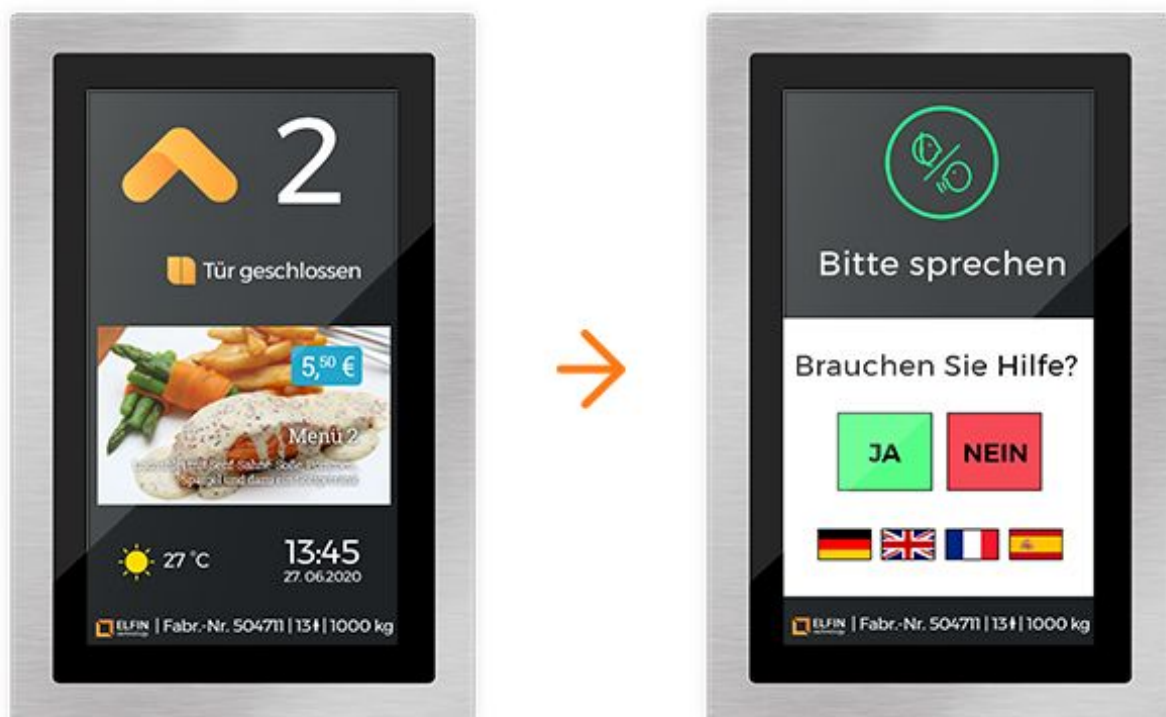


## User manual

# flexyPage Messenger

for the hearing impaired emergency call (2SC)

Version 0.1 - Draft



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# A brief overview

flexyPage is a modern, flexible system for the simultaneous display of lift information and multimedia presentations inside and outside of elevators.

The flexyPage displays are available in different sizes (from 7" to 65") and designs. With the media players in the boxed version, standard monitors and TVs can also be controlled via a DVI/HDMI interface. External sensors, input/output modules and controllers that support the CANopen CiA 417 - CANopen-Lift standard can be connected via the integrated CAN interface. The audio signal is available via a line-out interface or a loudspeaker connection. Various touch sensors can be connected for the input of commands by the user. Configuration and connection to the Internet is done via the LAN interface.

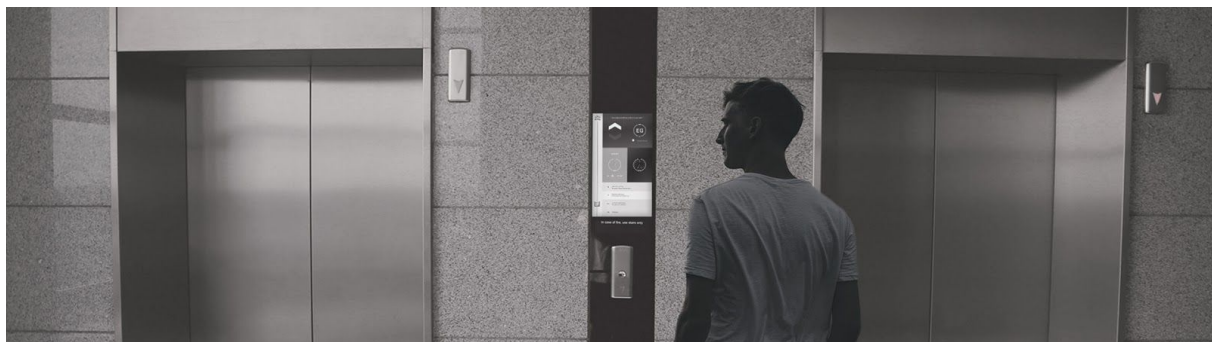
The displays can be used in all elevators for a wide range of applications, both in new buildings and in retrofitting.

The **flexyPage Messenger** is a component of the flexyPage displays. It enables visual communication with the people trapped in an elevator and thus extends the functions of the acoustic emergency call devices for users with a hearing impairment. The functionality of the displays and the control panel are described in this user manual.

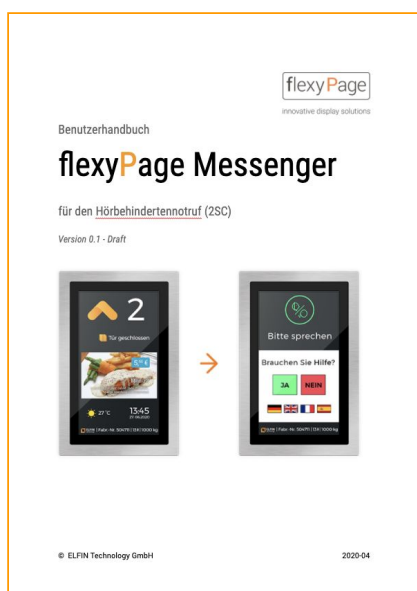


Do you have any questions or suggestions? Please contact us

[sales@flexyPage.de](mailto:sales@flexyPage.de).



# Notes on flexyPage documentation



This user manual describes the features of the Messenger widget and Messenger Server software, how to set it up and configure it, and how to use and interface it. This guide is only a part of the complete product documentation and is subject to constant updates.

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is prepared with great care. Nevertheless, errors cannot be excluded. We are very pleased to receive suggestions and information about errors in our documentation. Please contact our sales or support department.

ELFIN Technology GmbH is not liable for damages, possible errors and their consequences which occur in connection with the delivery or use of this user manual.

Please read the documents carefully before use!



The current version of the manuals, product data sheets and other documents and application examples can be found on the product homepage at:

Introduction to the flexyPage system

Quick start guide

Video and tutorials

flexyPage user manual

Widget descriptions

Product datasheets

Frequently asked questions

Sales contact

Support contact

[flexypage.de/en/doc/documentation](https://flexypage.de/en/doc/documentation)

[flexypage.de/en/doc/documentation](https://flexypage.de/en/doc/documentation)

[flexypage.de/en/videos-and-tutorials](https://flexypage.de/en/videos-and-tutorials)

[flexypage.de/en/doc/documentation](https://flexypage.de/en/doc/documentation)

[flexypage.de/en/doc/widget-descriptions](https://flexypage.de/en/doc/widget-descriptions)

[flexypage.de/en/doc/documentation](https://flexypage.de/en/doc/documentation)

[flexypage.de/en/faq](https://flexypage.de/en/faq)

[flexypage.de/en/sales](https://flexypage.de/en/sales)

[flexypage.de/en/support](https://flexypage.de/en/support)

## Safety Instructions

### Safety instructions and restrictions



Follow all instructions in this manual and on the device.

An exclamation point within a warning triangle alerts you to special instructions on the product.

Installation and commissioning may only be carried out by qualified personnel! The repair of defective displays may only be carried out by ELFIN support. Independent opening of the housing can damage the display and leads to immediate loss of warranty claims. If the unit is already damaged at delivery, do not connect it to the power supply! Please contact the ELFIN support.

Do not use caustic, sharp cleaning agents when maintaining the unit and do not attach sharp objects to the glass.

Heat build-up can cause the flexyPage display to overheat. This can cause damage to the display. The internal electronics are passively cooled by the housing. Ensure sufficient air circulation around the flexyPage display. If the housing is equipped with ventilation slots, make sure that the ventilation slots are always free. Moisture and liquids entering the flexyPage display can cause electric shock or short circuits. Only use the displays inside buildings. Do not allow liquids to enter the inside of the display.

## Application area of the flexyPage Manager

Modern elevators are equipped with an emergency call system that establishes a two-way voice connection to a permanently occupied location. The employees in the control centre can speak to the trapped persons via this connection.

Persons with impaired hearing cannot hear the questions from the switchboard and therefore cannot communicate with the employees. They do not know if their alarm has been registered and if help is on the way.

The situation is also unsatisfactory at the control centre. When an emergency call is made, the employee speaks to the trapped persons and does not receive an answer. A technician has to be sent to the system, even if there is a possibility that it was an operating error.

The flexyPage Messenger offers the possibility of a visual two-way communication from a control centre to the lift car, as a supplement to the acoustic emergency call.

The system can be used with all emergency call devices that provide the signals of the alarm button, 'Please wait' and 'Please speak' as discrete signals or have a CANopen Lift interface. The functionality of the acoustic emergency call does not change by using the flexyPage 2-sense communication (2SC) and cannot be replaced by it.

The flexyPage displays with the 2SC function are connected to the same permanently manned location that also receives the acoustic emergency call. The employees can then

communicate with the trapped persons via both ways. The connection to the control centre is made via the Internet or Intranet redundant to the acoustic emergency call system.

## Principle of operation

The emergency call in the elevator is realized autonomously by the emergency call device according to EN81-28. The emergency call device is connected to a permanently manned location.

The flexyPage display with the Messenger Widget is installed in the car operating panel and connected to the emergency call device and the elevator control via discrete signals or CANopen. The display communicates with the emergency call centre IP-based via the local network or the Internet.

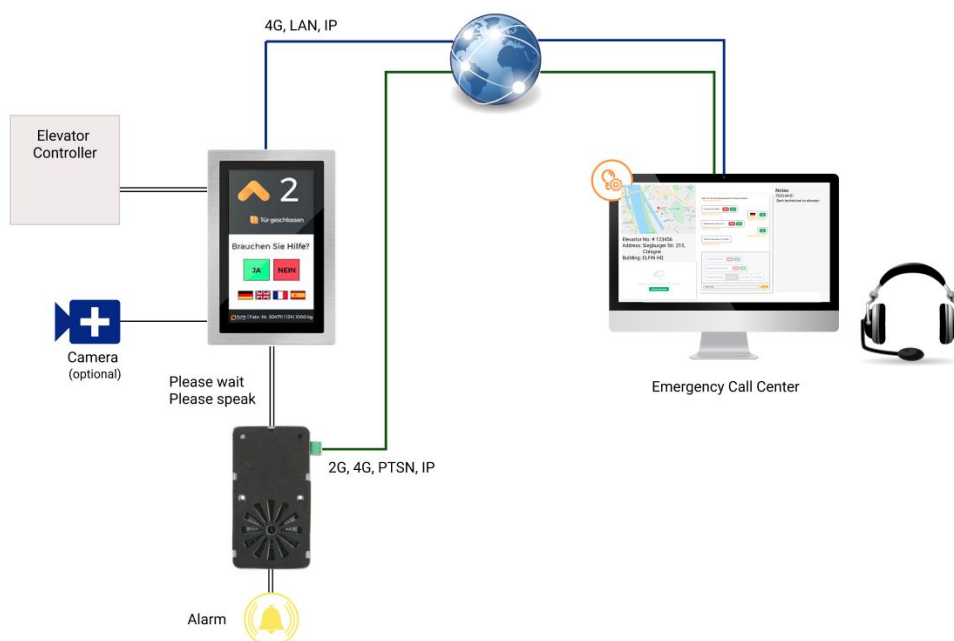


Figure: Functional overview for the hearing impaired emergency call in elevators

Optionally, the display can be extended with a camera that is only active during an emergency call and shows the situation in the cabin.

In the emergency call centre there is a workstation at which the acoustic and visual emergency calls are received and logged.

The user input by the trapped person can be done by touch screen (standard) or by two additional buttons 'Yes', 'No'. Only language selection and simple yes/no questions can be realised via the buttons, and questions with several answers can also be sent by touch.

The display with the 2SC can also be retrofitted in existing lifts of all brands.

Optionally, the display can also be used to display tenant information or advertising, e.g. via flexyPage Campaign.

## Requirements

For the two-sense communication (2SC) an emergency call device for lifts is necessary that can provide at least the signals 'Alarm', 'Please wait', 'Please speak' as discrete signals or via CANopen-Lift.

An IP connection is required for communication with the control center. This can be done via a 4G router, the local network or an Internet connection.

The central office must have access to the flexyPage server software. This can be done as SaaS web service or as local installation. The operation of the software is web based. Only a PC with a current browser is required.

Optionally, a USB or network camera can be connected to the display, which allows a view into the cabin in case of an emergency.

## Commissioning the display

### Assembly

Instructions for mounting the displays in an elevator can be found in the product data sheet of the display.

### Electrical connection

Instructions for the electrical connection of the displays in an elevator can be found in the product data sheet of the display.

### Setting up the Messenger Widget

The basic setup of the flexyPage displays is described in the flexyPage Displays user manual.

In addition to the widgets for displaying lift information, weather, tenant information or advertising, the flexyPage Messenger Widget must be activated and set up for 2SC communication.

To do this, drag the widget from the widget library onto the screen and place it in the display area intended for visual communication.

Set the following parameters for the communication with the central office:

URL

## Functional test

After setting up the display and Internet connection, you can perform a function test.

To do this, press the alarm button in the elevator. An acoustic connection to the emergency call centre will be established. The Messenger Widget must now appear on the display. If several languages are set up, the language selection appears. You can select a language by touching or using the Yes/No buttons. Afterwards, the center can send you voice messages. The test call can be ended by the central office and the display will show the configured screen design again.

## Adding a video camera

Many elevators are equipped with a camera that allows a view into the car in case of an emergency call or fire. The flexyPage displays can be used with USB or network cameras. To do this, connect the camera to the display and set up the interface to the camera.

Then carry out a function test as described in the previous chapter.

If the emergency call connection to the control center is established, a button to activate the camera will appear on the screen in the control center. The operator in the control center can now activate the camera and check its function. After the emergency connection is terminated, the camera in the elevator is switched off again.

# flexyPage Messenger Server

## Overview

The flexyPage Messenger Server is a modern web application that can be used by many clients with a browser. The company ELFIN Technology provides the software emergency call centres as SaaS software.

If required, a local installation on a server in an emergency call centre or a local network of a building complex is also possible.

The server software establishes the encrypted connection to all connected displays and monitors the connection status in real time.

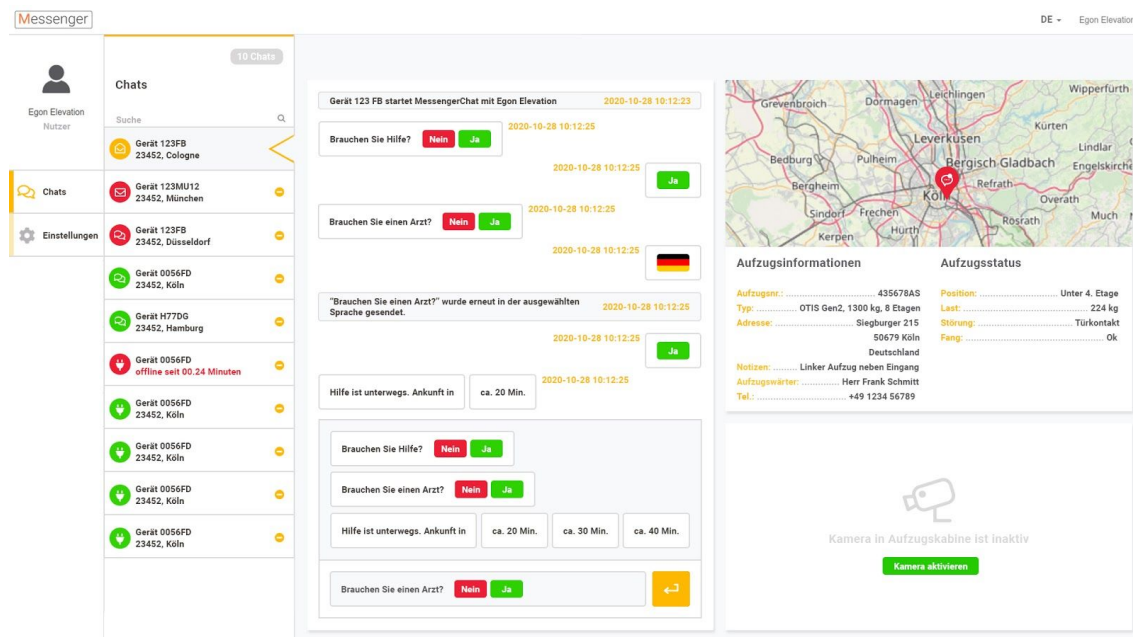
Users can be created and assigned different rights.



Administrators can add new displays, set up additional languages and set up predefined questions and text modules including translations.

The communication with the displays is logged on the server.

Via the open APIs, flexyPage Messenger can be easily integrated into the emergency call software of other companies.



## Installation

### SaaS or local installation

If you run a permanently manned office that manages emergency calls from elevators, you can extend it with flexyPage Messenger to also enable visual communication with hearing impaired users.

The easiest way is to use flexyPage Messenger as a SaaS service. For this you only need an account in our flexyPage portal. Then you can immediately start using the functions of flexyPage Messenger.

If you would like to host the server software in your data centre yourself, we can provide the server software as a docker container or virtual machine. Please contact our sales department to discuss your requirements and to receive a non-binding offer.

## External service provider (via the Internet)

If you, as a lift company, maintenance company or operator, connect the emergency calls of your lifts to an external service provider, then please contact them for information about the possibilities of connecting a display.

If your service provider is not yet able to offer this service, we will be happy to help you find an alternative service provider.

## User setup

### Adding devices

### Definition of languages

### Definition of predefined messages

### Functional test

### Logging

## Interface description for the Messenger API

## Interface description via the lift chat protocol

Are special port clearances necessary?

Device --> MQTT (SSL: 8883, unencrypted: 1883)

Frontend --> MQTT (WebSockets: WSS: 8081, WS: 9001)

Frontend (Browser) --> API (SSL: 443, unencrypted: 80, with redirect to 443)

Browser --> Frontend (SSL: 443, unencrypted: 80)

# Glossary

## Widget

A **widget** [<sup>1</sup>wɪdʒət] is a component of a graphical window system. The widget consists on the one hand of the window, a visible area that receives mouse and/or keyboard events, and on the other hand of the non-visible object that stores the state of the component and can change the visible area via certain drawing operations. Widgets are always integrated into a specific window system and use it to interact with the user or other widgets of the window system.

*Source: en.Wikipedia.org*

# Document history

Version	Release date	Release notes
0.1	2020-04-12	pre release

## Your contact persons

Even an extensive documentation cannot answer all questions. Do you have questions or suggestions concerning our flexyPage system? We look forward to your requests. You can contact us at:

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