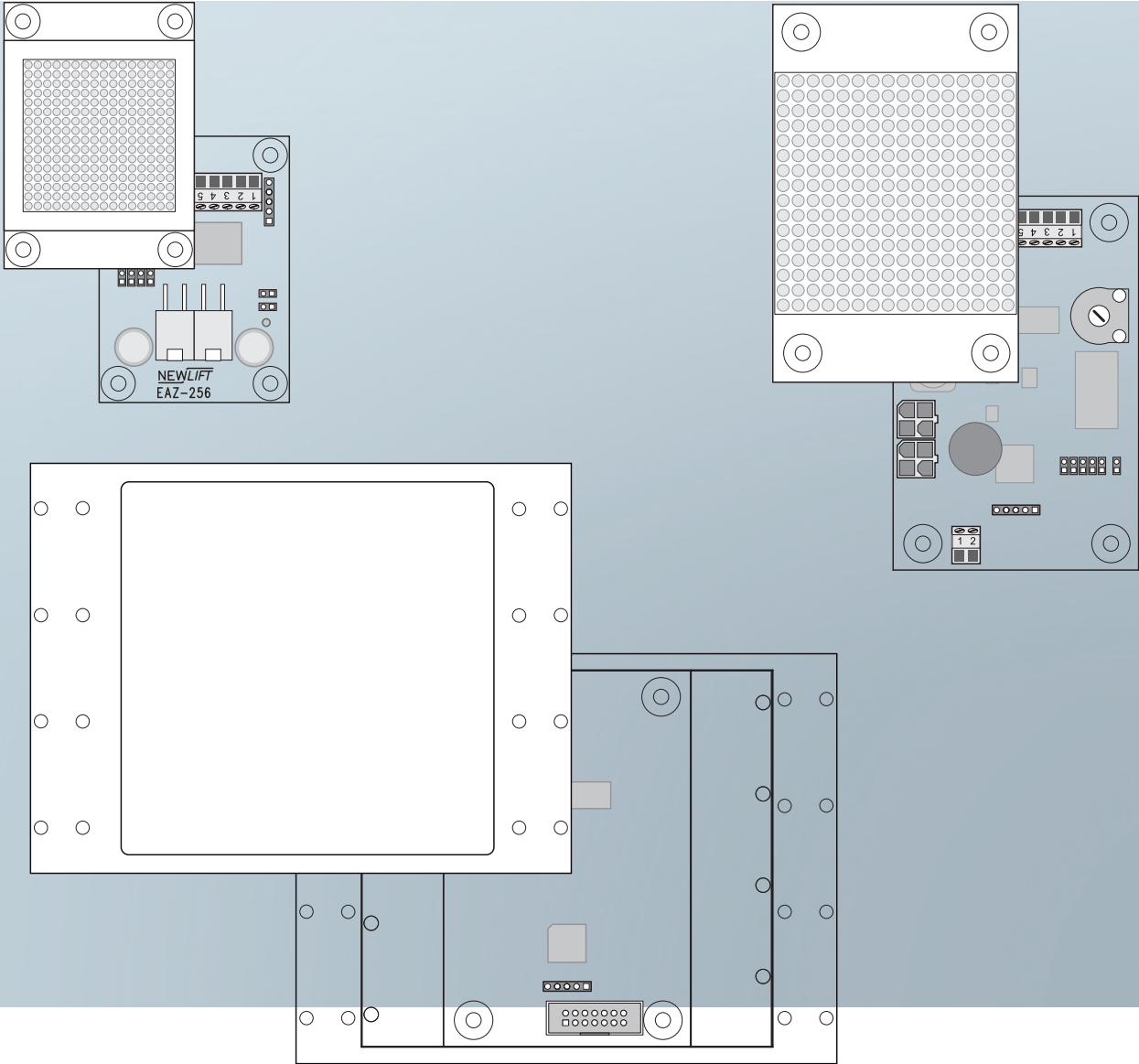




Position indicator



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1 General

The EAZ-256/40 and EAZ-256/64 dot matrix position indicators have been developed for the FST-Controller manufactured by NEW LIFT.



They have a LON-bus interface and features that far surpass the options of the conventional position indicators:

- › Dynamic parametrising of the name displayed for each floor from the controller
- › Dynamic parametrising of the display options from the controller
- › Automatic display of all system states such as overload, out-of-order, special drive, fire recall, fireman service etc.
- › The EAZ-256 is available in five colors: blue, red, green, amber and optionally white.

The EAZ-256 is available in various models. The table below provides the respective functions of the modules:

Function	EAZ-256/40	EAZ-256/64	EAZ-256/64.G	EAZ-256/64.FPM-2
Display area	40 x 40 mm	64 x 64 mm	64 x 64 mm	64 x 64 mm
Integrated ADM	✓	✓	✓	-
Acoustic call acknowledgment	-	✓	✓	-
Integrated chime function	-	✓	✓	-
with external loudspeaker	-	-	✓	-

1.1 Abbreviations, characters and symbols used

Symbol / abbreviation	Meaning
EAZ	Position indicator
P	Power
I	Eingang
O	Ausgang
L	low aktiv
H	hight aktiv
*	Delivery condition Settings that are supplied as standard are marked with an asterisk *
	Warning notice This symbol is located in front of safety-relevant information
	Information notice This symbol is located in front of relevant information.

1.2 Notation

Notation	Meaning
Bold	› Designations of switches and actuators › Input values
<i>Italics</i>	› Captions › Cross references › Designations of functions and signals › Product names
<i>Bold italics</i>	› Remarks
LCD font	› System messages of the controller

1.3 Further information

The following documents, among others, are available for the FST control system and its components:

- › ADM Manual
- › EAZ TFT.45.110.210 Manual
- › EN81-20 Manual
- › FPM Manual
- › FST-2XT/s Manual
- › FST-2XT MRL Manual
- › FST Installation & Commissioning Manual
- › GST-XT Manual
- › LCS Manual
- › RIO Manual
- › SAM Manual
- › Update-Backup-Analysis Manual
- › UCM-A3 Manual

These and other current manuals can be found in the download area of our website at <https://www.newlift.de/downloads.html>

1.4 How to contact us

If, after referring to this manual, you still require assistance, our service line is there for you:

Phone +49 89 - 898 66 - 110
E-mail service@newlift.de
Mon. - Thurs.: 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m.
Fr: 8:00 a.m. - 3:00 p.m.

2 Safety

2.1 General safety regulations

The EAZ-256 position indicators must only be operated in perfect working condition in a proper manner, safely and in compliance with the instructions, the valid accident prevention regulations and the guidelines of the local power company.



This manual is a supplement to the FST manual and the FST Installation and Commissioning manual whose safety guidelines must always be observed.

2.1.1 Standards and regulations applied

All EAZ-256 position indicators comply with:

- › the safety guidelines for the construction and installation of passenger and goods passenger lifts (DIN EN 81 Part 1 and 2).
- › the conditions for the erection of high voltage installations with nominal voltages up to 1 kV (DIN VDE 0100).
- › the contact protection measures in the machine room (VDE 0106).
- › the data sheet on safety measures for the installation, maintenance and commissioning of lift systems (ZH 1/312).

2.1.2 Electromagnetic compatibility (EMC)

An accredited inspection authority has inspected the FST control system and its components in accordance with the standards, thresholds and severity levels named in EN 12015/1995 and EN 12016/1995.

The FST control system and its components are:

- › immune to electrostatic discharge (EN 61000-4-2/1995)
- › immune to electrostatic fields (EN 61000-4-3/1997)
- › immune to fast transient disturbances (EN 61000-4-4/1995)

The electromagnetic disturbance field strengths created by the FST control system and its components do not exceed the permissible thresholds. (EN 55011/1997).

2.1.3 Handling electronic assemblies

- › Keep the electronic assembly in its original packaging until installation.
- › Before opening the original packaging, a static discharge must be performed. To do this, touch a grounded piece of metal.
- › During work on electronic assemblies, periodically perform this discharge procedure.
- › All bus inputs and outputs not in use must be equipped with a terminal resistor (terminator).

3 EAZ-256/40

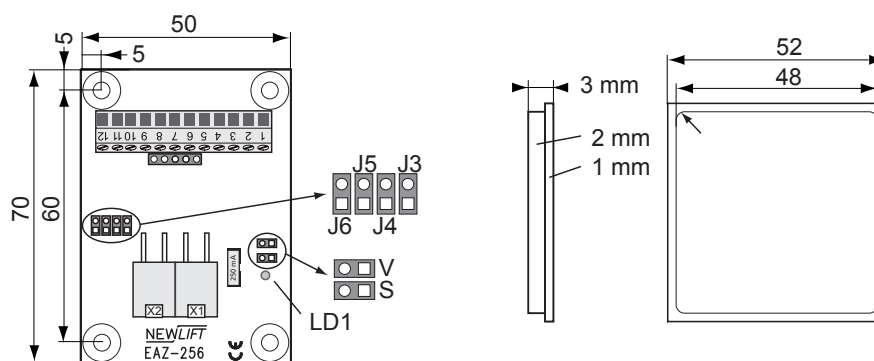
The EAZ-256/40 position indicator is a high quality 16x16 LED dot matrix display with a display area of 40 x 40 mm.

Terminal X3 enables the connection of landing calls, key switches and chime signals. Therefore, no ADM landing call module is required when using EAZ-256/40 in the landing control panel.

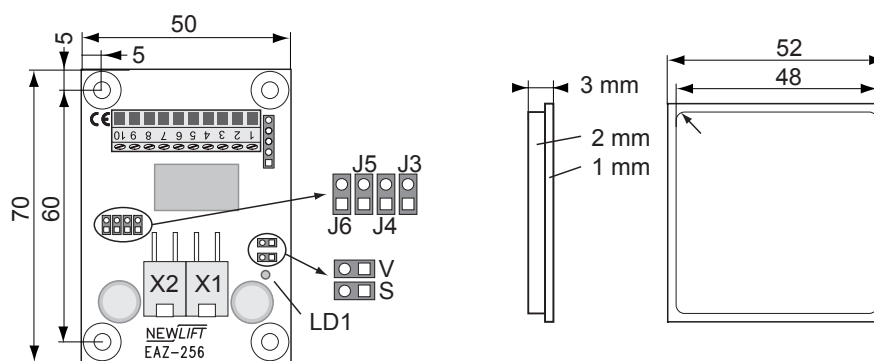
EAZ-256/40 can be used on shaft access from the outside or as LON floor position indicator in the car, because of different special texts or symbols that can be displayed here. These settings can be made via jumper.

3.1 Technical data

Description	Value
Supply voltage	24 V DC \pm 10%
Typical power consumption	100 mA
Outputs	short circuit proof
Length x Hight x Depth (+x: additional distance for cable)	50 x 70 (+20) x 30 mm
Bolt	M3 x 25 mm
Installation depth	35 mm
Bezel cutout	48 x 48 mm; r = 3 mm
Temperature range: Storage & Transportation / Operation	-20 - +70 °C / \pm 0 - +60 °C
Relative humidity: Storage & Transportation / Operation (non-condensing)	+5 - +95 % / +15 - +85 %



EAZ-256/40_V2 Circuit board drawing



EAZ-256/40 Circuit board drawing

3.2 Connection assignment and configuration

3.2.1 Terminal X3

The terminal X3 is needed for connecting of landing control panel components when using EAZ-246/40 on landing control panel.

EAZ-256/40 X3	Function	Technical details
1	+ 24 V	P
2	Landing call UP	I/O; L 350 mA / 24 V
3	Landing call DOWN	I/O; L 350 mA / 24 V
4	Landing call release	O; L 350 mA / 24 V
5	Direction UP	O; L 350 mA / 24 V
6	Direction DOWN	O; L 350 mA / 24 V
7	Chime trigger	O; L 350 mA / 24 V
8	Key switch 1	I; L
9	Key switch 2	I; L
10	GND	P
11	No function at the moment	from version 2.x
12	No function at the moment	from version 2.x

The terminals labelled with key switch 1 and key switch 2 can be factory-provided with the following functions: fire recall, smoke detector, remote shutdown and landing priority.

3.2.2 Jumper

The service jumper S is not plugged in.

Jumper V: Installation position

Installation position	V
horizontal („TOP-H“)	open
vertical („TOP-V“)	plugged

Jumper J3 – J5

FST allocation	J3	J4	J5
FST A	open	open	open
FST B	plugged	open	open
FST C	open	plugged	open
FST D	plugged	plugged	open
FST E	open	open	plugged
FST F	plugged	open	plugged
FST G	open	plugged	plugged
FST H	plugged	plugged	plugged

Jumper J6: Installation location

Installation location	J6
landing	open
car	plugged

4 EAZ-256/64

The EAZ-256/64 position indicator is a high quality 16x16 LED dot matrix display with a display area of 64 x 64 mm.

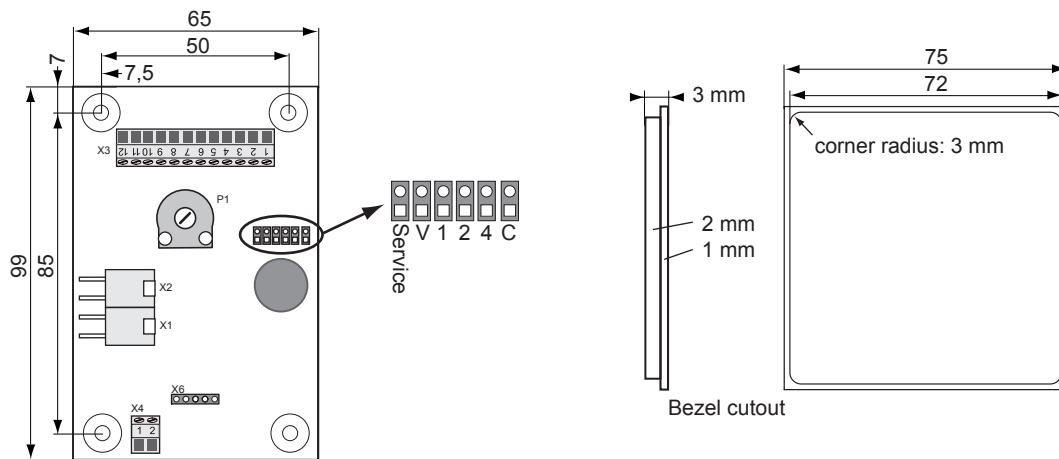
In addition to two acknowledgeable call button connections and an integrated Piezo Summer for acoustic call acknowledgement according to EN81-70, the EAZ-256/64 has also an integrated chime function according to EN81-70 for the approach chime (one sound for up, two sounds for down). The suitable loudspeaker is not included with this delivery (see chapter 4 EAZ-256/64G).

Terminal X3 enables the connection of landing calls and key swithes. No ADM landing call module is required when using EAZ-256/64 in the landing control panel.

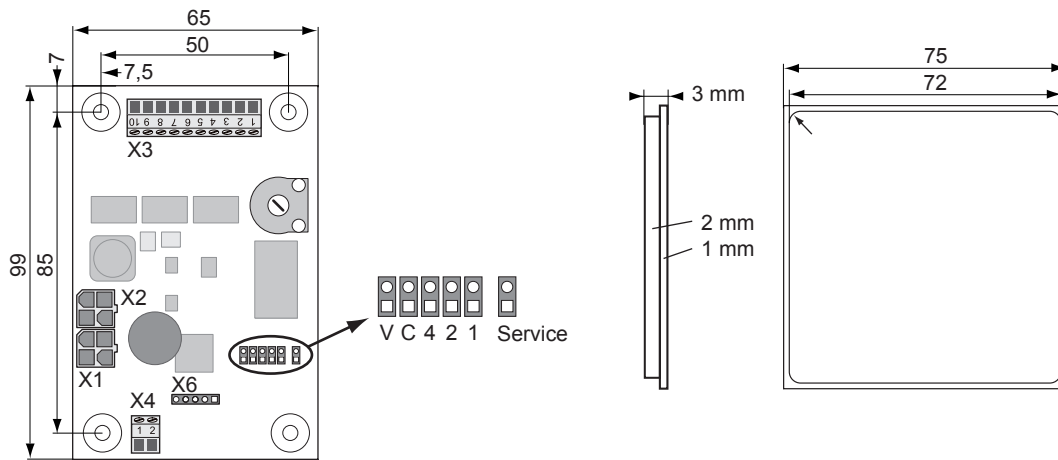
EAZ-256/64 can be used on shaft access from the outside or as LON floor position indicator in the car, because of different special texts or symbols that can be displayed here. These settings can be made via jumper.

4.1 Technical data

Description	Value
Supply voltage	24 V DC \pm 10%
Typical power consumption	200 mA
Outputs	short circuit proof
Length x High x Depth (+x: additional distance for cable)	65 x 99 x 35 (+40) mm
Bolt	M3 x 20 mm
Installation depth	40 mm
Bezel cutout	72 x 72 mm; r = 3 mm
Temperature range: Storage & Transportation / Operation	-20 - +70 °C / \pm 0 - +60 °C
Relative humidity: Storage & Transportation / Operation (non-condensing)	+5 - +95 % / +15 - +85 %



EAZ-256/64_V2 Circuit board drawing



EAZ-256/64 Circuit board drawing

4.1.1 Terminal X3

The terminal X3 is used to connect landing control panel components when using EAZ-246/64 on landing control panel.

EAZ-256/64 X3	Function	Technical details
1	+ 24 V	P
2	Landing call UP	I/O; L 350 mA / 24 V
3	Landing call DOWN	I/O; L 350 mA / 24 V
4	Landing call release	O; L 350 mA / 24 V
5	Direction UP	O; L 350 mA / 24 V
6	Direction DOWN	O; L 350 mA / 24 V
7	+24 V	P
8	Key switch 1	I; H
9	Key switch 2	I; H
10	GND	P
11	No function at the moment	from version 2.x
12	No function at the moment	from version 2.x

EAZ-256/64 X4	Function
1	Gong loudspeaker + (8 Ohm)
2	Gong loudspeaker - (8 Ohm)

The terminals labelled with key switch 1 and key switch 2 can be factory-provided with the following functions: fire recall, smoke detector, remote shutdown and priority landing.

4.1.2 Jumper

The service jumper JS is not plugged in.

Jumper JV: Installation position

Installation position	V
horizontal („TOP-H“)	open
vertical („TOP-V“)	plugged

Jumper J3 – J5

FST allocation	J3	J4	J5
FST A	open	open	open
FST B	plugged	open	open
FST C	open	plugged	open
FST D	plugged	plugged	open
FST E	open	open	plugged
FST F	plugged	open	plugged
FST G	open	plugged	plugged
FST H	plugged	plugged	plugged

Jumper J6: Installation location

Installation location	J6
landing	open
car	plugged

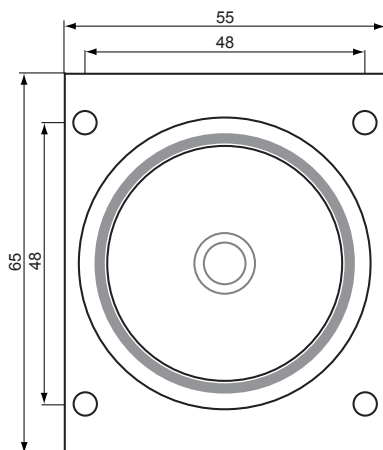
5 EAZ-256/64.G

The EAZ-256/64.G has exactly the same functions as the EAZ-256/64. In addition, the delivery includes a suitable loudspeaker, which is connected to the terminal EAZ-256/64.G X.

Please refer to the chapter 3 „EAZ-256/64“ on page 5 for description of technical data, pin assignment and configuration.

5.1 Technical data loudspeaker

Description	Value
Power	0,5 W
Impedance	8 Ohm
Diameter	50 mm
Installation depth	25 mm



Loudspeaker

5.2 Settings on the loudspeaker

The volume of the chime can be adjusted with the potentiometer P1 at the rear of the EAZ-256.64/G.

6 EAZ-256/64.FPM-2

The EAZ-256/64.FPM-2 is a low cost alternative to a LON position indicator. It hasn't a separate LON nod and can only be operated in connection with the car panel module FPM-2 (see manual of the FPM car panel module).

The EAZ-256/64.FPM-2 has no jumpers or terminals. The position indicator EAZ-256/64.FPM-2 will be connected to FPM-2 (pin connector X5) with ribbon cable via 14-pin connector X5 (NEW-internal SPI-connection). The display information is transmitted to position indicators by the ribbon cable.



Note:

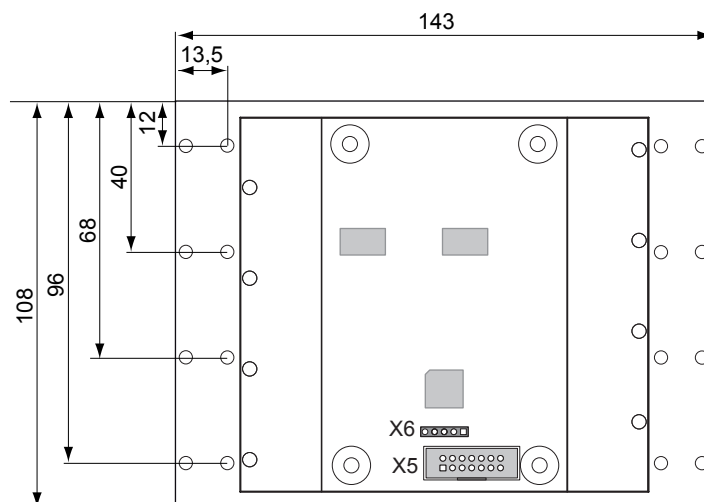
The maximum length of the ribbon cable at the pin connector X5 may not exceed 1,0 m.

All settings such as an installation location of this position indicator and direction of the display picture (jumper JV on the FPM-2) have to be made on the FPM-2.

The EAZ-256/64.FPM-2 will be delivered in a luminous field type MA9999 with red window by SCHÄFER GmbH including the ribbon cable that consists of 14 cores.

6.1 Technical data

Description	Value
Supply voltage	24 V DC $\pm 10\%$
Typical power consumption	100 mA
Length x Hight x Depth	143 x 108 x 35 mm
Bolt	M3 x 12 mm
Installation depth	55 mm
Bezel cutout	99 x 99 mm; r = 2,8 mm
Temperature range: Storage & Transportation / Operation	-20 - +70 °C / ± 0 - +60 °C
Relative humidity: Storage & Transportation / Operation (non-condensing)	+5 - +95 % / +15 - +85 %

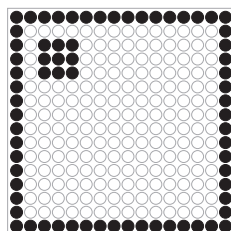


EAZ-256/64.FPM-2 Circuit board drawing

7 Diagnostic assistance

An interrupted LON connection

The display is functional, if the position indicator displays a luminous frame with a small square. However, the connection to the LON-Bus is interrupted.



Position indicator during a power supply and interrupted LON connection

Among others this may be due to one of the following reasons:

- › Incorrect assignment of FST:
Check the jumpers J3, J4, J5 and the corresponding assignment of the FST-IDs
- › The bus cable may be damaged:
Check the cable for proper operation. If necessary contact the service line.
- › The FST may be faulty:
Check the controller for proper operation. If necessary contact the service line.

Display inspection

To make display pixel fault clear, you can carry out a function test of the EAZ.256 by inserting a special cable to the EAZ.256 (only supply voltage, no LON connection). It can be obtained from NEW LIFT.

The position indicator displays the pattern from Fig. 6.1.

If jumper is changed in the switched-on state, the EAZ will switch to full screen mode a short time later. All points of the display inspection will light up simultaneously.

Installation position

The installation position is not correct, if the square is at a different position. 90° corrections can be carried out with the appropriate jumper V.

The EAZ must be turned accordingly, if the installation position can not be regulated using jumper settings.

Function

The yellow Service LED signals that the EAZ-256 in standby state. This is indicated by a short flash when the power supply is switched on.

If the LED continues to flash or the LED lights permanently, it indicates an error.

8 Settings in the FST menu

The options for the position indicators are set in the FST-Menu under `MAIN MENU - Config - EAZ Configuration`. The floor names displayed by the position indicator as well as various display options are set here.

8.1.1 Setting floor names

- › `SetConfig - EAZ Configuration - Use Text = YES`.
- › Enter a two-digit floor name for each floor in `Config - EAZ Configuration - EAZ Text - Text`
- › Use key combination `S+↑` or `S+↓` to scroll through the floors.

8.1.2 Setting type of position indicator

Set the available type of position indicator used under `Config - EAZ Configuration - LON-EAZ Type`. If different types of position indicators are installed in the system, the options of position indicators must be set for each type successively:

- › First select position indicator type
- › Then set all options for the selected type
- › Save
- › Then select next position indicator type
- › Repeat the procedure until the options for all installed position indicator types are set

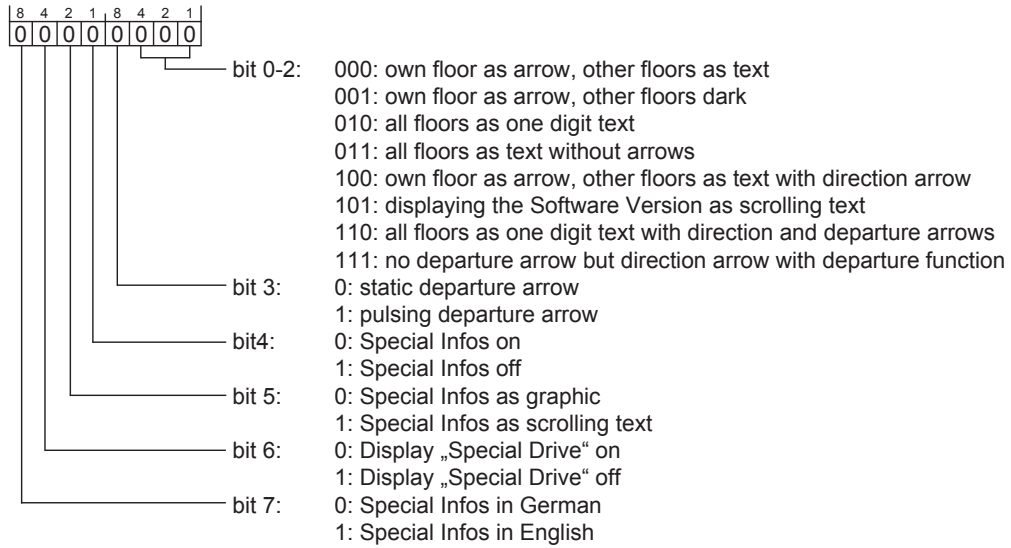
8.1.3 Setting options for position indicator

The position indicator options are set under `MAIN MENU - Config - EAZ Configuration - LON-EAZ Config`.

If jumper J6 is open (display in landing panel), the following options are available in the FST Menu under `Config - EAZ Configuration - LON-EAZ Config`.

The bits of parameter `LON-EAZ Config` have different meanings depending on the setting of parameter `Config - Departure Arrows`:

Departure arrows = Yes

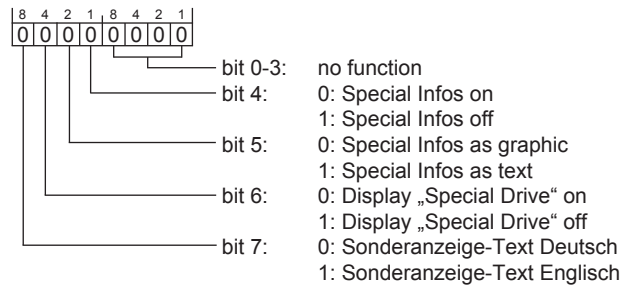


The bits 0-3 are only operable, if jumper J6 is not plugged (Landing Indicator)!

For displaying the Software-Version (bit 0-2) a Reset is required!

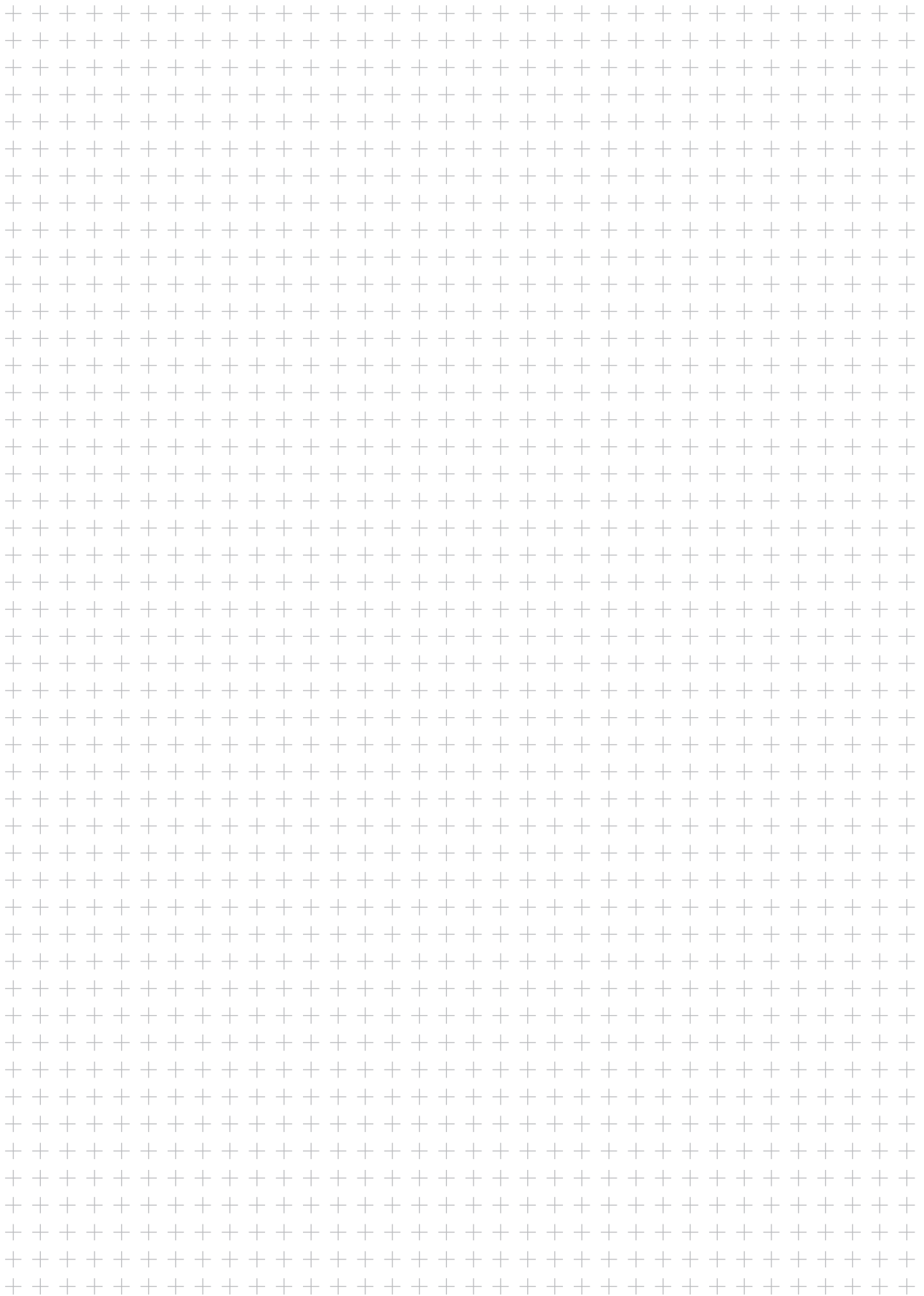
Configuration bits for departure arrows = Yes

Departure arrows = No



Configuration bits for departure arrows = No

NOTES



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