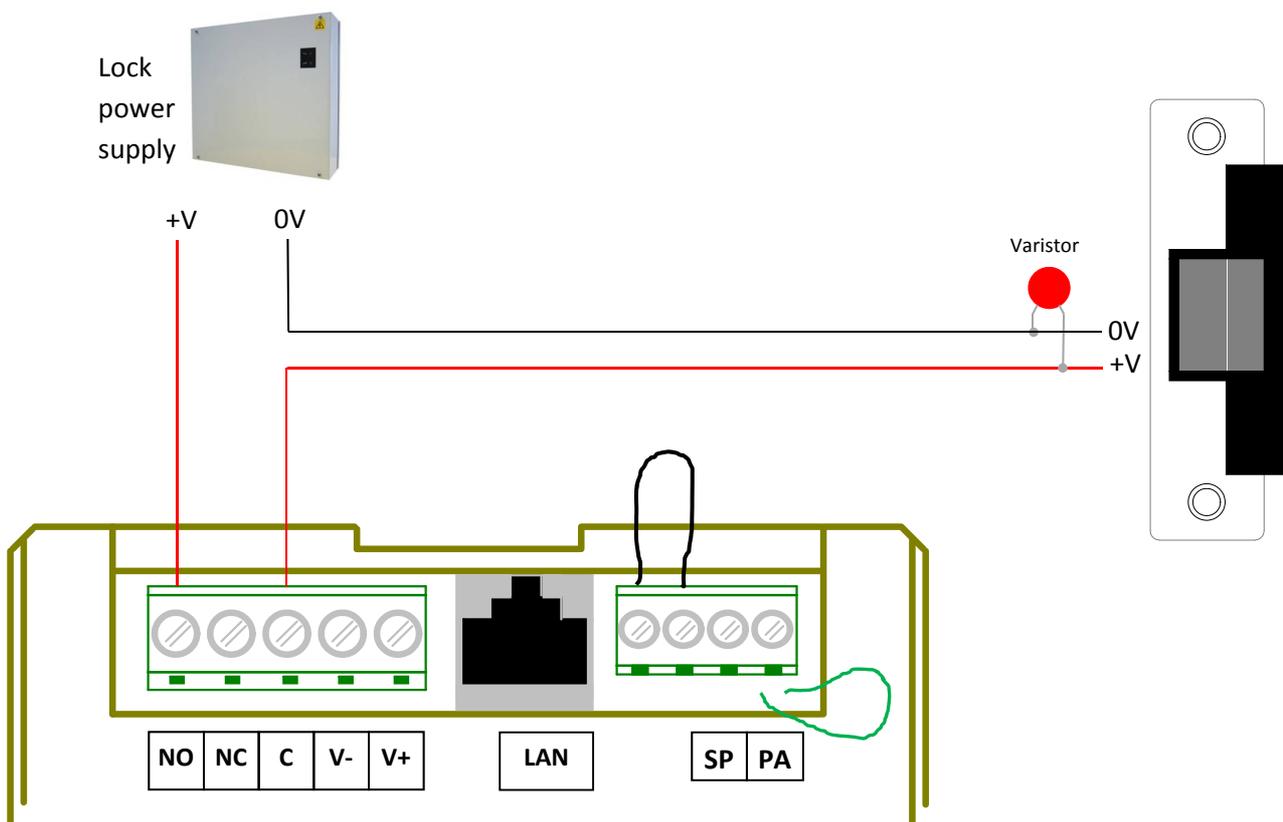
Typical connections for a maglock –



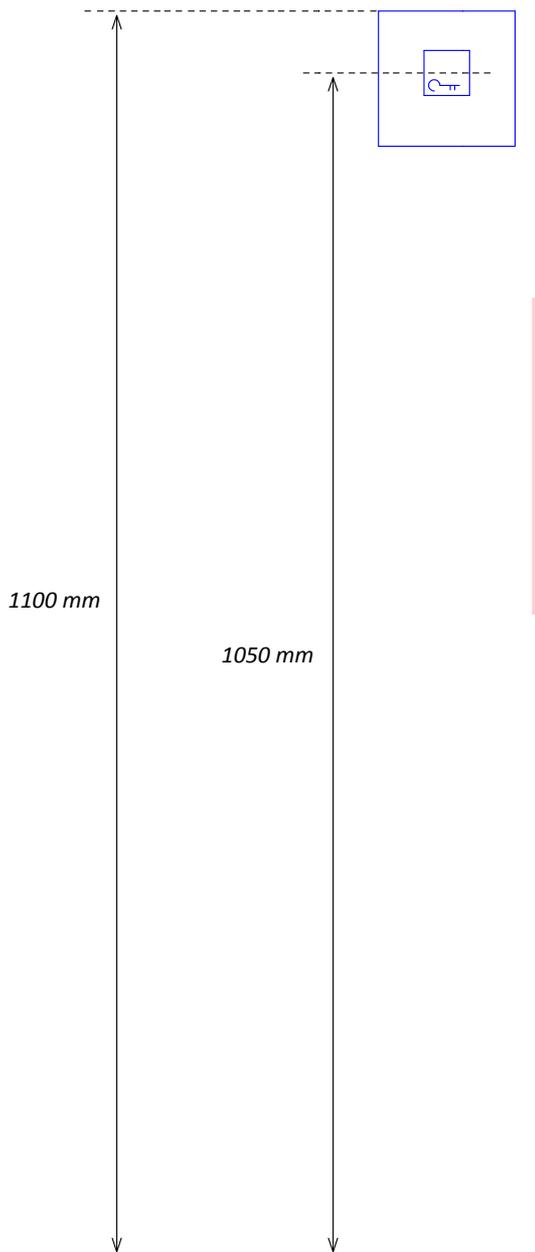
Typical connections for fail safe (fail open) electric release -



Typical connections for fail secure (fail locked) electric release -



## 1060/82 mounting height

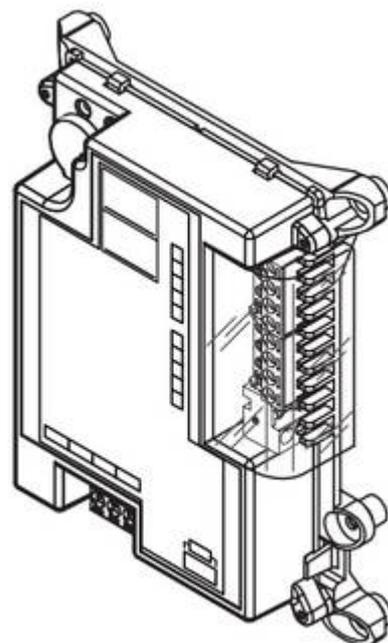
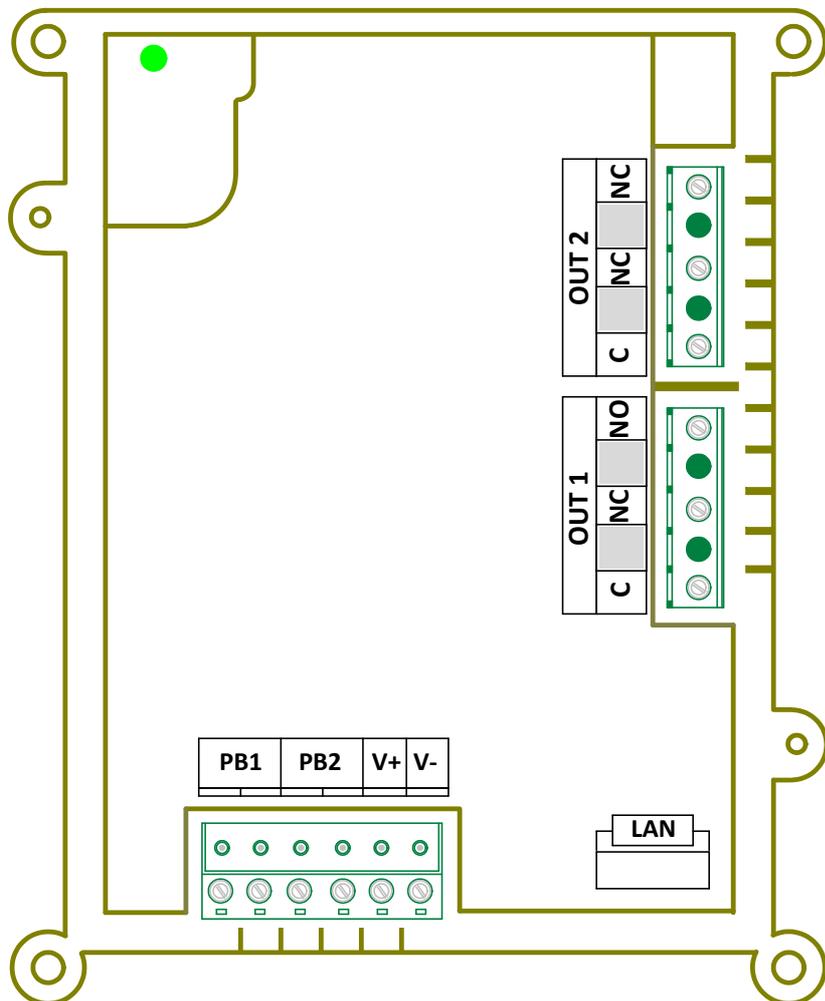


BS8300 6.6 for access control systems refers to the activation pad height of between 900mm and 1050mm

The "Activation Pad" i.e. the proximity reader is centred at a height of 1050mm.

Wheelchair Housing Design Guide (WHDG) refers to a height of 1200mm to the highest function.

Having the centre of the reader at 1050mm falls within these guidelines.



**PB1** – External normally open clean contact input 1

**PB2** – External normally open clean contact input 2

**OUT1** – **NO NC C** - Voltage free clean contact relay output rated at 30V DC @ 5.0A or 250V AC @ 5.0A

**OUT2** – **NO NC C** - Voltage free clean contact relay output rated at 30V DC @ 5.0A or 250V AC @ 5.0A

**V+ V-** Input for a local power supply, for use when PoE is not available. 44 – 56V DC @ 50mA

**LAN** – Network connection to PoE network switch port

**LED Functions –**

Slow blinking = acquisition of IP address in progress.

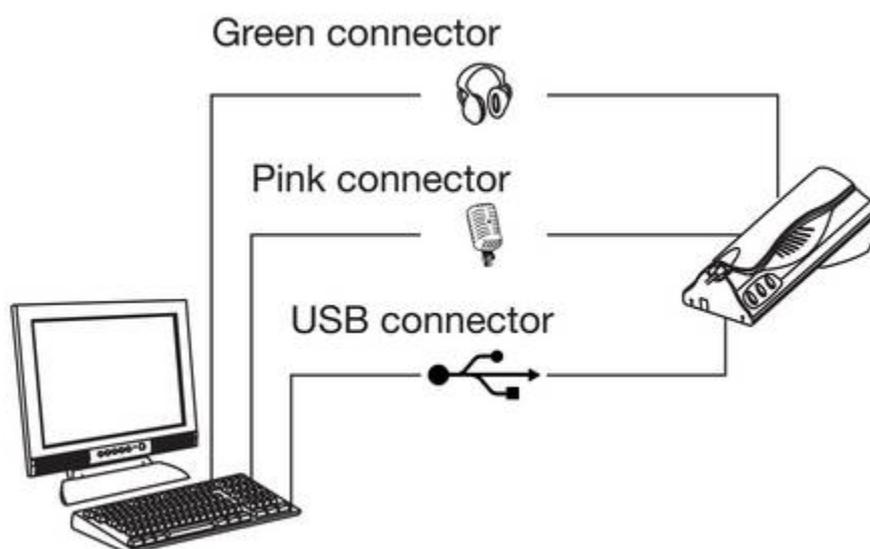
Steady on = IP address has been obtained

## 1060/41 Concierge Handset

Plug the loudspeaker connector (green connector) into the PC loudspeaker output

Plug the microphone connector (pink connector) into the PC microphone output

Plug the USB connector into a spare USB port on the PC



Internal connection –

**S+ S-** Connection for **1072/59** External Sounder

It is not necessary to install driver software for the 1060/41 Switchboard Handset. Installation starts automatically when the USB connector is plugged into the PC.







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