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8/2-WIRE interface

346150

Description

8/2-WIRE interface is a device that can be used for installing mixed video door entry systems, with common backbones using the digital system (8 WIRES), and risers using the 2 WIRE system.

It is ideal for very large systems as all the performance advantages of the digital system can be combined with the installation advantages of the 2 WIRE system (simple wiring system, intercommunication, no need for local power supply of monitors).

The device must be used together with the 346050 power supply.

In installing a system with local entrance panel, the entrance panel itself may be wired using both the 2 WIRE, or the 8 WIRE procedure.

Related items

346050   2 WIRE system power supply

Technical data

Power supply from SCS BUS: 18 – 27 Vdc
Operating temperature: 5 – 40 °C

SELV device
BACKBONE SIDE (IN-OUT):
- Stand-by absorption: 60 mA
- Max. operating absorption: 155 mA

RISER SIDE (EP-OUT M):
- Stand-by absorption: 25 mA
- Max. operating absorption: 110 mA

Dimensional data

Size: 6 DIN modules.

Front view

Legend

1. 8 WIRE local entrance panel connection clamp
2. 2 WIRE riser and power supply connection clamp
3. Configurator socket
4. Local conversation active signalling LED
5. Powered device flashing (stand by) signalling LED
6. Conversation with backbone active signalling LED
7. 8 WIRE backbone (IN-OUT) connection clamps

NOTE: the three flashing LEDs indicate a device configuration error.

Configuration

The device must be physically configured to set the operating mode:

MODE A: It is possible to generate up to 40 risers, each with up to 100 handsets (devices).

The total number of handsets installed on the riser column must also include any handsets and video handsets connected in parallel. With each extra device added in parallel to the base device, the total number of calls or apartments decreases by one. It is recommended that the risers in M1 are numbered starting with 1.

The configurators must only be connected to the M1 position. On the generated riser, handsets (max. 100) must be configured (in N) from 1 to 99.

MODE B: it is possible to generate up to 100 risers, with the possibility of installing on each of them a number of handset based on the value of the configurator connected to M1 and N1. However, the total number of calls in the system is 4000.

The configurators to be used are M1, N1, M2, N2; for each riser these will define the address of the first and the last video handset of the riser.

In this mode M1 must be the same as M2, and therefore up to 100 call address Handsets (N1 and N2) may be allocated to each riser.

NOTE: if only one handset can be installed on a riser (**M1=M2 and N1=N2**), the handset shall always be configured with N=1 due to the fact that the call on the 2 WIRE line (in this configuration) becomes general.
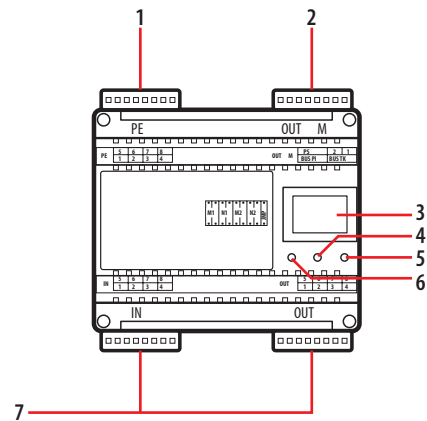

| M1 | N1 | M2 | N2 | J |

M1 = number of the riser
It allocates to the handsets the number of the riser they belong to

N1 = Call number
Mode A: MUST not be configured.
Mode B: it allocates the initial number of the handsets installed on the riser.

M2 = number of the riser
Mode A: MUST not be configured.
Mode B: It allocates to the handsets the number of the riser they belong to (it must be equal to M1)

N2 = Call number
Mode A: MUST not be configured.
Mode B: it allocates the final number of the handsets installed on the riser

J = Selection of the secondary riser entrance panel
It is possible to install a riser EP belonging to the 2 WIRE system range or a riser EP belonging to the digital system range However, both types of EPs cannot be installed at the same time.
Configurator J connected = 2 WIRE system EP
Configurator J disconnected = digital system EP (6-8 wires)

| M1 | N1 | M2 | N2 |
| 1 | 3 | 1 | 3 |

Handsets from 103 to 103 → The connected handset must be configured with N =1

| M1 | N1 | M2 | N2 |
| 2 | 1 | 9 | 2 | 1 | 9 |

Handsets from 219 to 219 → The connected handset must be configured with N =1

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Example of configuration in mode (A)

If **M1=2** the 100 handsets installed on this riser will take on the absolute address from 201 to 299 and will be configured from N=1 to N=99.

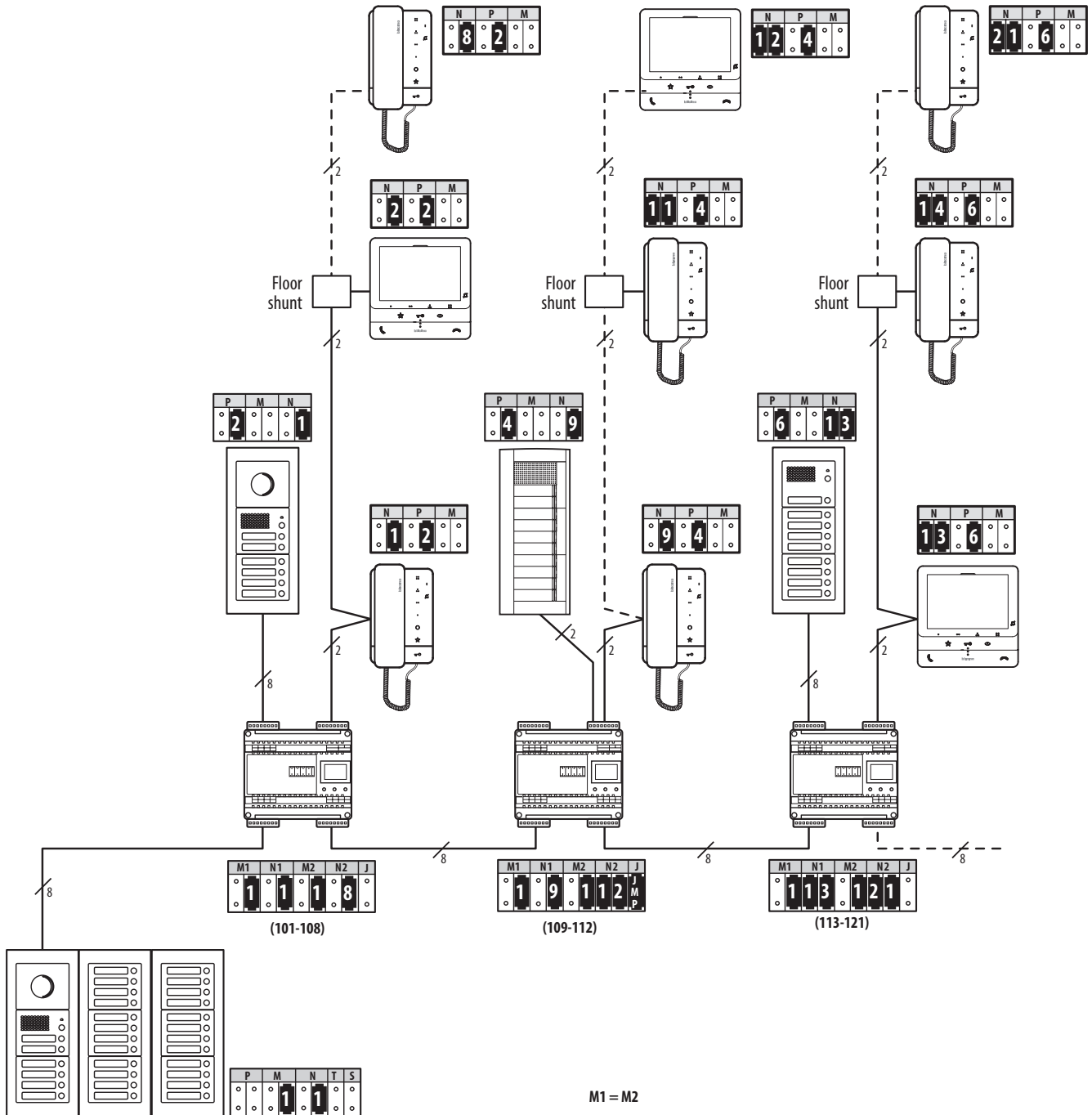**(101-199)**   **(201-299)**   **(301-318)**

M1 ≥ 1
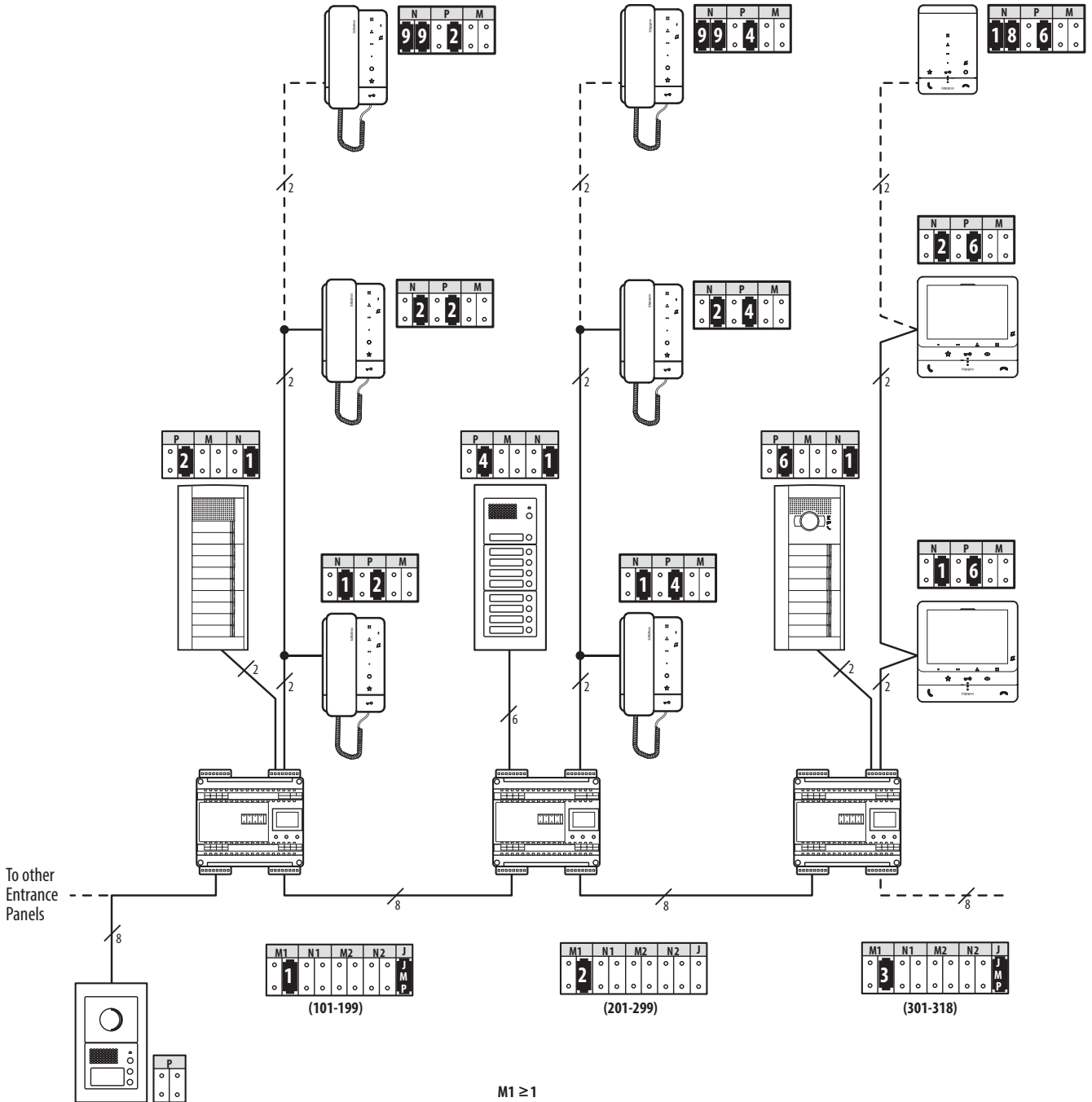
Example of configuration in mode (A):
The EP must be realised using digital call modules. On the 8/2 interface it is possible to install both 2 WIRE or 6/8 WIRE secondary (or local) entrance panels. On the risers it is possible to install both audio and video 2 WIRE handsets, complying with the installation limits of the 2 WIRE system.

Example of configuration in mode (B)

If **M1**=**12 N1**=**50 and M2**=**12 N2**=**65**, on the riser the handsets will have an absolute address going from 1250 to 1265. Therefore the riser handsets must themselves be configured in N from 50 to 65.

N	P	M
8		2

N	P	M
12		4

N	P	M
21		6

N	P	M
2		2

N	P	M
11		4

N	P	M
14		6

Floor shunt

P	M	N
2		1

P	M	N
4		9

P	M	N
6		13

N	P	M
1	2	

N	P	M
9	4	

N	P	M
13	6	

M1	N1	M2	N2	J
1	1	1	8	

(101-108)

M1	N1	M2	N2	J
1	9	1	12	JMP

(109-112)

M1	N1	M2	N2	J
1	13	1	21	

(113-121)

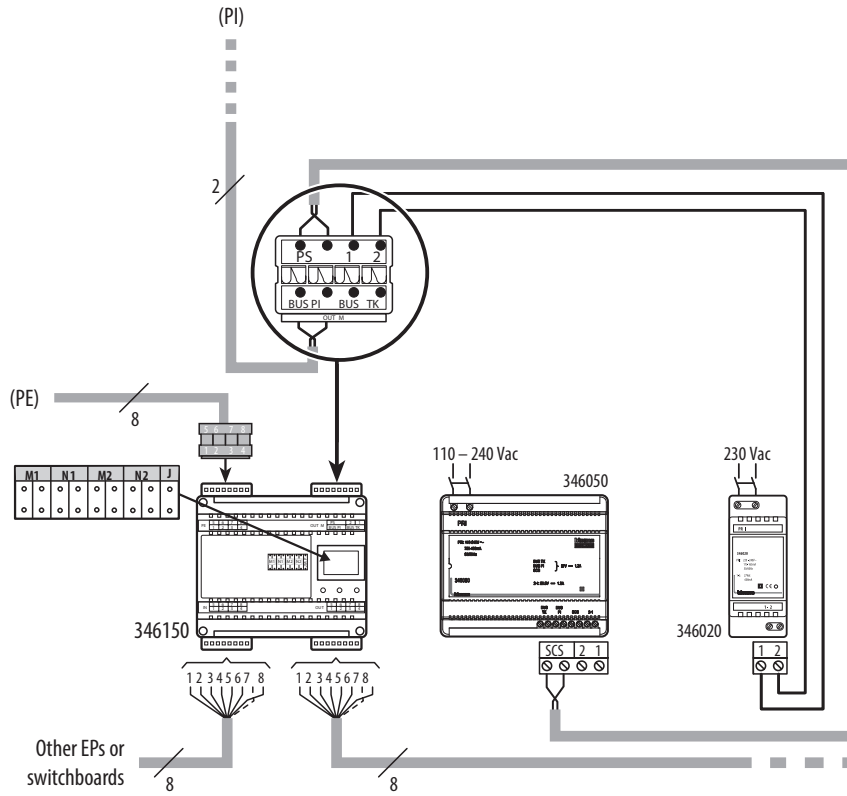| P	M	N	T	S
	1	1		

M1 = M2

Example of configuration in mode (B)

On the 8/2 interface it is possible to install both 2 WIRE or 6/8 WIRE secondary (or local) entrance panels. On the risers it is possible to install both audio and video 2 WIRE handsets, complying with the installation limits of the 2 WIRE system.

Wiring diagrams

Connection of local 8 WIRE EP

Connection of local 2 WIRE EP