



Hänel Installation Instructions
Interfaces (serial, USB and Ethernet) and cable
routing for data transfer MP12N / MP14

Lean-Lift
Multi-Space

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift
Multi-Space

Contents

1. General instructions.....	3
2. Installation Requirements.....	4
3. Installation instructions:.....	5
4. Interfaces.....	7
4.1 Interface assignments RS 232 serial interface (DB9 connector).....	8
4.2 Interface assignments USB 2.0 interface (type A).....	8
5. Ethernet cable routing (for Ethernet multi-unit network).....	9
6. Customer-side peripheral cables.....	11
7. Removal	12
8. Annex.....	13

1. General instructions

All text and images are the protected intellectual property of Hänel® GmbH & Co. KG. Any use that is not expressly permitted by law, specifically including reprinting, reproduction, electronic processing or translation, requires approval from Hänel® GmbH & Co. KG.

Caution

These Installation Instructions are intended for specially trained and authorised technicians employed by the Hänel factory or by Hänel representatives.

All safety instructions and general instructions provided in the corresponding Operating Manual "MANL-LL" or "MANL-MS" and in the corresponding Installation Instructions "INST-LL-S" or "INST-LW" or "INST-MS" for the Lean-Lift or Multi-Space must be followed at all times.

In addition, the "Safety Rules & Requirements" provided in the Memorandum for Technical Field Service "SICHA" and the "Safety Rules" provided in the Training of Auxiliary Personnel for Technical Field Service "SICHHK" must be observed at all times!



Intended use

These Installation Instructions describe only the installation of the interface connections for peripheral devices for Lean-Lift or Multi-Space with MP12N control system.

Any other use shall be considered non-compliant use.



Note

For routing and connection of the multipoint connecting cables, the corresponding cable routing diagrams "CABLELL3" or "CABLEMS1" must be observed.



Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift Multi-Space

2. Installation Requirements

1. Before starting the installation, secure the extractor, or cross-member with extractor, against descending or falling.



! DANGER

The extractor or cross-member with extractor is a suspended load that can fall.

Therefore, whenever working inside the lift, you have to lower it to ground level.

If this is not possible, you have to secure them using the locking device. (See operating manual "MANL-LL", Work inside the lift by authorised personnel - Securing the extractor or operating manual "MANL-MS", Work inside the lift by authorised personnel - Securing the cross-member with extractor).

2. Switch off the main switch (Q2) and secure it from being switched on again using a padlock.



! DANGER

Risk of electrocution!

SAFETY INSTRUCTIONS



The lift must be de-energised before work begins.

- Switch off main switch (Q2).
- Secure the main switch (Q2) from being switched on again
- Verify that the lift has been de-energised.
- Cover or block off neighbouring live parts. (External voltage source for multi-unit network)

3. Before entering the inside of the lift, lock the actuator of the safety switch on the service door (S3) with a padlock.

SAFETY INSTRUCTIONS



Secure the actuator latch!

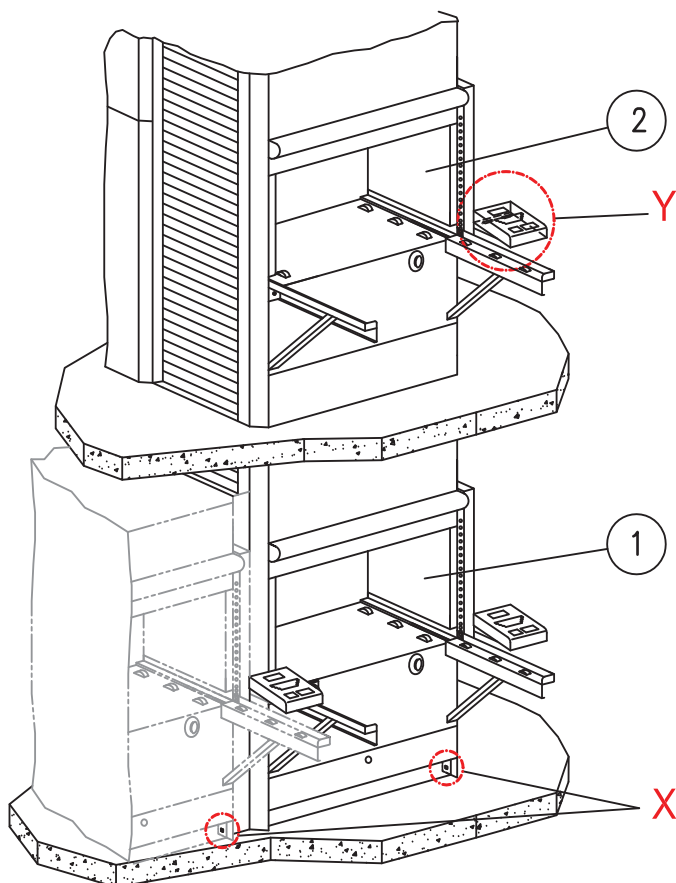
Before all work, secure the actuator latch of the service door from being switched on again using a padlock.

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift Multi-Space

3. Installation instructions:



Item	Description
1	Access point 1
2	Access point 2
3	Cover strip
4	Terminal strip
5	Keyboard baseplate
6	Magnetic holder
21	Base panelling
A1	Ethernet interface: RJ45 jack (1x):
A2	Ethernet interface: RJ45 jack (1x): (optional)
B	Serial interface: DB 9 jack (2x)
C	USB interface: jack
D	Ethernet interface: RJ45 jack (1x) (optional, only 2 nd access point and above, and GSC multi-unit network)

Fig. 1: Overview of interfaces for peripheral devices

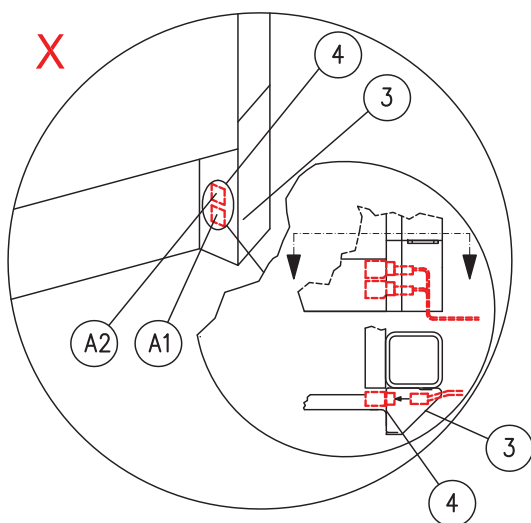


Fig. 2: Detail X from Fig. 1

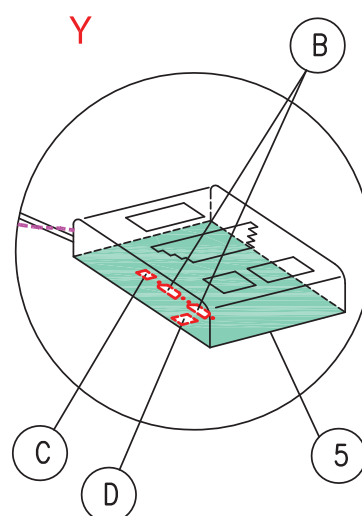


Fig. 3: Detail Y from Fig. 1

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift
Multi-Space

3. Installation instructions: (continued)

Step	Task	Notes / illustration
Interfaces on the key panel (beginning with the 2 access point for Lean-Lifts or Multi-Space lifts on several storeys):		
1	Snap out the slot cut-out for interfaces from the keyboard baseplate (<i>item 5</i>).	See Fig. 1 and 3
2	Screw on the DB 9 connector (<i>item B</i>). Snap the USB jacks (<i>item C</i>) and, where applicable, RJ45 jacks (<i>item D</i>).	See Fig. 1 and 3
Interfaces in base (according to order confirmation):		
3	Snap out the slot cut-outs (if there are some that need removing) for RJ45 jacks (<i>item A1 and A2</i>) in terminal strip (<i>item 4</i>).	See Figs. 1, 2 and 4
4	Snap the RJ45 jacks (<i>item A1 and A2</i>) into the terminal strip (<i>item 4</i>).	see Fig. 1, 2 and 4 Note: RJ45 jacks have to snap in correctly.
5	Snap the magnetic holder (<i>item 6</i>) into the terminal strip (<i>item 4</i>) from outside.	
6	Check that the interfaces function correctly.	

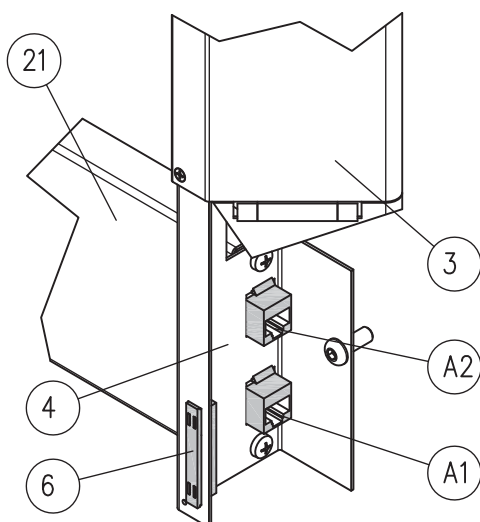


Fig. 4: Interfaces in the base

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift Multi-Space

4. Interfaces

MP12N connection / MP14 connection (item B, C):

	Interface (RS232)		
	S1	S2	USB
Label printer	x		
Barcode reader	x	x	x
Piece count scale	x	x	
Badge reader/transponder	x	x	

For interface assignment, interface parameters and protocol, refer to the Technical Description of the Microprocessor Control System MP12N Lean-Lift, Multi-Space, and Rotomat.

MP100D connection / MP100D-5 connection (item A1):

Ethernet	⇒	Host communication by file transfer via FTP protocol
	⇒	External browser for web server
	⇒	Service, software update
	⇒	Possible additional lifts in the MP multi-unit network
	⇒	Network printer

MP12N-S connection / MP14-S connection (item A1, D):

Ethernet	⇒	Host communication by file transfer via FTP protocol
	⇒	External browser for web server
	⇒	Service, software update
	⇒	Possible additional lifts in the MP multi-unit network
	⇒	Network printer

MP12N-H[HOST-WEB] connection / MP14-H[HOST-WEB] connection (item A1, D):

Ethernet	⇒	Host communication through HTML pages via HTTP protocol and data allocation via TCP / IP protocol
	⇒	Service, software update

MP12N-H[HOST-DATA] connection (item A1, D):

Ethernet	⇒	Host communication by data record transfer via FTP protocol
	⇒	External browser for web server
	⇒	Possible additional lifts in the MP multi-unit network
	⇒	Service, software update

MP12N-H[HOST-COM] connection (item A1, D):

Ethernet	⇒	Host communication by data telegrams via TCP / IP protocol
	⇒	Service, software update

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift
Multi-Space

4. Interfaces (continued)

4.1 Interface assignments RS 232 serial interface (DB9 connector)

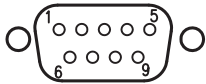


Fig. 5: RS232 serial interface (DB9 connector)

PIN	Assignment
Pin 2	Rxd
Pin 3	Txd
Pin 5	GND
Pin 7	RTS (only for S1)
Pin 8	CTS (only for S1)
Pin 9	+5V (only for S2, if jumper J2 is bridged, only for transponder)

4.2 Interface assignments USB 2.0 interface (type A)

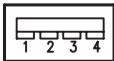


Fig. 6: RS232 serial port (jack DB25)

PIN	Assignment
Pin 1	+5V (maximum 500 mA)
Pin 2	D-
Pin 3	D+
Pin 4	GND

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift Multi-Space

5. Ethernet cable routing (for Ethernet multi-unit network)

Example views:

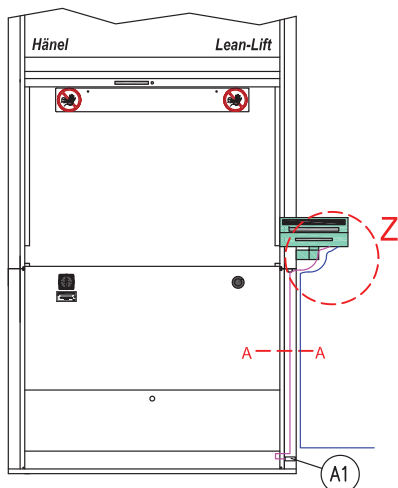


Fig. 7: 1 standard access point

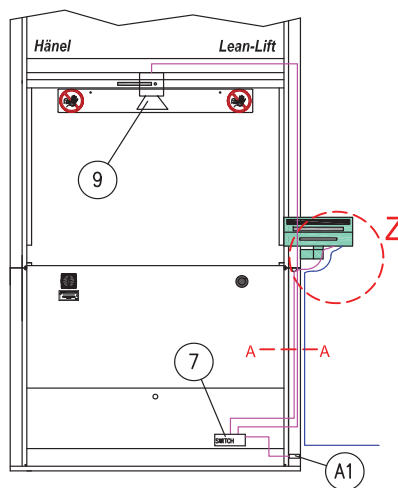


Fig. 10: 1 standard access point with camera

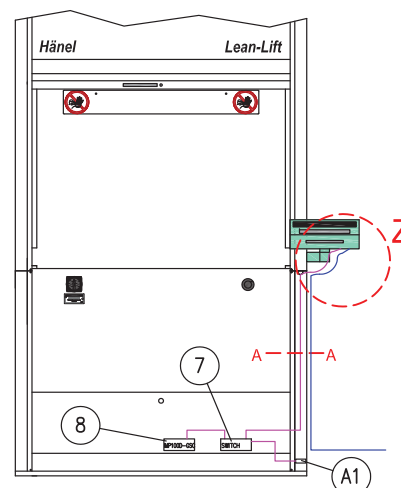


Fig. 9: Lift with MP100D-GSC

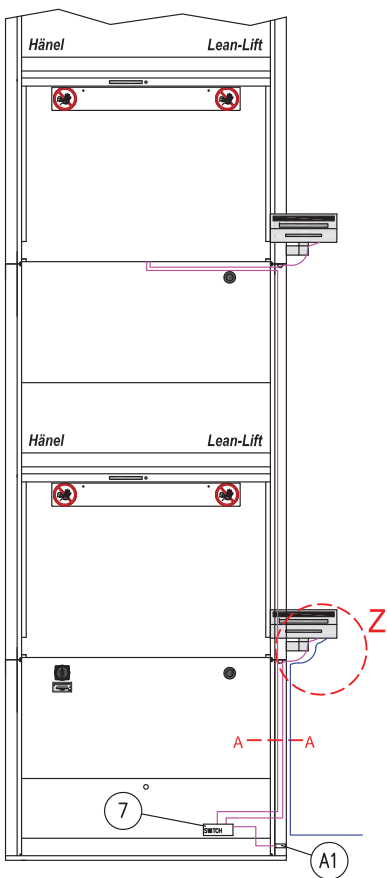


Fig. 8: Multiple access points

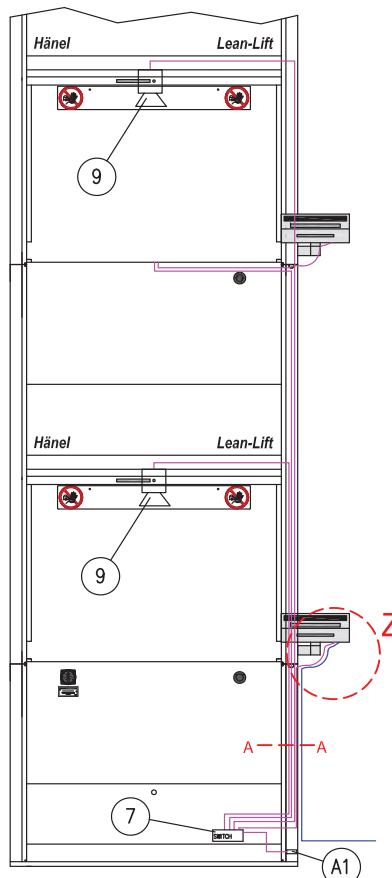


Fig. 11: Multiple access points with camera

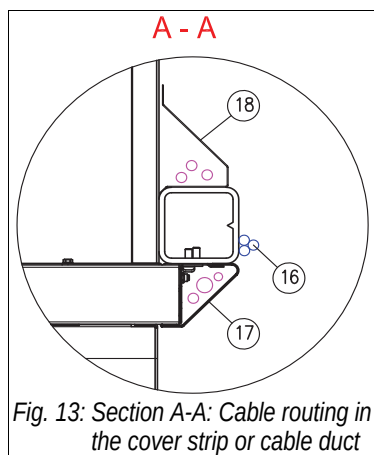
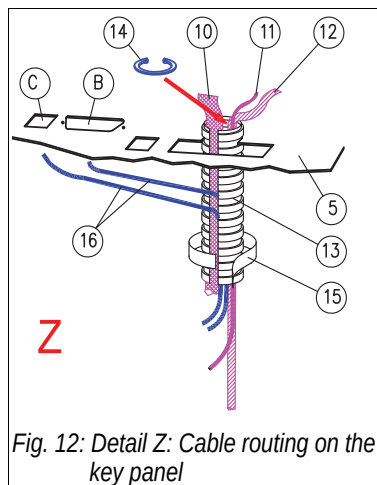
Item	Description
A1	Ethernet interface: RJ45 jack (1x):
7	Ethernet switch
8	MP100D-GSC
9	Ethernet camera
10	Keyboard connecting cable X15
11	Earthing cable
12	Multipoint connecting cable Only necessary for multi-unit networks: Refer also to drawing "S940008" and installation diagram "VERBUNDn"
13	Protective sleeve, slit
14	Fastening ring
15	Hook-and-loop tape approx. 12 cm (4.7 in) long
16	Customer-side peripheral cables
17	Cover strip
18	Cable duct behind rectangular tube

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift Multi-Space

5. Ethernet cable routing (for Ethernet multi-unit network) (continued)



Step	Task	Notes / illustration
1	The Ethernet connecting cables are routed to the key panel parallel to the keyboard connecting cable X15 (item 10) in the protective sleeve (item 13) and in the cover strip (item 17) or in the additional cable duct behind the rectangular tube (item 18).	See Fig. 7 - 13 See installation instructions "TAST"  Note: For additional access points (ES2, ES3, etc.) or access point 1 at a special height without drawer, the Ethernet connecting cable is routed into the corresponding electrical tray and then to the switch in the electrical drawer via a separate input jack and additional Ethernet connecting cable.
2	The Ethernet connecting cables are routed to the Ethernet camera in the additional cable duct behind the rectangular tube (item 18). In the case of multiple access points, the Ethernet connecting cables are routed to the Ethernet camera via the electrical tray of the corresponding access point if necessary.	See circuit diagram, page 9
3	The Ethernet connecting cables are routed to additional, directly adjacent lifts in the same way as the GSC multipoint connecting cables.	See cable routing diagram "CABLELL3"
4	The Ethernet connecting cables are routed to additional, not directly adjacent lifts by owner/operator; this must be carried out in accordance with regional regulations and so that the cables are protected from damage.	

6. Customer-side peripheral cables



Fig. 14: Routing of customer-side peripheral cables

Item	Description
5	Keyboard baseplate
13	Protective sleeve, slit
16	Customer-side peripheral cables
19	Adhesive clips (adhered)
20	Cable duct (adhered)



Fig. 15: Customer-side peripheral cables in the cable duct

The customer-side peripheral cables are routed by the customer

Step	Task	Notes / illustration
1	The customer-side peripheral cables (item 16) can be routed parallel to the connecting cable CPU I - CPU II (item 10) in the protective sleeve (item 13).	See Fig. 14 See Installation Instructions "TAST"
2	Additional routing of customer-side peripheral cables (item 16) can be done on the rectangular tube using adhesive clips (item 19) or in the cable duct (item 20).	See Fig. 14, 15 Note: Customer-side adhesive clips (item 19), cable ducts (item 20) or the like have to be adhered to the lift. They must not be screwed on!

Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift Multi-Space

7. Removal

1. Before starting the removal, secure the extractor, or cross-member with extractor, against descending or falling.



! DANGER

The extractor or cross-member with extractor is a suspended load that can fall.

Therefore, whenever working inside the lift, you have to lower it to ground level.

If this is not possible, you have to secure them using the locking device. (See operating manual "MANL-LL", Work inside the lift by authorised personnel - Securing the extractor or operating manual "MANL-MS", Work inside the lift by authorised personnel - Securing the cross-member with extractor).

2. Switch off the main switch (Q2) and secure it from being switched on again using a padlock.



! DANGER

Risk of electrocution!

SAFETY INSTRUCTIONS



The lift must be de-energised before work begins.

- Switch off main switch (Q2).
- Secure the main switch (Q2) from being switched on again
- Verify that the lift has been de-energised.
- Cover or block off neighbouring live parts. (External voltage source for multi-unit network)

3. Before entering the inside of the lift, lock the actuator of the safety switch on the service door (S3) with a padlock.

SAFETY INSTRUCTIONS



Secure the actuator latch!

Before all work, secure the actuator latch of the service door from being switched on again using a padlock.

4. To remove the interfaces, follow the reverse order of steps as that described previously in Chapter 3.
Close the openings created by removing the interfaces.
5. After removal, dispose of the structural components in an environmentally responsible manner (see Installation Instructions "INST-LL-S" or "INST-LW" or "INST-MS", Disposal instructions).



Hänel Installation Instructions

Interfaces (serial, USB and Ethernet) and cable routing for data transfer MP12N / MP14

Lean-Lift
Multi-Space

8. Annex

Revision notes

- | | |
|--|------------|
| Last issue dated: | 2008-06-24 |
| • With USB, interface adapter is omitted | 2011-03-30 |
| • With Ethernet connecting cable and customer-side peripheral cables | 2011-06-08 |
| • Added installation of the magnetic holder | 2011-09-06 |
| • Cable routing of camera revised | 2011-12-19 |
| • Ethernet connecting cable in electrical tray | 2016-04-25 |
| • MP14 added | |

Hänel
Büro- und Lagersysteme
Postfach 11 61
D-74173 Bad Friedrichshall, Germany
Tel. 0049 (0) 7136/27725
Fax 0049 (0) 7136/27741
<http://www.hanel.de>

Innovative ideas. Sound technology. Flexible systems.

