

IPerCom-2Voice hardware installation guide

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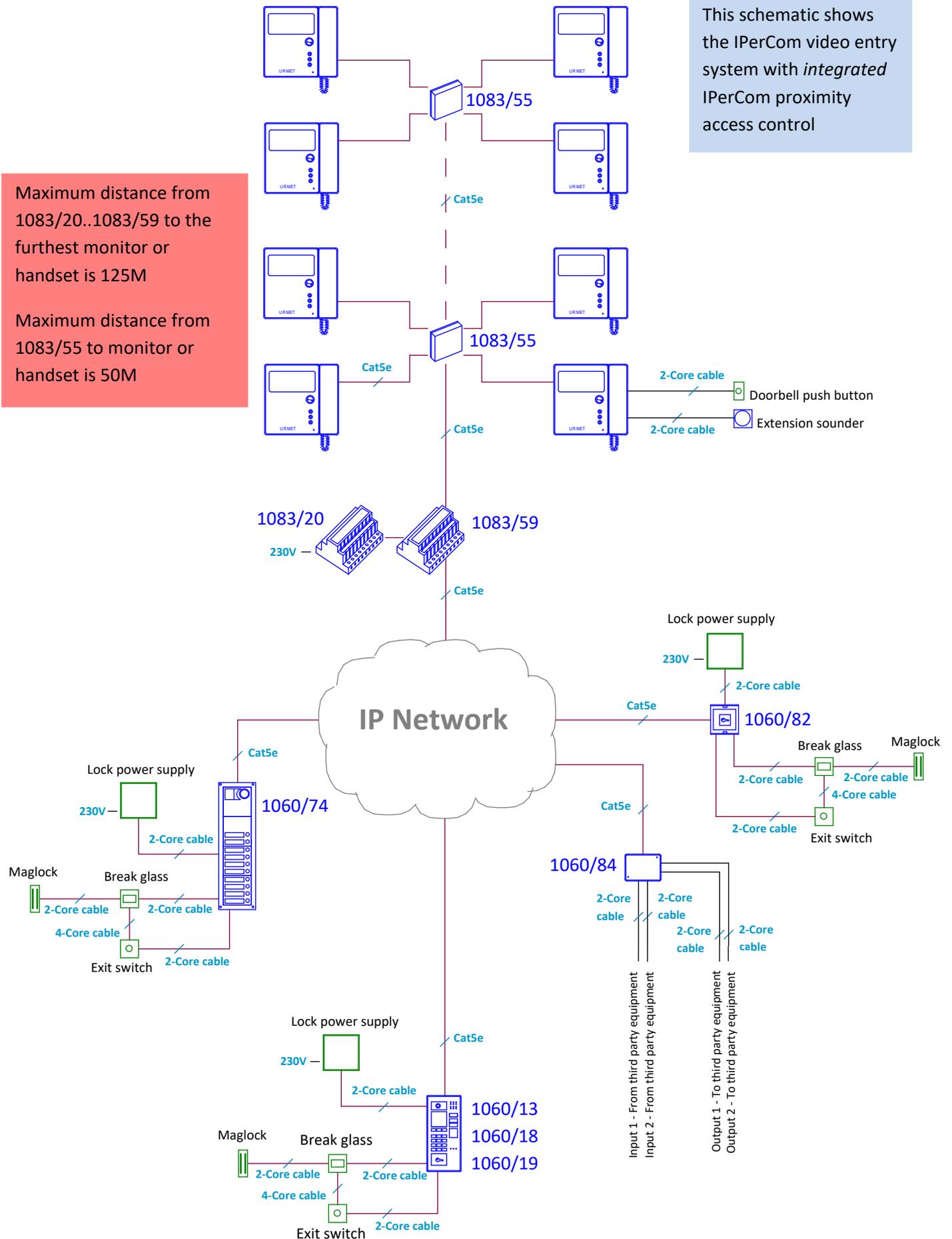
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IPerCom-2Voice schematic

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

Maximum distance from 1083/20..1083/59 to the furthest monitor or handset is 125M
 Maximum distance from 1083/55 to monitor or handset is 50M

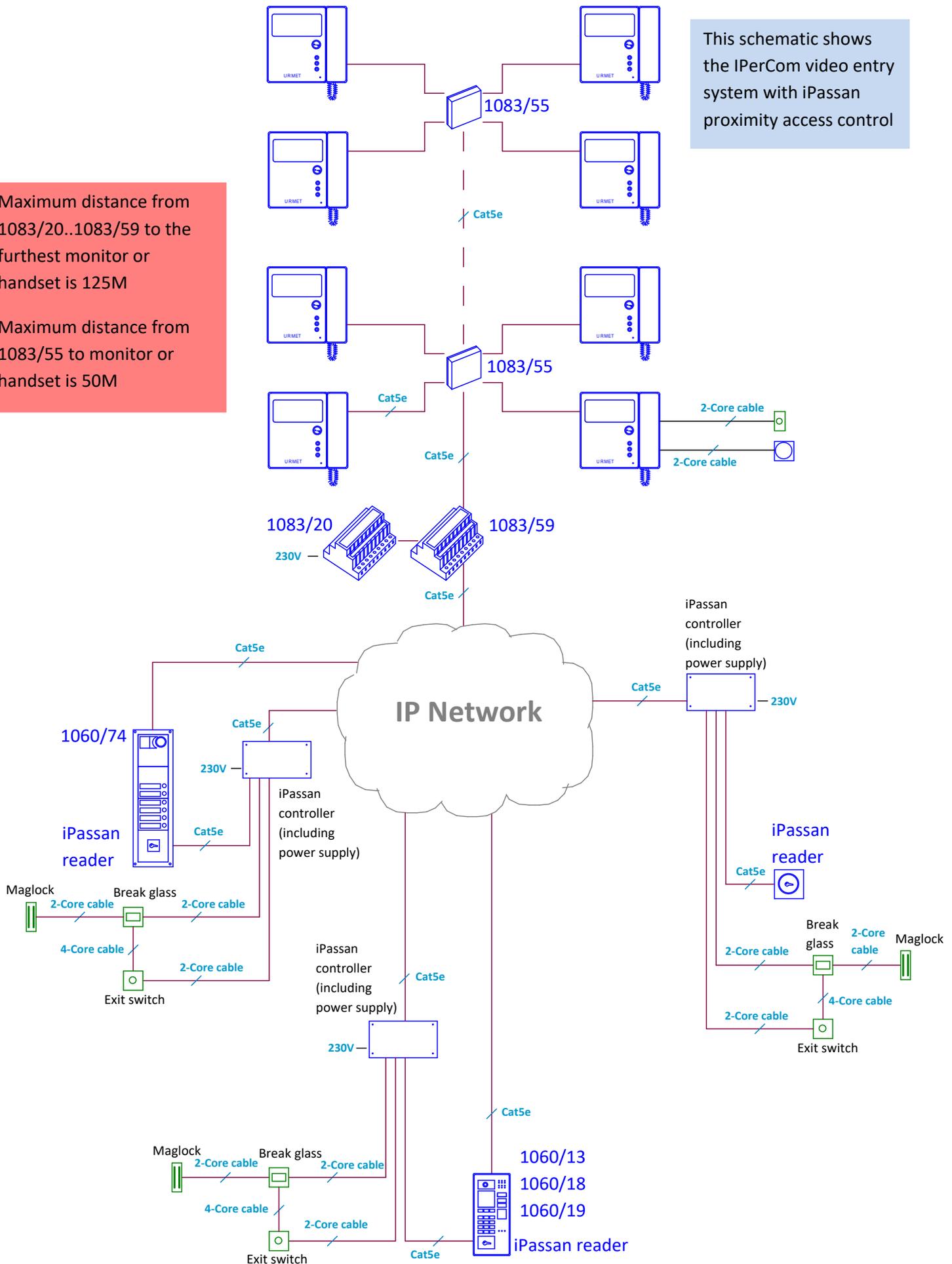


IPerCom-2Voice with iPassan schematic

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

Maximum distance from 1083/20..1083/59 to the furthest monitor or handset is 125M

Maximum distance from 1083/55 to monitor or handset is 50M



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 th 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, is 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.

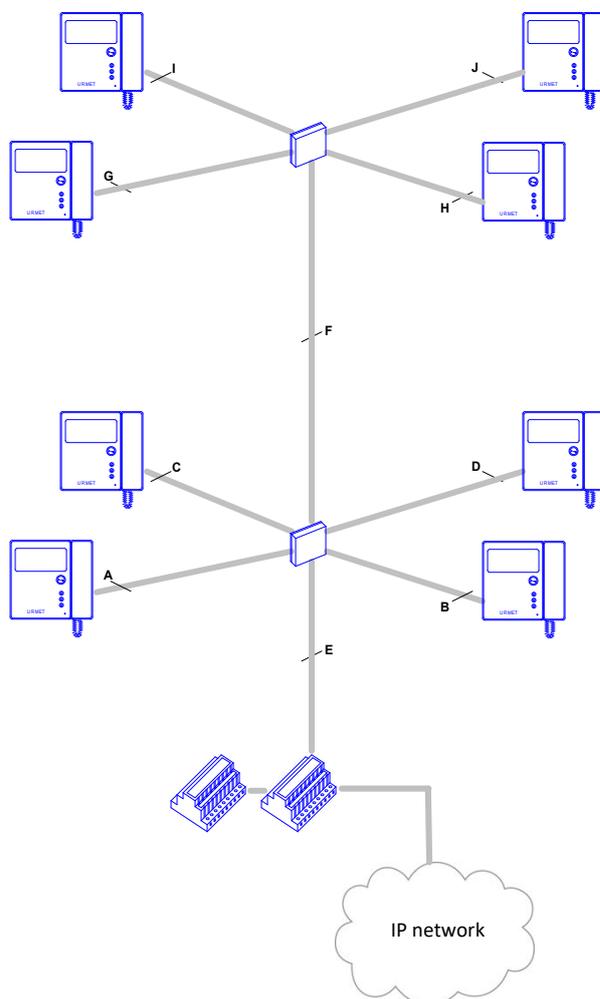
UDP ports 32768, 2049, 514, 32771, 34956, 917, 34839, 67, 5060, 69, 975, 111, 123.

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.

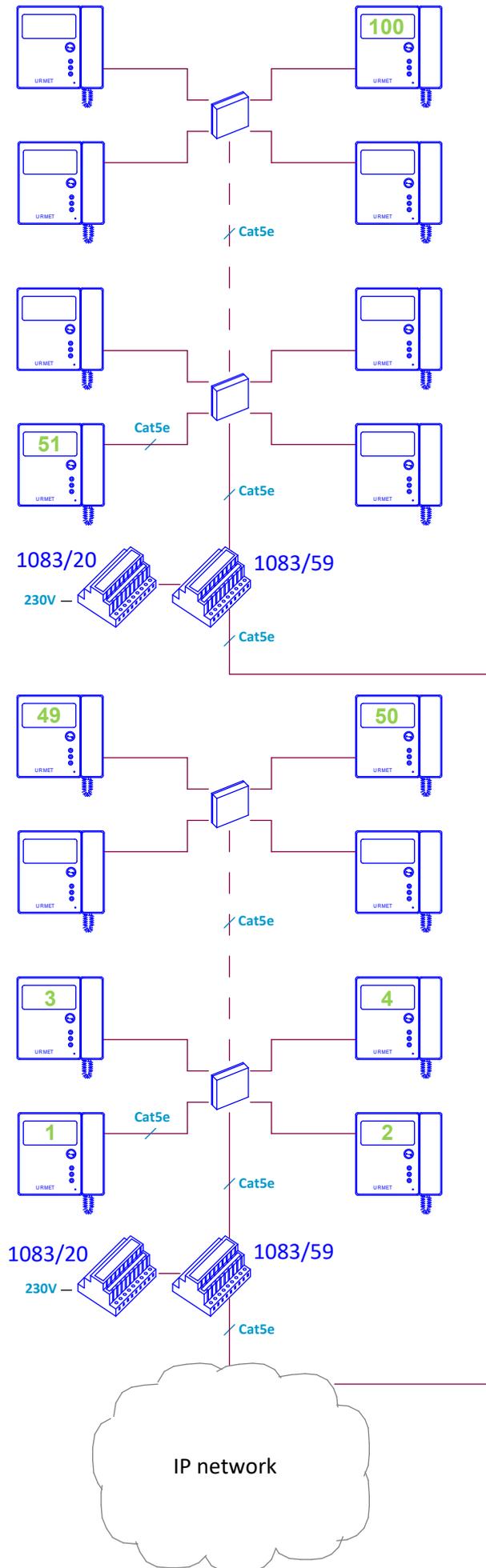
Specific installation requirements for the 2Voice riser –



When adding all of the branches together in the riser (A + B + C...+ J) the maximum total amount of cable must not exceed 800M.

Additional 1083/59 Gateways can be installed to achieve installations where more than 800M of cable is required.

As a general guide, after every 50 monitors another 1083/59 (and 1083/20) should be used – See example on Page 5

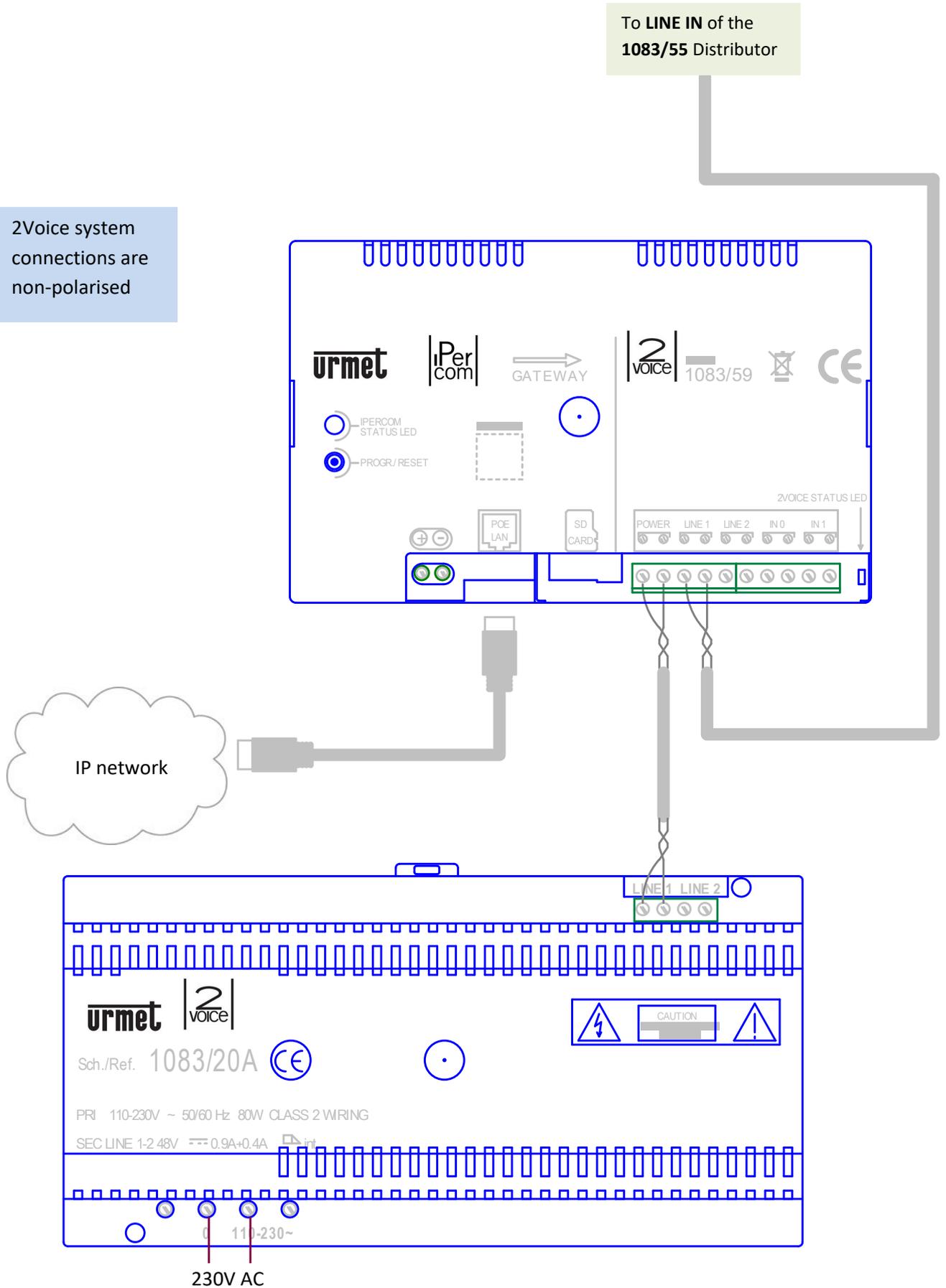


This method is used where there are more than 50 monitors in a building.

Any number of 1083/59 Gateways and 1083/20 Power Supplies can be used to increase the number of monitors in a building as required.

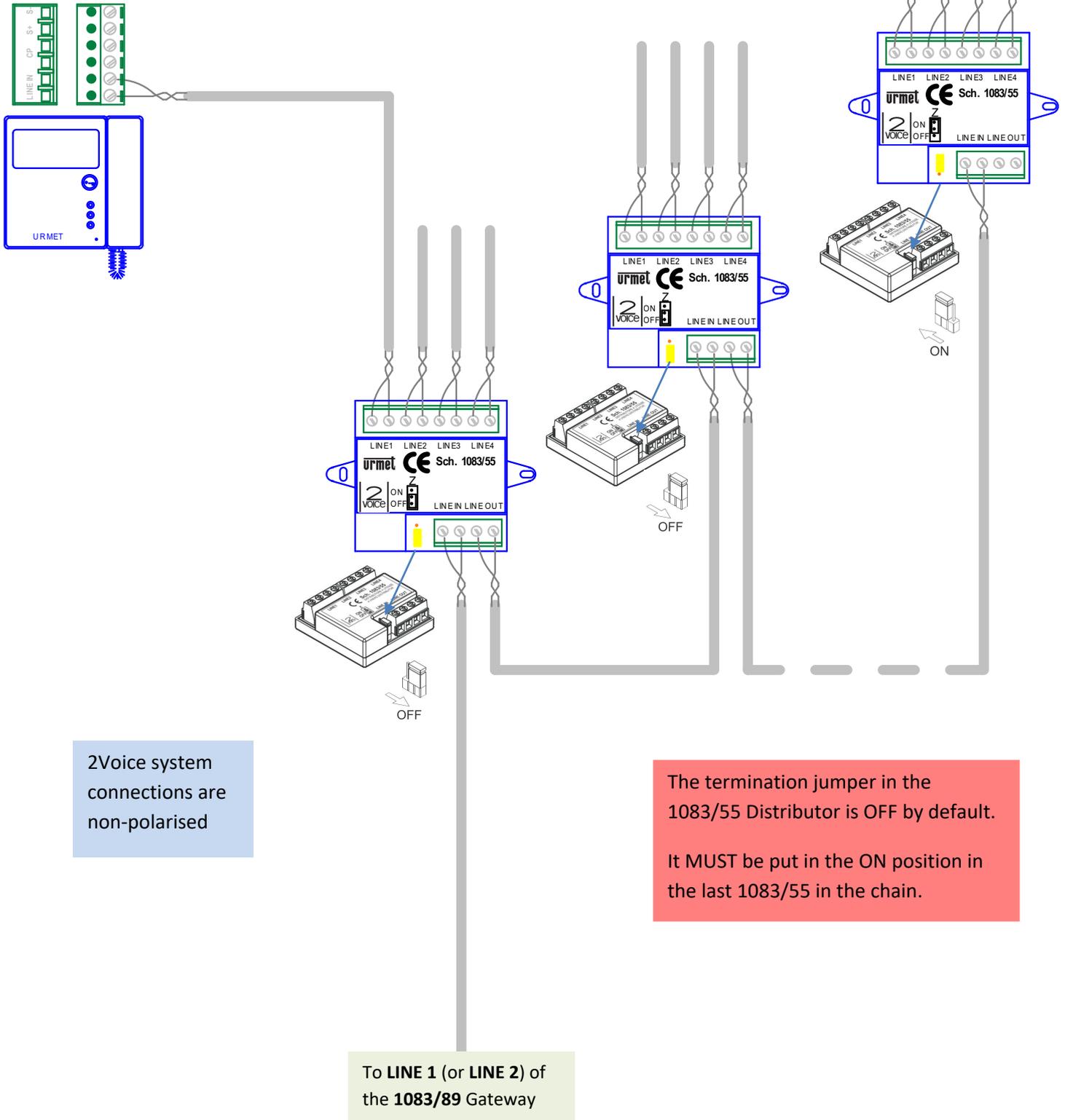
System connections

2Voice system connections are non-polarised



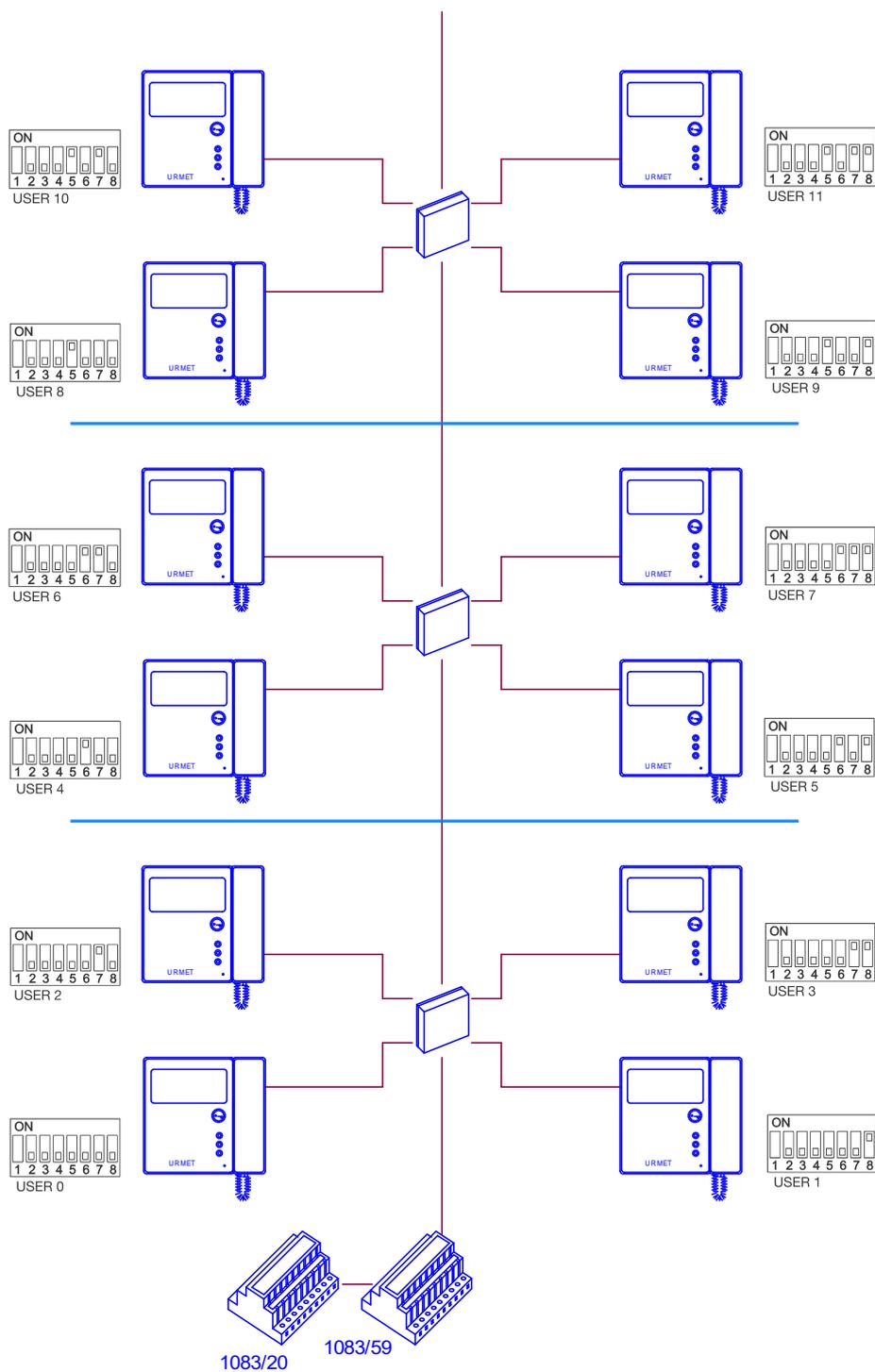
System connections continued

Important note – At the same time as connecting the monitor or handset, you must set the DIP switches and make a note of the apartment number (postal address) on the commissioning sheets provided.



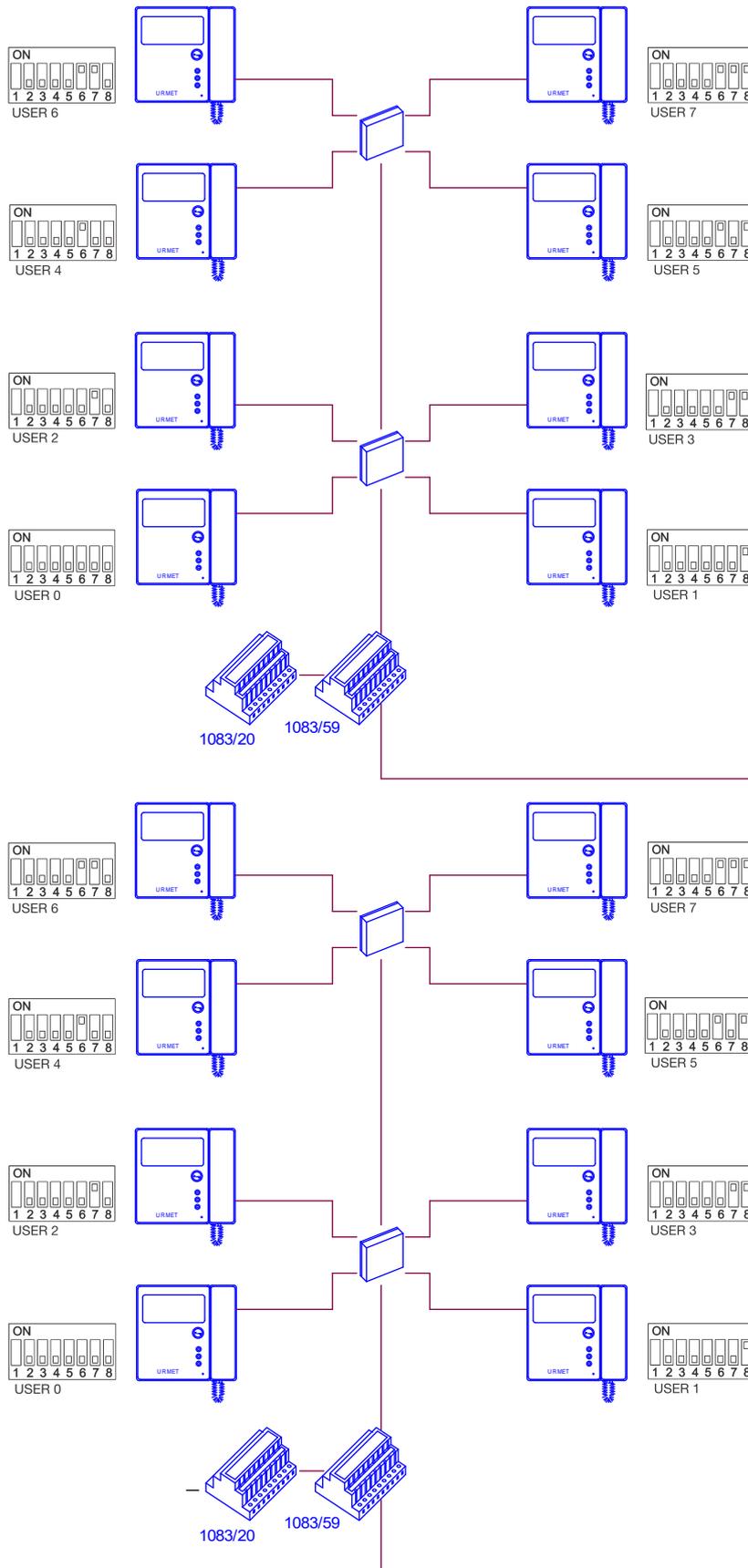
Monitor and handset DIP switches

Regardless of the apartment postal addresses, the DIP switches *must* start at USER 0 (binary address 0), and increase consecutively as shown below –



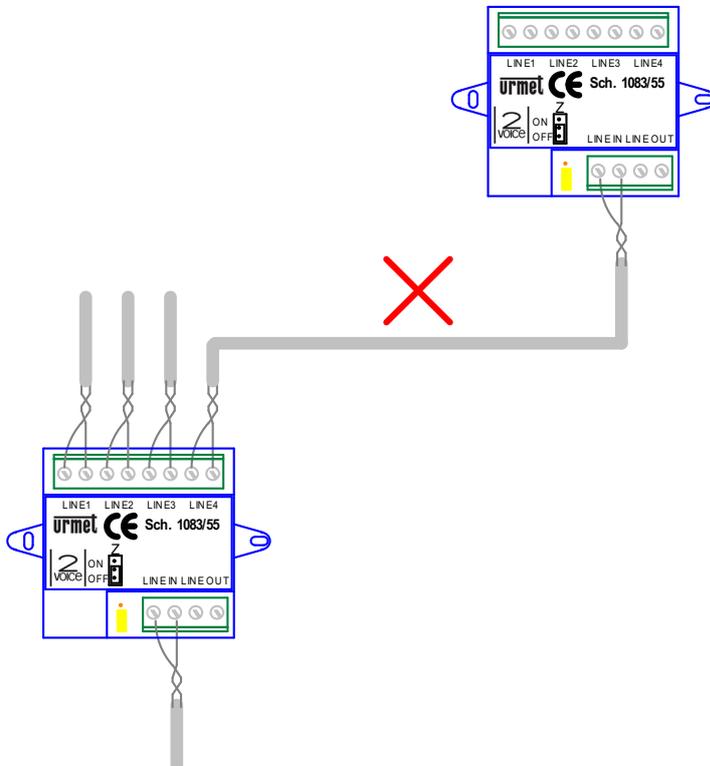
Monitor and handset DIP switches

In systems where the riser or block is split into sections using more than one 1083/59 Gateway, the monitor or handset DIP switches for each section *must* start at USER 0 (binary address 0) –

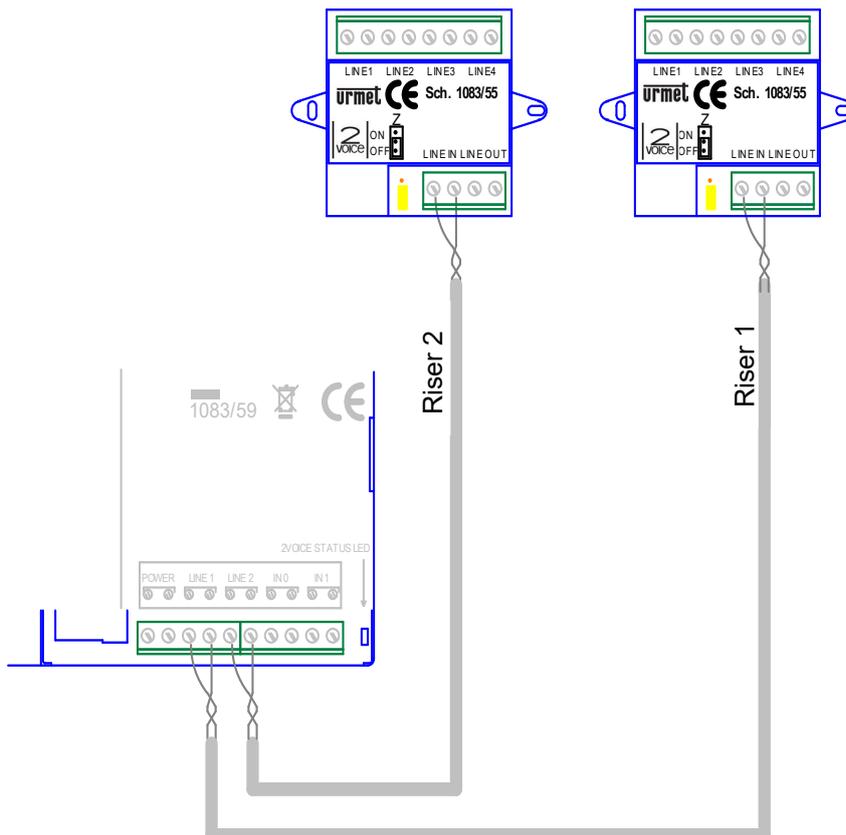


2Voice riser connection rules

To create a second riser, you CANNOT connect 1083/55 Distributors in this way –

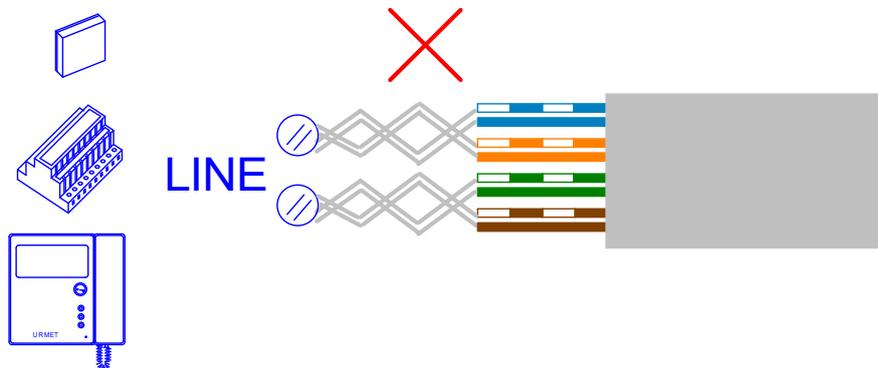


A second riser can be created using the **LINE 2** output on the 1083/59 Gateway –

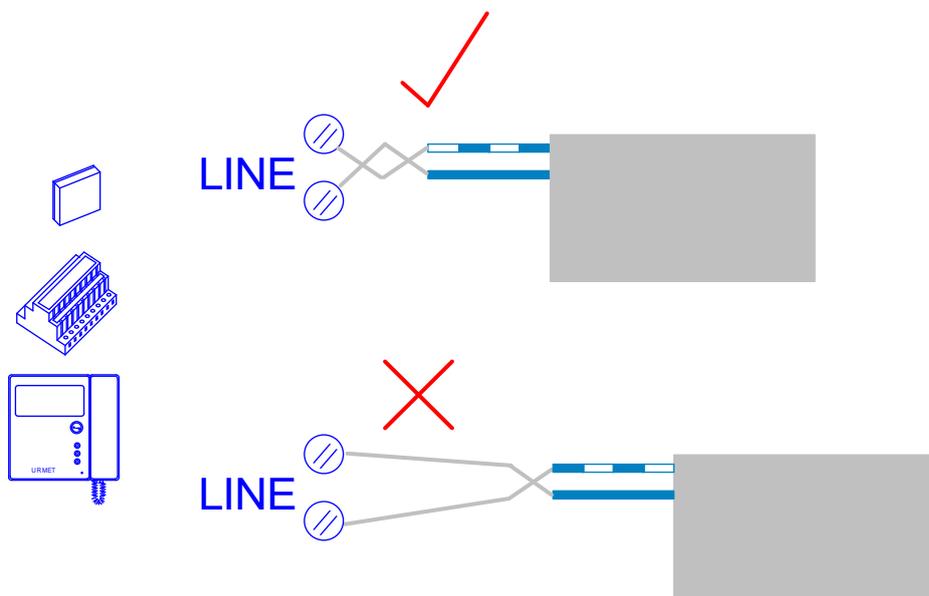


2Voice riser connection rules continued

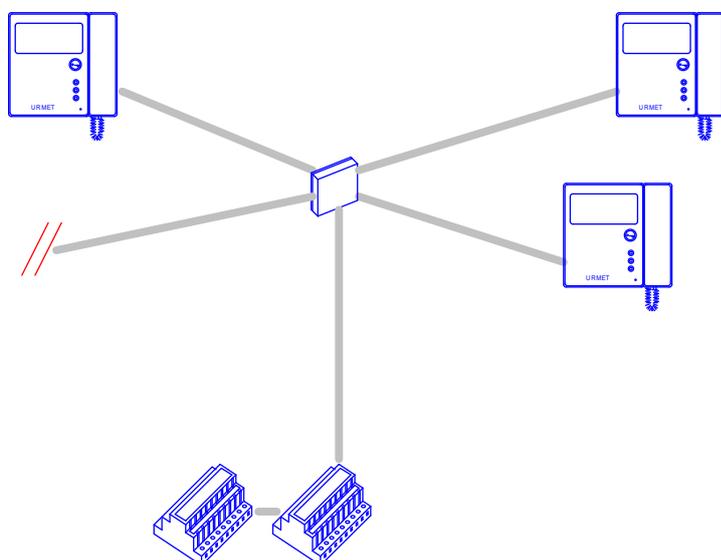
Do not 'double up' any 2Voice connections –



Keep the conductor pairs twisted as close to the terminals as possible –



Do not leave cables terminated at one end and un-terminated at the other –

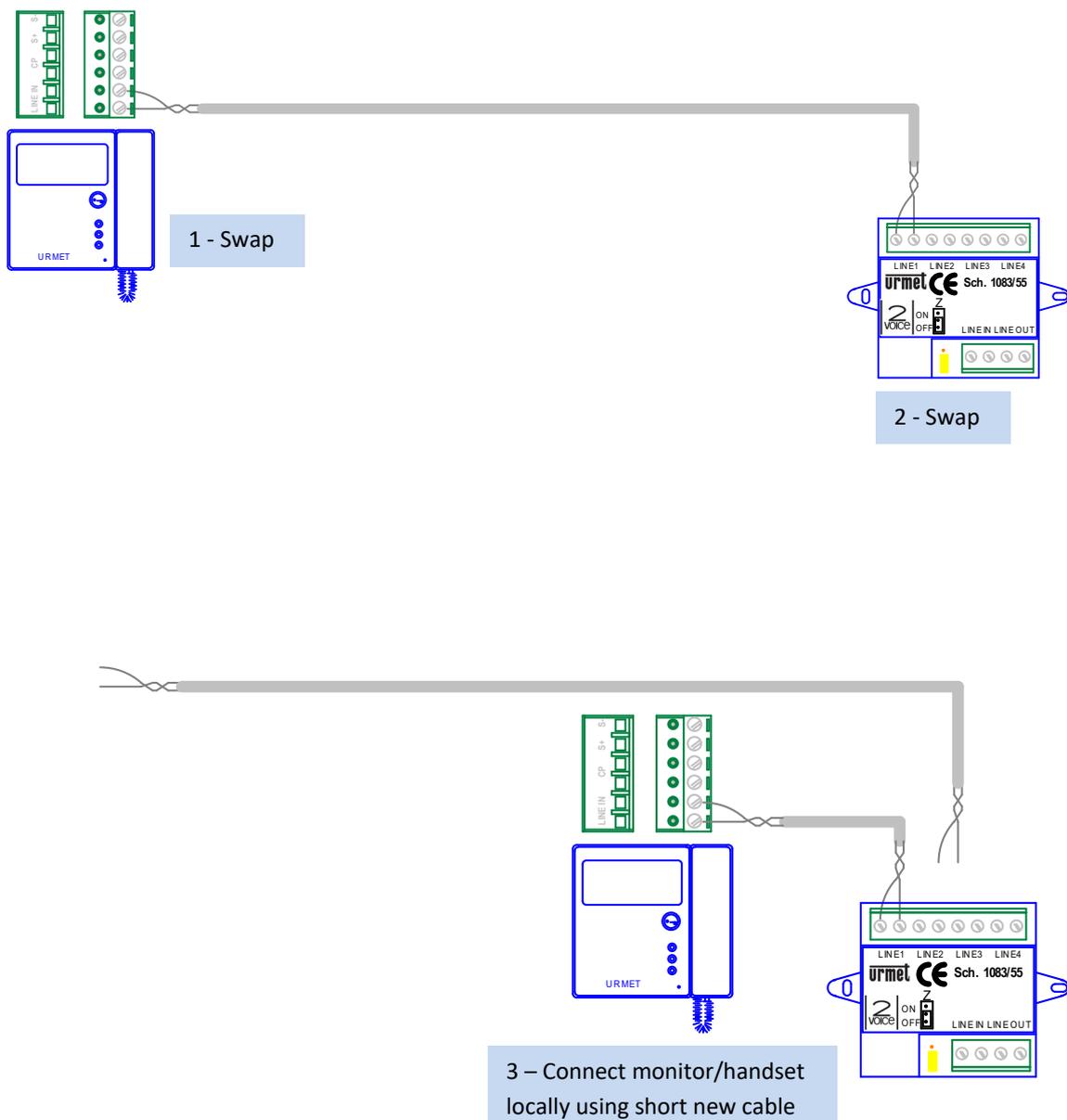


2Voice riser fault finding

If the fault is limited to one monitor or handset –

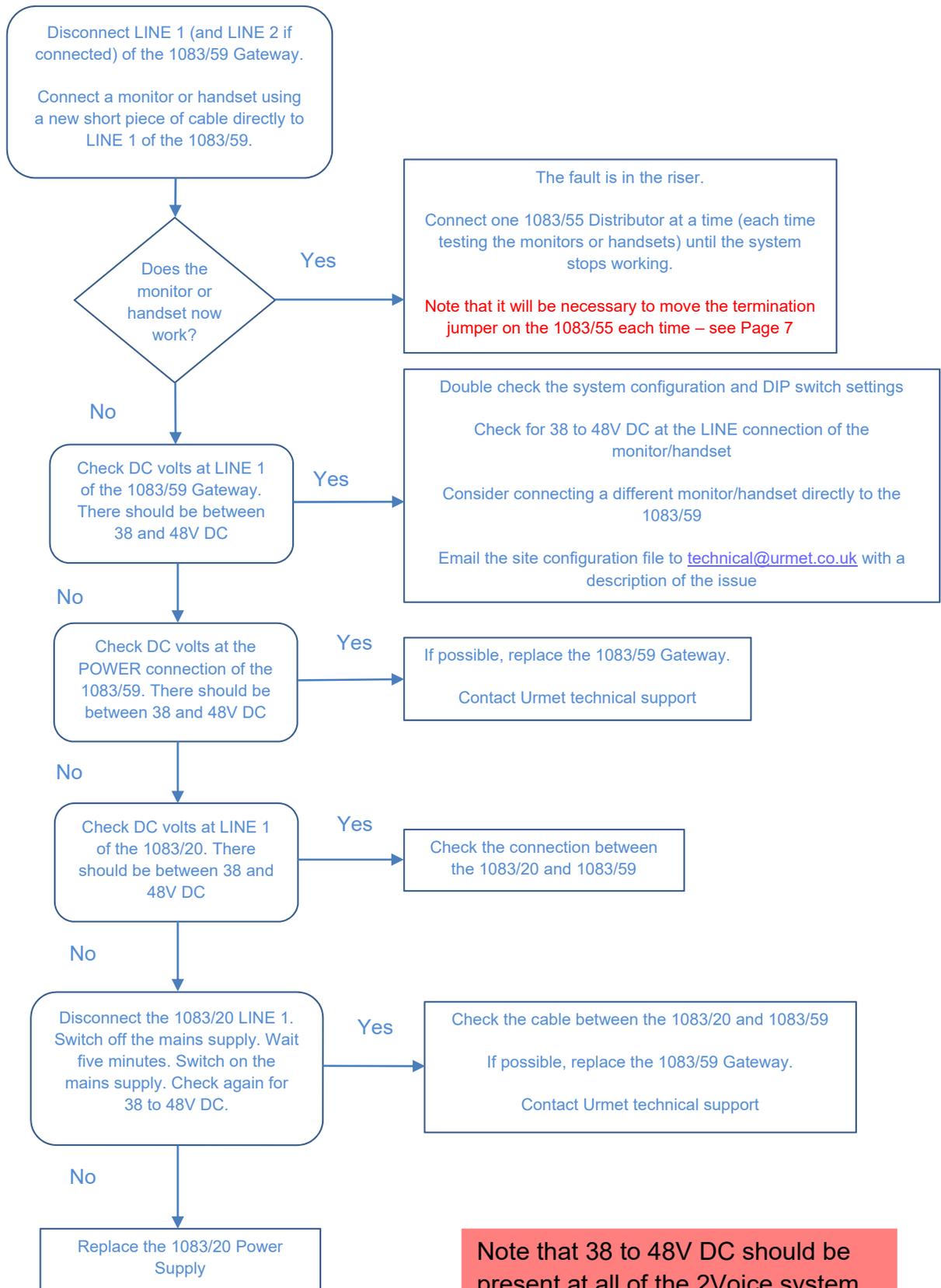
Assuming that the configuration and DIP switches have been checked first and are correct, the issue is either the 1083/55 Distributor, the cable between the 1083/55 and the monitor/handset, or the monitor/handset itself.

1. Rule out the monitor/handset - Swap the monitor/handset for a known working unit, not forgetting to adjust the DIP switches.
2. Rule out the 1083/55 Distributor – Swap the 1083/55 for a known working unit.
3. Rule out the cable – Take the monitor/handset and connect it directly to the 1083/55 Distributor on a short new piece of cable.



If the fault is affecting the whole riser –

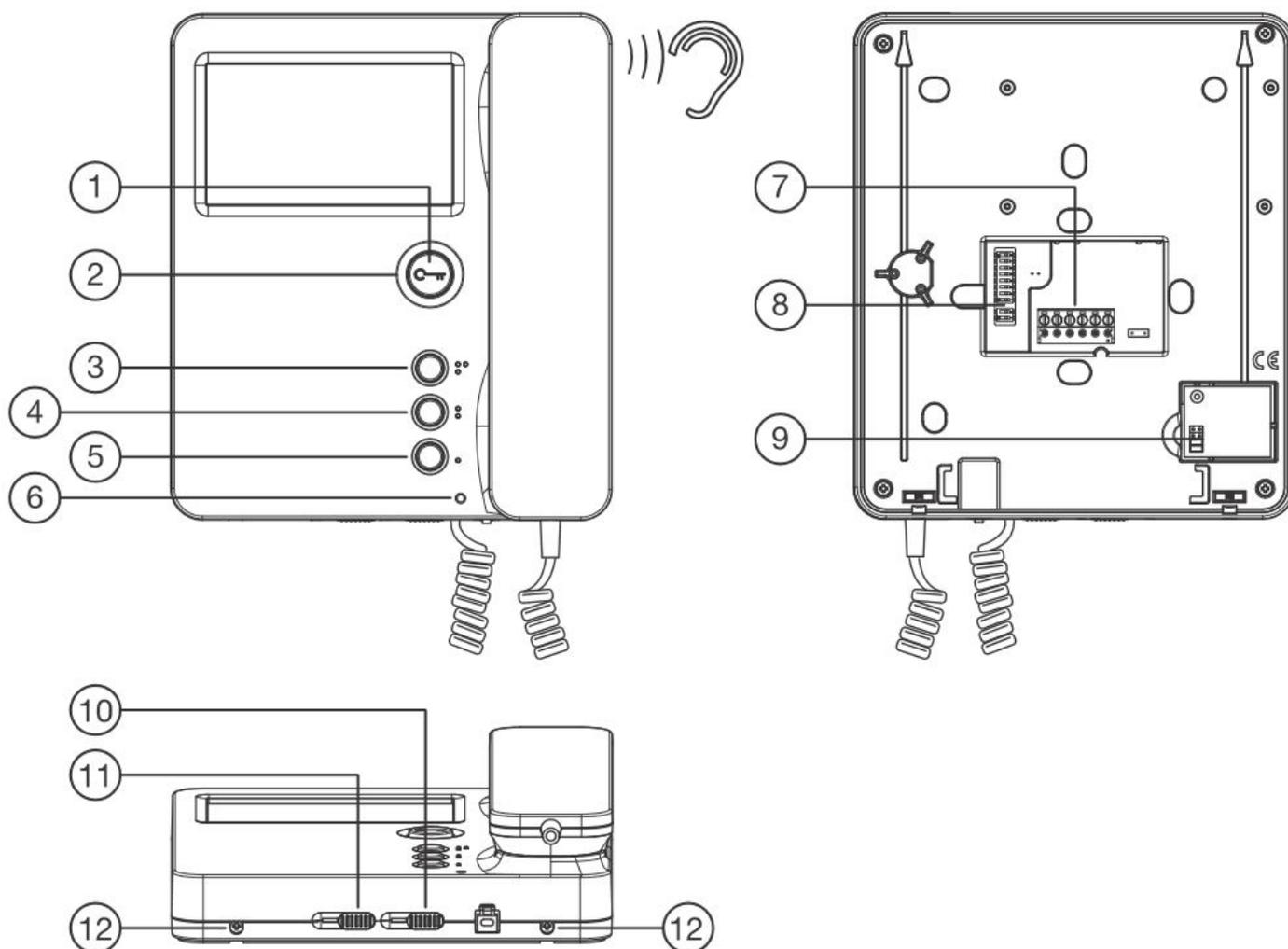
Assuming that the configuration and DIP switches have been checked first and are correct –



Note that 38 to 48V DC should be present at all of the 2Voice system LINE connections all of the time

1750/1 Miro video monitor

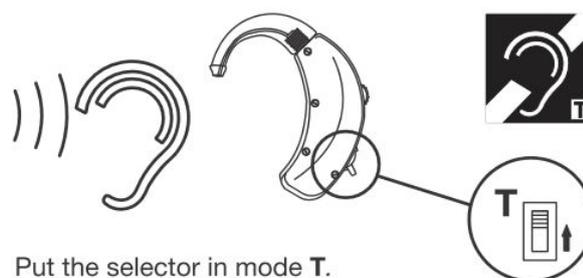
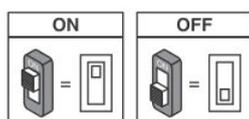
Controls and functions –



1. Door opener button
2. Green LED under door opening button
3. Button
4. Button
5. Button
6. Two-colour LED
7. Terminals for connecting to the system
8. Configuration dip switch:
 - a. 2 to define the monitor number within the apartment
 - b. 8 to define the address in the system

9. In-out connection setup with Ref. 1750/50
10. Brightness
11. Colour
12. Screws for fixing video door phone to bracket

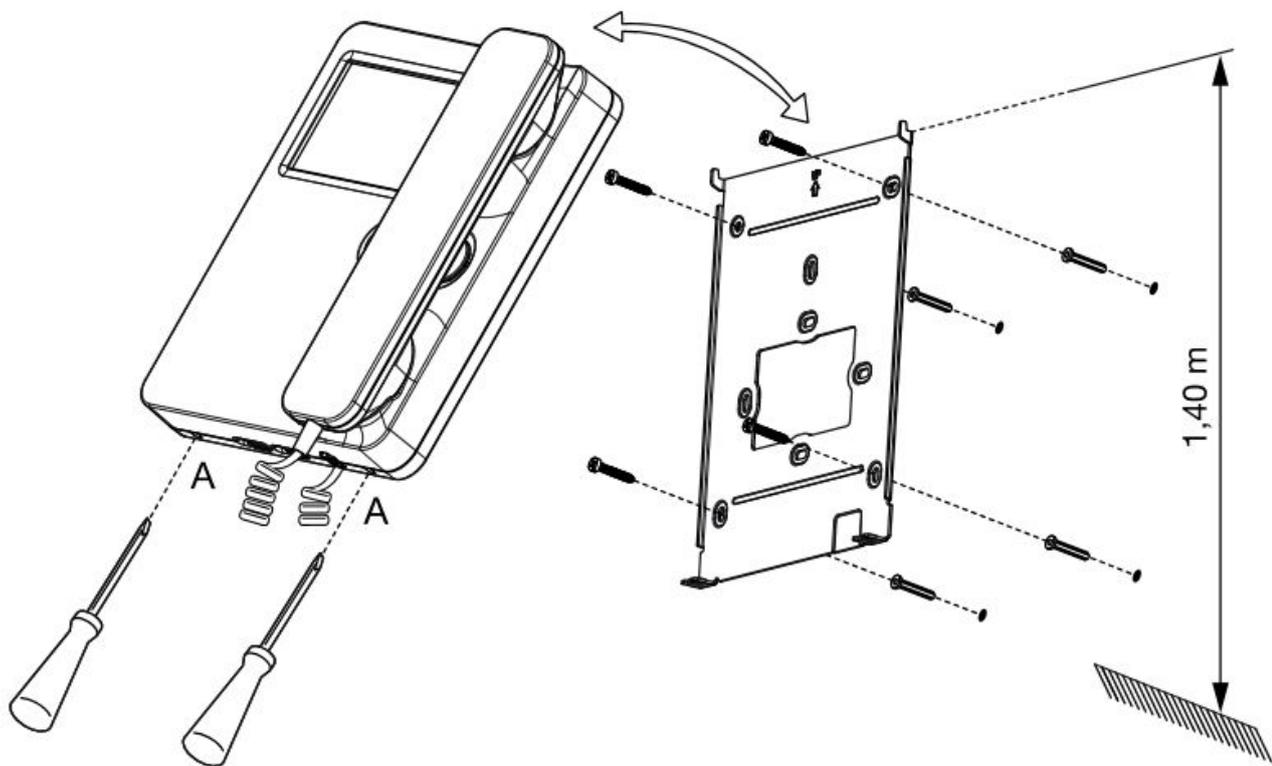
DIP switch settings are shown at the end of this manual.



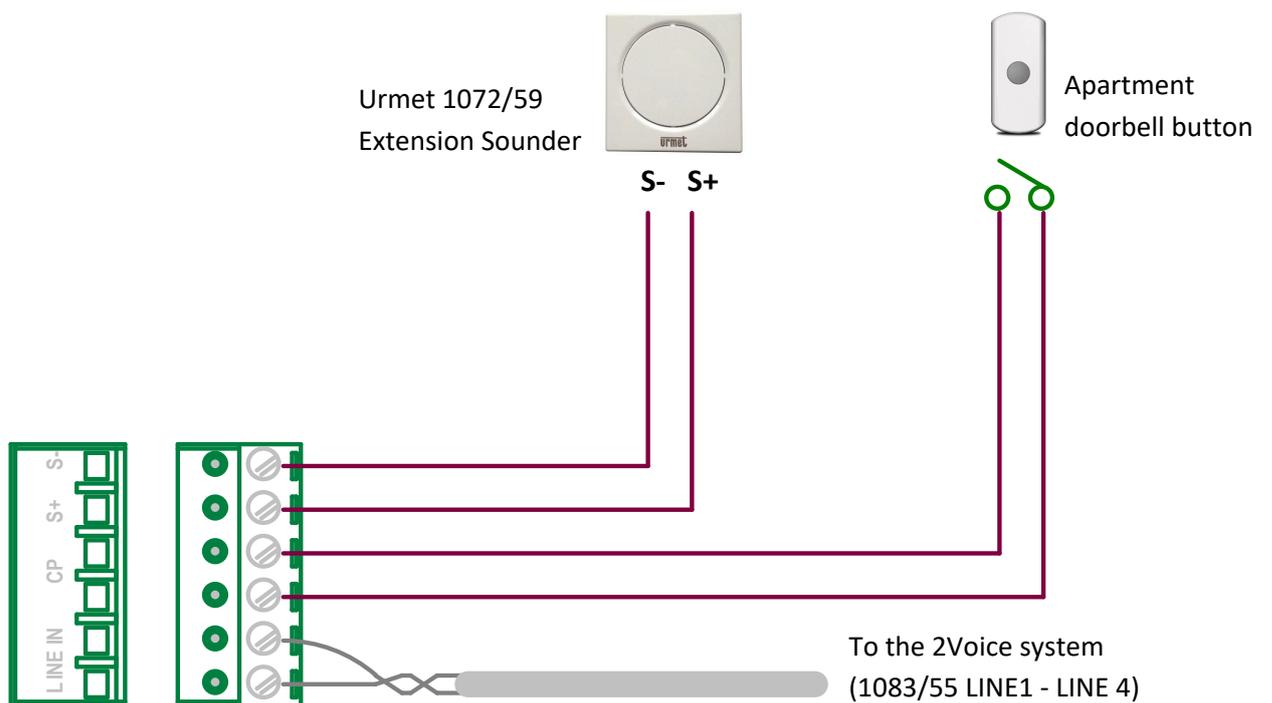
Put the selector in mode **T**.

Device compatible with all hearing aids with operating mode T (Standards ETS 300381 and EN 60118).

Installation –

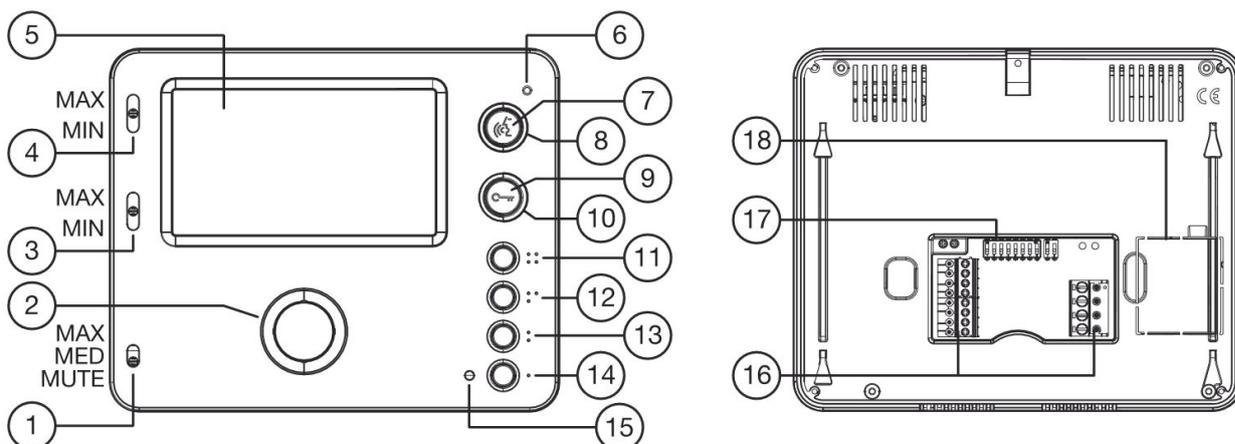


Connections –

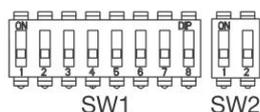


1750/5 (Black) & 1750/6 (white) Miro hands-free video monitor

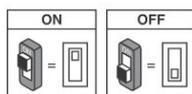
Controls and functions –



1. Call volume adjustment (MAX, MEDIUM; MUTE)
2. Call and conversation speaker
3. Display brightness adjustment
4. Display colour intensity adjustment
5. Display 4.3" format 16:9
6. Microphone
7. Button  used to activate/deactivate audio
8. Green LED under the  button
9.  door opener button
10. Green LED under the  button
11.  Button to connect to Yokis devices; N.O. contact Y1 Y2: max 50 mA @ 24V DC
12.  Button to connect to Yokis devices; N.O. contact X1 X2: max 50 mA @ 24V DC
13. Button : see button function table in manual supplied with the product
14. Button : see button function table in manual supplied with the product
15. Multicolour indicator LED
16. Terminals for connecting to the system
17. Configuration dip switch:
 - Switch 1 of SW1, defines the video door phone operating mode: OFF "Hands Free" (default) / ON "Push to talk"
 - Switches 2-8 of SW1, define the address within the system.
 - Switches 1 & 2 of SW2, define the monitor number within the apartment.



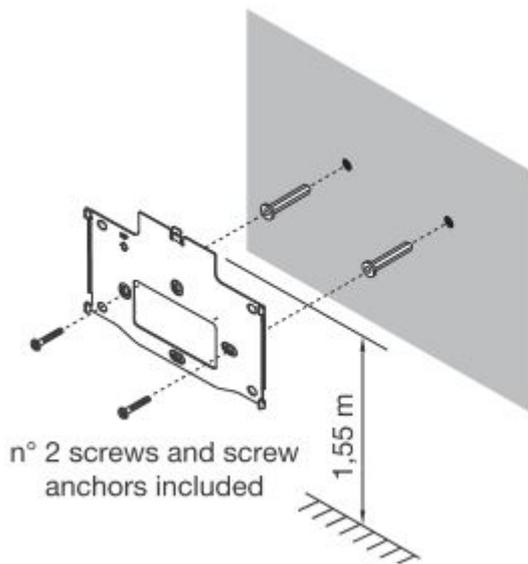
DIP switch settings are shown at the end of this manual.



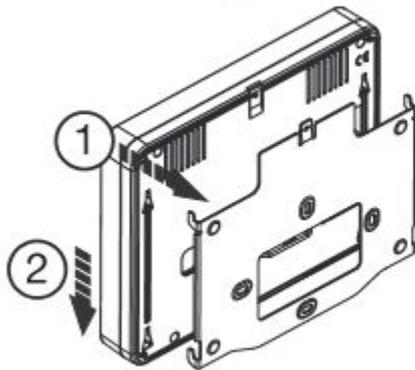
18. Cover can be removed to fit in-out connection accessory 1750/50

The **miro** video door phone is equipped with a built in hearing aid device that works only during the video door phone calls.

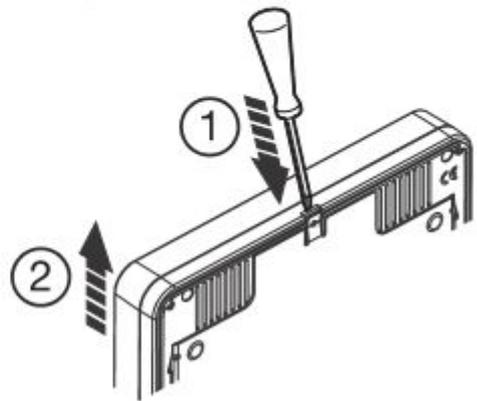
Installation –



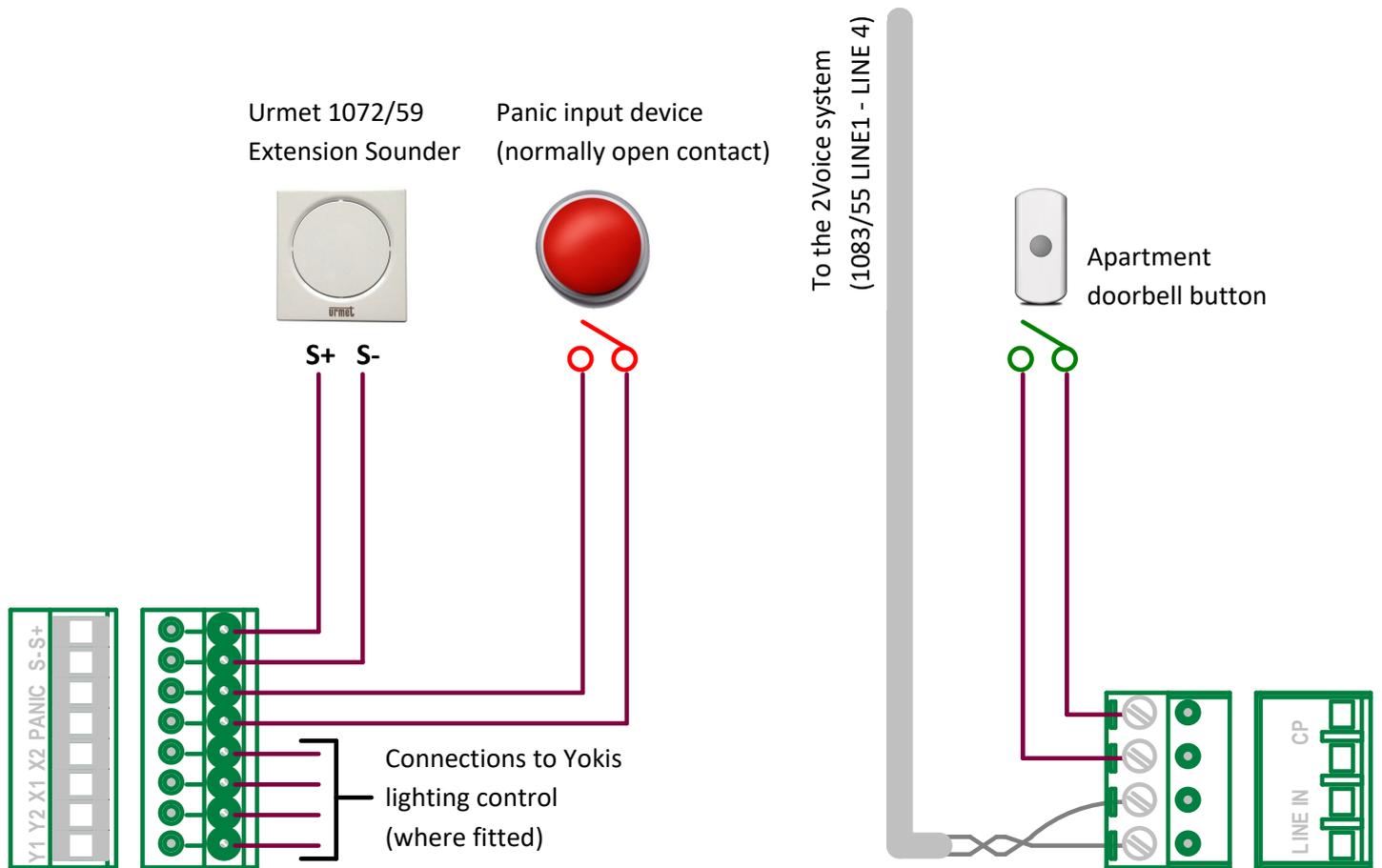
Make the connections.
Fix the video door phone to the bracket.



To remove the video door phone from the bracket, insert the tip of a screwdriver into the seating as indicated in the figure and push the video door phone upwards.

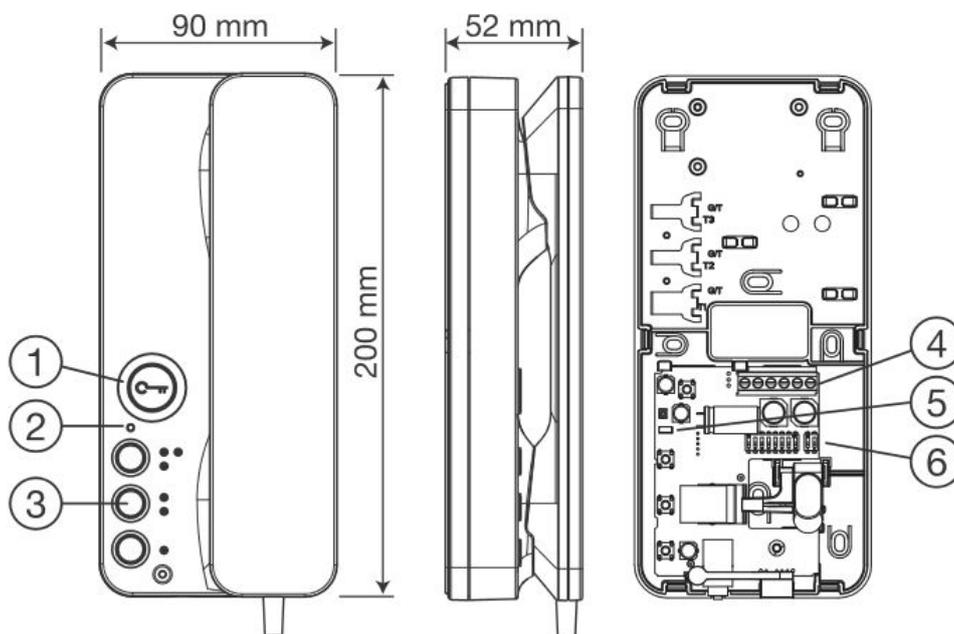


Connections –

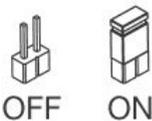


1183/5 Audio handset

Controls and functions –

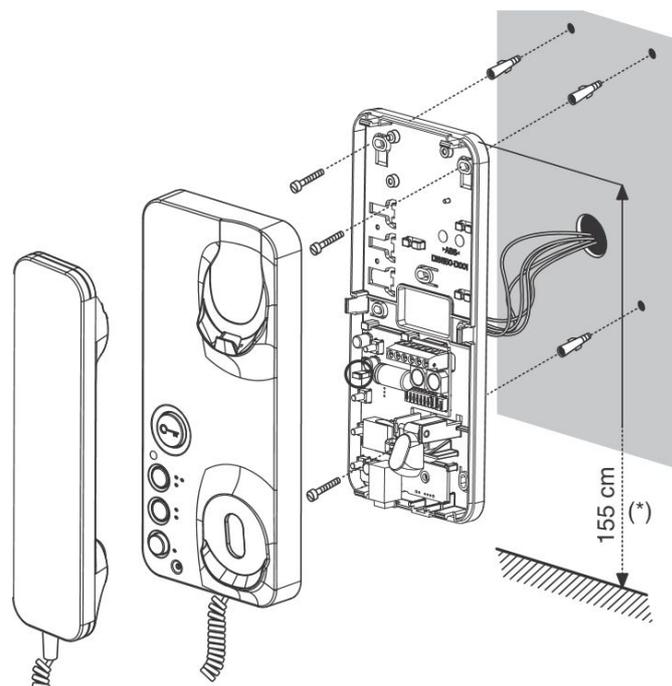


1. Door opener button 
2. Multicolour led
3. Buttons (•, ••, •••)
4. Terminal boards
5. Line termination Jumper

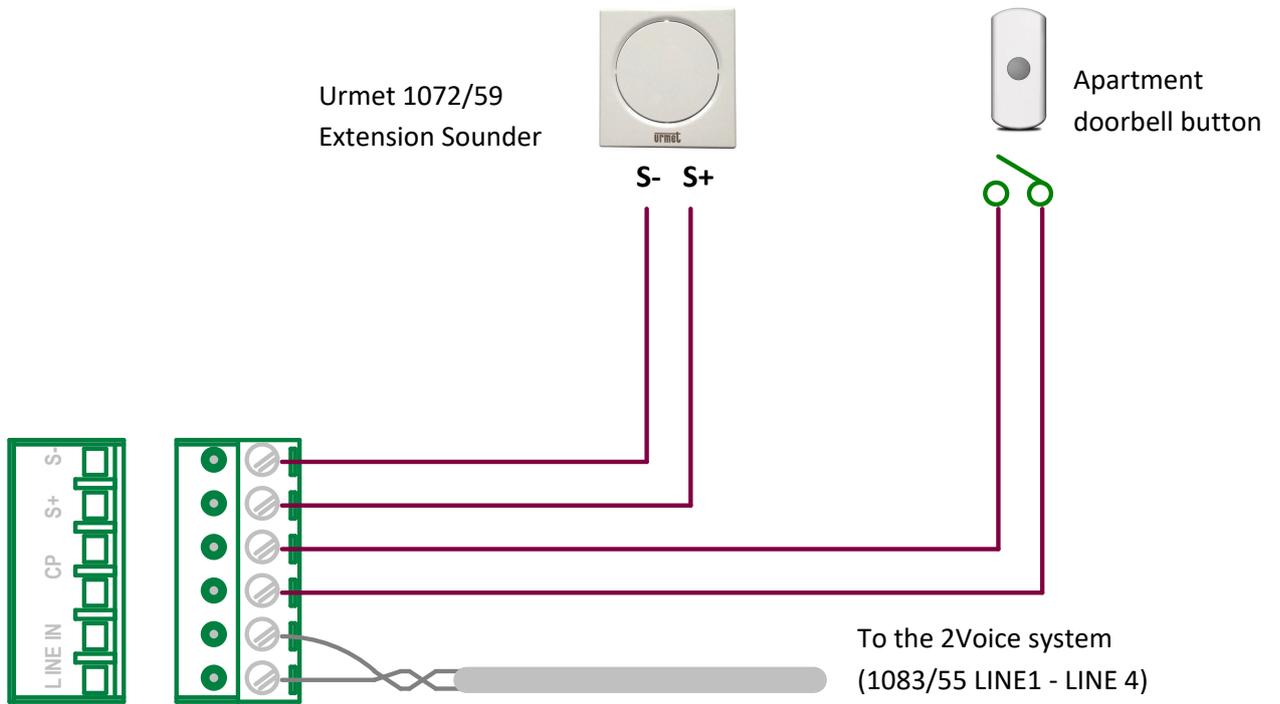


6. Configuration dip switch

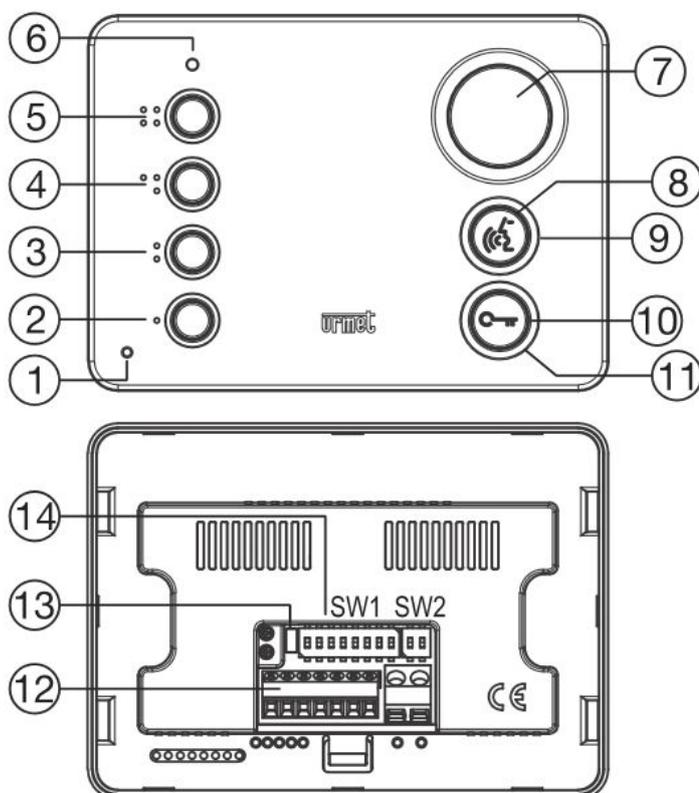
Installation –



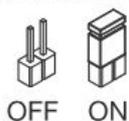
Connections –



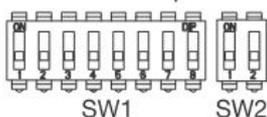
Controls and functions –



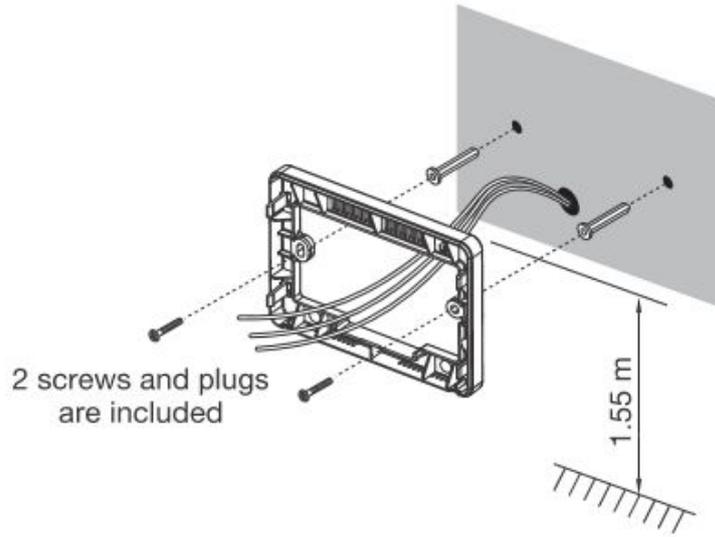
1. Microphone
2. Button ● see button function table
3. Button ● see button function table
4. ●● Button to connect to Yokis devices; contacts X1, GT: max 50 mA @ 12V DC
5. ●●● Button to connect to Yokis devices; contacts Y1, GT: max 50 mA @ 12V DC
6. Multicolour indicator LED
7. Call and conversation speaker
8. Button  used to activate/deactivate audio
9. Green LED under the  button
10.  Door opener button
11. Green LED under the  button
12. Terminals for connecting to the system
13. Line termination jumper



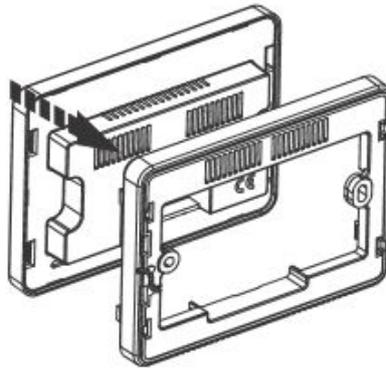
14. Configuration dip switch (SW1 - SW2):
 - n.1 of SW1, defines the door phone operating mode: OFF “Hands Free” (default) / ON “Push to talk”
 - 2 to 8 of SW1, define the apartment number in the column;
 - 1 to 2 of SW2, define the station number in the apartment.



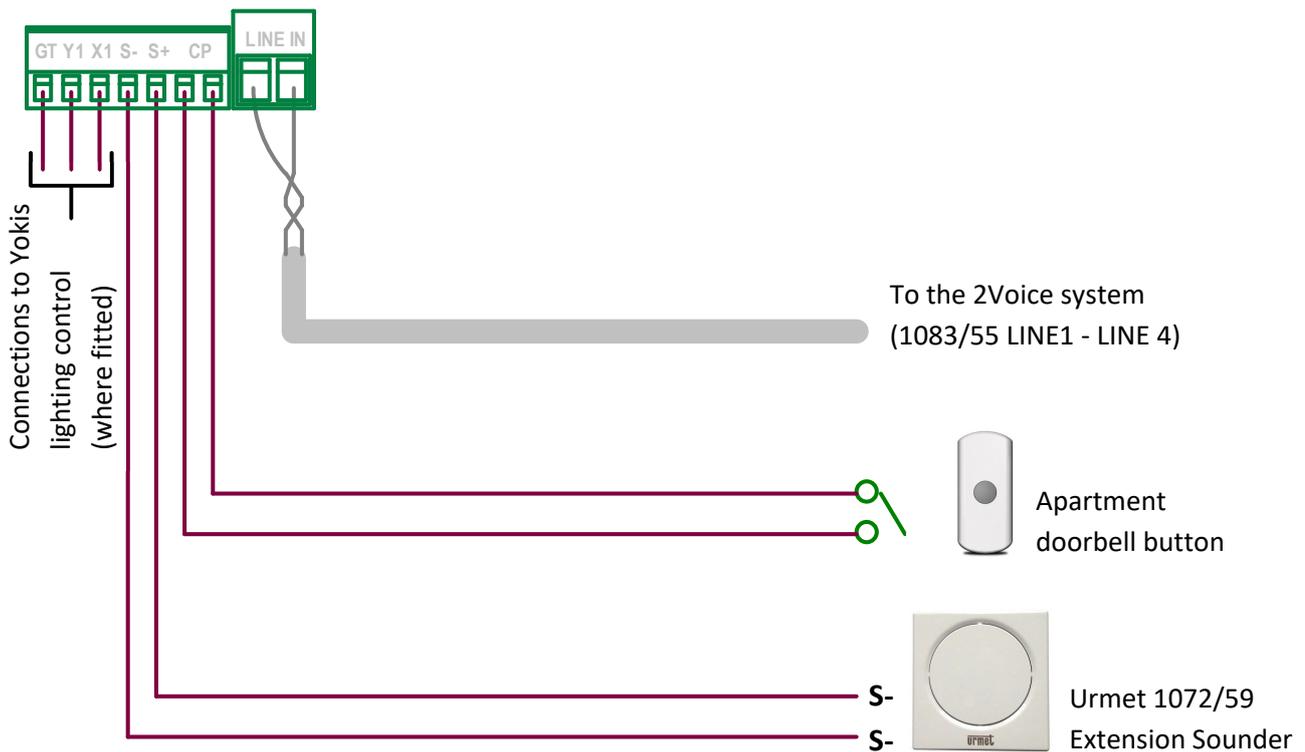
Installation –



- Make the connections
- Fix the unit to its plastic base

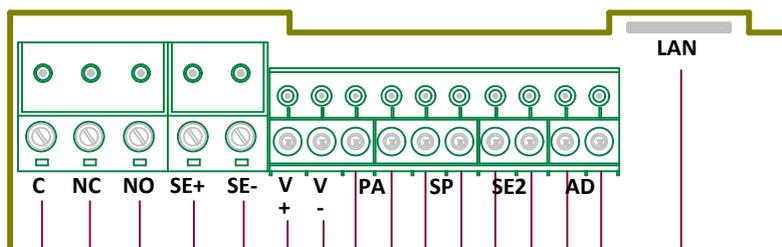
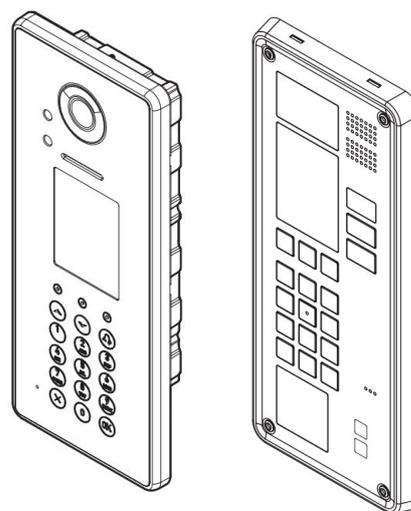


Connections –



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 the button with one 'dot' on the monitor or handset

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.

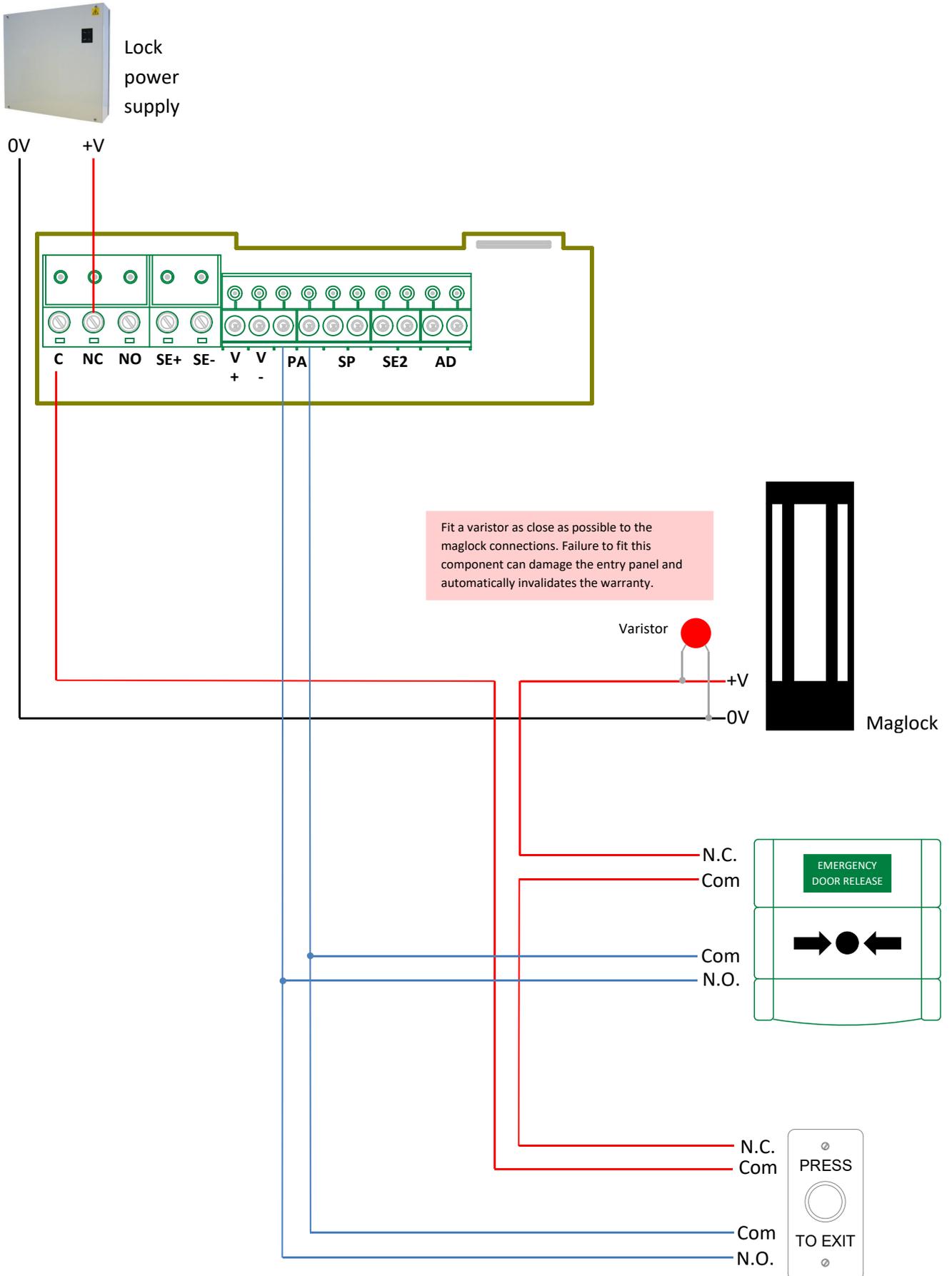
V+ V- Input for a local power supply, for use when PoE is not available. 44 – 57V DC @ 200mA

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

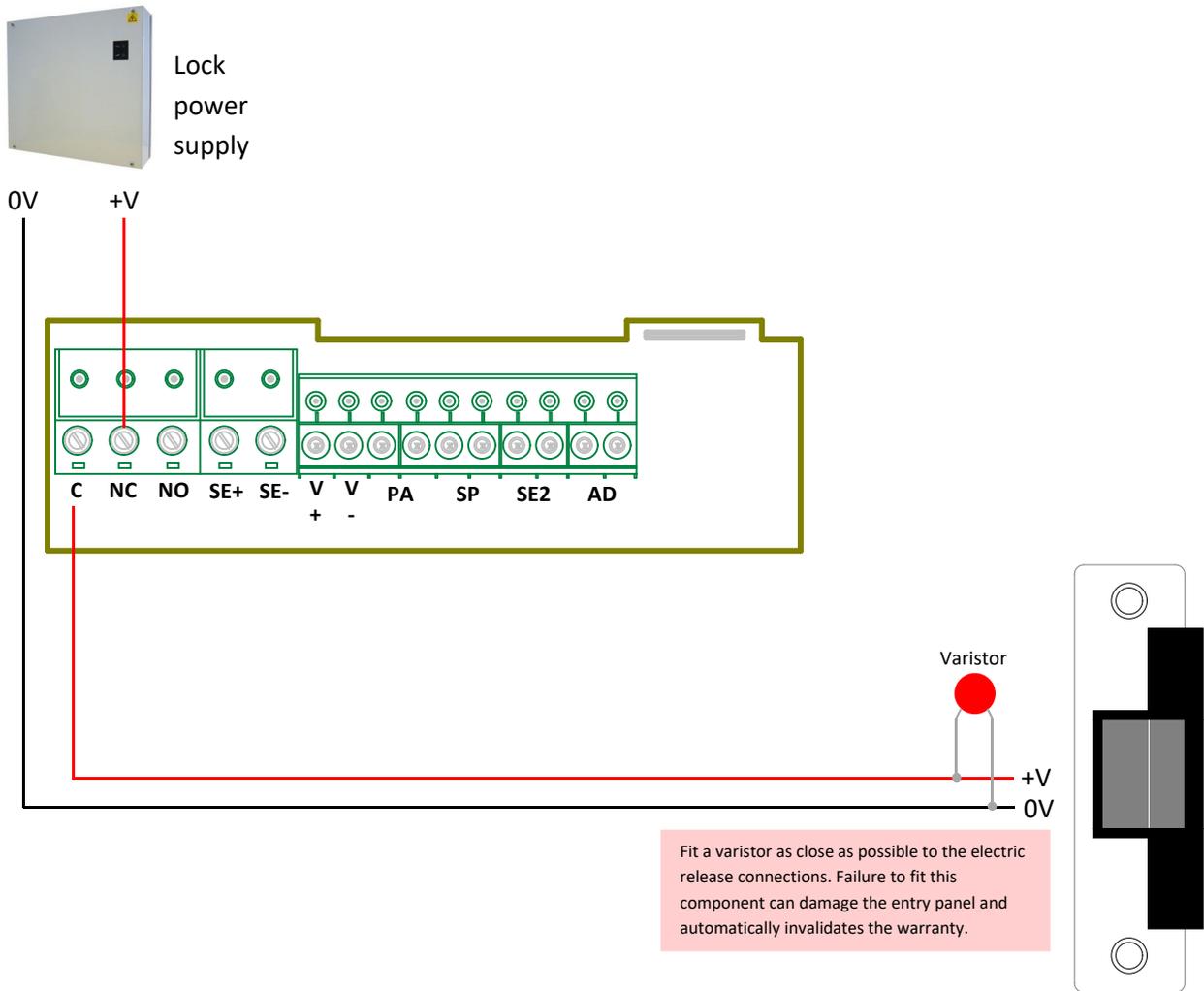
SE+ SE- Output for direct connection to a *fail secure (fail locked)* release.

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

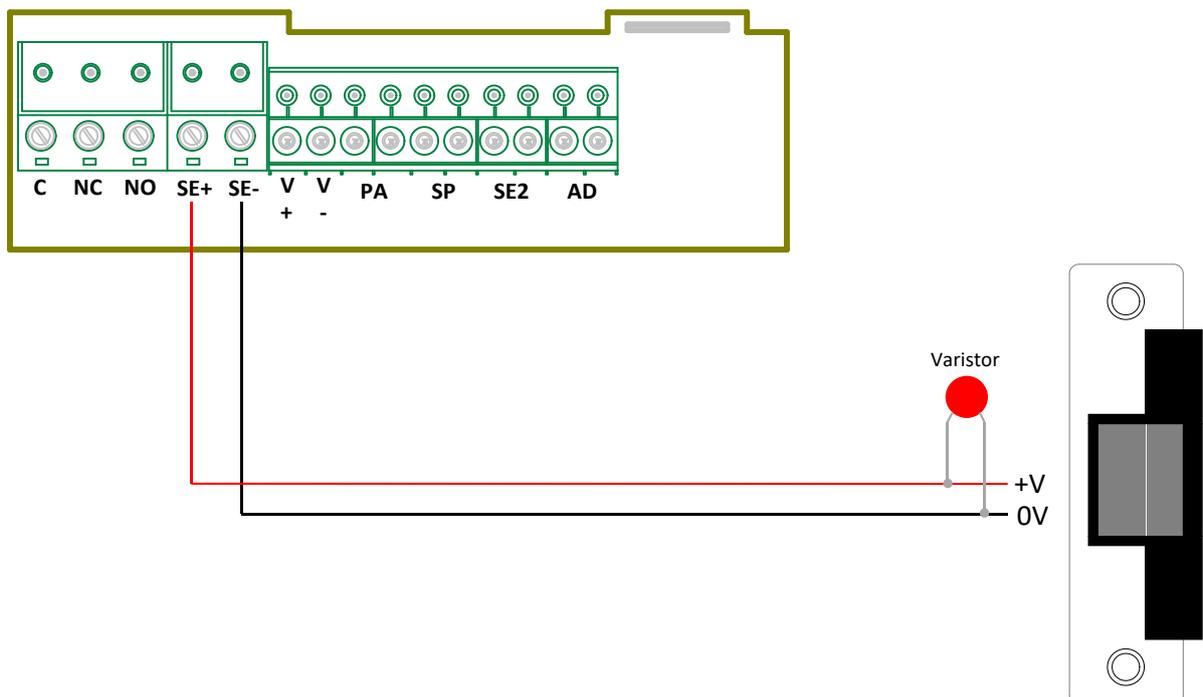
Typical connections for a maglock –



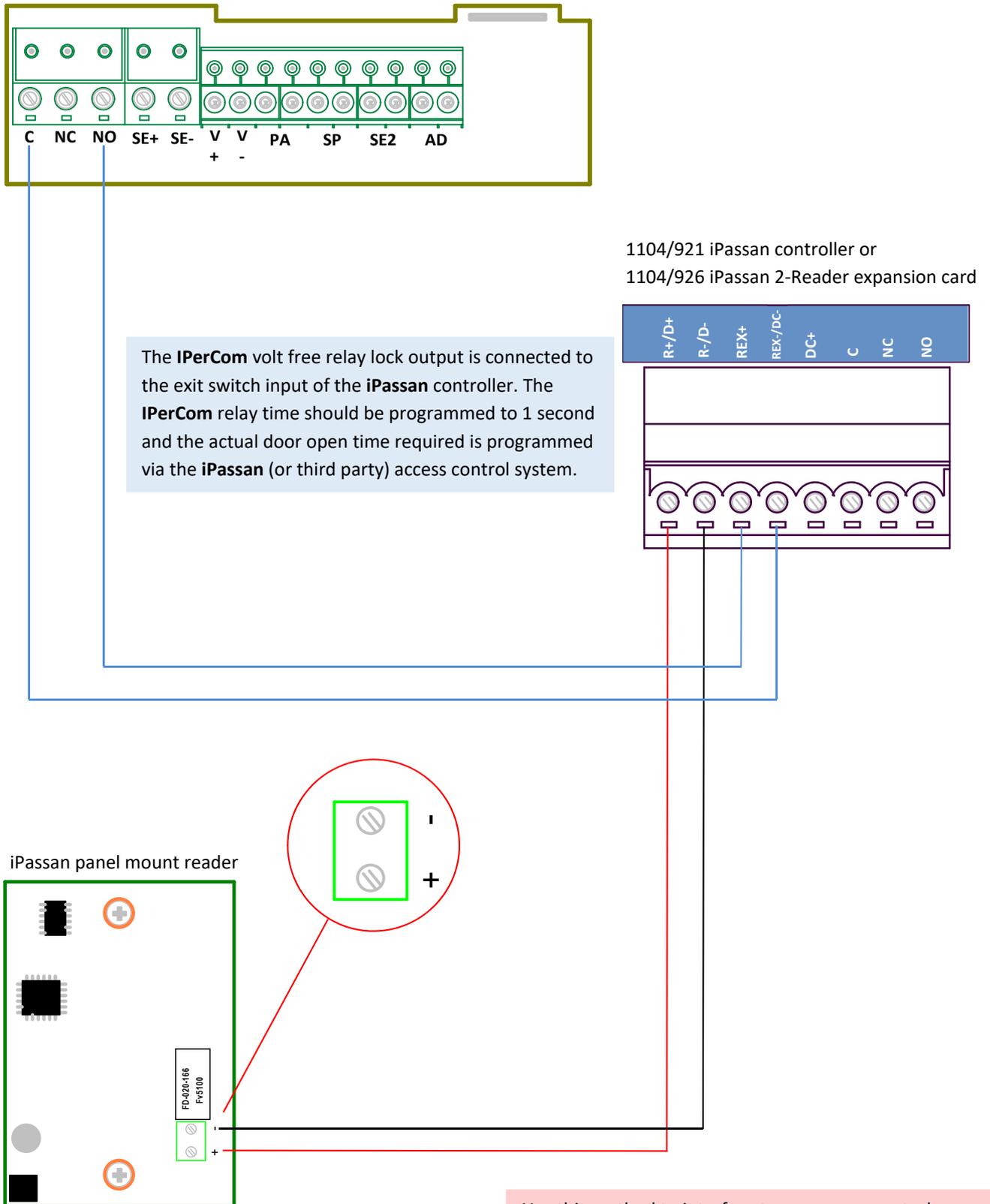
Typical connections for fail safe (fail open) electric release -



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

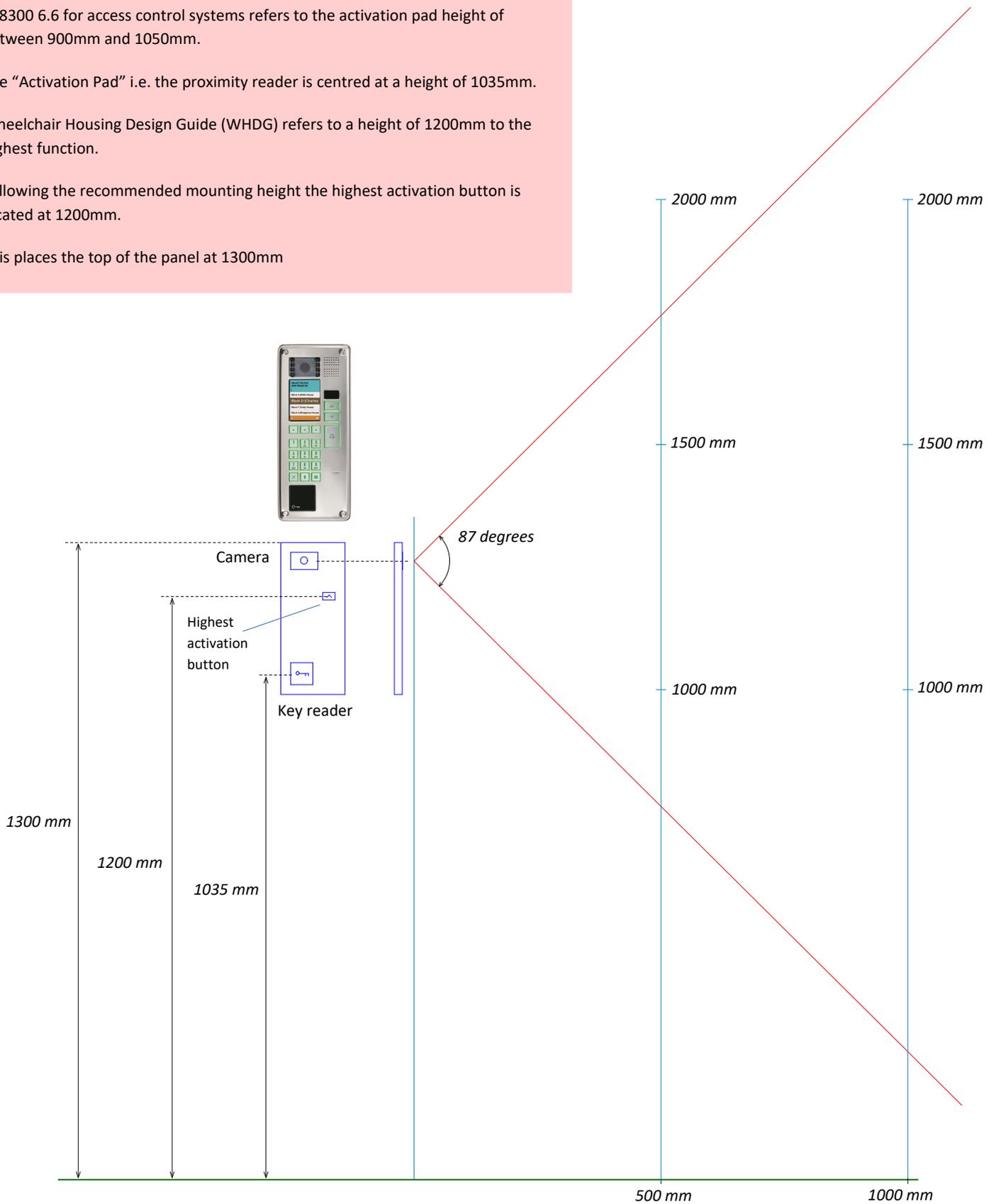
BS8300 6.6 for access control systems refers to the activation pad height of between 900mm and 1050mm.

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



1060/13 mounting height

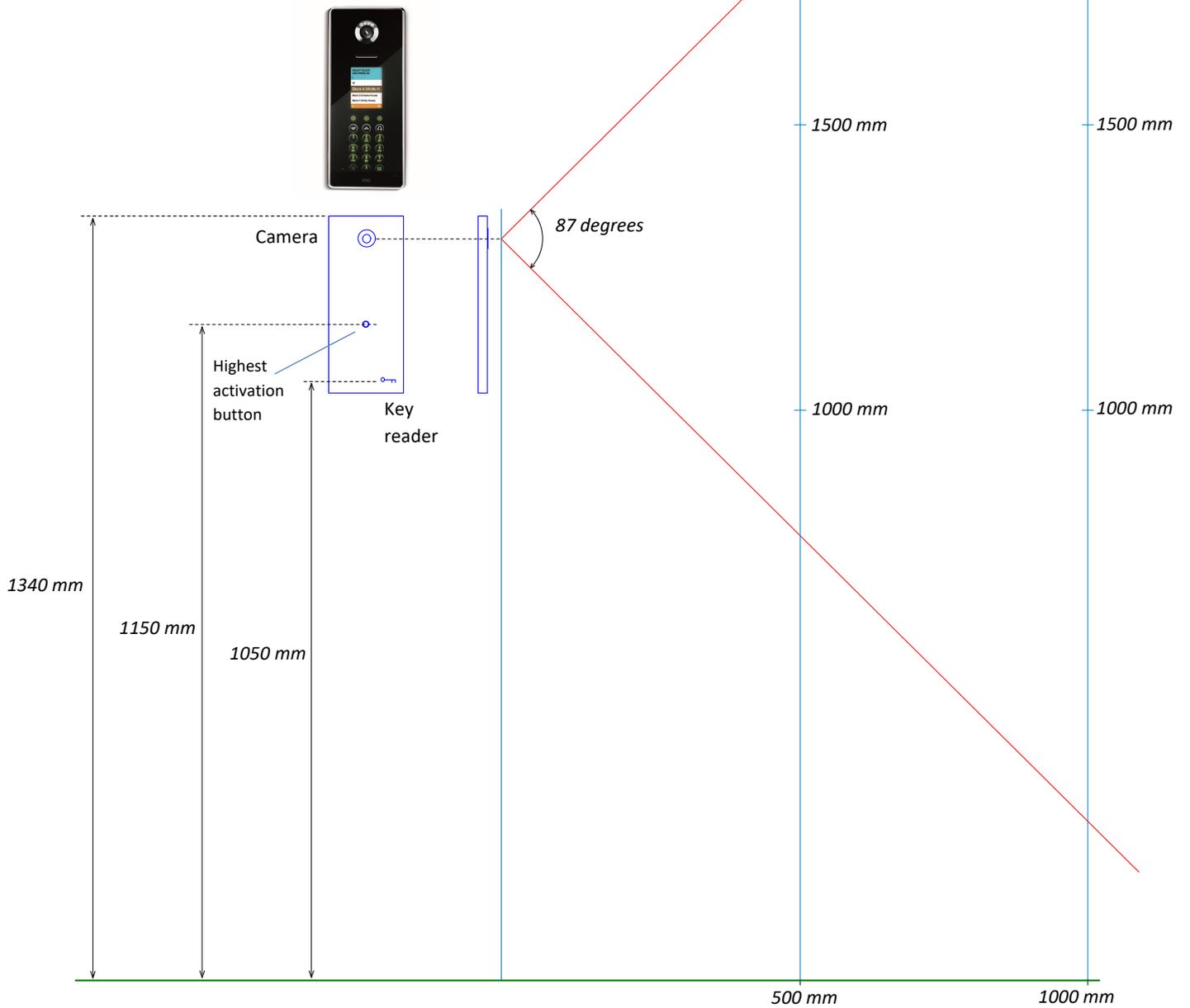
BS8300 6.6 for access control systems refers to the activation pad height of between 900mm and 1050mm.

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

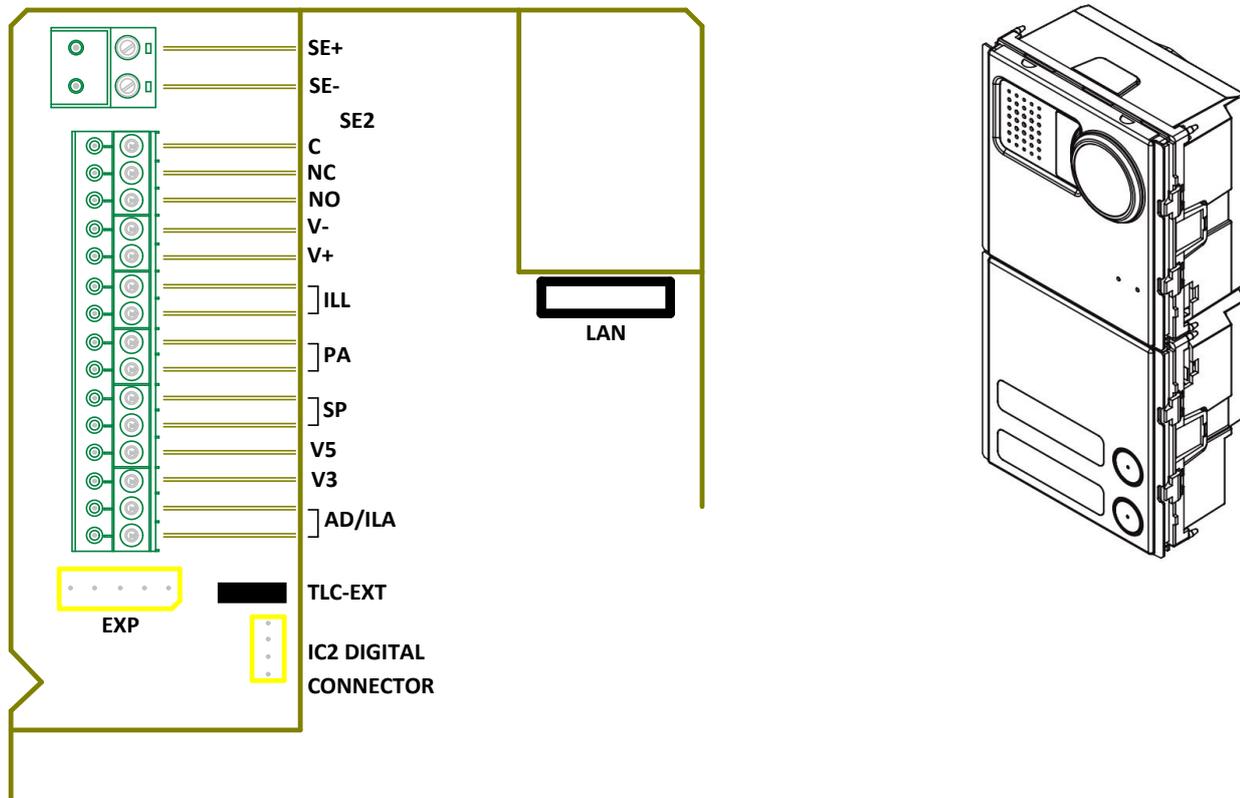
Wheelchair Housing Design Guide (WHDG) refers to a height of 1200mm to the highest function.

Following the recommended mounting height the highest activation button is located at 1150mm.

This places the top of the panel at 1340mm



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 the button with one 'dot' on the monitor or handset.

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

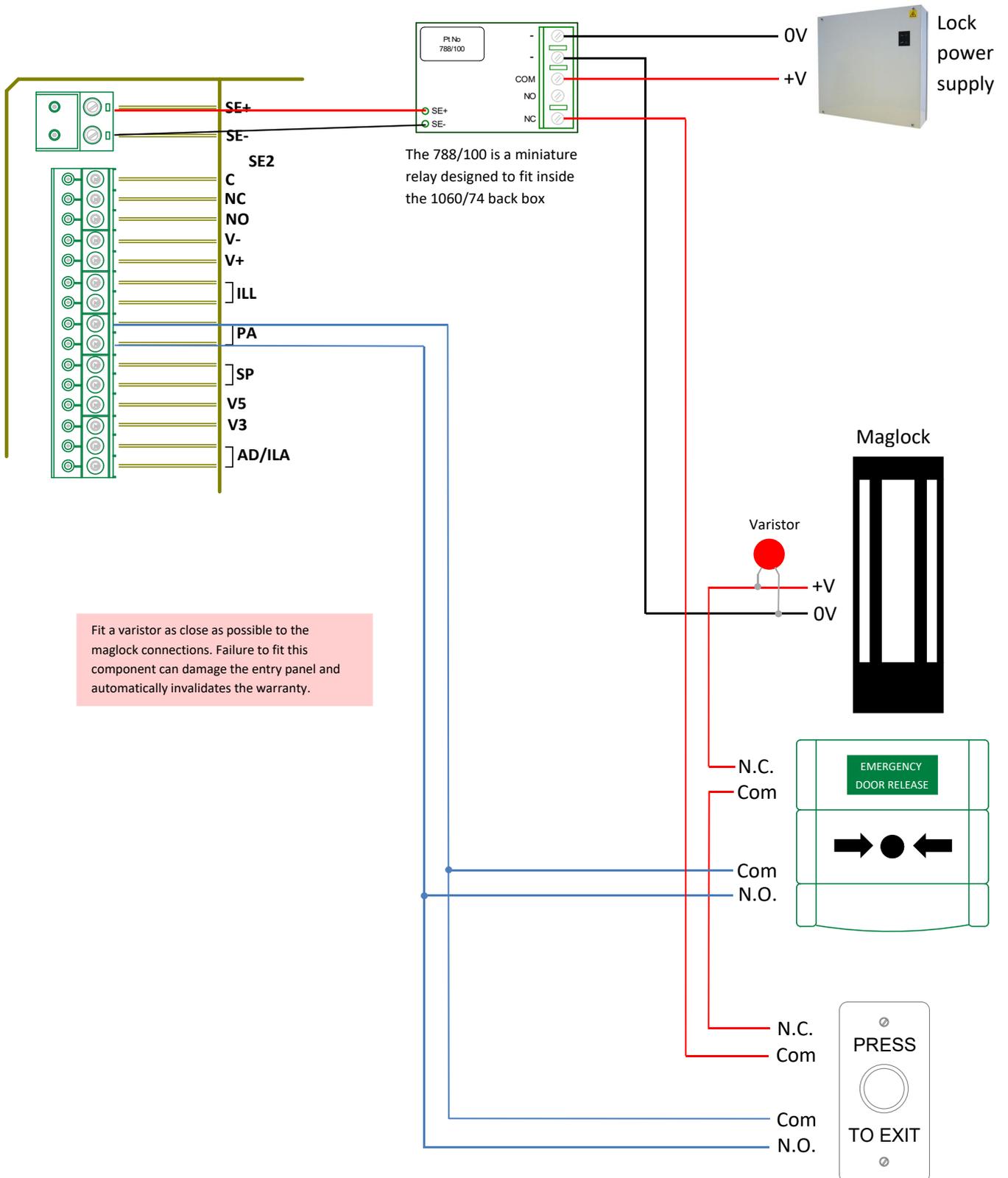
AD/ILA – Input for 1158/48 Hearing Aid Module

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

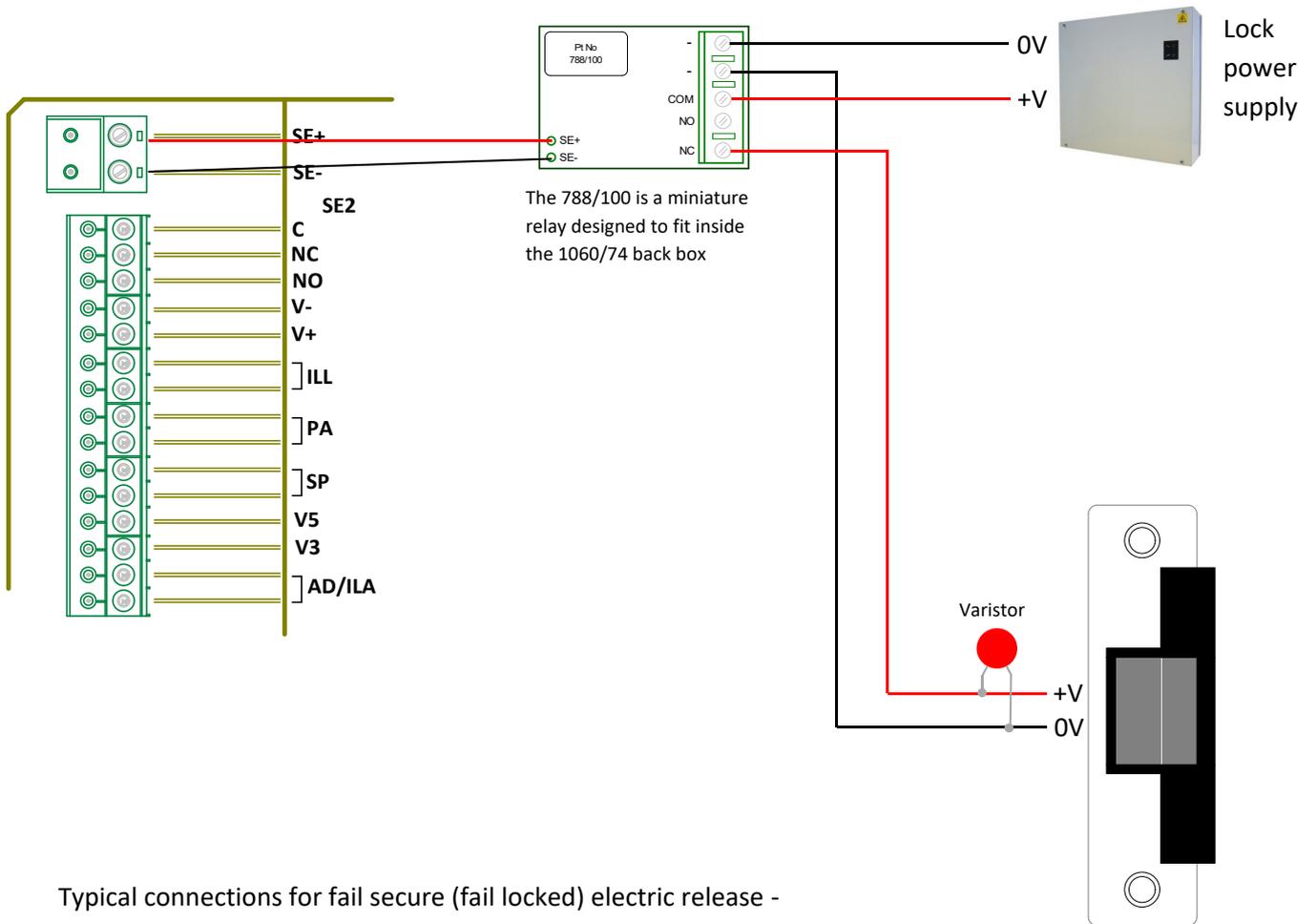
IC2 DIGITAL CONNECTOR – Used to connect 1158/47 DDA Module. See the product manual supplied with the 1158/47.

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

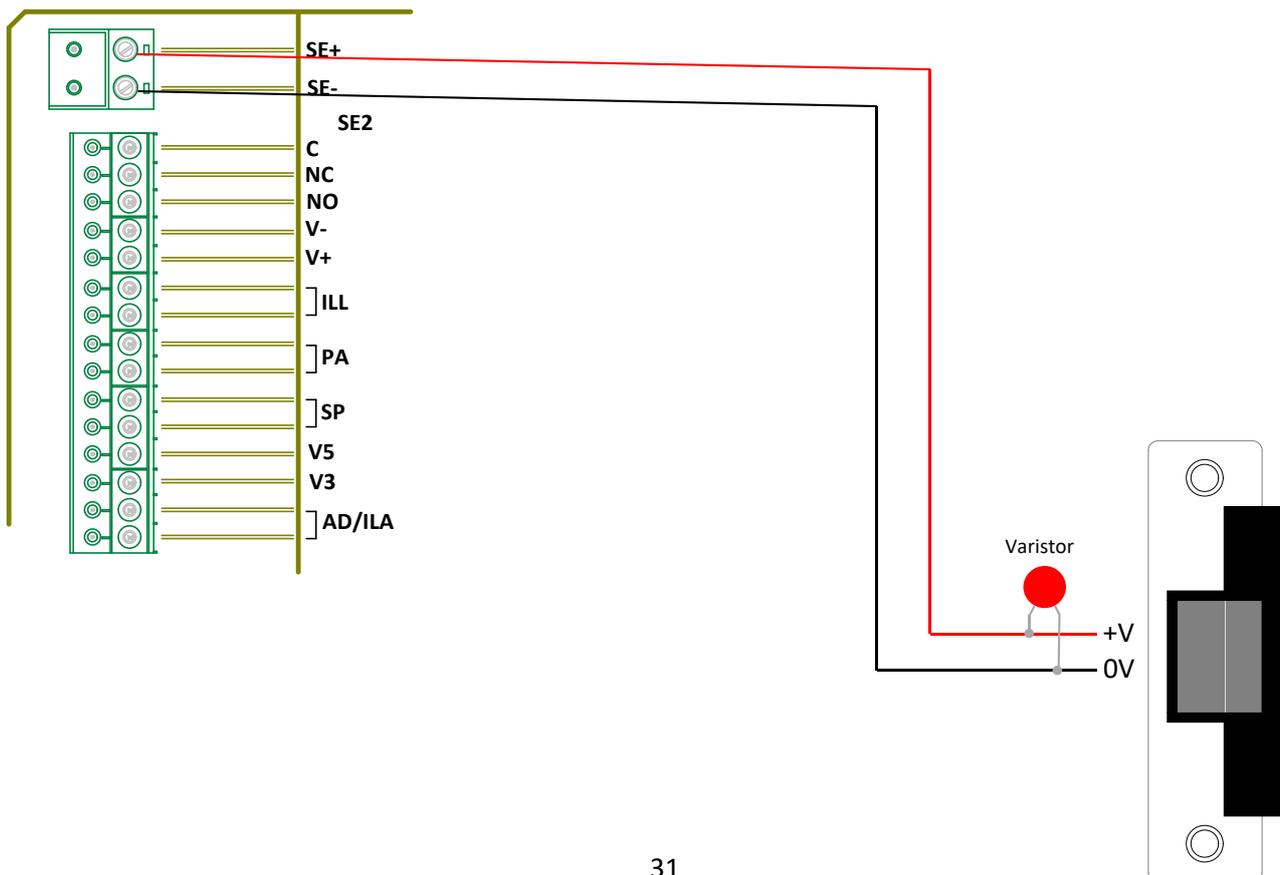
Typical connections for a maglock –



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



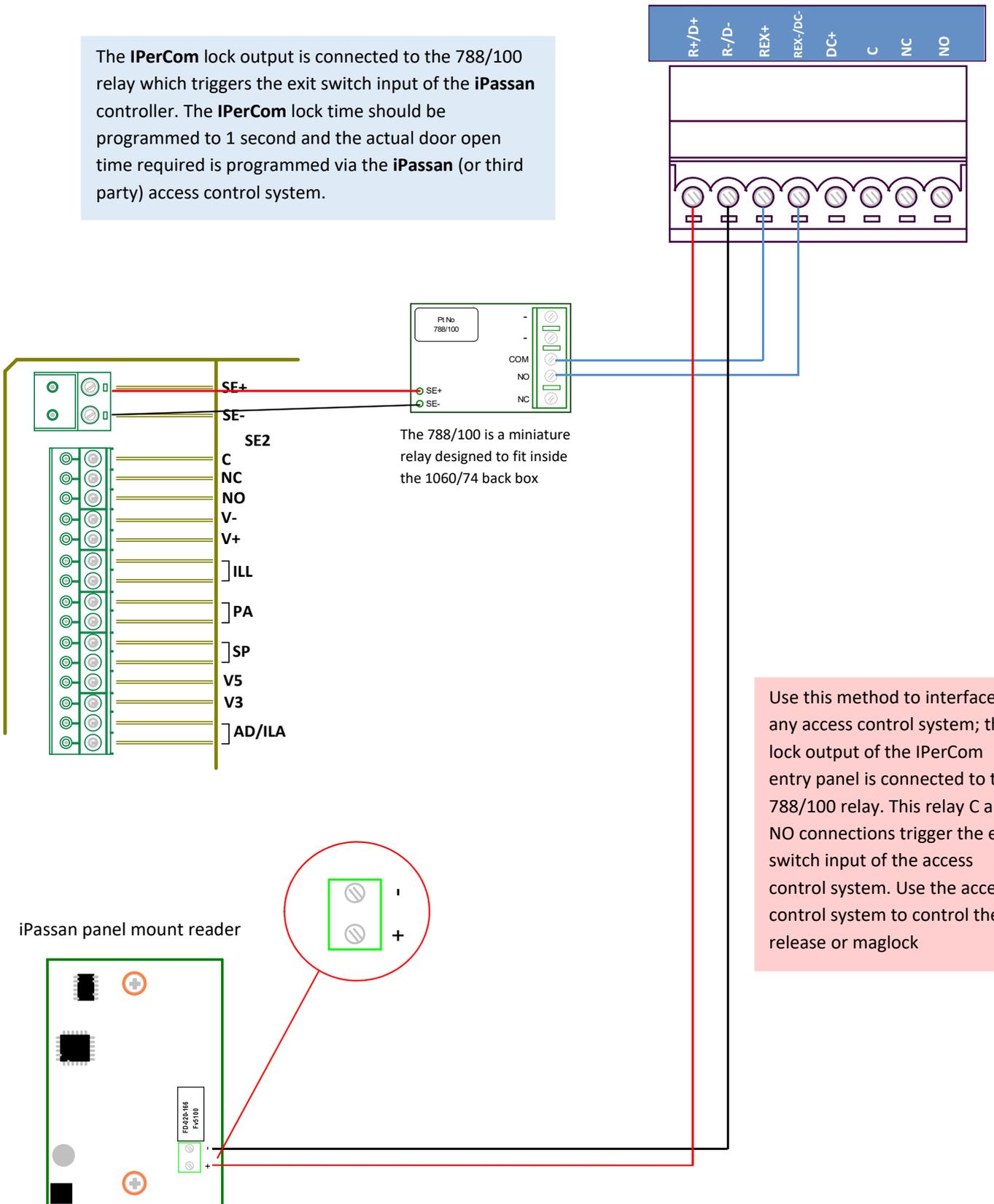
Typical connections for fail secure (fail locked) electric release -



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 party) access control system.



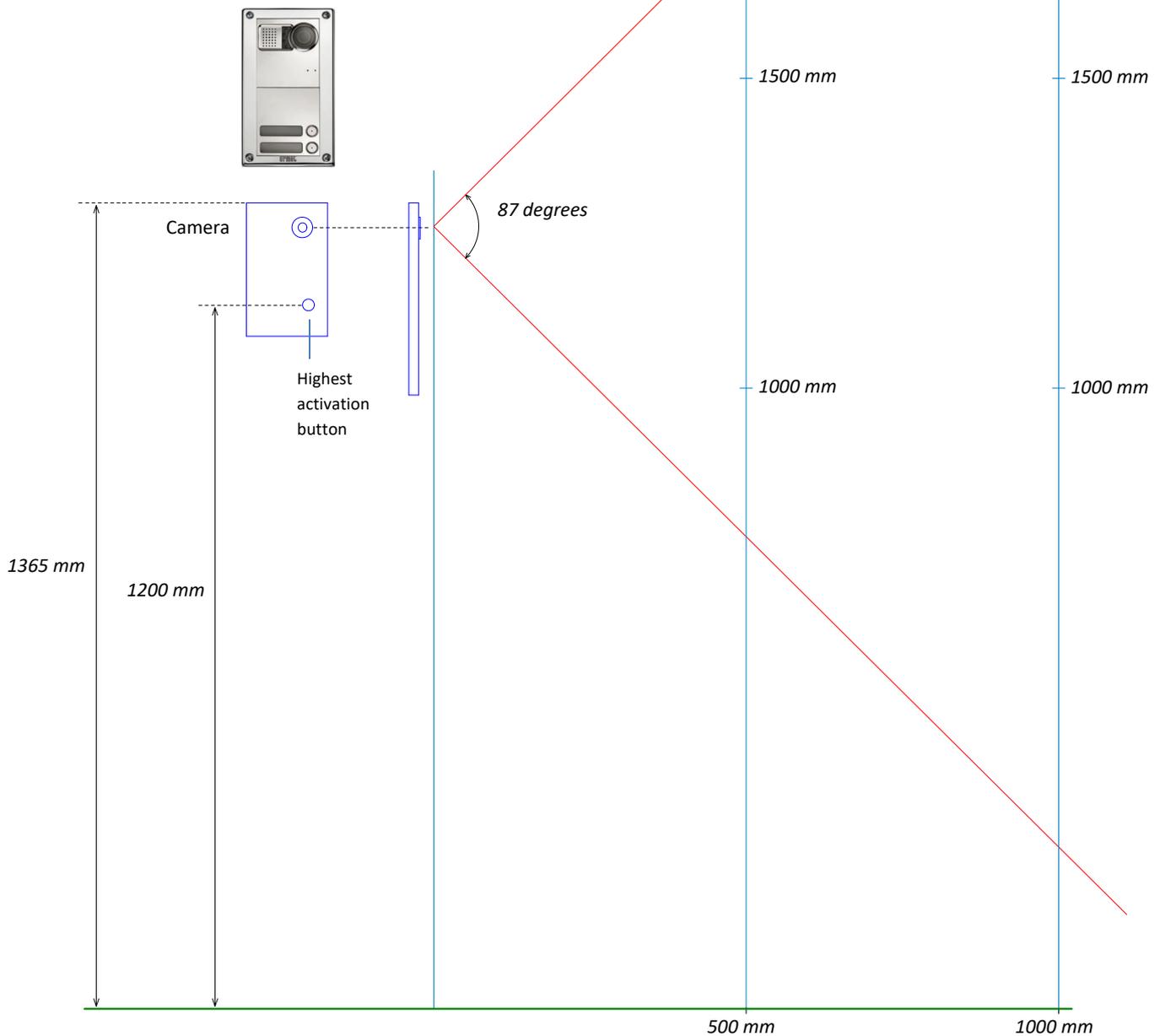
Use this method to interface to any access control system; the lock output of the IPerCom entry panel is connected to the 788/100 relay. This relay C and NO connections trigger the exit switch input of the access control system. Use the access control system to control the release or maglock

1060/74 mounting height

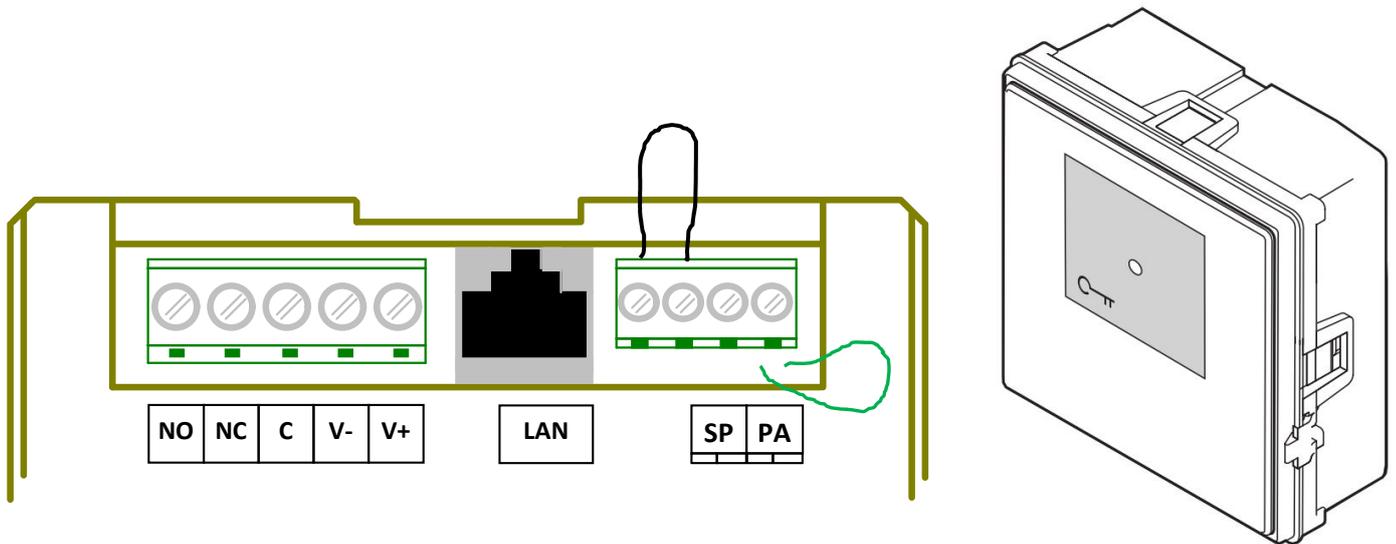
Wheelchair Housing Design Guide (WHDG) refers to a height of 1200mm to the highest function.

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

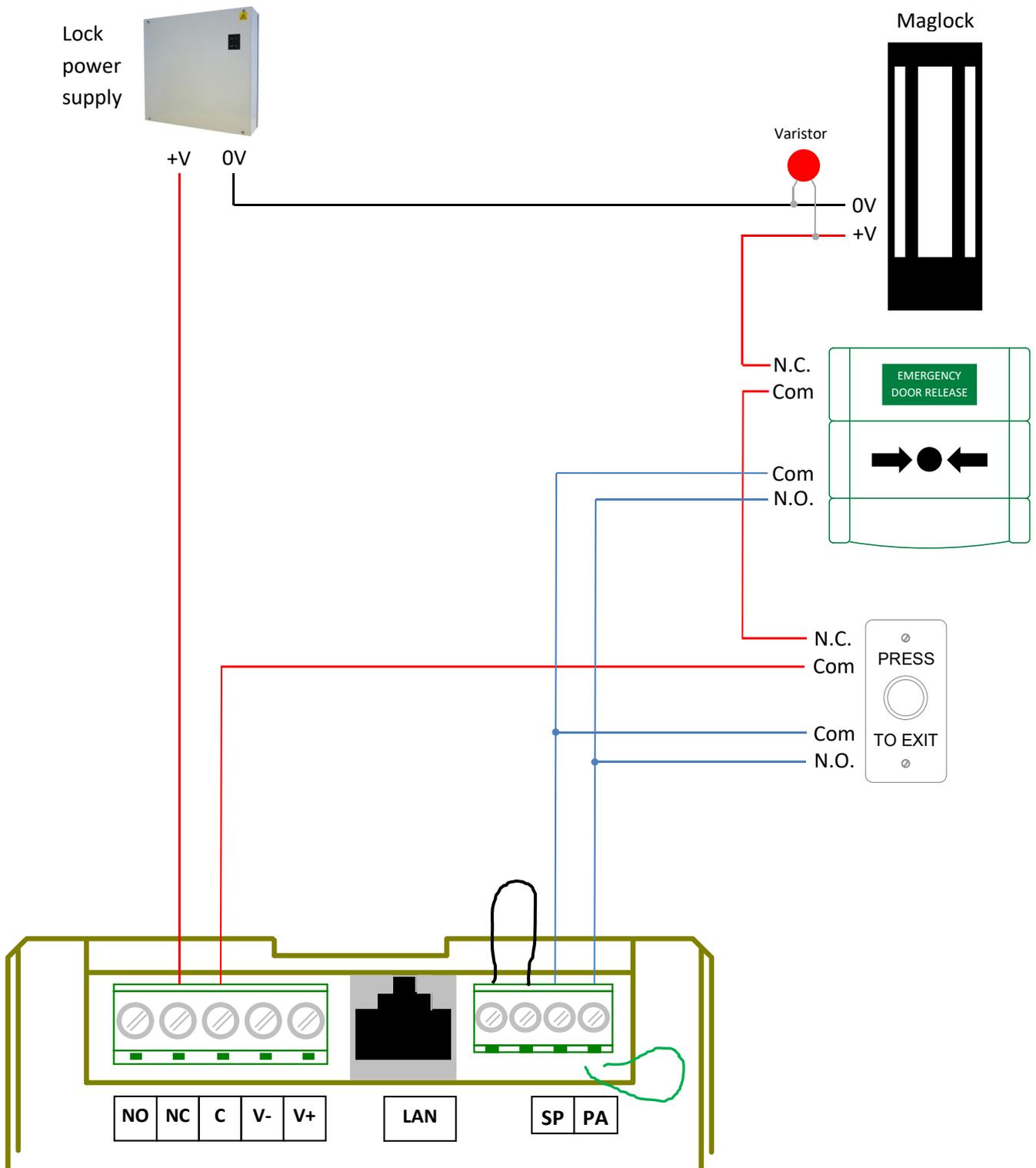
LAN – Network connection to PoE network switch port

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.

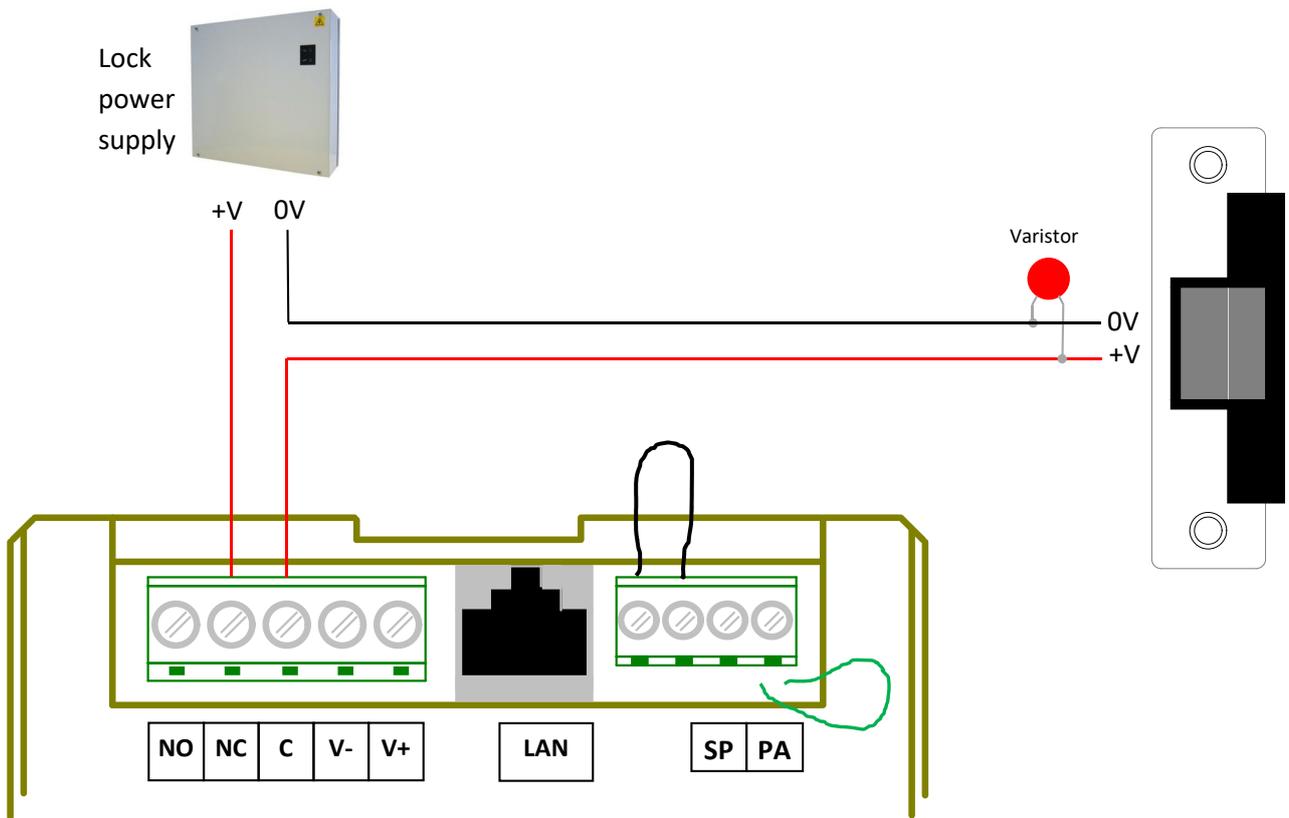
PA - Input for a normally open push to exit switch.

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

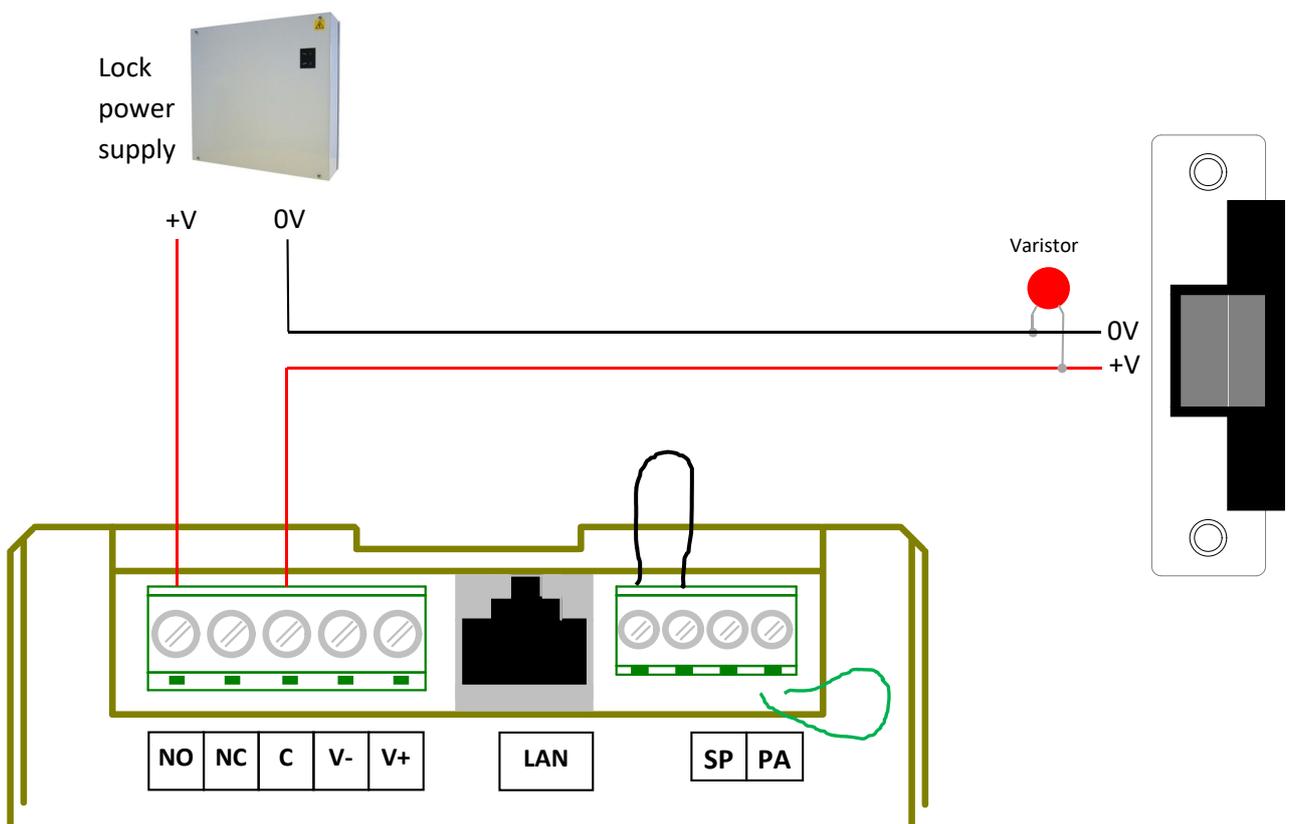
Typical connections for a maglock –



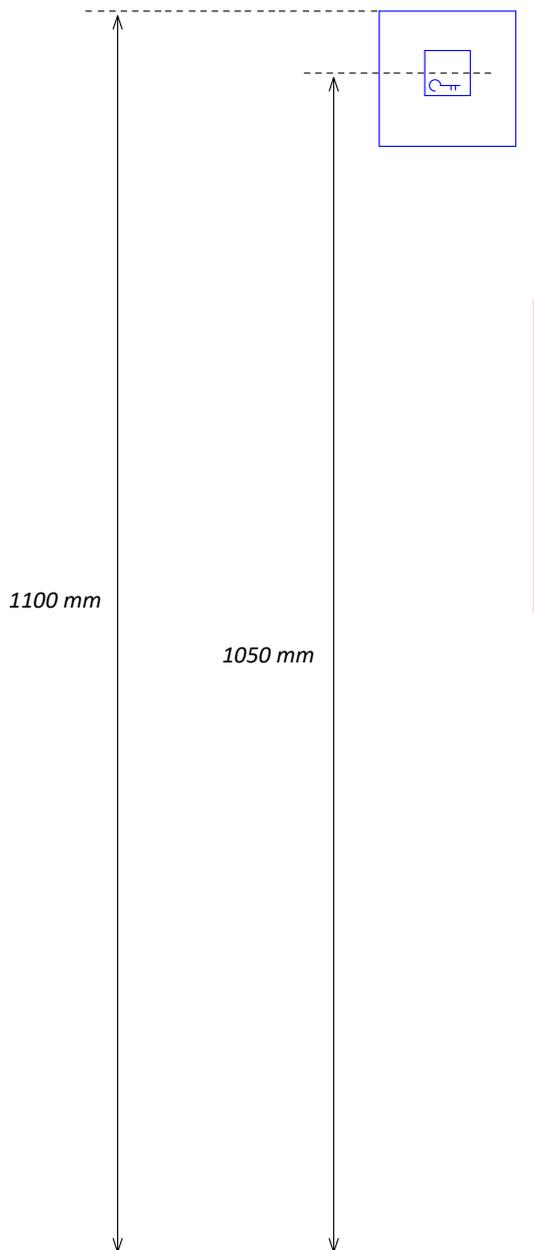
Typical connections for fail safe (fail open) electric release -



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



1060/82 mounting height



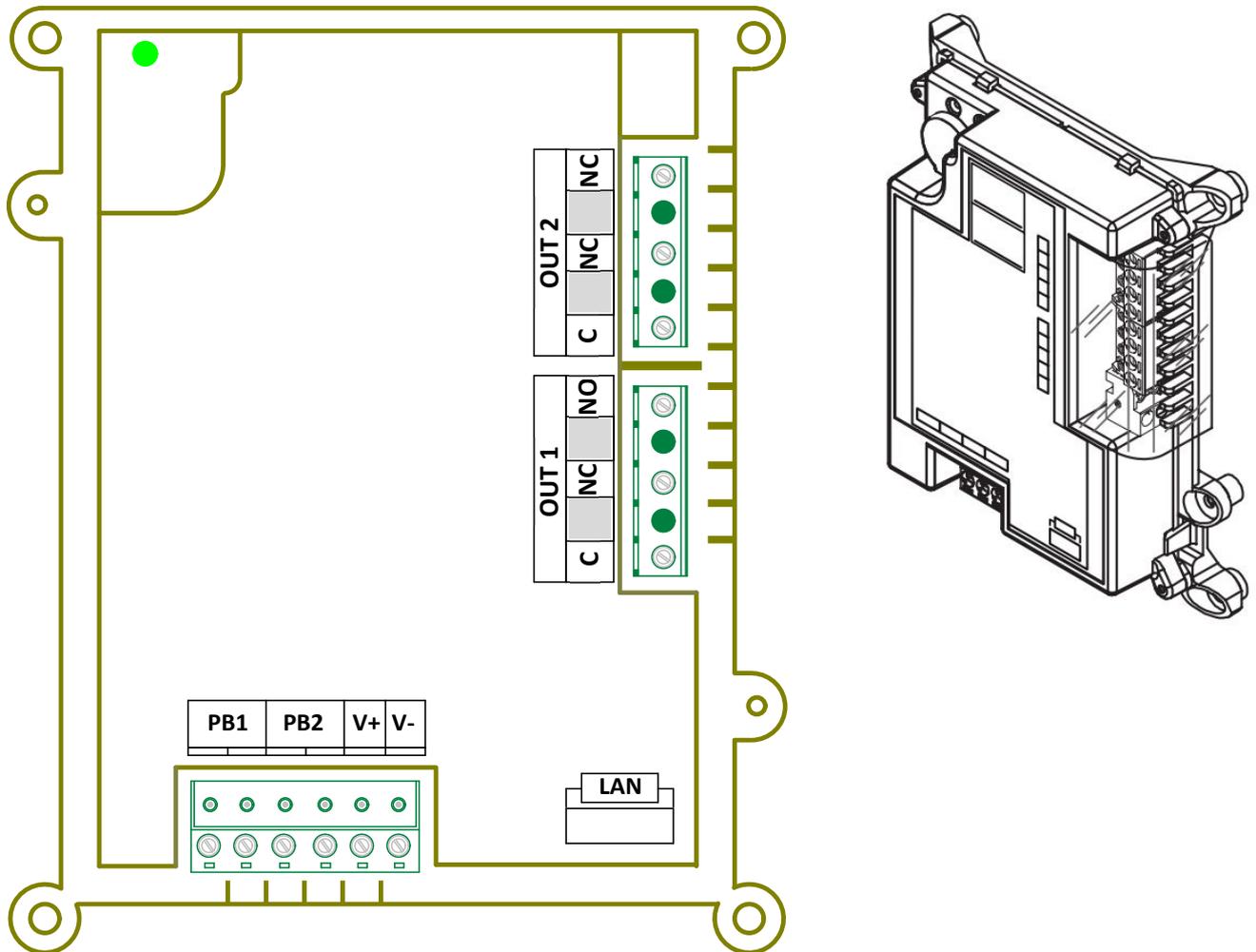
BS8300 6.6 for access control systems refers to the activation pad height of between 900mm and 1050mm

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.

1060/84 Relay Module



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.

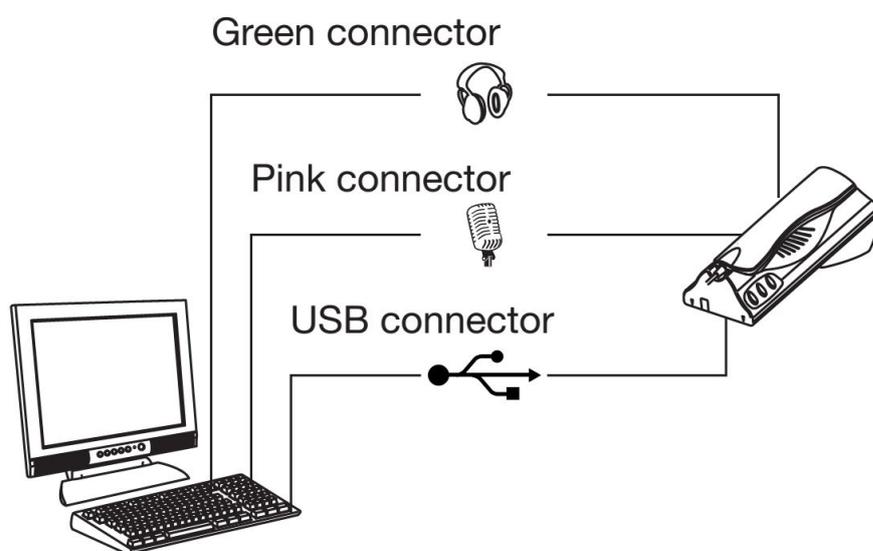
Steady on = IP address has been obtained

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 –

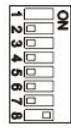
S+ S- Connection for **1072/59** External Sounder

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.

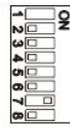
Monitor/handset DIP switch settings



USER 0



USER 1



USER 2



USER 3



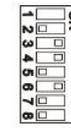
USER 4



USER 50



USER 51



USER 52



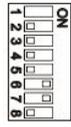
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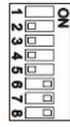
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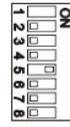
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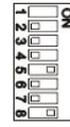
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USER 7



USER 8



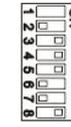
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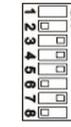
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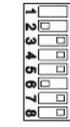
USER 56



USER 57



USER 58



USER 59



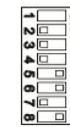
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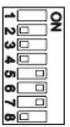
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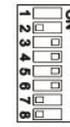
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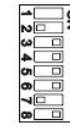
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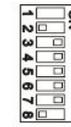
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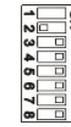
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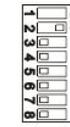
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USER 62



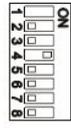
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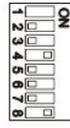
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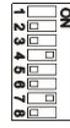
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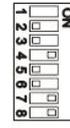
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USER 17



USER 18



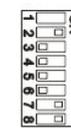
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USER 65



USER 66



USER 67



USER 68



USER 69



USER 20



USER 21



USER 22



USER 23



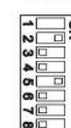
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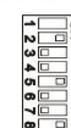
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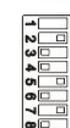
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USER 72



USER 73



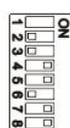
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USER 25



USER 26



USER 27



USER 28



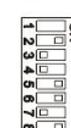
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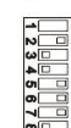
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USER 76



USER 77



USER 78



USER 79



USER 30



USER 31



USER 32



USER 33



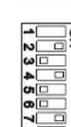
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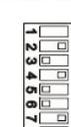
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USER 81



USER 82



USER 83



USER 84



USER 35



USER 36



USER 37



USER 38



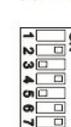
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USER 85



USER 86



USER 87



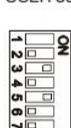
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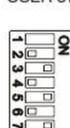
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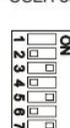
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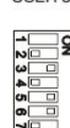
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USER 42



USER 43



USER 44



USER 90



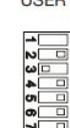
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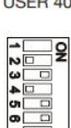
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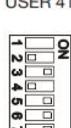
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USER 94



USER 45



USER 46



USER 47



USER 48



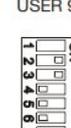
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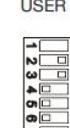
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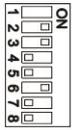


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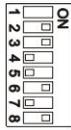


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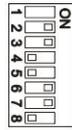
Monitor/handset DIP switch settings continued



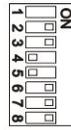
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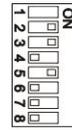
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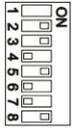
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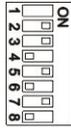
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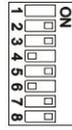
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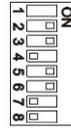
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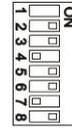
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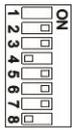
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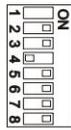
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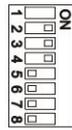
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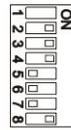
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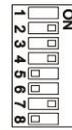
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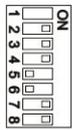
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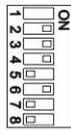
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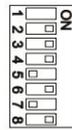
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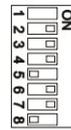
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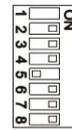
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USER 117



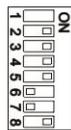
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USER 119



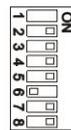
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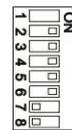
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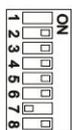
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USER 123



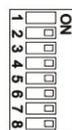
USER 124



USER 125



USER 126



USER 127



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