GIRA



Gira IP door communication

System basics

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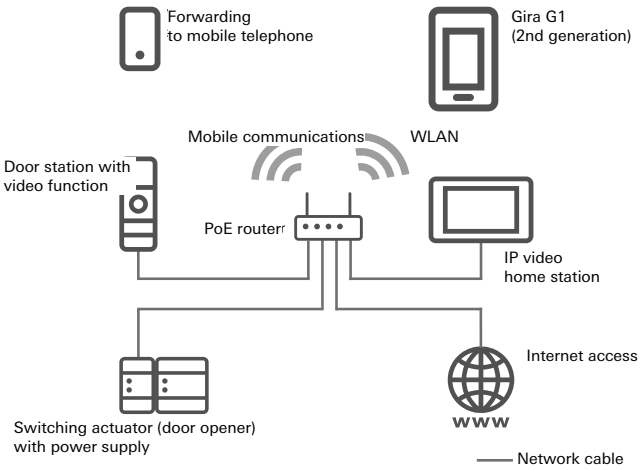
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1 Introduction

1.1 The Gira IP door communication system

The IP-based Gira IP door communication system offers a scalable and powerful solution for residential and commercial properties. It can be used in various scenarios, from single-family homes to properties with up to 1000 residential or rental units per system. The system makes it possible to integrate up to 100 door stations across several buildings. Up to 10 clients can be connected within a residential or rental unit, with a maximum number of 10,000 stationary clients per system. There are up to 100 IP switching actuators available for controlling door openers or performing switching actions, and up to 200 external IP cameras can also be integrated.



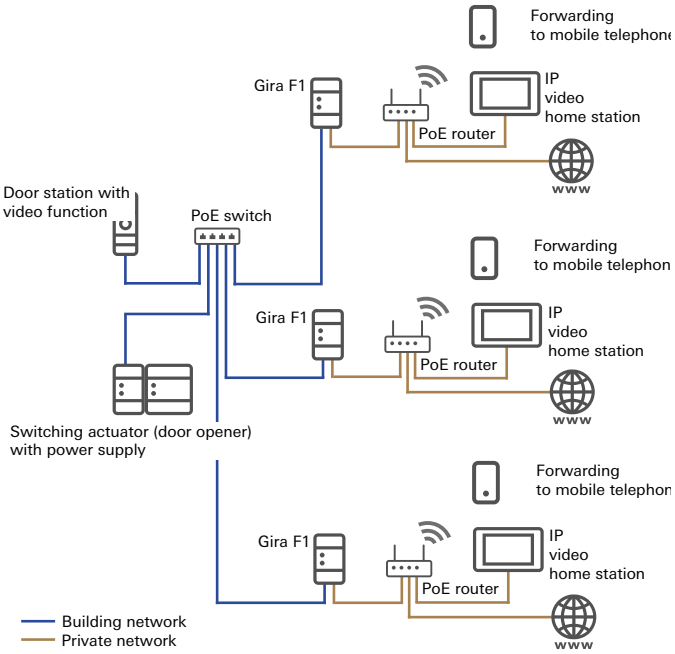
Gira IP door communication system

The system is server- and licence-free and does not require a cloud connection – either during commissioning or during ongoing operation of the door communication system. Communication is encrypted according to current security standards. The system is based on international standards and offers a Concierge function via PC software.

Third-party clients and IP telephone systems can be integrated via the Gira F1. Dedicated access for diagnostics and administration is available for operators. Connecting to the mobile app via Gira clients is user-friendly (the Gira DCS mobile app requires a paid Apple or Google subscription via in-app purchase).

Configuration and commissioning are efficient and easy using the Gira Project Assistant (GPA), from version 6.0. Configuration can be completed without hardware. After installation, commissioning can be completed in less than 10 minutes, and can be staggered. All components can be updated centrally and global settings can be configured across devices (depending on the selected project type). Complete documentation can be generated and exported automatically.

The door stations are part of the modular and award-winning Gira System 106 design. The Gira F1 ensures secure network separation between building and private networks, while the Gira S1 enables secure remote access. Integration into the Gira Smart Home system is via the second-generation Gira G1.



Network separation with the Gira F1

Important information

The descriptions and examples contained in this manual refer to the Gira Project Assistant from version 6.1 onwards in conjunction with the Gira System 106 intercom module firmware version 1.1.31 and up.

The contents apply to the current software version at the time of publication. Due to software updates, firmware updates or functional upgrades, representations, functions and processes may differ from the contents described here.

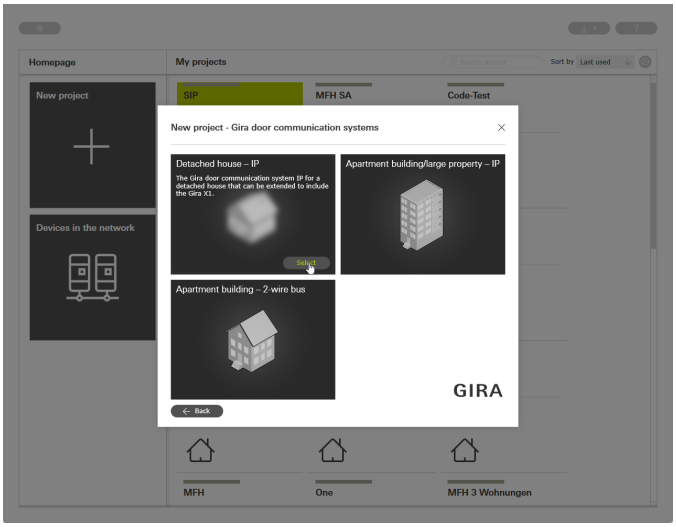
1.2 Planning, configuration, commissioning

To plan the door communication system, you first need to assess the local conditions and the individual needs of your customer. You can use these details to compile suitable components and functions. The information in this document will help you to select the appropriate devices.

Gira Project Assistant (GPA)

The Gira IP door communication system is configured using the Gira Project Assistant (GPA). You can always find the latest version of the Gira Project Assistant software on the Gira homepage, under Downloads:

- Download Gira Project Assistant



The Gira Project Assistant

1.3 Gira Academy – Specialist knowledge. Anytime, anywhere.

With the web-based training courses on Gira door communication systems, you can learn wherever and whenever you want. You can complete the multimedia content and practical simulations through self-study on the Internet. The web-based training courses are also optimised for mobile devices such as tablets and smartphones. This means you can access your specialist knowledge at any time during discussions with customers or on a construction site. At the end of the training course, there is the opportunity to take a voluntary exam. Anyone who passes it will receive a certificate from Gira confirming that they took the course and passed the exam.

The webinars on Gira door communication systems are online seminars that take place at various times in a virtual classroom. You will be connected in real time to the trainer and other course participants via the Internet. The trainer will give a presentation with slides, applications and simulations, answer your questions and provide the opportunity for discussion with other participants. To participate in the webinar, you will need a computer, a headset and Internet access. An additional benefit of the web-based trainings and webinars is that they do not involve any travel or accommodation costs. The Gira Academy also offers further training on other intelligent building technology topics.

Learn more about the comprehensive training offer available at

- academy.gira.com



Gira Academy

1.4 Promoting measures for age-appropriate conversions

KfW Bankengruppe supports individual measures for greater accessibility and safety. Home owners and tenants can apply for a subsidy or loan for their Gira door communication system.

Let your customers know!

Applications for measures to increase accessibility and safety must be submitted via the "Altersgerecht umbauen – Kredit (159)" [age-appropriate conversions – loan (159)] funding programme. In some cases, it is even possible to combine this with the KfW "Energieeffizient sanieren" [energy-efficient renovations] programme.

For all applications, further funding information and the current conditions, visit www.kfw.de/kfw.de-2.html

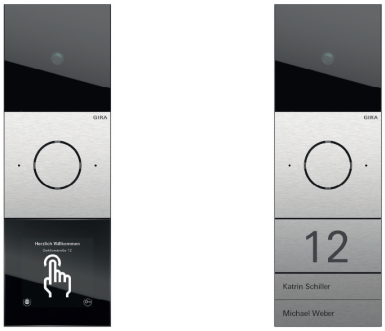
⊕ Key points at a glance

- Promotional loan from 2.32% APR*
- Loans of up to EUR 50,000, regardless of your age
- Can also be used to buy converted housing

*As of January 2026

2 Overview of devices

2.1 Gira System 106



System 106 door station

The Gira System 106 is a real-metal installation system with an elegant, minimalist and frameless design, basic dimensions of 106.5 × 106.5 mm and a low profile height of 28.7 mm. With the Gira System 106 modular door station, hospitality begins right at the front door. From call display, call button, intercom and camera modules to info and blank modules, in all design surfaces, such as a glass surface for integrating third-party access control readers, all functions are presented in a harmonious overall design. In the dark, the backlit call buttons with inscription space ensure good readability and an attractive appearance.

Customisable, thanks to modular design

The System 106 can be used in single-family and multi-family homes, and also in office buildings, industrial properties and hotels. The modular design makes it possible to adapt the system's size, design and functionality to suit individual needs. Extensions and changes can be easily implemented at any time by replacing modules.

Even just changing the front is possible with the system. This means that the appearance of the system can be changed retrospectively from, for example, traffic white to a stainless steel surface, without having to replace the electronic components.

High-quality materials

The modules are frameless with real material design fronts available in two brushed stainless steel variants (V2A and V4A), anodised aluminium C-0, PVD bronze, metal alloy lacquered in traffic white (RAL 9016) and powder-coated in black matt V2A: robust materials that ensure durability. Camera and display module (DIN 18040) have a black glass cover. The stainless steel surface V4A is suitable for use in the vicinity of seawater and also harmonises particularly well with the surface used by the letterbox manufacturer Renz.

Easy installation and mounting in stages

In the case of surface-mounted installation, the system can be installed in various stages, in parallel with the progress of construction. This makes it possible to initially install only the lower part of the surface-mounted housing in the building shell; cables and modules can then be added when they are needed.

In the case of flush mounting, it is sufficient to use the external thermal insulation composite system (ETICS) module or the housing for the customer-supplied front plates, such as letterbox systems. The door station assembly, consisting of the housing and functional modules, can be connected and put into operation once construction is complete.

Staggered acceptance is also guaranteed. This allows the network cable to be measured via the RJ45 plug and a test log to be created.

The enclosed installation space extension replaces the standard cable feed-through of the surface-mounted housing and extends into the flush-mounted device box. This protects the keystone adapter used for the connection from environmental influences.

Individual inscription options

Call-button modules and info modules can be individually laser-inscribed using the Gira inscription service.

Modular system

System 106 is a modular system. Depending on requirements, the various modules can be combined to form a door station. The following modules are currently available:

- IP intercom module
- IP call display module
- Call-button module 1-gang to 4-gang
- IP camera module
- Display module (DIN 18040)
- Info module
- Blank module

The modules can be arranged vertically or horizontally in 1-gang to 5-gang housings or in a square 2 x 2 housing.

Note:
The IP camera module must always be installed directly next to the IP intercom module.

Larger systems can be implemented in consultation with the Gira field service. Please get in touch with your personal contact directly.

Installation is surface-mounted or integrated into a letterbox or parcel system.

⊕ Note on the ambient temperature of a door station

The door station consists of several modules with different permissible ambient temperatures.
Please note that the maximum permissible ambient temperature of the entire door station is determined by the module with the narrowest temperature range.

Therefore, make sure that the door station is only operated in environments that meet the requirements of all installed modules.
Detailed information on the temperature ranges can be found in the technical data of the respective modules.

2.2 System 106 surface-mounted housing



Order no. 5501 .., 5502 .., 5503 .., 5504 .., 5505 .., 5508 ..

Features

The System 106 surface-mounted housings are used to mount the System 106 modules. Regardless of the construction progress, the housings can already be mounted in the building shell. Cables and modules can be added when they are needed.

With the housings, the modules can be arranged 1-gang to 5-gang vertically or horizontally, or 2 x 2 in a square. Installation is surface-mounted. Larger systems can also be implemented in consultation with the Gira field service. Get in touch with your personal contact for this.

Technical data

Dimensions (W x H x D)	
1-gang:	106.5 x 106.5 x 25.35 mm
2-gang:	106.5 x 213.0 x 25.35 mm
3-gang:	106.5 x 319.5 x 25.35 mm
4-gang:	106.5 x 426.0 x 25.35 mm
2 x 2-gang:	213.0 x 213.0 x 25.35 mm
5-gang:	106.5 x 532.5 x 25.35 mm

2.3 System 106 housing for flush mounting



Order no. 5511 00, 5512 00, 5513 00, 5514 00, 5515 00, 5518 00

Features

The System 106 housings for flush mounting are used to mount the System 106 modules. With the housings, the modules can be arranged 1-gang to 5-gang vertically or horizontally, or 2 x 2 in a square.

Larger systems can also be implemented in consultation with the Gira field service. Get in touch with your personal contact for this.

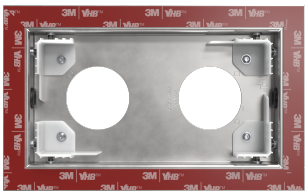
On external façades with an external thermal insulation composite system, and also for highly insulating masonry and timber structures, the housing is installed in a façade module with a surrounding PVC plaster profile. The façade module is produced with the correct thickness of ≥ 14 cm and insulation material (e.g. EPS, mineral wool) depending on the property, and is sourced and plastered into the façade by the company responsible for the façade.

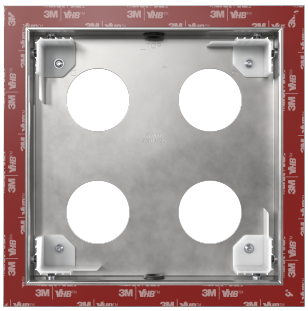
The System 106 housing for flush mounting and the System 106 modules can then be installed. The operating surface of the modules is flush with the façade surface when installed. A circumferential design gap (plastering strip) provides a frameless appearance.

Technical data

Dimensions (W x H x D)	
1-gang:	106.5 x 106.5 x 25.35 mm
2-gang:	106.5 x 213.0 x 25.35 mm
3-gang:	106.5 x 319.5 x 25.35 mm
4-gang:	106.5 x 426.0 x 25.35 mm
2 x 2-gang:	213.0 x 213.0 x 25.35 mm
5-gang:	106.5 x 532.5 x 25.35 mm

2.4 System 106 installation box for flush mounting





Order no. 5521 00, 5522 00, 5523 00, 5524 00, 5525 00, 5528 00

Features

The installation box for flush mounting can be used for seamless integration into customer-supplied front plates, door-side installation and letterboxes. The installation box can be simply glued or screwed in.
The housing is available in an anthracite lacquered metal alloy and is made of robust materials that ensure a long service life. Both vertical and horizontal mounting is possible, which ensures optimum adaptation to the installation location in question. The installation box is specifically designed for use with customer-supplied front plates such as letterboxes or door-side installations.

Technical data

Dimensions (W x H x D)	
1-gang:	168 x 168 x 38 mm
2-gang:	168 x 274 x 38 mm
3-gang:	168 x 381 x 38 mm
4-gang:	168 x 487 x 38 mm
2 x 2-gang:	274 x 274 x 38 mm
5-gang:	168 x 594 x 38 mm

2.5 IP intercom module



Order no.: 5592 …

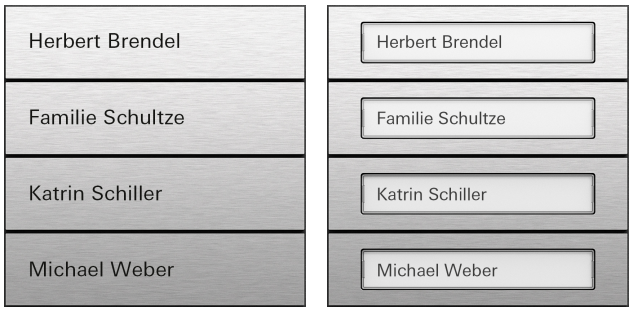
Features

The IP intercom module enables high-quality audio communication between indoors and outdoors in HD quality with full-duplex speakerphone function.
Two integrated microphones and a weatherproof speaker ensure clear communication – even if there is loud background noise, which is effectively suppressed by Active Noise Cancelling (ANC).
Power is supplied via Power over Ethernet (PoE). All other System 106 modules of the door station are supplied with power via the IP intercom module.

Technical data

Power supply:	PoE via RJ45 PoE standard IEEE 802.3af-2003, PoE standard IEEE 802.3at-2009, PoE standard IEEE 802.3bt-2018-1 Only power injectors with a maximum output power of 30 W may be used.
Protection class:	III (SELV)
Power consumption:	Idle state: 1.75 W Audio-call state: 2.50 W Video-call state: 2.76 W
Connections	
Network and PoE power supply:	RJ45 (only to be operated in conjunction with the supplied patch cord)
Video components:	1 x camera module connection 1 x call display module connection
System:	2 x connector strip
Ambient temperature:	-20°C to +50°C
Protection class:	IP54
Dimensions in mm:	W 106.5 x H 106.5 x D 28.7

2.6 Call-button module



Order no.: 5531 .. – 5534..

Features

The call-button modules are available with one to four call buttons. They can be combined with an IP intercom module to form a door station. The call buttons of the call-button modules are easy to operate, vandalism-proof and scratch-resistant. Function changes, e.g. from 2-gang to 4-gang, can be easily implemented by replacing the buttons.

The modules can be arranged vertically or horizontally in 1-gang to 5-gang housings or in a square 2 x 2 housing.

Installation is surface-mounted or integrated into a letterbox or parcel system.

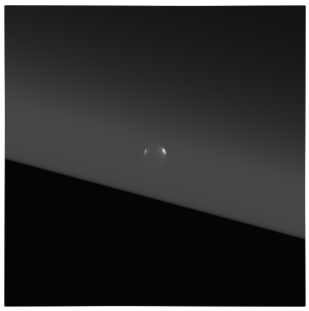
The call button can be individually inscribed via the Gira inscription service.

- www.beschriftung.gira.de/en/

Technical data

Connections	
Power supply:	via flat ribbon cable, 10-pole
Power consumption	
Maximum:	160 mW
Stand-by mode:	14 mW
System connections:	2 x connector strip
Ambient temperature:	-25°C to +70°C
Protection type:	IP54
Dimensions in mm:	W 106.5 x H 106.5 x D 28.7

2.7 IP camera module



Order no. 5562 000

Features

With the IP camera module, the IP door communication system can be expanded to include a powerful video function. Behind the black glass panel is a high-quality, high-sensitivity Full HD camera that delivers clear images even in challenging lighting conditions. Thanks to a generous detection angle of 126°, the module offers a broad overview of the entrance area at all times. In the dark, the camera automatically switches to night mode, ensuring reliable image transmission even when visibility is poor. If necessary, the black glass panel can be replaced via the Gira Service Centre.

Technical data

Connections	
Power supply:	via flat ribbon cable, 10-pole
Video:	1 x connector strip
System:	2 x connector strip
Power consumption	
Idle state:	130 mW
Idle state and heating:	1.36 W
Active state, day:	1.53 W
Active state, night:	3.32 W
Camera sensor	
Type:	CMOS
Resolution:	Full HD [1920 x 1080], 16:9, at 2 MP
Visible detection range:	126° horizontal, 67° vertical
Contrast ratio:	800:1
Ambient temperature:	-20°C to +50°C
Protection class:	IP54
Dimensions in mm:	W 106.5 x H 106.5 x D 28.7

2.8 IP call display module



Order no. 5564 000

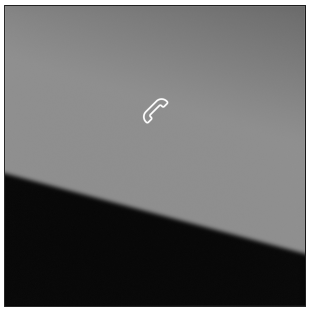
Features

The IP call display module supplements the door station with a modern 4 IPS full-touch display, featuring intuitive operation. It offers maximum flexibility by allowing up to 1000 users to be called directly. The smart alphanumeric search function speeds up selection, while the option to temporarily switch languages provides a user-friendly way for international guests to operate the device. The module also has a keypad function, which can be enabled if needed. Configuration and administration are carried out conveniently via a web browser. An integrated proximity sensor activates the display automatically and detects dirt at the same time. Thanks to its excellent readability from different viewing angles – even in direct sunlight – and unrestricted operability in rain, the module is ideal for outdoor use.

Technical data

Power supply:	via flat ribbon cable, 10-pole
Display	
Size:	4-inch IPS TFT LCD full-touch display
Resolution:	480 x 480 pixels (active area)
Brightness:	950 cd/m^2
Viewing angle:	85°
Power consumption	
Idle state (display off):	300 mW
Active state (display on, max. brightness):	1.3 W
Connections	
Video:	1 x connector strip
System:	2 x connector strip
Ambient temperature:	-20°C to +50°C
Protection class:	IP54
Dimensions in mm:	W 106.5 x H 106.5 x D 28.7

2.9 Display module



Order no.: 5567000

Features

The display module is used to visually indicate when a visitor is being requested to speak and when the door has been opened.

The module meets the DIN 18040 accessible construction standard.

Technical data

Connections	
Power supply:	via flat ribbon cable, 10-pole
Power consumption	
Maximum:	250 mW
Stand-by mode:	14 mW
Connections	System: 2 x connector strip
Ambient temperature:	-25°C to +70°C
Protection type:	IP54

2.10 Info module



Order no. 5560 ..

Features

The info module can be used, for example, to make house numbers or names clearly visible and to integrate them into the door station in the System 106 design.

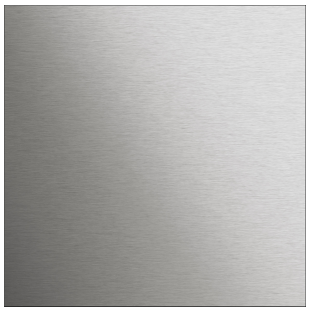
The module can be individually inscribed via the Gira inscription service.

- www.beschriftung.gira.de/en/

Technical data

System connections:	2 x connector strip
Ambient temperature:	-25°C to +70°C
Protection type:	IP54
Dimensions in mm:	W 106.5 x H 106.5 x D 28.7

2.11 Blank module



Order no. 5568 ..

Features

The blank module leaves room for future applications and serves as a design element for implementing large-scale door stations in the system design.

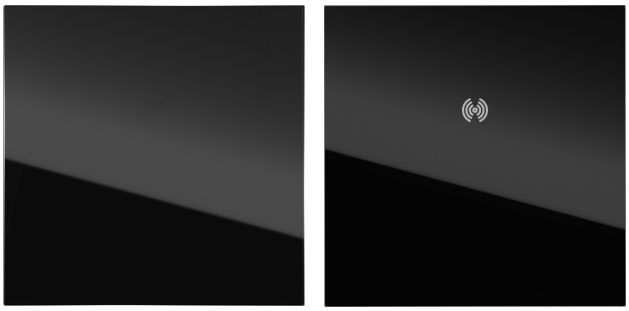
The module can be individually inscribed via the Gira inscription service.

- www.beschriftung.gira.de/en/

Technical data

System connections:	2 x connector strip
Ambient temperature:	-25°C to +70°C
Protection type:	IP54
Dimensions in mm:	W 106.5 x H 106.5 x D 28.7

2.12 Blank module; blank module RFID



Order no. 5593 .., 5594 ..

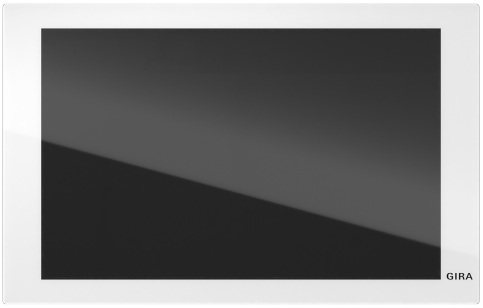
Features

The Gira System 106 blank module in black glass leaves room for future applications and serves as a design element for implementing large-scale door stations in the system design. It can also be used to integrate third-party access control readers into the Gira System 106 design. To ensure system sealing when additional cabling is used for the third-party application, the Gira System 106 black glass blank module variants with and without "RFID" pictogram are supplied in a sales package with a Gira System 106 housing.

Technical data

Ambient temperature:	-25°C to +70°C
Protection type:	IP54
Dimensions in mm:	W 106.5 x H 106.5 x D 28.7

2.13 IP video home station



Order no. 1237 .., 1238 ..

Features

- Home station for the Gira IP door communication system
- Home station with SIP client
- Home station for DCS IP gateway
- Fully pre-assembled unit with a 17.78 cm (7") HD colour display
- Convenient speakerphone function
- Full-surface glass front with touch functionality
- Very wide viewing angle from all directions
- Zero-voltage input for connecting a floor-call button
- Wall mounting in dual device box
- WLAN interface (Order No. 1237)

Technical data

Power supply:	PoE: PoE performance class 0: DC 48 V PoE PoE standard: IEEE 802.3af or DC 16–31 V ± 2 V
Power consumption:	Maximum: 8 W Typical: 4 W
Network connection:	RJ45
Power supply connection:	2-pole plug terminal
Floor-call button connection:	2-pole plug terminal
Display diagonal:	17.78 cm (= 7")
Number of colours:	16.7 M
Resolution:	800 x 1280 px. 216 ppi
Ambient temperature:	+5°C to +40°C
Protection type:	IP30D
WLAN standard:	IEEE 802.11b/g/n/ac 2.4 GHz + 5 GHz
Dimensions:	W 181 x H 114 x D 15 mm (profile height)

2.14 Gira G1 (2nd generation)



Order no.: 2066 .., 2087..

Features

The Gira G1 is a multifunctional room operating device for visualising and operating a wide range of building functions. The Gira G1 serves as a client for the Gira Server X1, Gira One and the Gira HomeServer. In the Gira IP door communication system, the Gira G1 can be used as a home station. Door communication is therefore one of many building functions that can be centrally controlled by a single device.

The following functions are available with the Gira G1:

- Video home station
- Home station with SIP client
- Home station for DCS IP gateway
- Display of the weather forecast for up to five locations (Internet connection required)
- Client for the following systems/servers: Gira HomeServer, Gira X1, Gira One

Technical data

Power supply:	PoE: PoE performance class 0: DC 48 V PoE PoE standard: IEEE 802.3af or DC 16–31 V ± 2 V
Power consumption:	Maximum: 8 W Typical: 4 W
Network connection:	RJ45
Power supply connection:	2-pole plug terminal
Floor-call button connection:	2-pole plug terminal
Display diagonal:	17.78 cm (= 7)
Number of colours:	16.7 M
Resolution:	800 x 1280 px. 216 ppi
Ambient temperature:	+5°C to +40°C
Protection type:	IP30D
WLAN standard:	IEEE 802.11b/g/n/ac 2.4 GHz + 5 GHz
Dimensions:	W 181 x H 114 x D 15 mm (profile height)

2.15 Gira DCS mobile app



DCS mobile app

Features

The Gira DCS mobile app turns a mobile end device into a home station for a Gira door communication system.

When a door call is pending, the image from a door station camera is transmitted. The call can be accepted at a home station or forwarded to a mobile end device. Conversations can be held with the visitor via the mobile end device. In addition, switching actions can be performed and the door can be opened.

If the call is not accepted, an image of the visit can be loaded into an image memory if the camera has image functionality. In this way, the resident can later see who rang the doorbell at a home station or in the DCS mobile app.

When the app is closed, the user is notified of a door call via a push notification. Connection to the portal is either via the home WLAN or via the mobile network when on the go. This means that all functions can be used regardless of whether you are at home in the garden or shopping in town.

The Gira DCS mobile app is available here:

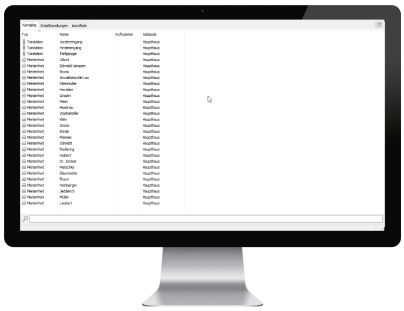
For iOS devices:

- Gira DCS mobile app for iOS devices

For Android devices:

- Gira DCS mobile app for Android devices

2.16 Concierge software



Concierge software

Features

The Concierge software enables professional call transfer between visitors and residents in residential complexes.

Key functions at a glance:

- Accepting door calls and forwarding them to specific residents.
- Putting calls on hold while a resident is being contacted.
- Announcing visitors and, if desired, putting the call through or ending it with a message.
- Contacting residents directly, for example, for package notifications or other issues.
- Call forwarding from the rental units to the Concierge.
- Opening doors.
- Performing switching actions, such as switching lights on and off.

2.17 IP switching actuator



Order no.: 5566 000

Features

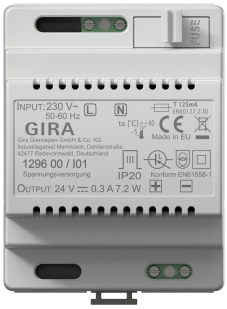
The IP switching actuator makes it possible to switch lights on and off, control a door opener and perform other functions via IP or network. This involves actuating a zero-voltage switching contact, which can be activated via the operating surfaces of the wall devices or the Gira DCS mobile app. In addition, a binary input is available via which the set function can be triggered with a connected mechanical button.

The switching actuator offers four operating modes: timer (e.g. for lighting control), door opener, switch and pulse – for example, to control existing staircase timers. The switching time depends on the selected function and is infinitely adjustable between 1 second and 10 minutes.

Technical data

Additional power supply:	21 V to 31 V DC e.g. Gira power supply (order no. 1296 00 or 2570 00).
Network connection:	RJ45
Relay contact:	230 V AC/6 A 30 V DC/2 A zero-voltage
Load types	
Light bulb:	230 V AC/6 A
LED:	230 V AC/100 W
Door opener:	30 V DC/2 A
Power consumption	
In idle state with network link:	0.6 W (24 VDC, 25 mA)
During switching:	1.8 W (24 VDC, 77 mA) for a duration of 0.1 s
Binary input:	NC/NO can be selected
Ambient temperature:	-5°C to +55°C
Dimensions:	2 HP

2.18 Power supply



Order no.: 1296 00, 2570 00

Features

The power supplies are used, for example, to supply the IP switching actuators, the IP video home station, the Gira G1, the Gira S1 or the Gira F1.

Technical data

Primary rated voltage:	AC 230 V, 50/60 Hz
Secondary rated voltage:	DC 24 V
Secondary rated current:	0.3 A (1296 00) 0.7 A (2570 00)
Fuse:	Fine wire fuse 250 V, T 125 mA (1296 00) electronically self-resetting (2570 00)
Ambient temperature:	-5°C to +40°C
Protection type:	IP 20
Dimensions:	4 MW (1296 00) 6 MW (2570 00)

2.19 Gira F1



Order no.: 2049 00

Features

The Gira F1 securely separates two building networks and ensures that only previously enabled functions and the associated data can pass the network boundaries. The device thus offers a reliable solution for integrating the Gira IP door communication system and for using network-based SIP door communication systems from third-party manufacturers in existing systems. In terms of SIP functionality, the Gira F1 enables specific forwarding of parameterised SIP telegrams and simultaneously protects the internal network against unauthorised access. Configuration is conveniently carried out via the integrated device website. In addition to SIP support, encrypted communication via SIPS is also possible.

Technical data

KNX medium:	TP256
Rated voltage:	DC 24 to 30 V
Power consumption:	2 W
IP communication:	Ethernet 10/100 BaseT (10/100 Mbit/s)
Connections	
IP:	2 x RJ45 jacks (public/private)
KNX:	Connection and junction terminal
Ambient temperature:	0°C to + 45°C
Dimensions:	2TE

2.20 Gira S1



Order no.: 2089 00

Features

The Gira S1 enables secure and convenient remote access to the customer's home network. It is integrated into the home network via Ethernet and automatically establishes an encrypted connection to the Gira device portal. This allows users to control their building functions even outside the local network.

At the same time, the Gira S1 allows remote maintenance and configuration of devices via the Gira Project Assistant. In addition, encrypted ETS remote access is provided so that you can establish a connection to remote KNX IP data interfaces.

Technical data

KNX medium:	TP256
Rated voltage:	DC 24 to 30 V
Power consumption:	2 W
IP communication:	Ethernet 10/100 BaseT (10/100 Mbit/s)
Connections	
IP:	2 x RJ45 jacks
KNX:	Connection and junction terminal
Ambient temperature:	0°C to + 45°C
microSD card for KNX data logger function:	up to 1 TB (SDXC)

3 Application examples

The following application examples illustrate typical scenarios in which the Gira IP door communication system can be used in practice. They are intended to provide an overview of how the system can be integrated into different projects and what special features need to be taken into account.

Please note that the configuration steps shown are not fully reflected in the individual examples. They are primarily used to highlight the specific requirements and special features of the respective application and to convey a better understanding of the planning and implementation.

Gira Project Assistant

The Gira Project Assistant (GPA) must be used for complete configuration of the Gira IP door communication system. The GPA offers all the functions required to carry out the configuration in an efficient and reliable way. It supports the user in setting up, adapting and managing the system and ensures optimum communication between all of the components.

Important information

The descriptions and examples contained in this manual refer to the Gira Project Assistant from version 6.1 onwards in conjunction with the Gira System 106 intercom module firmware version 1.1.31 and up.

The contents apply to the current software version at the time of publication. Due to software updates, firmware updates or functional upgrades, representations, functions and processes may differ from the contents described here.

Note on Gira G1

In the following examples, the designation “Gira G1” refers exclusively to the second generation of the Gira G1.

Please note that the first-generation Gira G1 cannot be operated with the IP door communication system.

Mobile forwarding

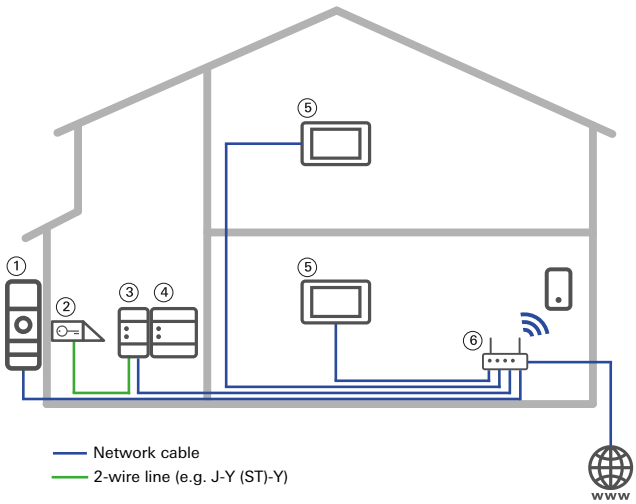


In the following application examples, the mobile forwarding symbol is shown in many of the images.

In these cases, it is possible to forward the door call to a smartphone. For better readability, this is not always explicitly addressed in the text of the respective examples.

Click here [▸ 79] to learn how to set up forwarding to a smartphone.

3.1 Single-family home



Application example: single-family home

In a single-family home, door calls should be displayed on two Gira IP home stations. Both home stations should be called simultaneously with one call button.
Forwarding to a smartphone can be set up.
The two home stations should be able to communicate with each other via an internal call.
The door opener is controlled via the IP switching actuator.

System components

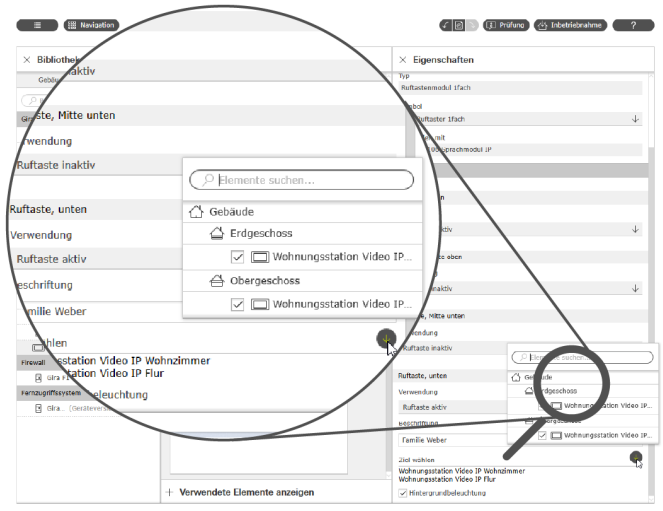
- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One power supply (IP switching actuator and door opener) ④
- Two IP video home stations with Modular Jack ⑤
- One PoE router ⑥
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Single-family home – IP” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode. The activation time can be customised.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destinations:
   Click on the call-button module tile and select both home stations as the call destination (see screenshot).
5. Commission project:
   Commission all project devices.

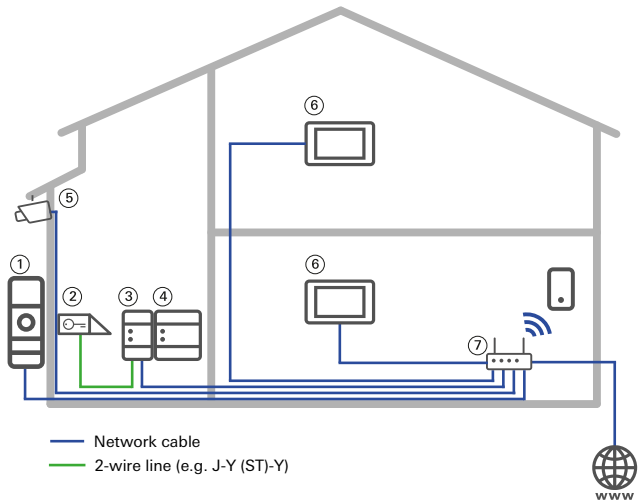
✓ The internal calls between the two home stations are created automatically during commissioning.

Click here [▶ 79] to learn how to set up forwarding to a smartphone.



Assign call-button module

3.2 Single-family home with IP camera



Application example: single-family home with IP camera

In a single-family home, door calls should be displayed on two Gira IP home stations. Both home stations should be called simultaneously with one call button.
Forwarding to a smartphone can be set up.
In addition to the camera that is integrated into the door station, a further camera is to be integrated into the Gira IP door communication system. This camera can be activated manually via the home stations during subsequent operation.
The two home stations should be able to communicate with each other via an internal call.
The door opener is controlled via the IP switching actuator. Here, in the GPA, you can set the amount of time for which the door opener should be enabled.

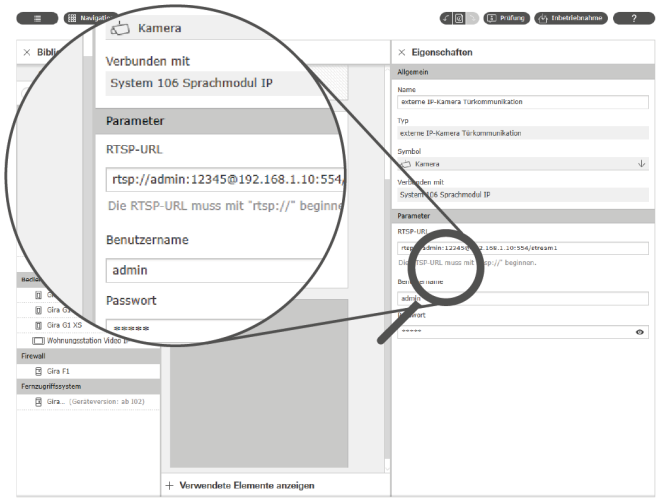
System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One power supply (IP switching actuator and door opener) ④
- One external IP camera ⑤
- Two IP video home stations with Modular Jack ⑥
- One PoE router ⑦
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Single-family home – IP” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   Note:
   The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
   The external IP camera must be located in the same building element as the door station.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destinations:
   Click on the call-button module tile and select both home stations as the call destination.
5. Configure external IP camera:
   Click on the external IP camera tile and enter the RTSP URL and the login details (username and password) for the IP camera (see screenshot).
6. Commission project:
   Commission all project devices.

✓ The internal calls between the two home stations are created automatically during commissioning.

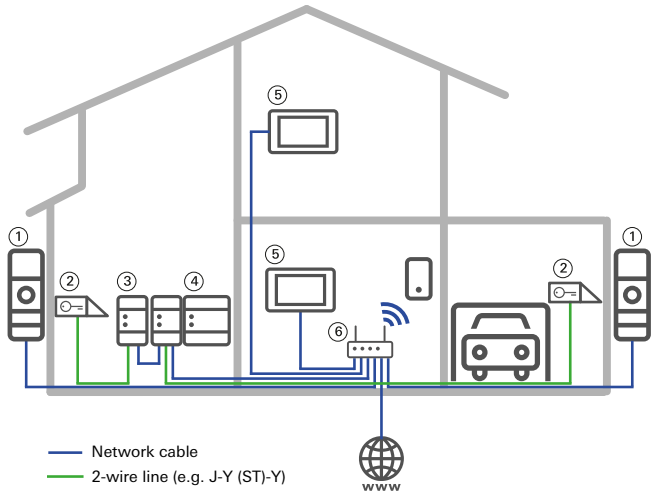


External camera login details

Click here [▶ 79] to learn how to set up forwarding to a smartphone.

Further information on external IP cameras is available here [▶ 61]

3.3 Single-family home with two door stations



Application example

In a single-family home, door calls should be displayed on two Gira IP home stations. Both home stations should be called simultaneously with one call button.
The two home stations should be able to communicate with each other via an internal call.
In addition to the door station on the main door, another door station is provided in the garage area. Both entrances are equipped with door openers, which are controlled via two IP switching actuators.

System components

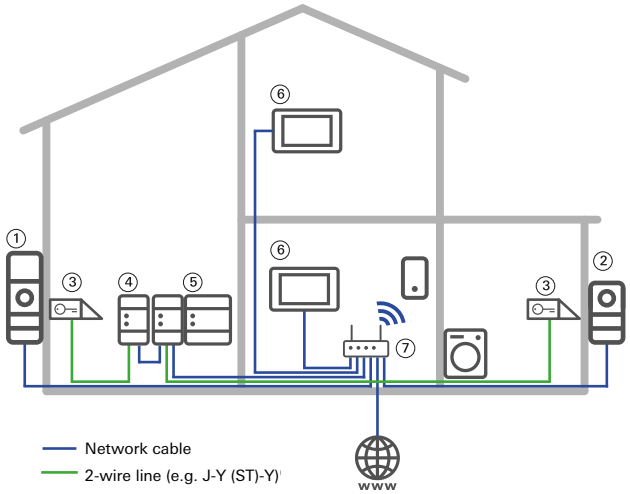
- Two door stations with 1-gang call-button module, IP camera module and Modular Jack ①
- Two door openers ②
- Two IP switching actuators ③
- One power supply (IP switching actuator and door opener) ④
- Two IP video home stations with Modular Jack ⑤
- One PoE router ⑥
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Single-family home – IP” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   Note: If both switching actuators are dragged into the project, they must be assigned to the respective door stations. The switching actuators are already in door opener mode; the activation time can be customised.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destinations:
   Click on the call-button module tile for each door station and select both home stations as the call destination.
5. Commission project:
   Commission all project devices.

✓ The internal calls between the two home stations are created automatically during commissioning.

3.4 Single-family home with video door station and audio door station



Application example

In a single-family home, door calls should be displayed on two Gira IP home stations. Both home stations should be called simultaneously with one call button.
The two home stations should be able to communicate with each other via an internal call.
A door station with video function is located at the front entrance. Another door station without video function is provided at the rear entrance. Both entrances are equipped with door openers, which are controlled via two IP switching actuators.

System components

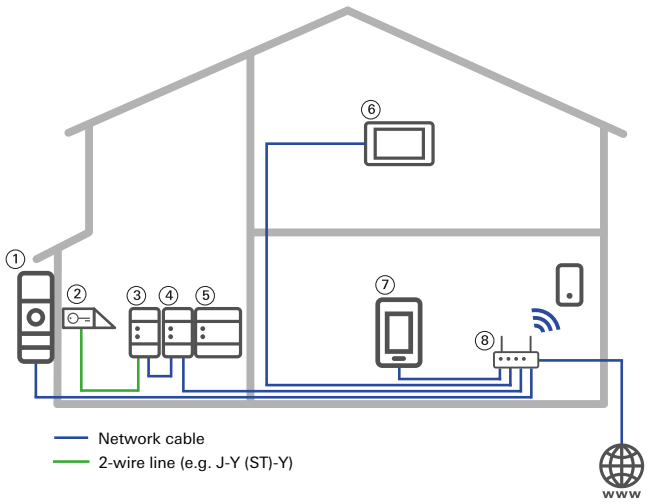
- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door station with a 1-gang call-button module and Modular Jack ②
- Two door openers ③
- Two IP switching actuators ④
- One power supply (IP switching actuator and door opener) ⑤
- Two IP video home stations with Modular Jack ⑥
- One PoE router ⑦
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Single-family home – IP” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   Note:
   If both switching actuators are dragged into the project, they must be assigned to the respective door stations. The switching actuators are already in door opener mode; the activation time can be customised.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destinations:
   Click on the call-button module tile for each door station and select both home stations as the call destination.
5. Commission project:
   Commission all project devices.

✓ The internal calls between the two home stations are created automatically during commissioning.

3.5 Single-family home with Gira X1



Application example

A Smart Home system with a Gira X1 server and other KNX devices is already installed in a single-family home. This system is to be extended by adding the Gira IP door communication system. Both a Gira G1 (2nd generation) and the Gira IP home station are to be used. The two devices are to be called in parallel via a call button. In addition to its function as a home station, the Gira G1 can also be used to perform Smart Home functions.

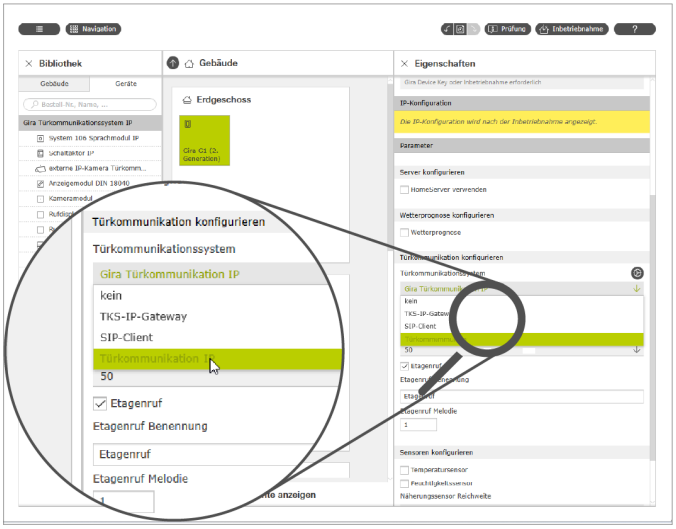
System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One Gira X1 (existing) ④
- One power supply (IP switching actuator and door opener) ⑤
- One IP video home station with Modular Jack ⑥
- One Gira G1 (2nd generation) ⑦
- One PoE router ⑧
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

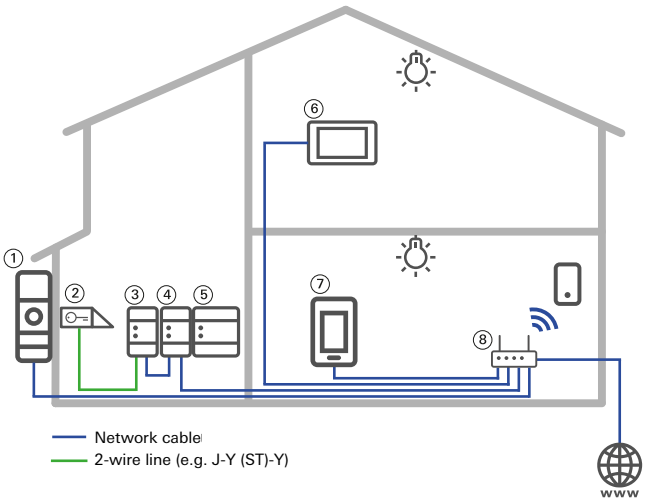
1. Open project:
   Start the GPA and open the existing project that was used to configure the Gira X1.
2. Adjust project scope:
   Open the project settings and activate the “IP door communication system” option in the project scope.
3. Add devices:
   Switch to the “Buildings and devices” view and drag the required devices from the IP door communication system into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
4. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
5. Configure call destination:
   Click on the call-button module tile and select the IP video home station and the Gira G1 as the call destination.
6. Configure the Gira G1:
   Select “IP door communication system” as the door communication system for the Gira G1 (see image).
7. Commission project:
   Commission all project devices.

✓ The internal calls between the IP video home station and the Gira G1 are created automatically during commissioning.



Configuring the Gira G1

3.6 Single-family home with Gira X1 – notification of door call via light signal



Application example

A Smart Home system with a Gira X1 server and other KNX devices is installed in a single-family home. This system is to be extended by adding the Gira IP door communication system. Both a Gira G1 (2nd generation) and the Gira IP home station are to be used. The two devices are to be called in parallel via a call button. In addition to its function as a home station, the Gira G1 can also be used to perform Smart Home functions.

Since a deaf person lives in the house, the ringing at the front door should not be signalled only by means of an audio cue, but also by visual signalling, e.g. by switching on or flashing a light source.

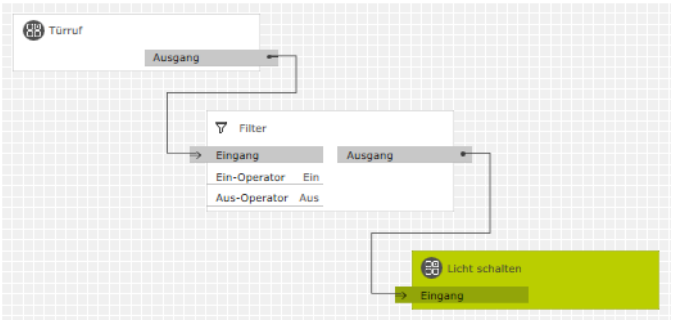
System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One Gira X1 ④ and the associated KNX system
- One power supply (IP switching actuator and door opener) ⑤
- One IP video home station with Modular Jack ⑥
- One Gira G1 (2nd generation) ⑦
- One PoE router ⑧
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

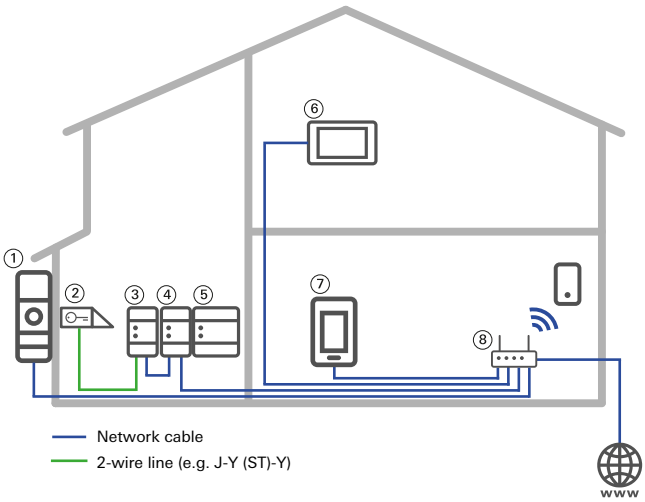
1. Open project:
   Start the GPA and open the existing project that was used to configure the Gira X1.
2. Adjust project scope:
   Open the project settings and activate the “IP door communication system” option in the project scope.
3. Add devices:
   Switch to the “Buildings and devices” view and drag the required devices from the IP door communication system into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
4. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
5. Configure call destination:
   Click on the call-button module tile and select the IP video home station and the Gira G1 as the call destination.
6. Configure the Gira G1:
   Select “IP door communication system” as the door communication system for the Gira G1.
7. Signalling door calls via KNX:
   Open the GPA logic editor. The IP door communication system and the KNX system devices are connected via the Gira X1’s logic function. The devices of the door communication system provide data points for this purpose.
   For this example, use the “Door call” and “Internal call” data points, which can be found in the “Visual display of incoming call” section of the IP video home station and of the Gira G1.
   You can use this data point as a logic input, which can then be linked, for example via a filter module, to an output, which sends the signal to a KNX data point (see image).
8. Commission project:
   Commission all project devices.

✓ The internal calls between the IP video home station and the Gira G1 are created automatically during commissioning.



Signal door call logic sheet

3.7 Single-family home with Gira X1 – trigger door opener via KNX



Application example

A Smart Home system with a Gira X1 server and the Gira IP door communication system is installed in a single-family home. Both a Gira G1 (2nd generation) and the Gira IP home station are to be used. The two devices are to be called in parallel via a call button. In addition to its function as a home station, the Gira G1 can also be used to perform Smart Home functions.

The residents of the house want to trigger the door opener not only via the home station, but also via a Smart Home button (e.g. push-button sensor 4) or directly via the Gira Smart Home app.

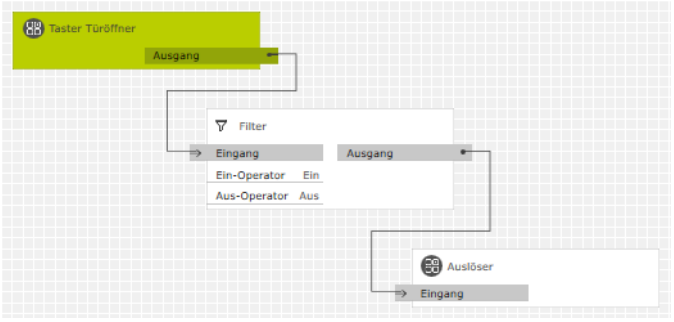
System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One Gira X1 ④ and the associated KNX system
- One power supply (IP switching actuator and door opener) ⑤
- One IP video home station with Modular Jack ⑥
- One Gira G1 (2nd generation) ⑦
- One PoE router ⑧
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

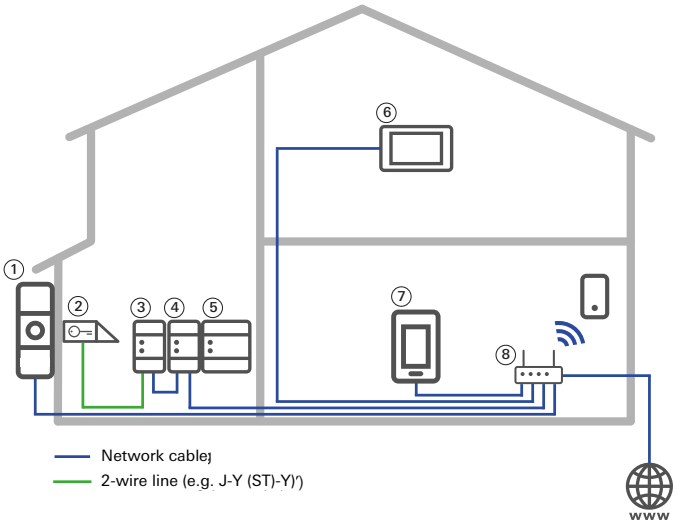
1. Open project:
   Start the GPA and open the existing project that was used to configure the Gira X1.
2. Adjust project scope:
   Open the project settings and activate the “IP door communication system” option in the project scope.
3. Add devices:
   Switch to the “Buildings and devices” view and drag the required devices from the IP door communication system into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
4. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
5. Configure call destination:
   Click on the call-button module tile and select the IP video home station and the Gira G1 as the call destination.
6. Configure the Gira G1:
   Select “IP door communication system” as the door communication system for the Gira G1.
7. Trigger door opener via a KNX button:
   Open the GPA logic editor. The IP door communication system and the KNX system devices from
   are connected via the Gira X1’s logic function.
   The devices of the door communication system provide data points
   for this purpose. For this example, use the “Trigger” data point, which can be found in the “Door opener” section of the IP intercom module. You can use this data point as a logic output, which can then be linked, for example via a filter module, to an input, which receives a switching signal from a pushbutton via a KNX data point (see image).
8. Commission project:
   Commission all project devices.

✓ The internal calls between the IP video home station and the Gira G1 are created automatically during commissioning.



Door opener logic sheet

3.8 Single-family home with Gira X1 – control functions via keypad



Application example

A Smart Home system with a Gira X1 server and the Gira IP door communication system is installed in a single-family home. Both a Gira G1 (2nd generation) and the Gira IP home station are to be used. The two devices are to be called in parallel via a call display. In addition to its function as a home station, the Gira G1 can also be used to perform Smart Home functions.

The IP call display is to be used as a code keypad. Entering codes can be used to:

- Open the front door.
- Trigger smart home functions (e.g. raise the shutters, switch on the indoor lighting).
- Trigger a "silent alarm".

The specific response to a code can be defined flexibly in the Gira X1 logic editor.

System components

- One door station with IP call display module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One Gira X1 ④ and the associated KNX system
- One power supply (IP switching actuator and door opener) ⑤
- One IP video home station with Modular Jack ⑥
- One Gira G1 (2nd generation) ⑦
- One PoE router ⑧
- Installation material, patch cord, patch panels for sub-distribution

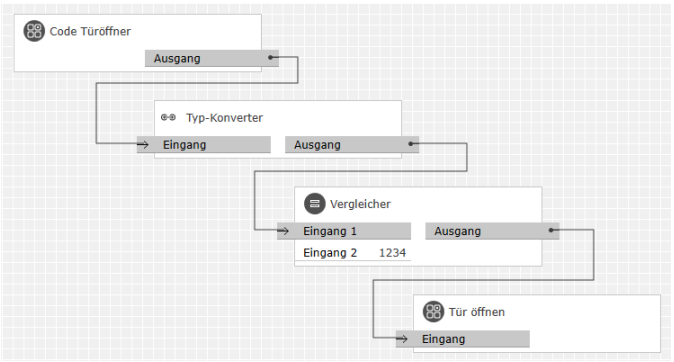
Configuration steps

1. Open project:
   Start the GPA and open the existing project that was used to configure the Gira X1.
2. Adjust project scope:
   Open the project settings and activate the "IP door communication system" option in the project scope.
3. Add devices:
   Switch to the "Buildings and devices" view and drag the required devices from the IP door communication system into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
4. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
5. Configure call destinations:
   Click on the call display module tile and specify the number of call buttons (one in this example). Select the IP video home station and the Gira G1 as the call destination.
6. Activate the code lock function:
   Activate the code lock function in the call display module settings.
7. Configure the Gira G1:
   Select "IP door communication system" as the door communication system for the Gira G1.

Trigger the KNX function using a code:
Open the GPA logic editor. The IP door communication system and the KNX system devices are connected via the Gira X1's logic function.
The devices of the door communication system provide data points for this purpose.
For this example, use the "Last numeric code entered" data point, which can be found in the "Call display module" section of the IP intercom module. You can use this data point as a logic input that you connect to a comparator module via a type converter. The comparator module is connected to the output, which sends a signal to a KNX data point if the code is entered correctly (see image).

1. Commission project:
   Commission all project devices.

✓ The internal calls between the IP video home station and the Gira G1 are created automatically during commissioning.

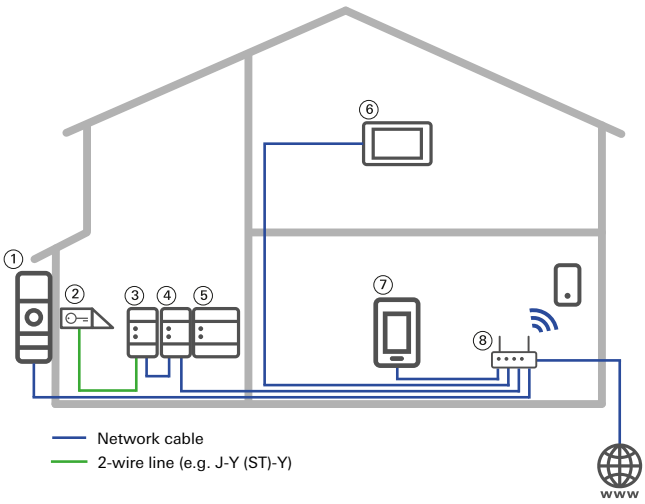


Code function logic sheet

Notes on the code function

Separate logic must be created for each function.
1–12-digit codes are supported.
Leading zeros cannot be used in codes, i.e. a code 0001 cannot currently be interpreted.
The display feedback of the call display module is based exclusively on the door opener function of the access code. The use of a code in the Smart Home system is not taken into account in the feedback.

3.9 Single-family home with Gira One



Application example

A Smart Home system with a Gira One Server is to be installed in a single-family home. In addition, the Gira IP door communication system is to be used in this system. Both a Gira G1 (2nd generation) and the Gira IP home station are to be used. The two devices are to be called in parallel via a call button. In addition to its function as a home station, the Gira G1 can also be used to perform Smart Home functions.

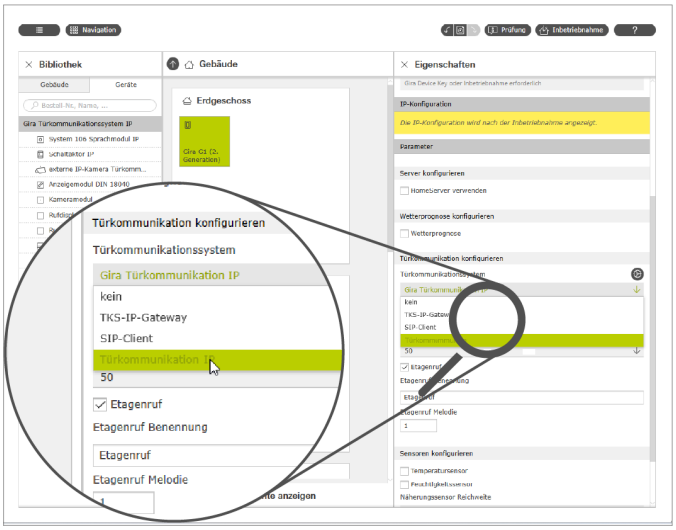
System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One Gira One server ④ with the associated Gira One devices
- One power supply (IP switching actuator and door opener) ⑤
- One IP video home station with Modular Jack ⑥
- One Gira G1 (2nd generation) ⑦
- One PoE router ⑧
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

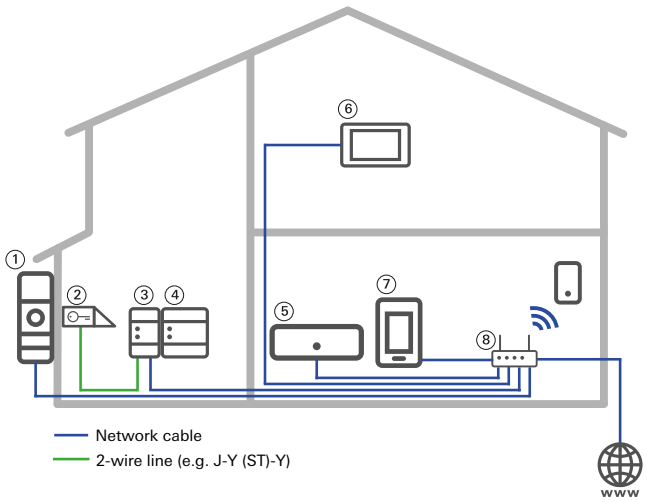
1. Create project:
   Create a new “Gira One” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices (for Gira One and door communication) into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destination:
   Click on the call-button module tile and select the IP video home station and the Gira G1 as the call destination.
5. Configure the Gira G1:
   Select “IP door communication system” as the door communication system for the Gira G1 (see image).
6. Commission project:
   Commission all project devices.

✓ The internal calls between the IP video home station and the Gira G1 are created automatically during commissioning.



Configuring the Gira G1

3.10 Single-family home with Gira HomeServer



Application example

A Smart Home system with a Gira HomeServer and other KNX devices is already installed in a single-family home. This system is to be extended by adding the Gira IP door communication system. Both a Gira G1 (2nd generation) and the Gira IP home station are to be used. The two devices are to be called in parallel via a call button. In addition to its function as a home station, the Gira G1 can also be used to perform Smart Home functions.

System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One power supply (IP switching actuator and door opener) ④
- One Gira HomeServer ⑤ and the associated KNX system
- One IP video home station ⑥
- One Gira G1 (2nd generation) ⑦
- One PoE router ⑧
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

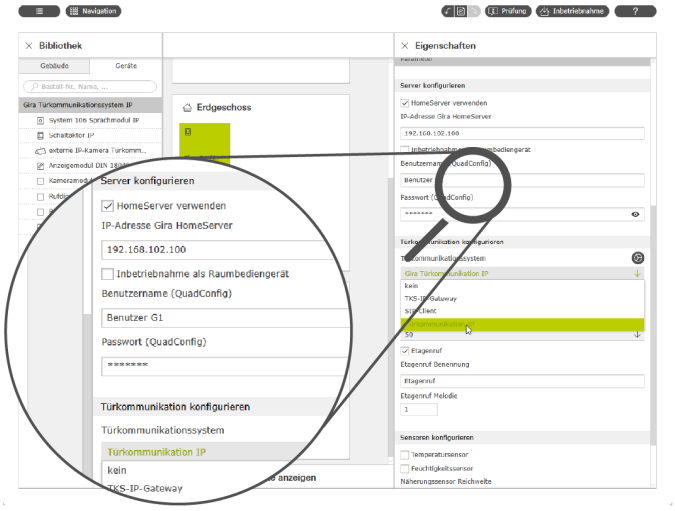
This configuration requires that the Gira HomeServer is already operational and that the visualisation has been created in “QuadConfig”.

1. Create project:
   Create a new “Gira G1 (2nd generation)” project in the GPA.
2. Adjust project settings:
   Open the “Project settings” view and enable the “IP door communication system” option in the project scope.
3. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
4. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
5. Configure call destinations:
   Click on the call-button module tile and select the IP video home station and the Gira G1 as the call destination.
6. Configure Gira G1:
   Click on the Gira G1 tile.
   Enable the “Use HomeServer” option in the properties column of the Gira G1.
   Enter the IP address of the Gira HomeServer.
   Enter the username and password that were previously created for the Gira G1 during configuration in QuadConfig (see image).
   Select “IP door communication system” as the door communication system.
7. Commission project:
   Commission all project devices.

✓ The internal calls between the IP video home station and the Gira G1 are created automatically during commissioning.

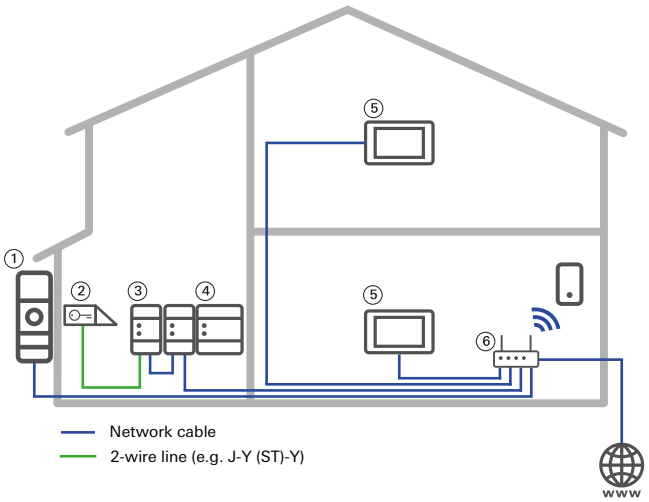
A detailed document on commissioning the Gira G1 with the Gira HomeServer can be found in the Gira download section.

⦿ partner.gira.com/en/service/download/



Configuring the Gira G1

3.11 Single-family home – switching lights on and off using an IP switching actuator



Application example

In a single-family home, in addition to the IP switching actuator for the door opener, another IP switching actuator is also installed. It should be possible to control the lighting on the staircase via mechanical buttons on the staircase and via the light button on the two home stations using this IP switching actuator.

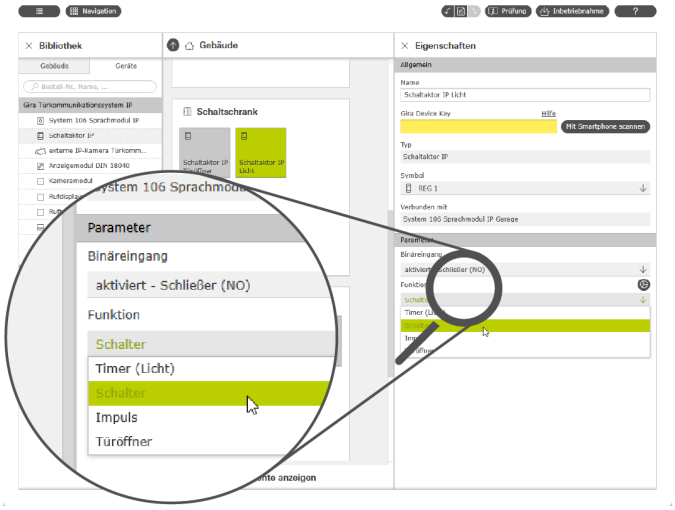
System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- Two IP switching actuators ③
- One power supply (IP switching actuator and door opener) ④
- Two IP video home stations ⑤
- One PoE router ⑥
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

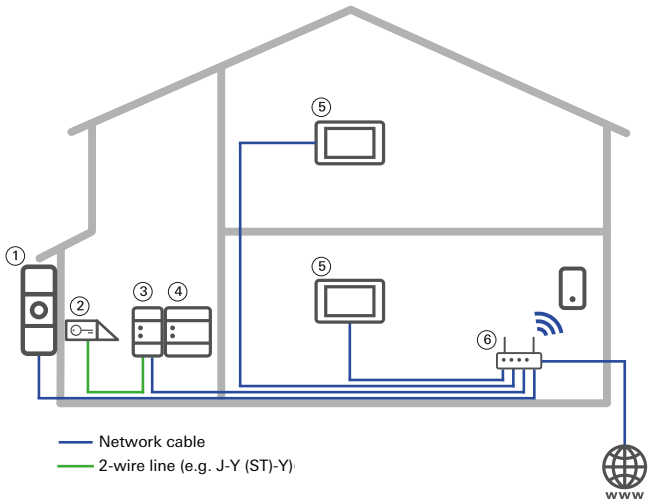
1. Create project:
   Create a new “Single-family home – IP” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destinations:
   Click on the call-button module tile and select both home stations as the call destination.
5. Add switching actuators:
   Drag the two IP switching actuators into the project:
   The first IP switching actuator is automatically assigned to the door station and is already in door opener mode. No further settings are required here.
   The function of the second IP switching actuator needs to be changed in the parameters (see image):
   “Timer (light)”, if the light on the staircase is to be switched off automatically after a specified amount of time,
   “Switch”, if the light is to be switched on and off at the touch of a button or
   “Pulse”, if an automatic staircase mechanism is to be activated.
6. Activate binary input:
   Activate the “Binary input” function on the second switching actuator if mechanical buttons are to be connected to the switching actuator.
7. Commission project:
   Commission all project devices.

The internal calls between the two home stations are created automatically during commissioning.



Configuring the IP switching actuator

3.12 Single-family home with code lock function



Application example

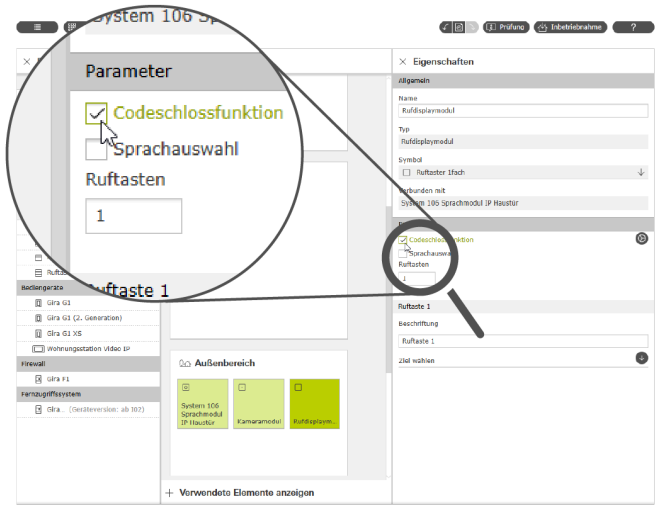
In a single-family home, the IP call display is to be used both as a call button and as a keypad. This allows residents to open the front door by entering a code. It should also be possible to grant temporary access to cleaning staff. Visitors can trigger a door call via the call display.

System components

- One door station with IP call display module, IP camera module and Modular Jack ①
- One door opener ②
- One IP switching actuator ③
- One power supply (IP switching actuator and door opener) ④
- Two IP video home stations with Modular Jack ⑤
- One PoE router ⑥
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Single-family home – IP” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destinations:
   Click on the call display module tile and specify the number of call buttons (one in this example). Select both home stations as the call destination.
5. Activate code lock function:
   Activate the code lock function in the settings of the call display module (see image).
   The codes for opening the door are defined on the door station device website after commissioning.
6. Commission project:
   Commission all project devices.
7. Define codes:
   Open the device website of the door station and configure the necessary settings for the code lock function.

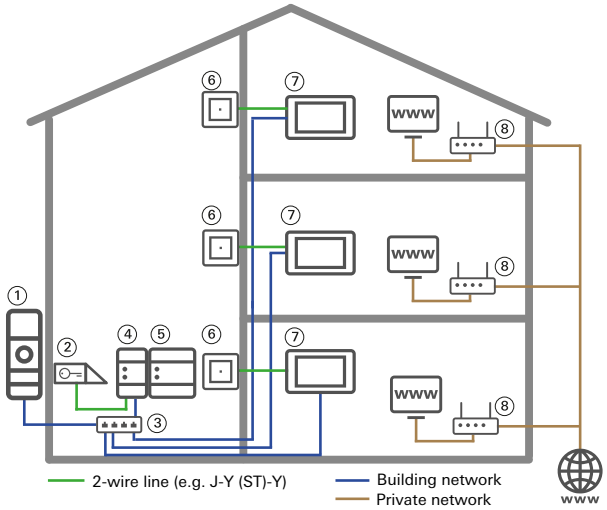


Activating the code lock function

⊕ Note on the IP call display

In “Single-family home – IP” projects, door calls can only be triggered via the name or names entered during commissioning. It is not possible to trigger a door call using a number.

3.13 Multi-family home with no Internet in the building network



Application example

There are three rental units in a multi-family home, each of which is equipped with an IP video home station without WLAN function. The building network for door communication is not connected to the Internet. The building network is not connected to the Internet in the rental units. This means that door communication cannot be forwarded to a smartphone.

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Three IP video home stations with Modular Jack ⑦
- Three routers ⑧
- Installation material, patch cord, patch panels for sub-distribution

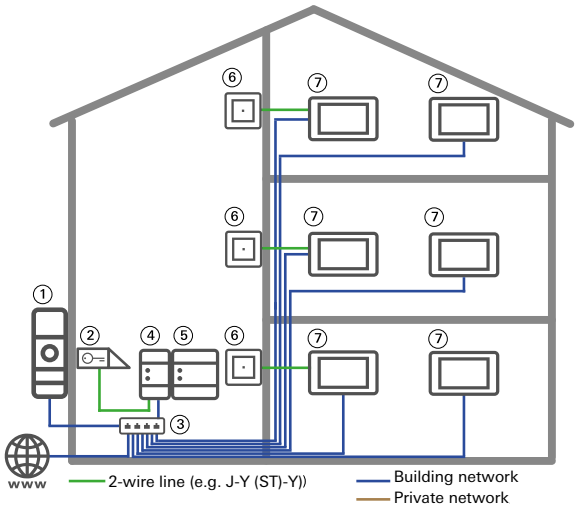
Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add to the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
4. Commission project:
   Commission the project.

⊕ Note on mobile forwarding

By using home stations with WLAN function, mobile forwarding could be implemented in this example via the respective private networks.

3.14 Multi-family home with floor call on multiple home stations



Application example

There are three rental units in a multi-family home, each of which is equipped with two IP video home stations. In each unit, one of the two home stations is permanently connected to a floor-call button. When the floor call button is pressed, both home stations within the rental unit are called simultaneously.

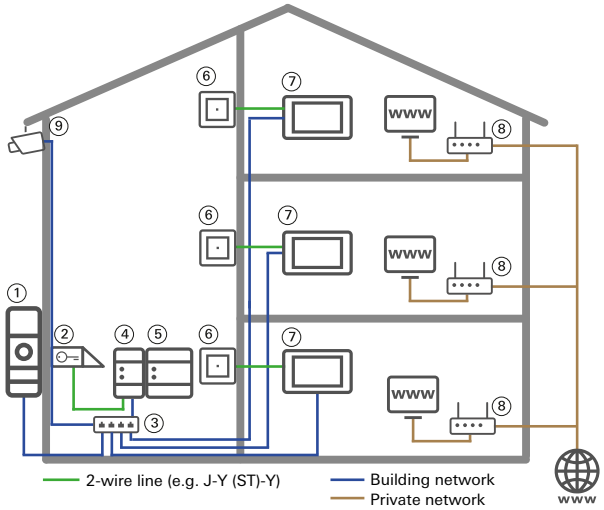
System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Six IP video home stations with Modular Jack ⑦
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   The simultaneous floor call function in the rental unit is set up automatically.
4. Commission project:
   Commission the project.

3.15 Multi-family home with IP camera without Internet in the building network



Application example

There are three rental units in a multi-family home, each of which is equipped with an IP video home station without WLAN function. The entrance area is to be monitored via an external IP camera. The building network is not connected to the Internet in the rental units. The building network for door communication is not connected to the Internet. This means that door communication cannot be forwarded to a smartphone.

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Three IP video home stations with Modular Jack ⑦
- Three routers ⑧
- One external IP camera ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add to the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
4. Commission project:
   Commission the project.
5. Configure external IP camera:
   Open the door station device website. In the field for the external IP camera, enter the RTSP URL and the login details (username and password) for the IP camera.
   You can then assign the rental units that you want to have access to the external camera.
6. Transfer changes:
   Click the green button to transfer the changes to the devices.

Further information on external IP cameras is available here [▸ 61]

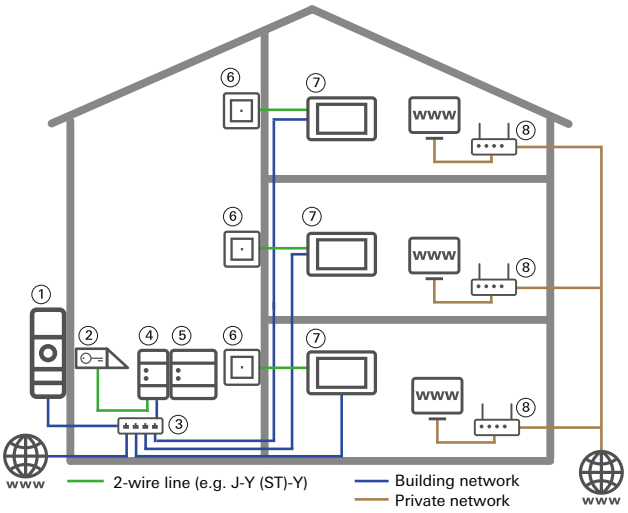
⊕ Note on free camera use

To enable all home stations of a rental unit to display the camera image from the door station even without a door call, activate the “Free camera use” option in the GPA. To do this, switch to the “Configure rental units” view in the configurator and click on the gearwheel symbol of the corresponding rental unit.

⊕ Note on mobile forwarding

By using home stations with WLAN function, mobile forwarding could be implemented in this example via the respective private networks.

3.16 Multi-family home with Internet in the building network



Application example

There are three rental units in a multi-family home, each of which is equipped with an IP video home station without WLAN function. The building network for door communication is connected to the Internet. There is no direct connection between the building network and the Internet within the rental units. Nevertheless, forwarding to a smartphone is possible. The Internet access required for this is provided via a router within the general building network. The associated operating and maintenance costs will need to be covered, for example by the property's service charge.

System components

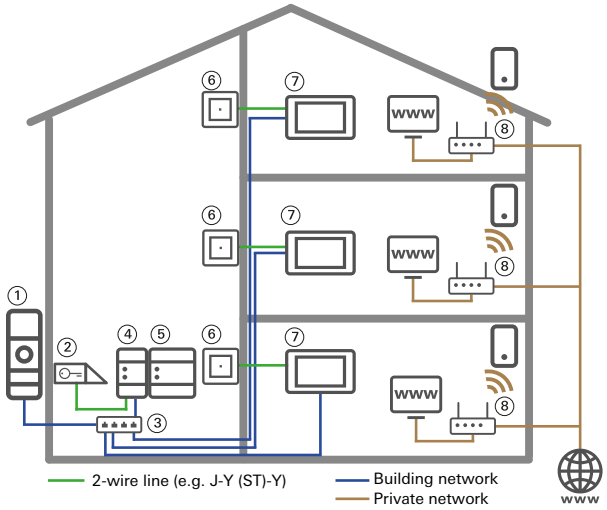
- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Three IP video home stations with Modular Jack ⑦
- Three routers ⑧
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new "Multi-family home/large property – IP" project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the "Configuration" view and add to the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
4. Commission project:
   Commission the project.

Click here [▸ 79] to learn how to set up forwarding to a smartphone.

3.17 Multi-family home – mobile forwarding via private WLAN



Application example

There are three rental units in a multi-family home, each of which is equipped with an IP video home station with WLAN. The building network for door communication is not connected to the Internet. The building network is not connected to the Internet in the rental units. The home stations are connected to the building network via a network cable, and in additional, to the private network of the respective rental unit via WLAN. Forwarding of door communication to a smartphone can be set up via this private Internet connection.

System components

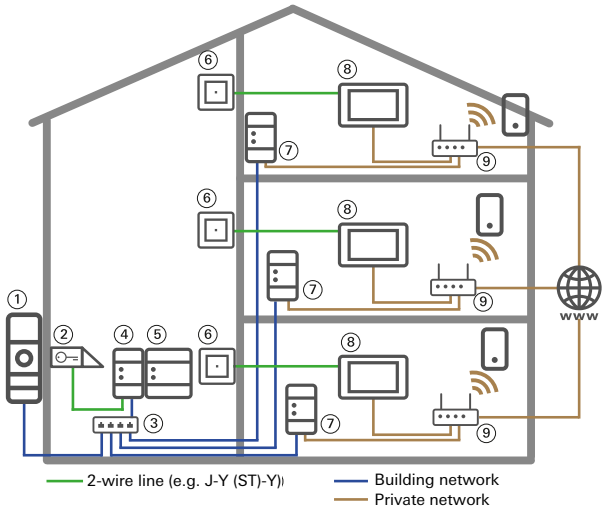
- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Three IP video home stations with WLAN and Modular Jack ⑦
- Three routers ⑧
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration
   Enter the basic data required for the project in the Basic Configuration Wizard.
3. Edit configuration
   Open the “Configuration” view and add to the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
4. Commission project
   Commission the project.
5. Configure home stations
   Connect the home stations to the WLAN of the respective rental unit and set up mobile forwarding.

Click here [▸ 79] to learn how to set up forwarding to a smartphone.

3.18 Multi-family home with Gira F1



Application example

There are three rental units in a multi-family home, each of which is equipped with an IP video home station. The building network is not connected to the Internet. The private networks within the apartments are each separated from the building network by a Gira F1. Forwarding to a smartphone is possible. This takes place via the private networks in the respective rental units.

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Three Gira F1s ⑦
- Three IP video home stations with Modular Jack ⑧
- Three PoE routers ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the basic configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring each of the rental units, the “Gira F1 available” option must be enabled (see figure).
4. Commission project:
   Commission the project.

Click here [▶ 79] to learn how to set up forwarding to a smartphone.

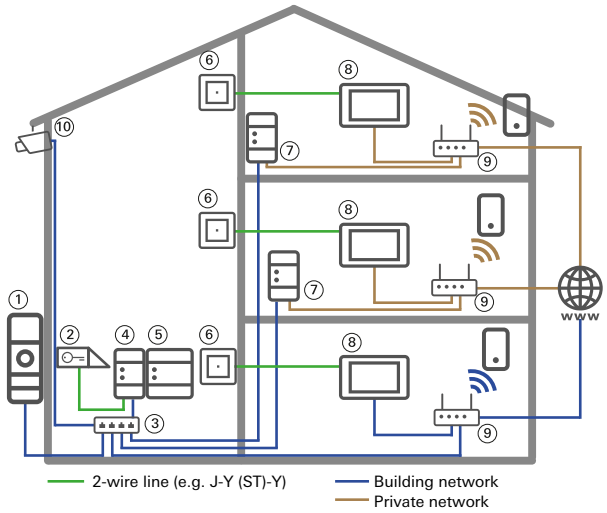


Enable “Gira F1 available”

Note on network configuration

When using the Gira F1 to separate the rental unit network from the building network, please observe the important notes on network configuration [▶ 59].

3.19 Multi-family home with IP camera and Gira F1



Application example

There are three rental units in a multi-family home, each of which is equipped with an IP video home station. The ground-floor apartment is directly connected to the building network. Each of the two upper-floor apartments has its own private network, separated from the building network by a Gira F1. The external IP camera can be accessed via the home stations of all apartments.
Forwarding to a smartphone is possible in all three apartments. This takes place via the networks in the respective rental units.

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Two Gira F1s ⑦
- Three IP video home stations with Modular Jack ⑧
- Three PoE routers ⑨
- One external IP camera ⑩
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring the two upper-floor rental units, the “Gira F1 available” option must be enabled.
4. Commission project:
   Commission the project.
5. Configure external IP camera:
   Open the door station device website. In the field for the external IP camera, enter the RTSP URL and the login details (username and password) for the IP camera.
   Assign the rental units which are to have access to the external camera.
6. Transfer changes:
   Click the green button to transfer the changes to the devices.

Click here [▶ 79] to learn how to set up forwarding to a smartphone.

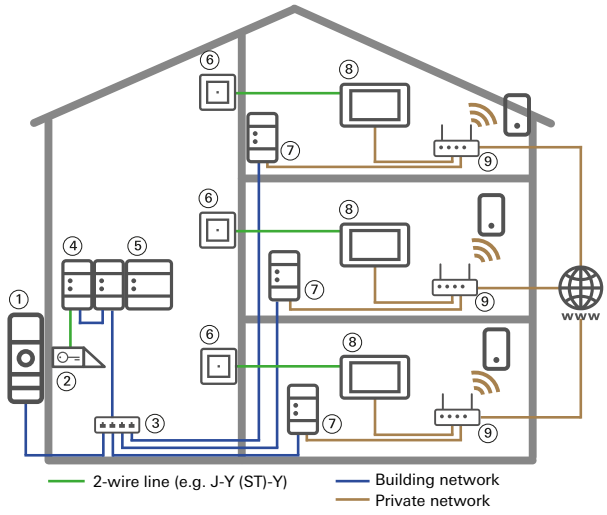
⊕ Note on network configuration

When using the Gira F1 to separate the rental unit network from the building network, please observe the important notes on network configuration [▶ 59].

⊕ Note on free camera use

To enable all home stations of a rental unit to display the camera image from the door station even without a door call, activate the “Free camera use” option in the GPA. To do this, switch to the “Configure rental units” view in the configurator and click on the gearwheel symbol of the corresponding rental unit.

3.20 Multi-family home – switching lights on and off using an IP switching actuator



Application example

There are three rental units in a multi-family home, each of which is equipped with an IP video home station. The building network is not connected to the Internet. The private networks within the apartments are each separated from the building network by a Gira F1. Forwarding to a smartphone is possible. This takes place via the private networks in the respective rental units.

In addition to the IP switching actuator for the door opener, another IP switching actuator is also installed. This IP switching actuator should make it possible to control the lighting on the staircase via the light button on the two home stations and via mechanical buttons on the staircase. The mechanical buttons are connected to the binary input of the second switching actuator.

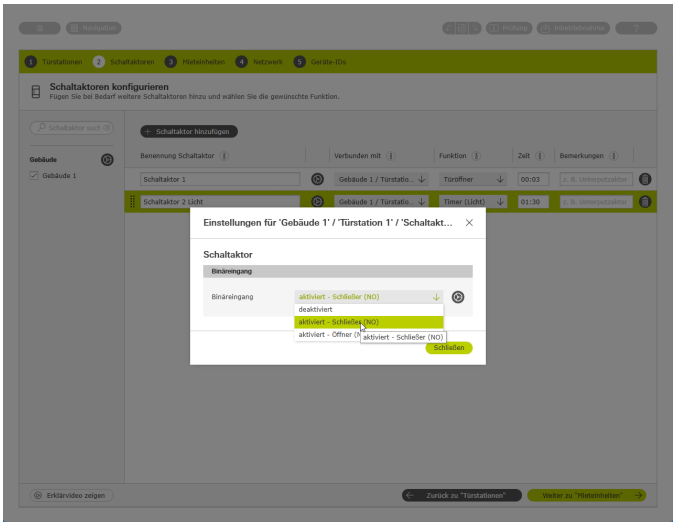
System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- Two IP switching actuators ④
- One power supply (IP switching actuators and door opener) ⑤
- Three floor-call buttons ⑥
- Three Gira F1s ⑦
- Three IP video home stations with Modular Jack ⑧
- Three PoE routers ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the basic configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Note:
   All designations made here can be subsequently changed or corrected on the door station device website.
   For the switching actuators, an IP switching actuator has automatically been assigned to the door station for the door opener function.
   Add the second switching actuator and select the function:
   “Timer (light)” if the light on the staircase is to be switched off automatically after a specified amount of time,
   “Switch” if the light is to be switched on and off at the touch of a button or
   “Pulse” if an automatic staircase mechanism is to be activated.
   Click on the gear wheel to open the settings of the second switching actuator. Activate the binary input here (see figure).
   The “Gira F1 available” option must be enabled for each rental unit.
4. Commission project:
   Commission the project.

Click here [▶ 79] to learn how to set up forwarding to a smartphone.

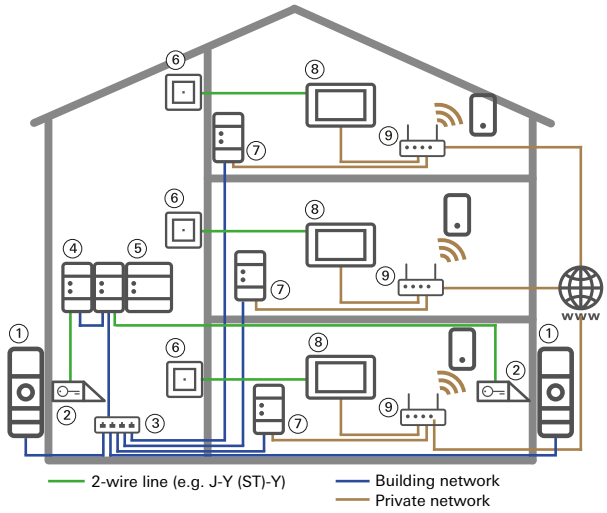


Activating the binary input on the IP switching actuator

Note on network configuration

When using the Gira F1 to separate the rental unit network from the building network, please observe the important notes on network configuration [▶ 59].

3.21 Multi-family home with main door and side door



Application example

In addition to the door station at the main entrance, a multi-family home also has a second door station at the side entrance. Both entrances are equipped with a door opener. Two IP switching actuators are required for the two door opener functions.

It should be possible to call the IP home stations in the rental units from both door stations.

System components

- Two door stations with 3-gang call-button module, IP camera module and Modular Jack ①
- Two door openers ②
- One PoE switch ③
- Two IP switching actuators ④
- One power supply (IP switching actuators and door opener) ⑤
- Three floor-call buttons ⑥
- Three Gira F1s ⑦
- Three IP video home stations with Modular Jack ⑧
- Three PoE routers ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

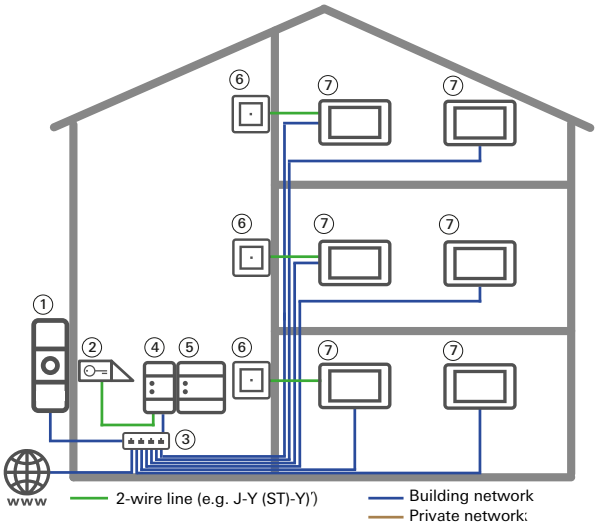
1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the basic configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Note: All designations made here can be subsequently changed or corrected on the door station device website.
   A switching actuator for the door opener function is automatically created for each door station entered in the basic configuration. This has already been assigned to the respective door station.
   The “Gira F1 available” option must be enabled for each rental unit.
4. Commission project:
   Commission the project.

Click here [▸ 79] to learn how to set up forwarding to a smartphone.

⊕ Note on network configuration

When using the Gira F1 to separate the rental unit network from the building network, please observe the important notes on network configuration [▸ 59].

3.22 Multi-family home with virtual call buttons



Application example

There are three rental units in a multi-family home, each of which is equipped with two IP video home stations. Visitors can trigger a door call via the call display. It should be possible to call each of the home stations directly.

This is implemented with the help of the IP call display via “virtual call buttons”. Up to 10 virtual call buttons can be set up here per rental unit.

During commissioning, a call button must first be created for each rental unit, to which all intercom units are assigned. The virtual call buttons can then be set up via the device website of the commissioning door station.

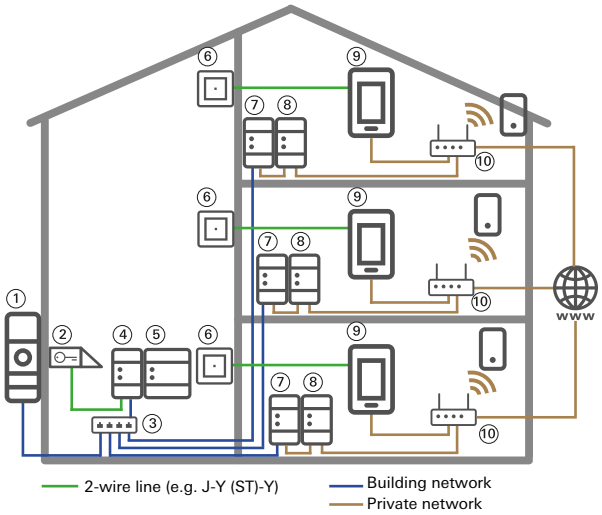
System components

- One door station with IP call display module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Six IP video home stations with Modular Jack ⑦
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   The simultaneous floor call function in the rental unit is set up automatically.
4. Commission project:
   Commission the project.
5. Set up virtual call buttons:
   Open the device website of the commissioning door station.
   There, you can assign the virtual call buttons to the individual intercom units.

3.23 Multi-family home with Gira X1



Application example

There are three apartments in a multi-family home, each of which is equipped with a Gira X1. The Gira G1 (2nd generation), which can also perform Smart Home functions, is used as the home station for the Gira IP door communication system.
The private networks within the apartments are each separated from the building network by a Gira F1.
Forwarding to a smartphone is possible. This takes place via the private networks in the respective rental units.

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Three Gira F1s ⑦
- Three Gira X1s ⑧
- Three Gira G1s (2nd generation) with Modular Jack ⑨
- Three PoE routers ⑩
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

This example requires four projects:

- One project for the door communication
- Three projects for the individual rental units.
  (The Gira G1, which is used as a home station, is located within the project structure for each of the rental units).

1. Create project for door communication:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring each of the rental units, the “GPA Smart Home Project” option must be activated.
4. Commission project:
   Commission the project.

The following steps must be carried out for each rental unit (3 x for this example).

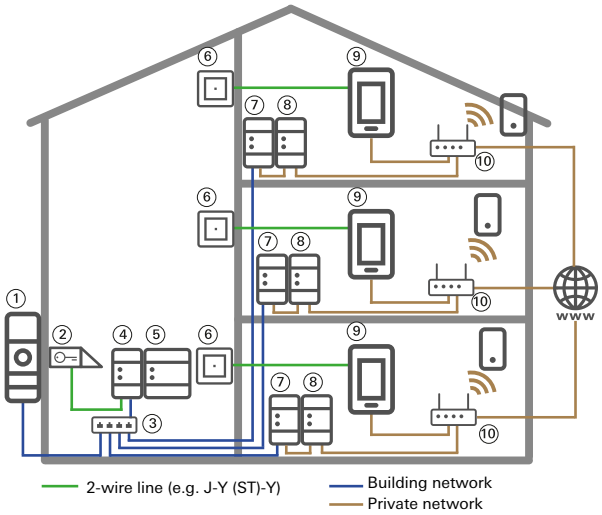
1. Create project for a rental unit:
   Create a new “Gira X1” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   The Smart Home project with the Gira X1 is configured as usual.
   The Gira F1 is an essential part of this project.
   The Gira G1 is added to the project as a home station for the IP door communication system.
3. Name the devices:
   Assign unique names to the home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure the Gira G1:
   Select “Gira IP door communication” as the door communication system for the Gira G1.
5. Commission project:
   Commission the project.

Commissioning the Gira F1 after a factory reset

Following a factory reset, the Gira F1 must be commissioned again via the GPA, both in the door communication project and in the corresponding Smart Home project.

If KNX projects were previously saved on the Gira F1, commissioning must take place again via the ETS for both the TP and IP interfaces.

3.24 Multi-family home with Gira One



Application example

There are three apartments in a multi-family home, each of which is equipped with a Gira One Server. The Gira G1 (2nd generation), which can also perform Smart Home functions, is used as the home station for the Gira IP door communication system.
The private networks within the apartments are each separated from the building network by a Gira F1.
Forwarding to a smartphone is possible. This takes place via the private networks in the respective rental units.

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three floor-call buttons ⑥
- Three Gira F1s ⑦
- Three Gira One Servers ⑧ with the associated Gira One devices
- Three Gira G1s (2nd generation) with Modular Jack ⑨
- Three PoE routers ⑩
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

This example requires four projects:

- One project for the door communication
- Three projects for the individual rental units.
  (The Gira G1, which is used as a home station, is located within the project structure for each of the rental units).

1. Create project for door communication:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Note:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring each of the rental units, the “GPA Smart Home Project” option must be activated.
4. Commission project:
   Commission the project.

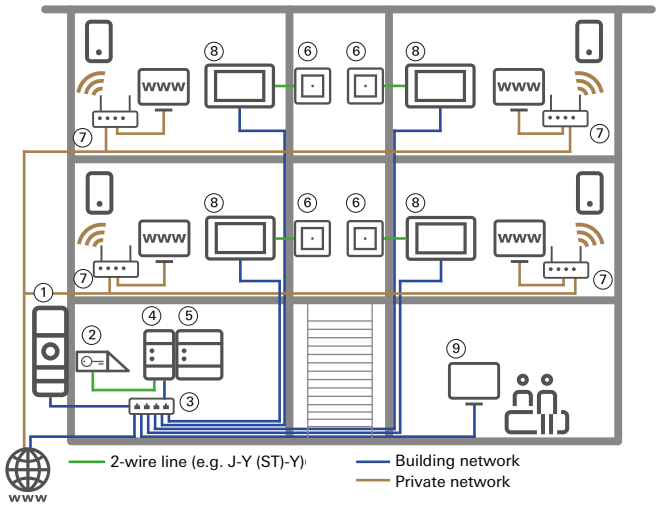
The following steps must be carried out for each rental unit (3 x for this example).

1. Create project for a rental unit:
   Create a new “Gira One” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   The Smart Home project with the Gira One server is configured as usual.
   The Gira F1 is an essential part of this project.
   The Gira G1 is added to the project as a home station for the IP door communication system.
3. Name the devices:
   Assign unique names to the home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure the Gira G1:
   Select “Gira IP door communication” as the door communication system for the Gira G1.
5. Commission project:
   Commission the project.

Commissioning the Gira F1 after a factory reset

Following a factory reset, the Gira F1 must be commissioned again via the GPA, both in the door communication project and in the corresponding Smart Home project.

3.25 Large property with Concierge



Application example

A large property contains several rental units, each of which is equipped with an IP video home station without WLAN function. On the ground floor, there is a reception area with a computer running the Gira Concierge software.
The building network used for door communication is connected to the Internet. There is no direct connection between the building network and the Internet within the rental units. Nevertheless, forwarding to a smartphone is possible. The Internet access required for this is provided via a router within the general building network. The associated operating and maintenance costs will need to be covered, for example by the property's service charge.

System components

- One door station with IP call display module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE router ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Four floor-call buttons ⑥
- One router per rental unit ⑦
- One IP video home station with Modular Jack per rental unit ⑧
- One PC with Concierge software ⑨
- Installation material, patch cord, patch panels for sub-distribution

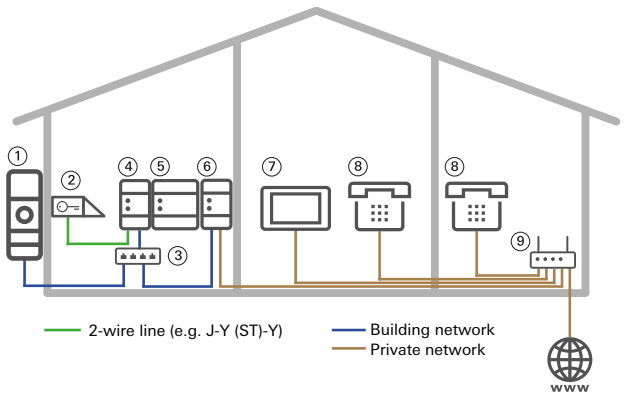
Configuration steps

1. Create project:
   Create a new "Multi-family home/large property – IP" project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project. You must enable the Concierge feature at this stage.
3. Edit configuration:
   Open the "Configuration" view and add the project-specific settings.
   Note:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
4. Commission project:
   Commission the project.
5. Set up the Concierge software:
   Install the Concierge software on the PC.
   The Concierge function is configured on the door station device website.
   You can find more information here [▸ 78].

⊕ Note on mobile forwarding

By using home stations with WLAN function, mobile forwarding could be implemented in this example via the respective private networks.

3.26 Doctor’s surgery with IP telephones



Application example: doctor’s surgery

A doctor’s surgery requires its door calls to be accepted via the existing IP telephones and an IP video home station.
The door is to be opened via the IP telephones.
IP telephones can only be integrated into the Gira IP door communication system as clients in combination with a Gira F1. This requires a private network that is separate from the building network. In this example, the doctor’s surgery must therefore be configured as a rental unit in a multi-family home project.
Please note that the Gira F1 provides 10 slots for the assignment of call stations (IP video home station, Gira G1 and third-party devices, such as IP telephones).

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- One Gira F1 ⑥
- One IP video home station with Modular Jack ⑦
- Two IP telephones ⑧
- One PoE router ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the basic configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Note: All designations that you make here can be subsequently changed or corrected on the door station device website.
   When configuring the rental unit, the “Gira F1 present” option must be enabled.
4. Commission project:
   Commission the project.
   Although the IP video home station is commissioned automatically, the IP telephones must be set up manually in the next step.
5. Set up an IP telephone:
   Open the Gira F1 device website.
   There you can set the necessary parameters for configuring the IP telephones. The way in which IP telephones are configured differs depending on the manufacturer and usually takes place via the IP telephone’s web interface. The documents for configuring selected IP telephones are available in the Gira download section.

Forwarding to a smartphone

In this example, forwarding to a smartphone can only be configured via the IP video home station. Configuration via an IP telephone is not possible.

Click here [▸ 79] to learn how to set up forwarding to a smartphone.

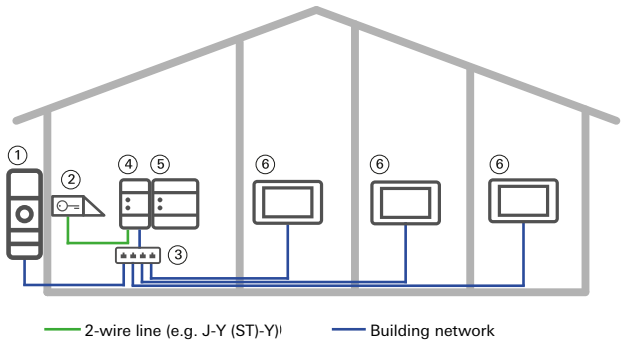
⊕ Note on mixed operation

If devices from the Gira IP door communication system are used together with devices from third-party providers as call stations within a project (e.g. IP telephones), please note the following information regarding the configuration of third-party devices:

Third-party devices must always be integrated into the IP door communication system via the Gira F1. The Gira F1 provides 10 slots for this purpose. During the automatic assignment of home stations, the slots are assigned in ascending order (starting with slot 1).

To prevent overlapping, when manually configuring the third-party devices, the slots should be used in descending order (starting with slot 10).

3.27 Doctors' surgery with automatic door opener



Application example: automatic door opener

The "automatic door opener" function is to be used in a doctors' surgery.
The automatic door opener is used to open the door automatically after a door call so that a person can enter the building directly.
The automatic door opener triggers approx. 4 seconds after the door call – at the door station from which the door call originated.
An active automatic door opener is indicated accordingly in the status bar of the home station. As there are three home stations in the surgery, the activated automatic door opener is displayed on all home stations.
The three home stations are able to communicate with each other via an internal call.
The door opener is controlled via the IP switching actuator.

System components

- One door station with 3-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Three IP video home stations with Modular Jack ⑥
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new "Single-family home – IP" project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   Note: The IP switching actuator is automatically assigned to the door station and is already in door opener mode. The activation time can be customised.
3. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names are displayed on the devices during subsequent operation.
4. Configure call destinations:
   Click on the call-button module tile and select the three home stations as the call destination.
5. Commission project:
   Commission all project devices.

✓ The internal calls between two home stations are created automatically during commissioning.

⊕ Automatic door opener in "Multi-family home/large property – IP" projects

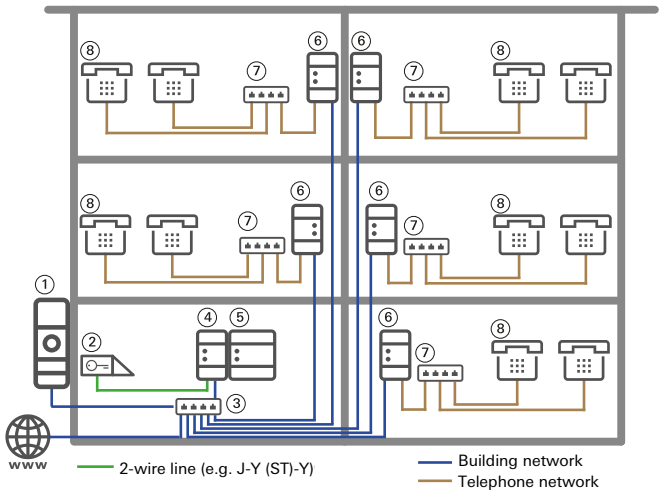
In the "Apartment building/large property – IP" project type, the automatic door opener must be enabled in the GPA during configuration.

Activating the automatic door opener

Activate/deactivate the automatic door opener in the home station as follows:

1. Go to Settings > [Advanced settings] > Door communication section [Allow automatic door opener].
2. When enabled, the corresponding button appears on the start screen of the door communication system.
3. Tap the automatic door opener button to activate/deactivate the function.

3.28 Commercial property with IP telephone systems



Application example: commercial property

A Gira IP door station with an IP call display is installed at the entrance door of a commercial property. It should be possible to make door calls to the five rental units via IP telephones. An IP telephone system is installed in each rental unit, by means of which door calls are to be forwarded to individual IP telephones. In this case, the number of IP telephones that can be connected depends on the IP telephone systems used.

An IP telephone system can only be integrated into the Gira IP door communication system as a client in combination with a Gira F1. This requires a private network that is separate from the building network. In this example, the IP telephone systems must be configured as rental units in a multi-family home project.

System components

- One door station with IP call display module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE router ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Five Gira F1s ⑥
- Five IP telephone systems ⑦
- Multiple IP telephones ⑧

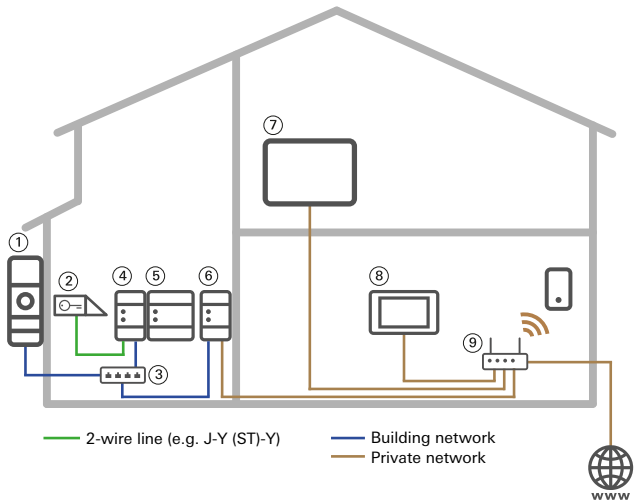
Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the basic configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Notes:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring each of the rental units, the “Gira F1 available” option must be enabled.
4. Commission project:
   Commission the project.
5. Configure an IP telephone system:
   Open the Gira F1 device website.
   There you can set the necessary parameters for configuring the IP telephone system. The way in which IP telephones are configured differs depending on the manufacturer and usually takes place via the IP telephone system’s web interface or its configuration software. The documents for configuring selected IP telephone systems are available in the Gira download section.

⊕ Note on the IP switching actuator

Since no switching actions can be triggered on the IP switching actuator via an IP telephone, only the door opener function of the switching actuator can be used in this example.

3.29 Single-family home with wall PC



Application example: wall PC

In a single-family home, door calls are to be displayed on both a Gira IP home station and a wall PC. A call button should call both call stations simultaneously.
Forwarding to a smartphone can be set up.
The two home stations should be able to communicate with each other via an internal call.
The door opener is to be controlled via the IP switching actuator.

Devices from third-party providers, such as the wall PC used in this example, can only be integrated into the Gira IP door communication system as clients in combination with a Gira F1. This requires a private network that is separate from the building network.
In this example, the home must be configured as a rental unit in a multi-family home project.

System components

- One door station with 1-gang call-button module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE switch ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- One Gira F1 ⑥
- One wall PC with SIP software ⑦
- One IP video home station with Modular Jack ⑧
- One PoE router ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the basic configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Note:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring the rental unit, the “Gira F1 available” option must be enabled.
4. Commission project:
   Commission the project.
5. Configure the client on the wall PC:
   Open the Gira F1 device website.
   There you can set the necessary parameters for configuring the SIP client. The way in which the client is configured differs depending on the manufacturer and usually takes place via the client’s web interface. The documents for configuring selected clients are available in the Gira download section.

Forwarding to a smartphone

In this example, forwarding to a smartphone can only be configured via the IP video home station. Configuration via a SIP client is not possible.

Click here [▸ 79] to learn how to set up forwarding to a smartphone.

⊕ Note on mixed operation

If devices from the Gira IP door communication system are used together with devices from third-party providers as call stations within a project, please note the following information regarding the configuration of third-party devices:

Third-party devices must always be integrated into the IP door communication system via the Gira F1. The Gira F1 provides 10 slots for this purpose. During the automatic assignment of home stations, the slots are assigned in ascending order (starting with slot 1).

To prevent overlapping, when manually configuring the third-party devices, the slots should be used in descending order (starting with slot 10).

3.30 Opening the door without a key

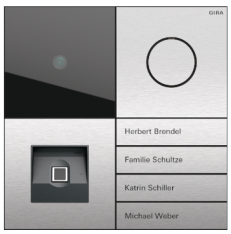
The Gira IP door communication system offers the user a range of convenient and secure options for opening the front door without the need for a conventional key.

Keypad function

The IP call display module plays a central role in this. It includes a keypad function, which allows for keyless access by entering a previously defined numeric code. Users can choose a personal numeric combination to serve as a secure access code. This ensures convenient access without having to carry physical keys or transponders.

Typical use cases in which the IP call display module is used as a keypad can be found in the examples here [▶ 32] and here [▶ 51].

Gira Keyless In Fingerprint



System 106 door station with fingerprint module

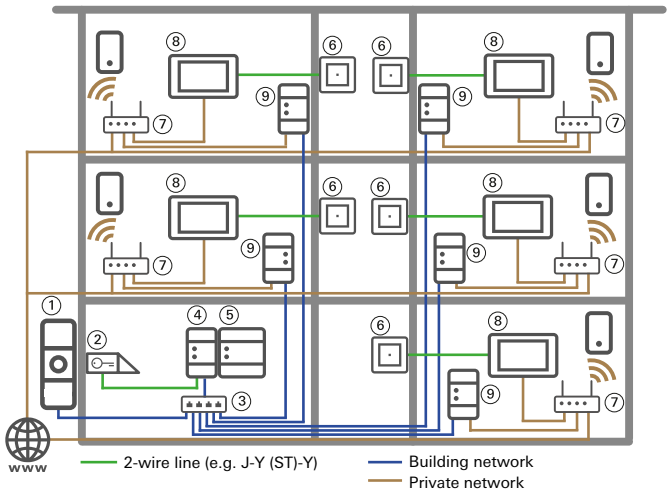
Another option for keyless door opening is the Gira System 106 fingerprint module. This system uses biometric recognition and compares the individual characteristics of a finger positioned on the sensor with up to 99 stored fingerprints. This allows a large number of people to be securely authorised without the need to share items such as keys, cards or codes.

The following application example [▶ 53] shows how the Gira System 106 fingerprint module is integrated into the IP door communication system.

Gira System 106 blank module; RFID blank module

Gira System 106 blank modules are available for future extensions or the integration of third-party technologies. These modules offer free space within the Gira System 106 design and can be used, for example, to elegantly embed RFID readers from other manufacturers into the Gira System 106. This ensures that a uniform outer appearance can be maintained for the door station, even where different access control systems are to be combined. The blank modules therefore support maximum flexibility while maintaining a clear design language.

3.31 Call display as a keypad (door opener function)



Application example: keypad

In a multi-family home, the IP call display is to be used as a keypad. Residents will be able to open the front door by entering codes.

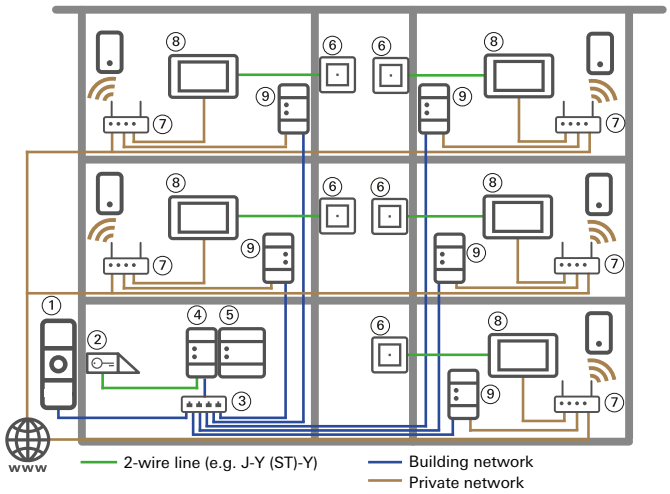
System components

- One door station with IP call display module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE router ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Five floor-call buttons ⑥
- One router per rental unit ⑦
- One IP video home station with Modular Jack per rental unit ⑧
- Five Gira F1s ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Note:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring each of the rental units, the “Gira F1 available” option must be enabled.
4. Commission project:
   After you have completed all configuration steps, commission the project.
5. Define codes:
   Open the device website of the commissioning door station and configure the necessary settings for the code lock function.
   Codes can be set up for rental units as well as for external users.

3.32 Call display as a code keypad (door call via apartment number)



Application example: keypad

In a multi-family home, the IP call display is to be used as a keypad. Visitors will be able to trigger the door call in the desired rental unit by entering a call number.

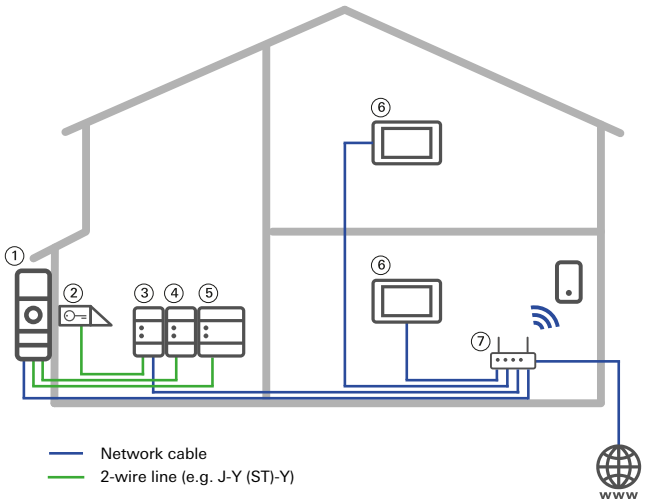
System components

- One door station with IP call display module, IP camera module and Modular Jack ①
- One door opener ②
- One PoE router ③
- One IP switching actuator ④
- One power supply (IP switching actuator and door opener) ⑤
- Five floor-call buttons ⑥
- One router per rental unit ⑦
- One IP video home station with Modular Jack per rental unit ⑧
- Five Gira F1s ⑨
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Multi-family home/large property – IP” project in the GPA.
2. Basic configuration:
   In the Basic Configuration Assistant, enter the basic data required for the project.
3. Edit configuration:
   Open the “Configuration” view and add the project-specific settings.
   Note:
   All designations made here can be subsequently changed or corrected on the door station device website.
   An IP switching actuator has automatically been assigned to the door station for the door opener function.
   When configuring each of the rental units, the “Gira F1 available” option must be enabled.
4. Select call method:
   The call method can be set in the “Configure rental units” view. To do so, click on the gearwheel icon and select the call method “Call by call number” for this example.
5. Set call number:
   Set the call number for the rental unit. This number is displayed on the call display and can only be set or changed in the GPA.
6. Commission project:
   After you have completed all configuration steps, commission the project.

3.33 Single-family home with System 106 fingerprint module



Application example: fingerprint module

A single-family home is to be accessed by fingerprint. In order to achieve this, the Gira System 106 fingerprint module is integrated into the Gira IP door communication system via the DCS switching actuator.
The fingerprint module has its own power supply and controls the DCS switching actuator when a known finger is placed on it. The output of the DCS switching actuator is connected to the binary input of the IP switching actuator. The IP switching actuator then controls the door opener when a taught-in finger is placed on the device. The door opener function of the IP switching actuator can, of course, also be triggered via the home station.

System components

- One door station with a 1-gang call-button module, IP camera module, Modular Jack, and System 106 Keyless In fingerprint module ①
- One door opener ②
- One IP switching actuator ③
- One DCS switching actuator ④
- One power supply (fingerprint module, IP switching actuator and door opener) ⑤
- Two IP video home stations ⑥
- One PoE router ⑦
- Installation material, patch cord, patch panels for sub-distribution

Configuration steps

1. Create project:
   Create a new “Single-family home – IP” project in the GPA.
2. Add building structure and devices:
   Create the building structure and drag the required devices into the project.
   The IP switching actuator is automatically assigned to the door station and is already in door opener mode. The activation time can be customised.
3. Configure switching actuator:
   Click on the tile for the IP switching actuator.
   In the properties column, select the “Activated – NO contact“ option for the “Binary input” parameter.
4. Name the devices:
   Assign unique names to the door and home stations.
   Note: These names will be displayed on the devices during subsequent operation.
5. Configure call destinations:
   Click on the call-button module tile for each door station and select both home stations as the call destination.
6. Commission project:
   Commission all project devices.

✓ The internal calls between the two home stations are created automatically during commissioning.

7. Configure fingerprint module:
   The fingerprint module must be configured in “Use without door communication system” mode.
   We recommend commissioning the fingerprint module using the Gira Keyless In app. More detailed information on configuring the fingerprint module can be found in the instructions supplied with the device and in the Gira download section.

   ⦿ Notes on the System 106 fingerprint module

4 Planning and system limitations

Planning a door communication system involves the selection of suitable components and the associated cable routing. Planning starts with establishing the desired range of functions of the system.

Selecting components

In order to select suitable components and configure the system with them, the customer must first determine which doors are to be equipped with door stations and where the door calls are to be received by the home stations.

They must also decide whether audio or video functionality is desired.

They should also clarify whether additional door communication system functions are to be used, such as:

- Open side doors
- Switch light on/off
- Forward calls to telephones, computers or mobile devices

Once the number of devices, desired range of functions and mounting type have been clarified, the customer can select the appropriate door and home stations based on their preferred design and desired operating mode.

Maximum number of participants

Residential/rental units per system:	1 to 1,000
Door stations/buildings per system:	1 to 100
Clients per residential/rental unit:	1 to 10
Clients per system (stationary):	Max. 10,000
IP switching actuators per system:	Max. 100
External IP cameras per system:	Max. 200

4.1 Network planning

4.1.1 Address assignment

The IP addresses in a project can be assigned via AutoIP, DHCP or statically.

It is essential to ensure that none of the subnets in the private network of a Gira F1 are ever identical to or overlap with the subnet of the building network. For this reason, addresses that are frequently used by routers in the standard configuration should not be used in the building network. These include: 192.168.0./24, 192.168.1.0/24, 192.168.170.0/24 and 192.168.178.0/24.

It is also not possible to configure AutoIP for use on both the building and private network side.

4.1.1.1 AutoIP

Address assignment via AutoIP should only be used in small systems with only a few devices. For example, in a multi-family home with a door station and a small number of home stations.

⊕ **Maximum of five home stations per rental unit**

When using AutoIP, no more than five home stations can be called with one call button.

Since AutoIP does not allow for Internet access, automatic time synchronisation, remote maintenance and forwarding to a smartphone are not possible. In order to adjust configurations, a PC with the Gira Project Assistant must be connected directly to the network.

If a Gira F1 is used in the system, it is not possible to use AutoIP in the building network.

4.1.1.2 DHCP

Depending on the components selected, the DHCP server can be operated at different points. In many cases, it can be operated directly on the router, which also provides Internet access for the door communication network.

If higher-quality components are used at central points, such as L3 switches with redundant power supply units, it makes sense to shift the DHCP functionality to these devices. This significantly increases operating reliability.

The maximum lease time (validity period of an IP address) should be set to a fairly high value on the DHCP server. A week, for example. This ensures that the system remains operational even if the DHCP server suffers a temporary outage.

If the operating mode “Multiple subnets in the building network” is selected in the GPA, a DNS server is required for operation. To ensure that the DNS server knows the IP addresses and names of the devices, they must be entered in the DNS server by the DHCP server when assigning an IP address.

4.1.1.3 Static assignment of IP addresses

Assignment of static IP addresses is possible, but requires increased configuration effort both during commissioning and during subsequent expansions of the system. This is because the IP settings must be configured individually on each device via its web interface.

If a DNS server is operated and used in the system, the assignments of names to the IP addresses for all statically configured devices must be entered manually on the DNS server.

4.1.2 Mobile forwarding

The home station requires an Internet connection to forward calls to a mobile device, which can be provided either via the building network or via private Internet access.

Mobile forwarding using AutoIP networks is not possible.

4.1.3 Dividing the installation into several subnets

When configuring a system that comprises several buildings or building parts and there is a large number of end devices, the network must be divided into several subnets. Dividing the network into several subnets rather than one large subnet has the following effects:

- Creation of multiple broadcast domains reduces the base load in each network segment.
- Name resolution via mDNS is no longer possible, so DNS is required.
- Local faults/errors in a subnet have no effect on the overall network.

The following rules should be followed regarding the network topology:

- The number of cascaded switches should not exceed four.
- If the subnets are separated using VLANs, only one subnet can be operated within each VLAN.
- The switches should always be connected using optical fibre cabling if the two devices to be connected are not in the same room.
- VLANs should not be stretched across multiple core switches.
- The bandwidths between two switches should be >= 1 Gbit/s.
- A subnet should not contain more than 500 devices.

4.1.4 Selection of network topology

When planning a Gira IP door communication system, important decisions must be made regarding network topology. The choice of suitable topology depends largely on the size and spatial extent of the system.

In the Gira Project Assistant (GPA), you can choose between the project types “Single-family home – IP” and “Multi-family home/large properties – IP” when starting configuration.
If the “Multi-family home/large properties – IP” option is selected, two options are available in the network settings:

- Standard
- Multiple subnets in the building network

Depending on the selected options, the different operating modes have the following characteristics:

	Single-family home – IP	**Multi-family home/large properties – IP**	
		Standard	**Multiple subnets in the building network**
All devices must be in one subnet	yes	yes	no
Name resolution	mDNS	mDNS	DNS
External DHCP server with DNS integration required	no	no	yes
Concierge function available	no	no	yes
IP addresses can be assigned via DHCP	yes	yes	yes (DHCP must register the device names and IP addresses in the DNS server)
IP addresses can be statically assigned	yes	yes	yes (systems must also be entered in the DNS server)
IP addresses can be assigned using AutoIP	yes (no mobile forwarding)	yes (not in the building network if a Gira F1 is present, no mobile forwarding)	yes (not in the building network if a Gira F1 is present, no mobile forwarding)
Recommended maximum number of components in the building network	200	200	>200

4.1.5 Required bandwidths

The quality of the video transmission can be individually adjusted in the door station settings.
In addition to the three predefined quality levels, the parameters can also be configured manually.
The following table shows the bandwidth requirements for a video connection with audio. These values are used as a basis for calculating the total bandwidth required.
Please note: If the parameters are manually adjusted, the bandwidth requirement can be significantly higher.

Default setting	Required bandwidth
Low	1 Mbps
Medium	2 Mbps
High (standard)	4 Mbps

If only one central switch is used in an installation, it is not usually necessary to consider bandwidths. However, once multiple switches/routers/firewalls are connected, it must be ensured that sufficient bandwidth is available. The actual requirement cannot be generally specified, as it depends on the parametrisation of the door calls in the project.

The following values can be used to determine the bandwidth required:

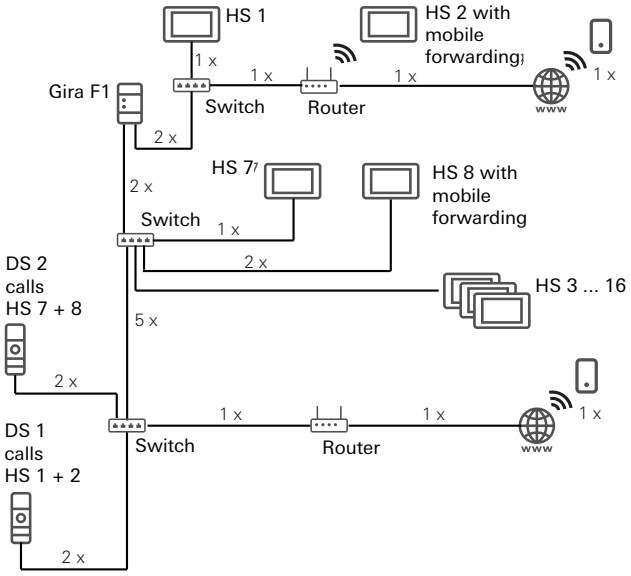
- The required bandwidth depends on the selected quality setting on the door station (see table).
- A door station can call up to 10 call stations (e.g. IP video home station, Gira G1, Concierge or IP telephone) simultaneously in a door call.
- A door communication project may include up to 100 door stations.
- For mobile forwarding, you need to allow for an additional stream from the call station to the Internet.
- For a home station with mobile forwarding set up, the required bandwidth is required once for incoming and once for outgoing data.
  Once for the incoming door call from the door station or the Gira F1 and once for the outgoing call to the mobile device.

To determine the required bandwidth between two network components, the maximum number of simultaneous door calls must be multiplied by the bandwidth.

Example:

- Two door stations are installed in one building.
- There are 19 apartments in the building.
- In one apartment, a Gira F1 is used. There are two home stations behind the Gira F1. Mobile forwarding is set up on one home station and the device is connected via WLAN.
- Both door stations are connected to a switch on the ground floor.
- The home stations in the apartments are attached to another switch, which is connected to the switch for the door stations.
- In the event of a door call for 18 of the apartments, one home station is called.
- In the event of a door call for the two remaining apartments, two home stations are called in each case.
- Mobile forwarding is set up on a home station in the building network

The following diagram shows which bandwidth is required on which connections if a door call is triggered by both door stations simultaneously to both apartments with the two door stations:



Required bandwidths

4.1.6 VLANs

The Gira IP door communication system does not support VLAN.

Only Ethernet frames without a VLAN tag can be forwarded to all Ethernet ports to which components from the door communication system are connected.

The use of VLAN tags can lead to malfunctions in the IP door communication system.

4.1.7 Physical structure of the infrastructure components

Be aware of the following recommendations when setting up the network:

- The switches should always be connected using optical fibre cabling if the two switches to be connected are not in the same room.
- The bandwidths between two switches should be >= 1 Gbit/s.
- If the switches have star-shaped cabling, redundant power supply units are recommended on the central switch.
- When selecting the devices, durability should be ensured. This can be achieved primarily by eliminating active components such as fans. As a rule, very high packing density has a rather negative effect on the service life due to the higher temperatures in the devices.
- The number of cascaded switches should not exceed four.

4.1.8 Firewalls

If firewalls are used in the network, the following ports must be enabled to ensure that the system functions correctly:

ID	Type	Port	Protocol
1	TCP	80	HTTP
2	TCP	8080	HTTP
3	TCP	443	HTTPS
4	TCP	4242	HTTPS
5	TCP	4433	HTTPS
6	TCP	1883	MQTT
7	UDP	1900	SSDP
8	TCP	3671	KNXnet/IP
9	UDP	3671	KNXnet/IP
10	TCP	5061	SIPS
11	UDP	5353	mDNS
12	UDP	6771	BitTorrent LSD
13	UDP	6881	BitTorrent DHT
14	TCP	6881	BitTorrent
15	TCP	8182	WebSocket
16	TCP	4432	WebSocket
17	TCP	4432	WebSocket

4.2 Cabling used

Selection of cables and lines

Shielded data lines of category Cat 5e or higher must be used for installation of the IP door communication system. These lines offer high transmission quality and are suitable for gigabit networks. The use of halogen-free and flame-retardant network cables is recommended to minimise smoke accumulation and the release of toxic gases in the event of a fire.

Twisted-pair cables are used for the network connections. Twisted-pair (TP) cables and individual components are divided into categories according to their performance. Here are the most important categories (also abbreviated to “Cat”) for network components:

Category	Max. length	Speed
Cat 5e	100 m	up to 1 Gbit/s
Cat 6	55 m 100 m	up to 10 Gbit/s up to 1 Gbit/s
Cat 6a	100 m	up to 10 Gbit/s
Cat 7	100 m	up to 10 Gbit/s
Cat 8	30 m	25–40 Gbit/s

Further information about the categories

- With Cat 6, the transfer rate for 10 Gbit/s drops significantly over 55 m.
- Cat 8 is designed for short distances in data centres (max. 30 m).
- Optical fibre cabling is recommended for longer distances or higher bandwidths.
- Although cables often meet the performance requirements of Cat 7 and 8, the other components (network sockets, patch panels etc.) still only meet the Cat 6a standard, which means that the entire transmission path only meets the Cat 6a standard.

Laying of cables

- In accordance with DIN 18015, network cables should always be laid in empty tubes or cable ducts.
- Separation of power and data lines
  In order to prevent electromagnetic interference, data lines must be laid separately from power lines. This can be achieved by physical separation or by using cable ducts with separate chambers.
- Do not kink or bend the network cables excessively, do not mechanically stress them too much during routing and be aware of damage.

Standards

A number of standards and guidelines apply to the laying of network cables in Germany and internationally. Here is an overview:

- EN 50173:
  Application-neutral communication cable systems – regulates structured cabling systems for different building types.
- ISO/IEC 11801:
  International standard for structured cabling systems, covers copper and optical fibre cabling. It defines transmission paths, categories (Cat 5e, 6, 6A, 7, 8) and classes (D, E, EA, F, FA).
- EN 50174:
  Regulates the planning and installation of IT cabling:
- DIN VDE 0100-520:
  Requirements for laying electrical cables, also relevant to communication cables (e.g. protection, pipe layouts).
- DIN 18015:
  Planning of electrical installations in residential buildings – requires that communication cables be laid in installation pipes (mechanical protection, interchangeability).

4.3 Surge protection

If a network cable is routed out of the building – for example to a gate at the property boundary or to a device on the outside wall of the building – the use of overvoltage protectors (OVPs) is recommended.

The surge protection should be installed both on the device itself and at the point where the network cable exits the building.

Surge protection is not required if a device is mounted on the outside of the building and the network cable is routed directly back into the building interior.

The aforementioned notes on surge protection are non-binding recommendations. Their actual implementation is decided by the electrical engineering firm that carries out the work, which must be familiar with and comply with the applicable installation regulations.

4.4 PoE – Power over Ethernet

The IP intercom module, the IP video home station and the Gira G1 are powered by PoE (Power Over Ethernet). PoE enables power and data to be transmitted simultaneously via an Ethernet cable. Instead of laying two separate cables – one for data transfer and one to supply power – PoE requires only one single cable.

The routers/switches used must comply with one of the following standards:

- PoE standard IEEE 802.3af-2003
- PoE standard IEEE 802.3at-2009
- PoE standard IEEE 802.3bt-2018

Depending on the network infrastructure, the decentralised PoE supply can also be provided via "PoE injectors".
If a separate PoE injector is used, it can provide a power output of no more than 30 W.

4.5 The Gira F1 in the IP door communication system

For a "Multi-family home/large property – IP" project, the Gira F1 serves as an interface between the building network and the network in the rental unit.
The Gira F1 cannot be used for a "Single-family home – IP" project.

Network configuration

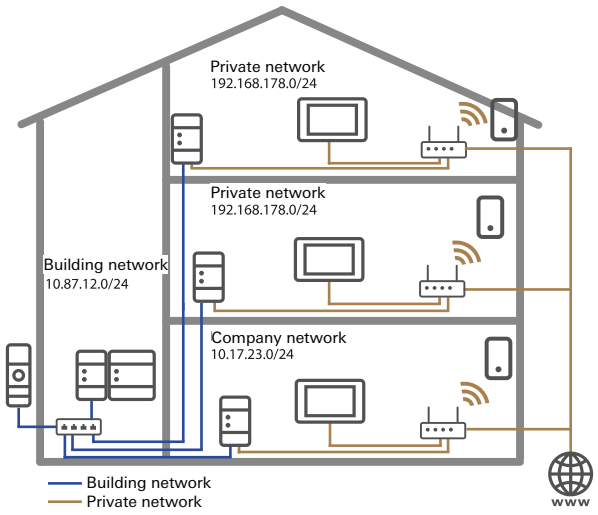
When using the Gira F1 to separate the rental unit network from the building network, please note the following points:

- Different IP address ranges:
  The IP address ranges of the rental units and the building network must be clearly separated from each other. For example, it is recommended that the building network use the range 10.42.x.x with the subnet mask 255.255.0.0. The private network must not be a subnet of the building network (e.g. 10.42.1.0 with subnet mask 255.255.255.0), nor identical to this.
  To prevent conflicts with typical home networks (e.g. 192.168.0.0/net mask 255.255.255.0, which is common in routers such as the FritzBox), the building network should use a different address range. The building network should also avoid using the address ranges 192.168.1.0/24, 192.168.178.0/2 and 192.168.178.0/24, as an overlap is very likely in these cases.
  In the commercial sector, appropriate coordination with the companies connected to the system is always required.
- DHCP server recommended:
  Use of a DHCP server is recommended in the building network. This is usually integrated into the router and facilitates automatic IP assignment.
  If no DHCP server is available, IP addresses must be assigned manually via the device website of the respective devices (not recommended).
- Auto IP not possible:
  Operation with Auto IP in the building network is not possible when using the Gira F1.
- All call stations in the same subnet:
  The Gira F1 supports several subnets on the private interface. Please note that all call stations of the door communication system (including those from third-party providers) must be located on the same subnet.

⊕ **Warning: Do not configure network settings via the ETS!**

The network settings on the Gira F1 can also be configured via the ETS. However, this is not recommended!
If the network settings are configured via the ETS, you must check whether the network settings created can be adopted by the IP door communication system.
When switching to static IP addresses, the addresses must be entered in the DNS.

The following image shows the possible network ranges for three rental units that are connected to the building network by a Gira F1:



Gira F1 in a multi-family home

Hardware requirements

- The Gira F1 has 10 slots available for assignment of call stations (IP video home station, Gira G1 and third-party devices, such as IP telephones). This means that up to 10 call stations can be connected via the Gira F1 in a rental unit.
- Up to 1000 Gira F1 units can be used in a project.
- Two Ethernet ports with at least 100 Mbit are required for the connection (one port for the door communication network and one for the home network).
- The power is not supplied via PoE but via a 24 V power supply unit

Configuration

The Gira F1 is configured in the GPA as a "Multi-family home/large property – IP" project. A distinction must be drawn between two different scenarios here:

- Rental unit without Smart Home project:
  The Gira F1 and the home stations connected to it are fully configured and commissioned via the "Multi-family home/large property – IP" GPA project.
- Rental unit with Smart Home project:
  Configuration and commissioning are carried out in two separate projects (the "Multi-family home/large property – IP" project and a Smart Home project with the Gira X1 or Gira One server). These two projects are independent of each other and do not recognise each other. The connection is established by the Gira F1. The home stations in the Smart Home rental unit are also not part of the multi-family home project.

Special situations

- Factory reset of the commissioning door station:
  A factory reset of the commissioning door station will also reset the Gira F1 to factory settings. The KNX configuration of the Gira F1 is also reset, i.e. the TP and the IP application must then be transferred again.
- Subsequent network settings via the ETS:
  If the TP application with assignment of the network settings is subsequently transferred to the Gira F1 in a door communication project that has already been put into operation, the settings most recently transferred from the ETS will apply. This can cause problems if, for example, AutoIP settings are overwritten by the ETS network settings.
- Device identification:
  The FindMe function is closely linked to the KNX programming mode. Programming mode must not be terminated after two minutes. With the Gira F1, it must be taken into account that FindMe and KNX programming mode are identical. For this reason, device identification does not automatically end after two minutes, as is the case with other devices in the IP door communication system.
- Changes in the private network:
  After router replacement or configuration changes in the private network, all devices of the IP door communication system, including the Gira F1, must be restarted. This quickly restores the system to full functionality.
  Otherwise, call stations might not be contactable and the display will show the following message: "Error in door communication".
- Commissioning or updates to the IP door communication system:
  If commissioning or an update is carried out in the IP door communication system, there may be delays in the KNX bridge functionality in the Gira F1.
  If a device needs to be restarted, the Gira F1 will temporarily lose function during the restart.

Integration of third-party call stations

Third-party call stations, such as IP telephones, can only be integrated into the Gira IP door communication system as a client in combination with a Gira F1. This requires a private network separate from the building network.

Please note that the Gira F1 has 10 slots available for assignment of call stations (IP video home station, Gira G1 and third-party devices, such as IP telephones).

Important information:

- Registration interval:
  The connection display on the Gira F1 device website is updated depending on the client's set registration interval. A connection may appear to be active even though it has already been interrupted. The registration interval should be reduced in this case.
- Changing the port settings:
  Third-party clients must be re-registered after adjusting the port settings.
- Power failure:
  After a power failure, it can take up to 15 minutes for the devices behind the Gira F1 to regain full functionality.

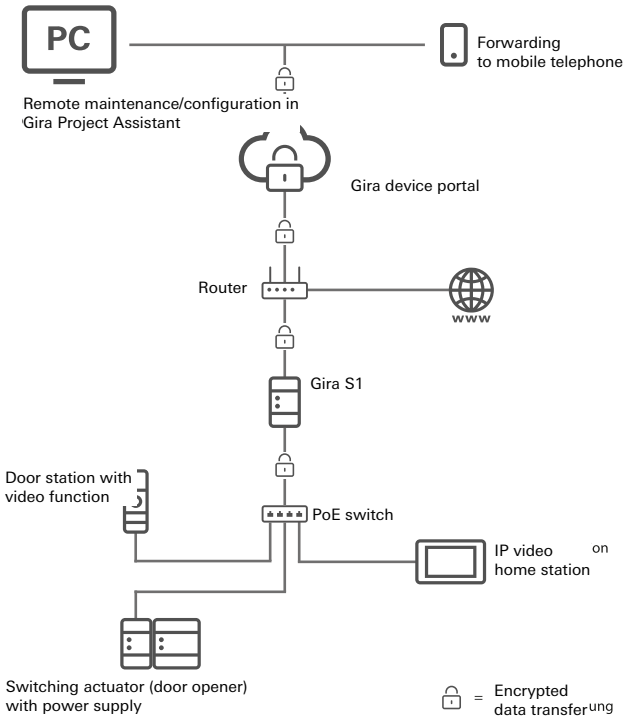
4.6 The Gira S1 in an IP door communication system

For secure remote access to the IP door communication system, it is recommended to use the Gira S1, as this ensures protected access.

Functional description

The Gira S1 is installed in the customer's home network and makes the home network ready for secure access via the Internet.

The connection is via Ethernet. Using the existing Internet connection, the Gira S1 automatically connects to the Gira device portal. Communication between the Gira S1 and the Gira device portal is encrypted via AES and secured with digital certificates.



Gira S1 in the IP door communication system

Configuration in the GPA

The Gira S1 is incorporated into the project via the Gira Project Assistant in the "Remote access" view. First, select the "Remote access module Gira S1" option and then click on the "Configure remote access" button. Then follow the instructions on screen to configure the Gira S1.

Gira device portal

The Gira S1 is managed via the Gira device portal (https://geraete-portal.gira.de/en/). You can also grant other users access to the Gira S1 and thus to the network devices available on the home network using the Gira device portal.

If you, or a person authorised by you, wants to access end devices in the home network, the Gira device portal always acts as an intermediary. The Gira device portal does not store the transferred data, but only forwards it.

The server for the Gira device portal is located in Germany and is subject to German data protection regulations.

4.7 Integrating external IP cameras

The following requirements apply to the integration of external IP cameras into the Gira IP door communication system:

- The camera must support the RTSP protocol.
- Authentication with or without digest authentication.
- Login with and without user authentication.
- Video resolutions supported:
  HD: 1280 × 720 pixels, with a maximum of 30 fps
  Full HD: 1920 × 1080 pixels, with a maximum of 30 fps
  Video encoding: H.264
- Audio streams are not supported:
  The RTSP URL can contain both an audio and a video stream. However, the audio stream does not play.

Functions supported and limitations

"Multi-family home/large property – IP" project type

- It is not possible to assign an audio door station in such a way that the external IP camera's image is automatically displayed on the home station when a door call is received.
- The number of external camera streams which can be active simultaneously is limited to five.
  A sixth stream is rejected, with corresponding feedback given at the intercom unit.

"Single-family home – IP" project type

- Camera images from the external IP camera are available on all clients and can be called up manually there.
  It is not possible to assign an audio door station in such a way that the external IP camera's image is automatically displayed on the home station when a door call is received. Camera images can only be called up manually.

Configuration and commissioning

"Multi-family home/large property – IP" project type

- The external IP camera is commissioned via the device website of the commissioning door station or the Gira F1.
- Assignment to a door station is not possible.
- The activation for the rental unit takes place via the device website of the commissioning door station.

"Single-family home – IP" project type

- The external IP camera is configured in the GPA.
- The external IP camera must be assigned to a door station (an IP intercom module) during configuration. This does not have any functional significance, however.

⊕ External IP camera in Gira One projects

In Gira One projects, a separate camera of the "external IP camera door communication" type must be added for each external IP camera used in conjunction with the Gira IP door communication system and assigned to an IP intercom module.

Possible errors

- Different formats:
  Only RTSP paths with resolution up to Full HD are supported. If different formats are used, the camera image will not be displayed (black image, loading indicator). If an audio stream is available, it will not be played.
- Incorrect information:
  Incorrect path information, missing login details (e.g. password) or similar configuration errors cause no video image to be displayed (black image, loading indicator).

Streaming external cameras via the Gira F1

Where a Gira F1 is used in a property, an additional tab is available on the Gira F1 device website. This contains a tabular overview of all cameras set up using the commissioning door station and activated for the respective rental unit.

The following information is displayed for each camera:

- Name
- Location
- RTSP URL

The RTSP URL already contains the login data and can be copied to the clipboard for use in applications such as the VLC media player.

4.8 Operation with telephone systems

Supported functions

The following functions are supported when connecting to local or cloud-based telephone systems:

- Door calls are forwarded to users of the telephone system.
- Callback from the telephone system to the door station (which last called)
- Door opener function, the door opener can be triggered during a door call via DTMF (RFC2833, SIP INFO or Inband DTMF).
- Video transmission (only if supported by the telephone system used)

Note:
You cannot make internal calls from the telephone system to Gira home stations or the Gira G1 or vice versa.

SIP door call requirements

- Protocols RFC 3261 (SIP/SIPS) and RFC 3550/3711 (RTP/SRTP)
- Audio codecs: G.722 and G.711
- Video codec H.264

Note:
No separate URL is provided to call up the video stream

Certificate-based authentication

Certificate-based authentication can be used to connect to local or cloud-based telephone systems.

The required certificates must be stored in the IP door communication system in accordance with the specifications of the telephone system used or the provider of the cloud-based telephone system. Configuration is carried out via the device's user interface.

Note for commissioning

- Assignment of SIP slots
  Set up third-party devices preferably starting with slot 10, and then use the lower slots (9, 8, 7 etc.). Gira devices occupy slots automatically, starting with slot 1 and then continuing in ascending order (2, 3, 4 etc.). In the event of overlaps, Gira devices will overwrite the slot assignment of third-party devices.
- DNS requirements for cloud telephone systems
  When using a cloud telephone system, the DNS server used for name resolution must be accessible on the same subnet as the private network interface (LAN2) of F1.
  Otherwise, registration of the IP door communication system on the SIP server of the cloud telephone system may fail or the connection may be unstable.

4.8.1 Local telephone systems

The IP door communication system can be connected to a local SIP telephone system for forwarding door calls to the telephone system of the respective rental unit. In practice, the door communication system is usually operated as an auxiliary unit of the telephone system.

The IP door communication system is connected to the building network. The rental units (e.g. law firms or medical practices) are connected to the door communication system in the building network via a Gira F1.

Supported modes of operation

The IP door communication system supports the following modes of operation:

- The third-party telephone system acts as a SIP registrar.
  The IP door communication system is registered as an auxiliary unit on the telephone system.
- The IP door communication system acts as a SIP registrar.
  The third-party telephone system is registered as an auxiliary unit on the IP door communication system.

Supported network topologies

The following network topologies are supported:

- The rental unit can be designed as a standard or Smart Home rental unit.
- The building network (LAN1) can consist of a single subnet or several subnets coupled via routers.
- The rental unit's private network (LAN2) consists of at least one subnet with router.

Permitted network configurations

Parameters	Building network (LAN1)	Rental unit network (LAN2)
IP address configuration*	Static or DHCP	DHCP
Name resolution	mDNS or DNS	mDNS for Gira devices, DNS for the telephone system
Subnet structure	single or multiple	single or multiple

* There must be no overlapping of IP address ranges between LAN1 and LAN2.

4.8.2 Cloud telephone systems

For rental units with Internet access, the IP door communication system can be connected to a cloud-based telephone system. The IP door communication system is operated as a SIP auxiliary unit on the cloud-based telephone system.

The IP door communication system is connected to the building network. The rental units (e.g. law firms or medical practices) are connected to the door communication system in the building network via a Gira F1.

Supported mode of operation

The IP door communication system can register with the SIP server (proxy and registrar) of a cloud-based telephone system via the existing Internet connection of the rental unit and be operated as an auxiliary unit.

Supported network topologies

The following network topologies are supported:

- The rental unit can be designed as a standard or Smart Home rental unit.
- The building network (LAN1) can consist of a single subnet or several subnets coupled via routers.
- The private network of the rental unit (LAN2) consists of at least one subnet with router and Internet access.

Permitted network configurations

Parameters	Building network (LAN1)	Rental unit network (LAN2)
IP address configuration*	Static or DHCP	DHCP
Name resolution	mDNS or DNS	mDNS for Gira devices, DNS for the telephone system
Subnet structure	single or multiple	single or multiple

* There must be no overlapping of IP address ranges between LAN1 and LAN2.

5 Configuration

The Gira IP door communication system is initially configured using the Gira Project Assistant (GPA). Depending on the specific requirements of the project, it may be necessary to configure additional settings directly via the websites of the devices used after configuration with the GPA.

Configuration with the Gira Project Assistant

The Gira IP door communication system is configured using the Gira Project Assistant (GPA). You can first create a project using the GPA user interface. You can then map building structures and adjust settings for the devices and components.

Using drag-and-drop, you can create building parts and rooms, as well as individual devices and components of the system using the library and device catalogue. You do not have to have the actual devices to hand to do this.

Finally, the GPA provides complete documentation at the touch of a button. The summarised project data can be provided to the customer as a printout or PDF.

Download and installation

You can always find the latest version of the Gira Project Assistant software on the Gira homepage, under Downloads.

You can find the system requirements and the download link at the following address:

⦿ partner.gira.com/en/service/download/index.html?type=D&id=3522

5.1 Different project types – which type should I choose for my project?

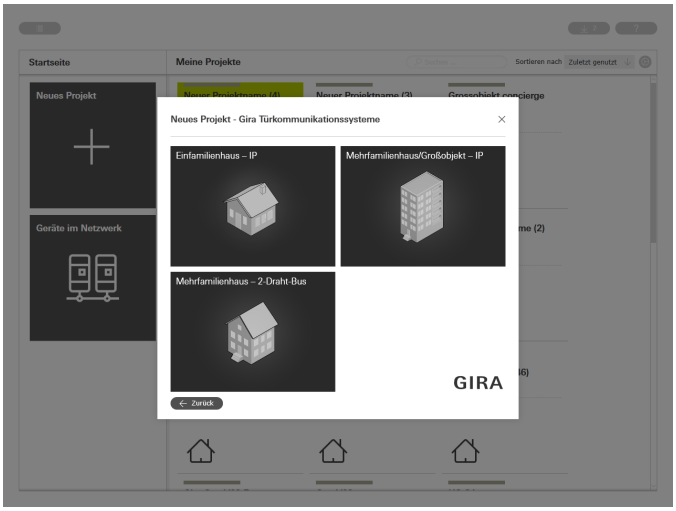
When you create a new project in the GPA, you must first decide on the right project type.

In the “Gira door communication systems” section, you can choose between the following options:

– Single-family home – IP

– Multi-family home/large property – IP

– Multi-family home – 2-wire bus
(In this option, you can configure the analogue door communication system using the DCS IP data interface. This is not covered in this system manual)



Create new project

Rental unit with Smart Home

If you want to use the Gira G1 both as a home station and as a visualisation display for the Gira X1, Gira One server or Gira HomeServer in your property, this is implemented via the “rental unit with Smart Home”.

Three project types

During configuration and commissioning of the Gira IP door communication system, a distinction is drawn between three project types, which are described in detail below:

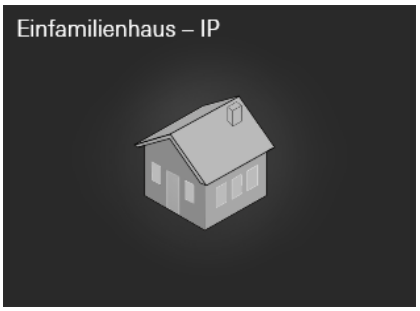
– Single-family home – IP

– Multi-family home/large property – IP

– Smart Home rental unit (Gira One or Gira X1)

Specific commissioning procedures apply for each project type, which are based on the respective technical requirements and framework conditions.

5.1.1 Single-family home – IP project type



Single-family home – IP project tile

With this project type, all components of a door communication system can be configured for smaller properties.
In addition, Smart Home components can also be configured in conjunction with the Gira X1.

Each device is commissioned individually.

Restrictions

- The Gira F1 cannot be configured when using the “Single-family home – IP” project type.
- A project of the type “Single-family home – IP” does not support the addition of Gira One functions.
  In order to combine the Gira One system with the IP door communication system, you need to either create a new Gira One project or use an existing Gira One project. The components of the IP door communication system can be configured within Gira One projects.

5.1.2 Multi-family home/large property – IP project type



Multi-family home/large property – IP project tile

Only the Gira IP door communication system is configured in this project type. Smart Home components such as Gira X1 or Gira One cannot be configured in this project type (this takes place in separate projects that are connected via the Gira F1).

In the Multi-family home/large property – IP project type, the devices in the following rental units are taken into account:

- Rental units directly connected to the building network without using the Gira F1.
- Rental units that are connected via a Gira F1, if no Smart Home functionalities are integrated.

Step-by-step commissioning via the commissioning door station

In the Multi-family home/large property – IP project type, one door station assumes the function of the “commissioning door station”. The GPA first transfers the system configuration to the commissioning door station. This then automatically takes over the commissioning of all the other devices in the project. The entire system is configured and commissioned in this way. Devices that are not yet available at the time of initial commissioning are automatically put into operation retrospectively as soon as they are detected by the commissioning door station.

Recommendation:

- Device keys should only be entered for the devices in the GPA project that are actually to be put into operation or are already connected to a power supply. Otherwise, the creation of certificates for unreachable devices may take an unnecessarily long time.
- A commissioning section should contain a maximum of 250 devices in order to ensure stable and efficient implementation.

Commissioning door station device website

Central settings for the entire door communication system can be configured via the device website of the commissioning door station. These include:

- Configuring additional door stations
- Managing access codes
- Setting up the Concierge function
- Insights into diagnostics data, system status and error messages

Commissioning with multiple networks

When commissioning a multi-family home with Smart Home rental units that are connected via a Gira F1, you will need to log in to a number of different networks. Please note the following points:

- Building network first:
  The commissioning computer must first be connected to the building network in order to put the multi-family home part into operation.
- Change to rental units:
  The individual rental units are then commissioned. To do this, the commissioning computer must connect to the network of each rental unit.
- Close the GPA when changing the network:
  Before changing the network connection, the GPA should be fully shut down each time to avoid communication problems.
- Only one network active:
  The commissioning computer should only be connected to a single network at a time. Multiple connections can lead to disruptions and malfunctioning.

Merge mechanisms/backup

- Configuration changes due to runtime changes:
  Runtime changes made via the device website of the commissioning door station are deemed to be configuration changes. If you access the system using the GPA (e.g. for configuration changes, firmware updates or to read out the project), these runtime changes are read out by the GPA and merged with the project status stored there.
- Backup and restore:
  Runtime changes are recorded centrally by the commissioning door station. Backup copies of these changes are also saved on other devices within the system. In the event of a defect in the commissioning door station, the GPA can automatically read these backups from the other devices and use them for recovery.

5.1.3 Smart Home rental unit project type



Gira One – Gira X1 – Gira G1 project tiles

If you want to use the Gira G1 both as a home station and as a visualisation display for the Gira X1, Gira One server or Gira HomeServer in your property, this is implemented via the “rental unit with Smart Home”.

In addition to the Smart Home functions (Gira X1 or Gira One), components of the IP door communication system can also be configured in this project type.

The following components can be configured:

- IP home stations
- Gira G1 (2nd generation)
- Gira F1

The following components cannot be configured:

- Door stations
- IP switching actuators

The rental unit is connected to the door communication system via the Gira F1. The Gira F1 has two independent commissioning components:

- Multi-family home/large property – IP
- Smart Home rental unit

Both projects must be fully operational in order to ensure full functionality.

Selection of the correct GPA project for the Smart Home rental unit

Selection of the appropriate GPA project type depends on the server solution used in the rental unit with Smart Home functions.

Gira X1

- “Gira X1” GPA project
  (activate the “IP door communication system“ option in the project settings)
- As an alternative: “Single-family home – IP” GPA project
  (activate the “KNX system with Gira X1” option in the project settings)
- On the Gira G1, set the DCS settings parameter to “IP door communication system”

Gira One server

- “Gira One” GPA project
- On the Gira G1, set the DCS settings parameter to “IP door communication system”

Gira HomeServer

- “Gira G1” (2nd generation) GPA project
- On the Gira G1, set the DCS settings parameter to “IP door communication system”

Commissioning without a server

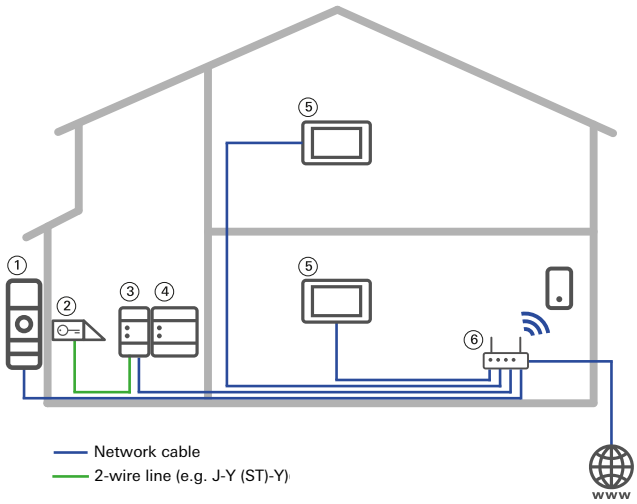
If there is no server (e.g. Gira One or Gira X1) in the network at the time of commissioning a Smart Home rental unit, even though this is provided for in the project, no connection to the Gira G1 can be established.
In this case, the Gira G1 remains on the welcome screen after commissioning. However, devices will respond acoustically to incoming door calls.

Commissioning with multiple networks

When commissioning a multi-family home with Smart Home rental units that are connected via a Gira F1, you will need to log in to a number of different networks. Please note the following points:

- Building network first:
  The commissioning computer must first be connected to the building network in order to put the multi-family home part into operation.
- Change to rental units:
  The individual rental units are then commissioned. To do this, the commissioning computer must connect to the network of each rental unit.
- Close the GPA when changing the network:
  Before changing the network connection, the GPA should be fully shut down each time to avoid communication problems.
- Only one network active:
  The commissioning computer should only be connected to a single network at a time. Multiple connections can lead to disruptions and malfunctioning.

5.2 Configuring the “Single-family home” application example



Application example: single-family home

In a single-family home, door calls are to be displayed on two Gira IP home stations. Both home stations are be called simultaneously with one call button.

Forwarding to a smartphone can be set up.

The two home stations are to be able to communicate with one another via an internal call.

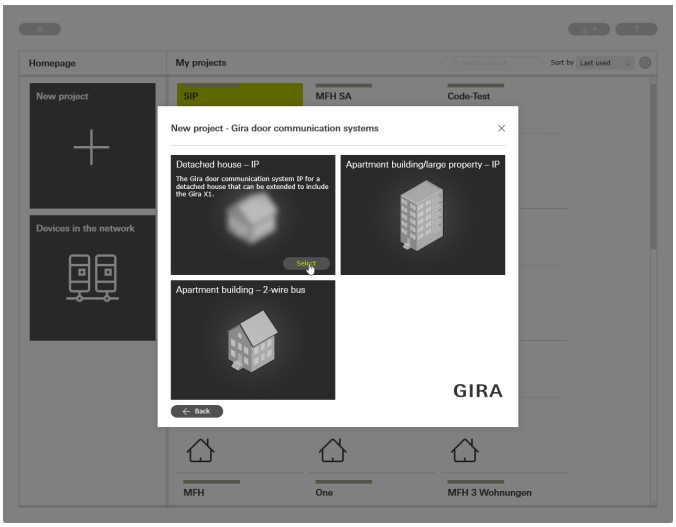
The door opener is controlled via the IP switching actuator.

5.2.1 Create project

To create a new project in the GPA, click on the “New project” tile.

In the dialogue box that opens, select the “Gira door communication systems” system and then the “Single-family home – IP” project type.

Then enter a name for the project and a project password.

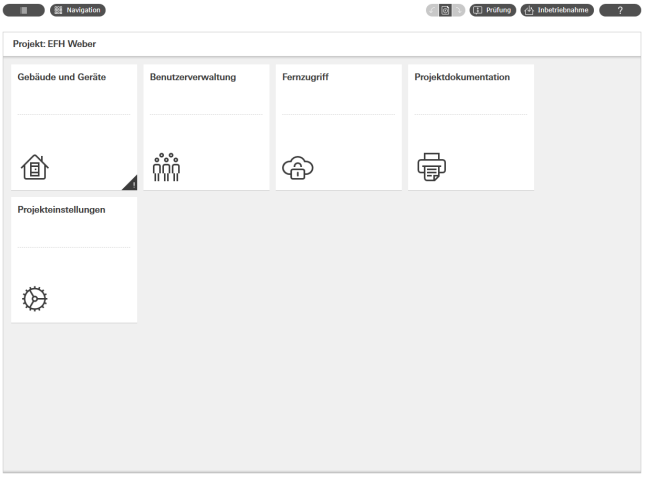


Project selection: Single-family home – IP

5.2.2 Project view

If you have created a new project, the project view opens first.
To start with the project, you first need to create the building structure for your project.

To do this, click on the “Buildings and devices” tile.



Project view

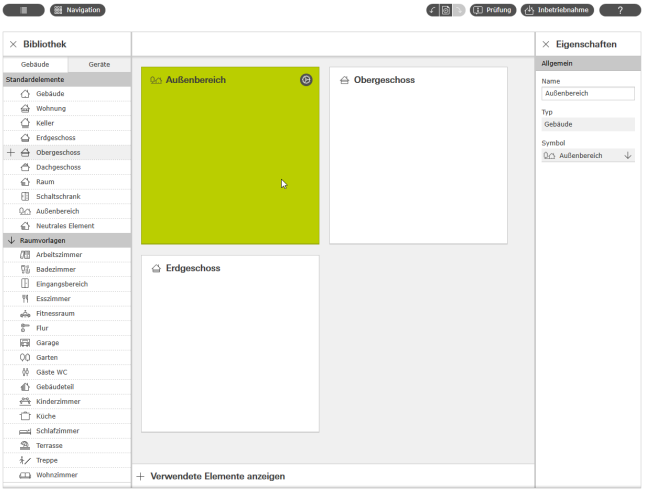
5.2.3 Create building structure

In the left-hand column, you will find the library with the building elements, such as floors or rooms. You can easily drag these elements from the library into the workspace to map your project.

All building elements can, of course, be renamed as desired and given other symbols.

For this example, we need the following building elements

- Outdoors
- Ground floor
- Upper floor



Create building structure

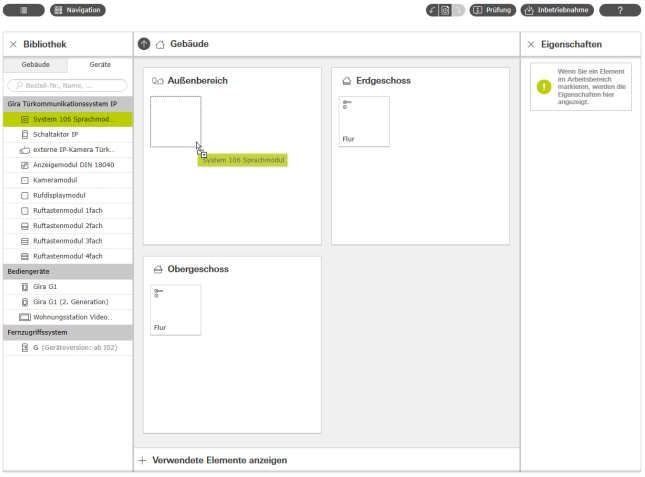
5.2.4 Add devices

Drag the required devices from the left-hand column into the building structure you have created.
To do this, first click on the “Devices” tab and then drag the required devices into your building structure.

For this application example, these are:

- 1 System 106 IP intercom module
- 1 camera module
- 1 single call-button module
- 1 switching actuator
- 2 IP video home stations

Note that each door station consists of an IP intercom module and the associated modules (e.g. IP camera module and call-button module).



Add devices

5.2.5 Name the devices

Assign unique names to the door and home stations.

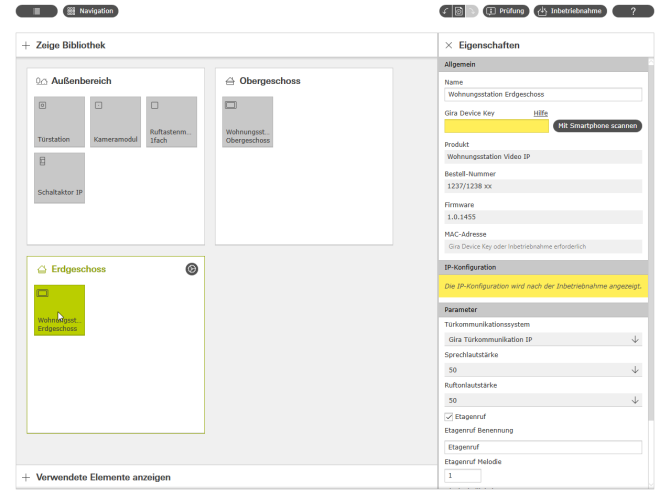
These names will be displayed on the devices during subsequent operation.

To name the devices, click on the device in the building structure and assign it a unique name in the properties column.

Note:
The name of the door station is assigned by selecting the System 106 IP intercom module and entering the desired name.

In this example, the following names are used:

- Door station
- Ground floor home station
- Upper floor home station



Name the devices

5.2.6 Configure call destinations

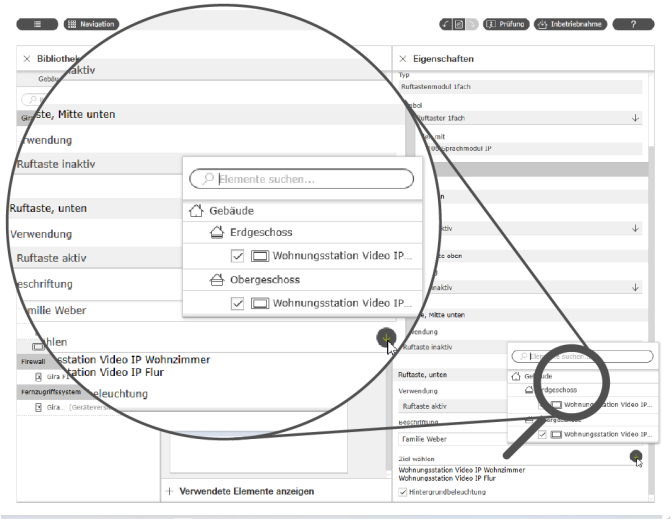
In the building structure, click on the call-button module tile and select both home stations as the call destination.



Configure call destinations

5.2.7 Configure the devices

To configure the devices, select a device by clicking on the corresponding tile. Configure the appropriate settings in the right-hand properties column of the GPA.



Configure the devices

5.2.8 Enter device IDs

The connection between the devices configured in the GPA and the devices actually installed in the project is established via the device IDs. Each device has a device ID (Gira device key or bus address) that can be used to uniquely identify it. You must enter these device IDs in the GPA.

You can find the device ID on a label on the device or on the Secure Card that is included with every device.

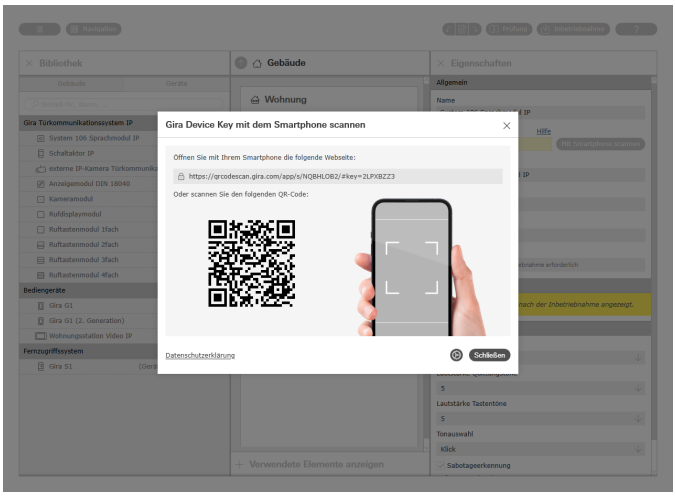
You can either enter the device ID for each device manually in the corresponding field or alternatively scan them in using a smartphone.

Scan the device ID with your smartphone

To avoid having to enter the device IDs manually, you can easily scan the devices with your smartphone.

This requires your PC to be connected to the GPA and your smartphone to be connected to the Internet.

1. Click on the “Scan with smartphone” button in the GPA.
2. Scan the QR code displayed on the monitor with your smartphone.
   The GPA uses this to establish an encrypted connection to your smartphone.
3. You can then enter the device ID QR codes from the Secure Card into the GPA by scanning them with your smartphone camera.



Scanning connection codes using a smartphone

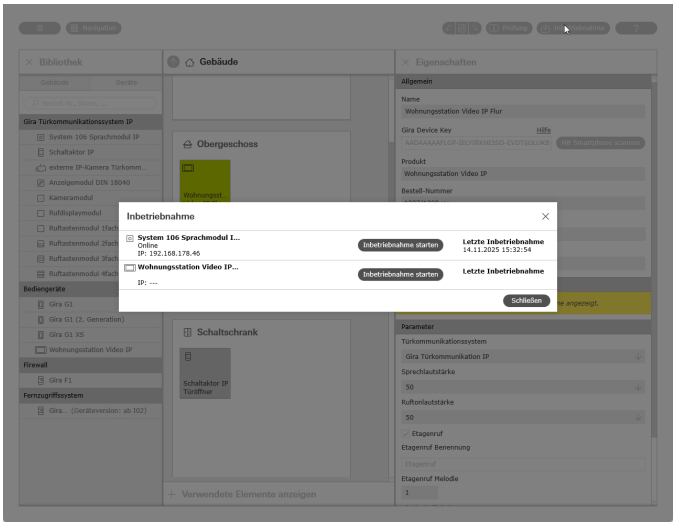


Scanning a device certificate from the Secure Card using a smartphone

5.2.9 Commission the project

Once everything is complete, the project is transferred to the devices.

To do this, click on the button at the top right of the GPA to initiate commissioning. All devices in the project will be listed in the commissioning dialogue box that opens. Click on the “Start commissioning” button for each device to transfer the project data to the devices.



Commissioning dialogue box for a single-family home

The following should be taken into account during commissioning:

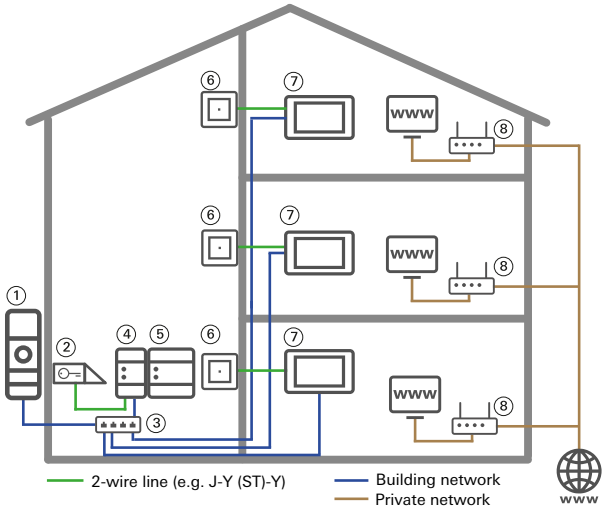
- Check system time:
  Before starting commissioning, the time of the computer on which the GPA is running should be checked and corrected if necessary. The correct system time is important for generating certificates and communicating with the devices.
- Ensure default state:
  Only devices that are in the default state should be put into operation. Devices that have already been configured or have not been reset may cause malfunctions or problems during commissioning.
- Use LAN connection:
  During commissioning, unstable WLAN connections (e.g. due to the connection dropping out or fluctuating bandwidth) can cause errors.
  In such cases, the GPA outputs various error messages, such as StreamingError.
  The GPA computer should thus be operated via a LAN connection to ensure reliable communication with the devices. A wired connection is significantly more stable than WLAN and reduces the risk of transmission errors.

5.2.10 Print out project documentation

After successful commissioning, you can transfer the project to your customer. The GPA assists you here with automatically generated project documentation, which can be created individually for each of your projects.

The project documentation clearly lists all the devices and functions with the set parameters. This documentation can then be printed out or provided to your customer as a file together with the project file.

5.3 Configuring the “Multi-family home” application example



Application example: multi-family home

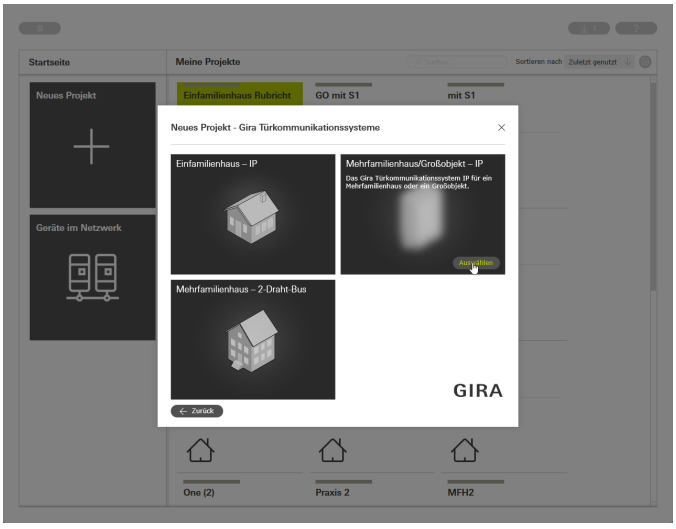
There are three rental units in a multi-family home, each of which is equipped with an IP video home station without WLAN function. The building network for door communication is not connected to the Internet. The building network is not connected to the Internet in the rental units. This means that door communication cannot be forwarded to a smartphone.

5.3.1 Create project

To create a new project in the GPA, click on the “New project” tile.

In the dialogue box that opens, select the “Gira door communication systems” system and then the “Multi-family home/large property – IP” project type.

Then enter a name for the project and a project password.



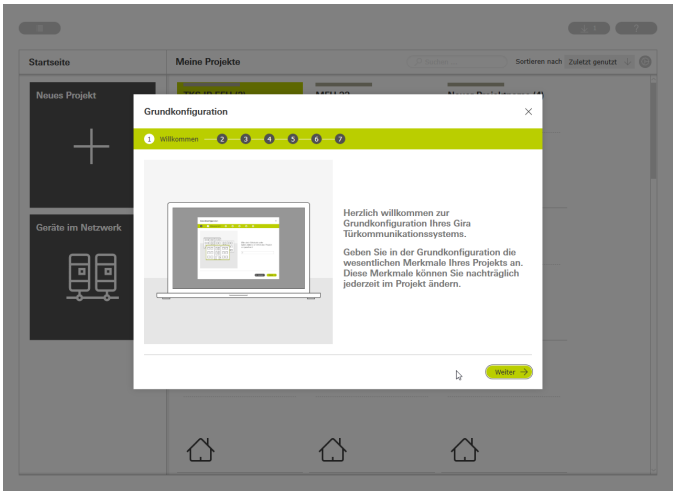
Project selection: multi-family home/large property - IP

5.3.2 Basic configuration

During the basic configuration, the basic data of your project is recorded in seven steps. Configure the necessary settings and click on “Next” each time to move on to the next step.

The following information is required for this application example:

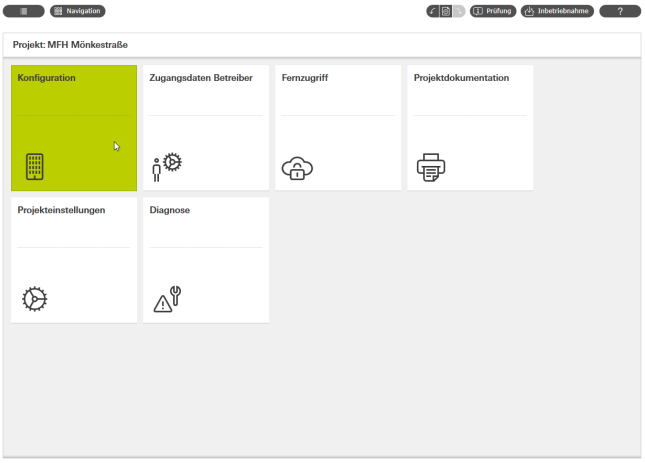
- One building, one door station, three rental units
- The IP video home station is used as the home station
- “German” is selected as the language
- No Concierge



Basic configuration

5.3.3 Configuration

The project is created automatically when the basic configuration is complete.

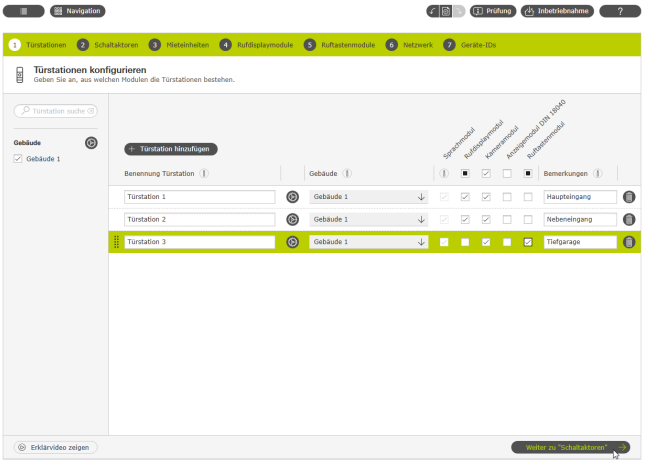


Project view

Then open the “Configuration” tile:
There you can configure the project-specific settings in up to seven steps (depending on the scope of the project):

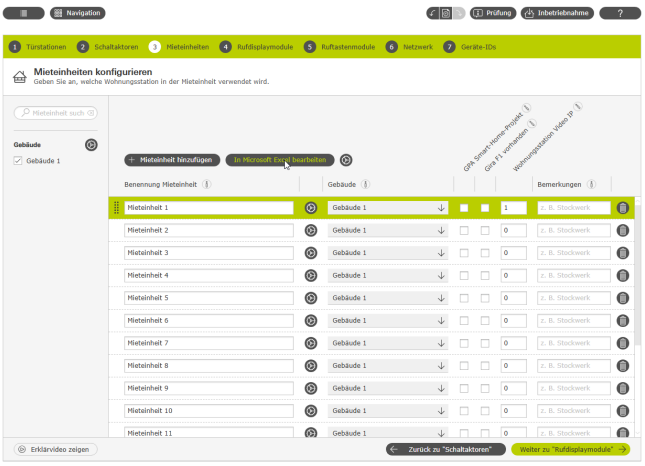
- Door stations:
  Here, you can select the individual components of the door station.
  By clicking on the gear wheel, you can configure default settings for the sounds and the tamper function.
  In this example, you must select the “Call-button module” option.

- Switching actuators:
  Here, you can establish the functions of the switching actuators. A switching actuator for the door opener function is automatically created for each door station.
  Additional switching actuators, e.g. for switching the entrance lighting on and off, could be added here.
- Rental units:
  Here, you can specify the type and connection (with/without Gira F1) of the rental units.
  By clicking on the gear wheel, you can configure default settings for all home stations in the rental unit.
- Call display modules (not available in this example):
  Here, you can connect the rental units to the door station.
- Call-button modules:
  Here, you can connect the rental units to the call buttons on the door station.
  To do so, click on a call-button module and select the corresponding rental unit for the respective call button.
- Network:
  Here, you can configure basic settings for your network.
  For this example, “Standard building network” is selected.
- Device IDs:
  The device IDs of all devices in your project are entered here.



Configure project

5.3.3.1 Tip: Edit rental units in Excel



Export rental units

If there is a large number of rental units, we recommend editing them in Microsoft Excel or LibreOffice.

1. In the “Configure rental units” step, click the “Edit in Microsoft Excel” button.
2. In the dialogue box that opens, you can export the rental units as an Excel workbook.
3. After editing in Excel, import the file back into the GPA.

5.3.4 Enter device IDs

The connection between the devices configured in the GPA and the devices actually installed in the project is established via the device IDs. Each device has a device ID (Gira device key or bus address) that can be used to uniquely identify it. You must enter these device IDs in the GPA.

You can find the device ID on a label on the device or on the Secure Card that is included with every device.

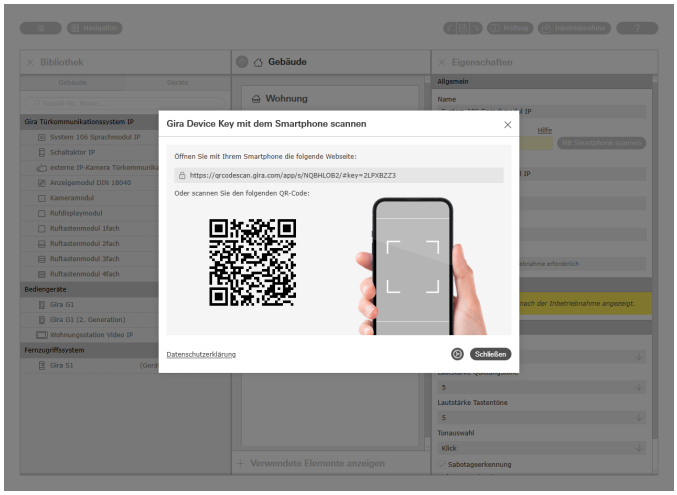
You can either enter the device ID for each device manually in the corresponding field or alternatively scan them in using a smartphone.

Scan the device ID with your smartphone

To avoid having to enter the device IDs manually, you can easily scan the devices with your smartphone.

This requires your PC to be connected to the GPA and your smartphone to be connected to the Internet.

1. Click on the “Scan with smartphone” button in the GPA.
2. Scan the QR code displayed on the monitor with your smartphone.
   The GPA uses this to establish an encrypted connection to your smartphone.
3. You can then enter the device ID QR codes from the Secure Card into the GPA by scanning them with your smartphone camera.



Scanning connection codes using a smartphone



Scanning a device certificate from the Secure Card using a smartphone

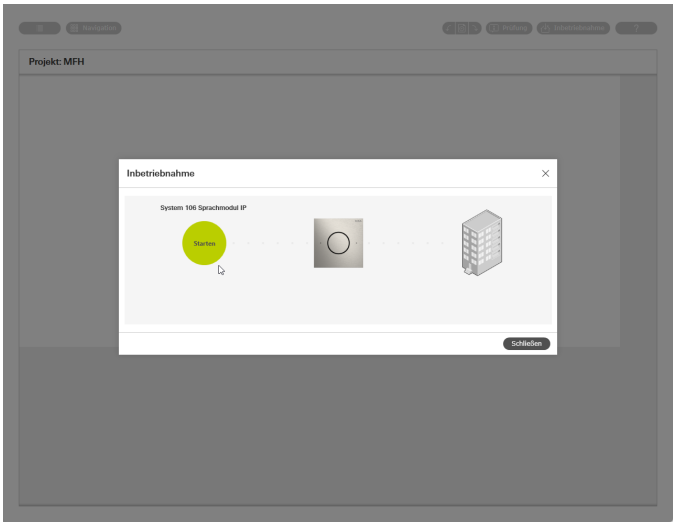
5.3.5 Commission the project

Once everything is complete, the project is transferred to the devices. To do this, click on the button at the top right of the GPA to initiate commissioning.

Step-by-step commissioning

For “Multi-family home/large property – IP” projects, the GPA first transfers the system configuration to the commissioning door station. This then takes over the commissioning of all the other devices in the project. The entire system is configured and commissioned in this way. Devices that are not yet available at the time of initial commissioning are automatically put into operation retrospectively as soon as they are detected by the commissioning door station.

Note:
When using one or more Gira F1 units, you may need to wait for up to 15 minutes.
You can view the current commissioning status on the device website of the commissioning door station.



Commissioning dialogue box for multi-family home/large property

The following should be taken into account during commissioning:

- Check system time:
  Before starting commissioning, the time of the computer on which the GPA is running should be checked and corrected if necessary. The correct system time is important for generating certificates and communicating with the devices.
- Ensure default state:
  Only devices that are in the default state should be put into operation. Devices that have already been configured or have not been reset may cause malfunctions or problems during commissioning.
- Use LAN connection:
  During commissioning, unstable WLAN connections (e.g. due to the connection dropping out or fluctuating bandwidth) can cause errors.
  In such cases, the GPA outputs various error messages, such as StreamingError.
  The GPA computer should thus be operated via a LAN connection to ensure reliable communication with the devices. A wired connection is significantly more stable than WLAN and reduces the risk of transmission errors.

5.3.6 Print out project documentation

After successful commissioning, you can transfer the project to your customer. The GPA assists you here with automatically generated project documentation, which can be created individually for each of your projects.

The project documentation clearly lists all the devices and functions with the set parameters. This documentation can then be printed out or provided to your customer as a file together with the project file.

5.4 Device websites

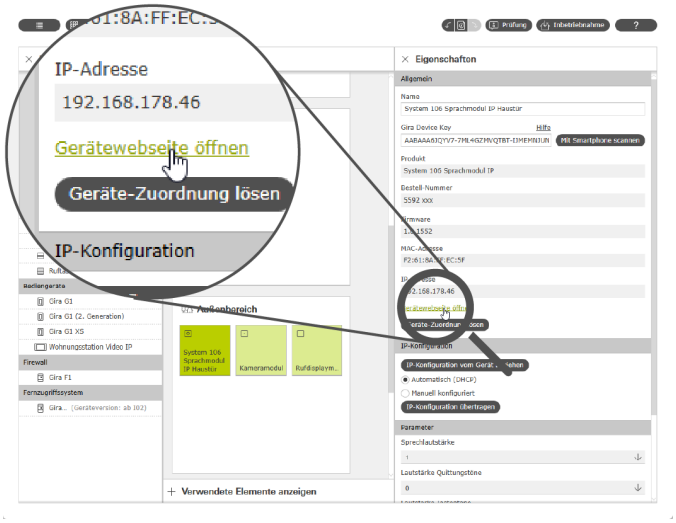
The device website contains all of the device and diagnostic information for the respective device. SIP door communication is also configured via the device website.

Go to the device website

The device website can be displayed either in an Internet browser or in the GPA. The PC and the device must be on the same network for the device website to be displayed.

– Via an Internet browser:
Open the device website by entering the device's IP address in the address bar of your Internet browser. You can find the IP address in the GPA in the "Devices in network" view.

– Via the GPA:
Click on the intercom module tile. In the properties column, click the "Open device website" link.



Open the device website

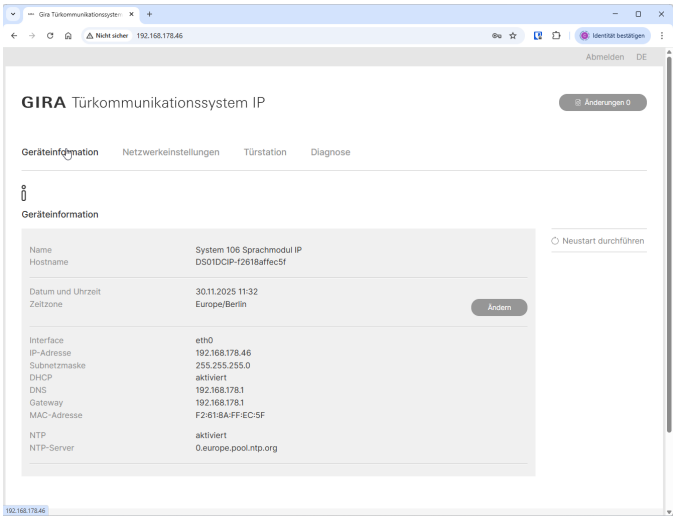
Error message in the browser

When calling up the device websites via "https", a certificate warning ("website not secure") may appear in the browser. This message can be ignored in this case.

Password for the device website

After accessing the device website, you will be prompted to enter a password. The password depends on the device, the type of project selected and the user role. Information about the required passwords can be found in the following chapters for the respective devices.

5.4.1 IP intercom module device website



IP intercom module device website

Password for the IP intercom module

After accessing the device website, you will be prompted to enter a password. The password depends on the type of project selected and the user role.

For "Single-family home -IP" projects:

User role	Password
Device	System key (from GPA project)
Installer	Installer password (from GPA user management)
Administrator	Administrator password (from GPA user management)

For "Multi-family home/large property – IP" projects (as commissioning door station):

User role	Password
Device	System key (from GPA project)
Installer	System key (from GPA project)
Operator	Initial operator password* or individual operator password (from GPA "Operator login details")

* The first time the user logs in as an operator with the initial operator password, they will be prompted to change the password.

For "Multi-family home/large property – IP" projects (no commissioning door station):

User role	Password
Device	System key (from GPA project)

Device website functions

Depending on the project configuration or the modules connected to the IP intercom module, the IP intercom module device website provides the following information, settings and functions:

- Under [Device information], you can see device-specific data and carry out a restart of the door station.
- If necessary, you can adjust the network configuration under [Network settings].
- Under [Door station], you can configure settings on the door station. This includes, for example, the settings on the IP camera module.
- You can configure the numerical codes for the IP call display under [Numerical codes].
- Settings can be configured for the IP switching actuator, external IP cameras and the concierge software under [System devices].
- The [Diagnostics] page provides information about memory usage, system utilisation and device details. You can also perform the following functions:
  - Restart
  - Factory reset (not for the commissioning door station)
  - Log files that can be downloaded in the event of an error or during servicing and forwarded to the Gira hotline.
  - Extended logging should only be activated upon request by the Gira hotline. In this case, the door station records all information for analysis purposes.

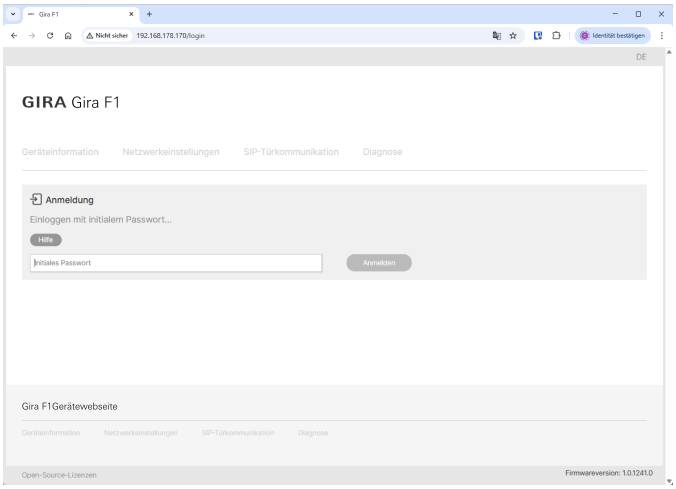
Special case: commissioning door station

For “Multi-family home/large property – IP” projects, system-wide settings and diagnostic options can be configured via the device website of the commissioning door station.
For further information about diagnostic options, see Diagnostics in multi-family home/large property – IP projects [▶ 89].

⊕ Changes to door station with IP call display module

Changes to a door station with IP call display module are only applied after the IP call display module has been in idle status.

5.4.2 Gira F1 device website



Gira F1 device website

Password for the Gira F1

After accessing the device website, you will be prompted to enter a password. The password depends on the type of project selected and the user role.

For “Multi-family home/large property – IP” projects (connection of a rental unit without Smart Home function):

User role	Password
Device	System key (from GPA project)
Installer	System key (from GPA project)
Operator	Individual operator password (from “Operator login details” in the GPA) Login with the initial operator password not possible

For “Multi-family home/large property – IP” projects (connection of a rental unit without Smart Home function):

User role	Password
Device	System key (from the “Multi-family home/large property – IP” GPA project, no longer valid after commissioning the GPA project in the rental unit) or System key (from the rental unit GPA project)
Installer	System key (from the “Multi-family home/large property – IP” GPA project) or Installer password (from user management in the rental unit GPA project)
Operator	Individual operator password (from “Operator login details” in the GPA) Login with the initial operator password not possible!
Administrator	Administrator password (from user management in the rental unit GPA project)

Supplementary information about the Gira F1

Since the Gira F1 is part of two GPA projects, duplicate access paths can be created.

As long as the Gira F1 has only been put into operation using the “Multi-family home/large property – IP” project, you can log in using the system key of the “Multi-family home/large property – IP” project.

The password created in the GPA for the administrator must be changed on the commissioning door station after commissioning: only then can it be used on the Gira F1.

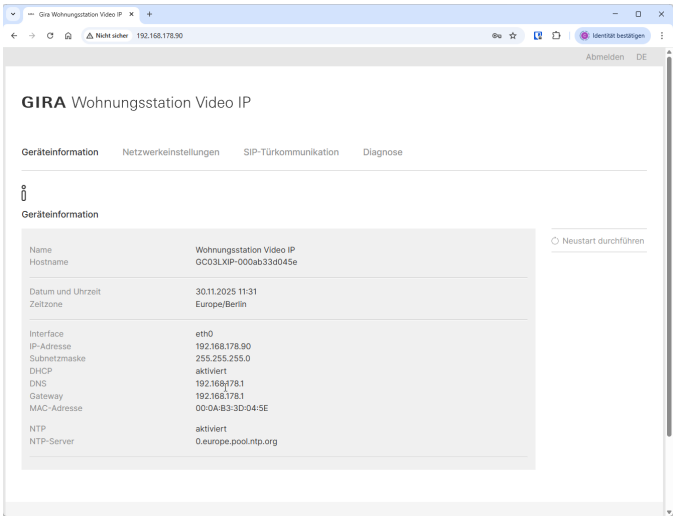
Once the rental unit project has been put into operation, you can also log in using the passwords from the rental unit GPA project.

Device website functions

The Gira F1 device website has the following sections:

- Under [Device information], you can see basic information about the Gira F1.
  Among other things, the MAC addresses of the public network (LAN 1) and the private network (LAN 2) can be found here.
- If necessary, you can adjust the network configuration under [Network settings].
- Under [SIP door communication], you can configure the settings for connecting third-party devices, such as IP telephones.
- On the [Diagnostics] page, you can find the following options:
  - Information about storage usage, the file system and ongoing processes
  - Carry out a restart
  - Reset device to factory settings (KNX TP, KNX IP and SIP)
  - Activate programming mode for the Gira F1 KNX Bridge TP
  - Activate programming mode for the Gira F1 KNX Bridge IP (LAN 1)
  - In the event of an error or servicing work, download a log file for the Gira Hotline

5.4.3 IP video home station device website



IP video home station device website

Password for the IP video home station

After accessing the device website, you will be prompted to enter a password. The password is independent of the selected project type:

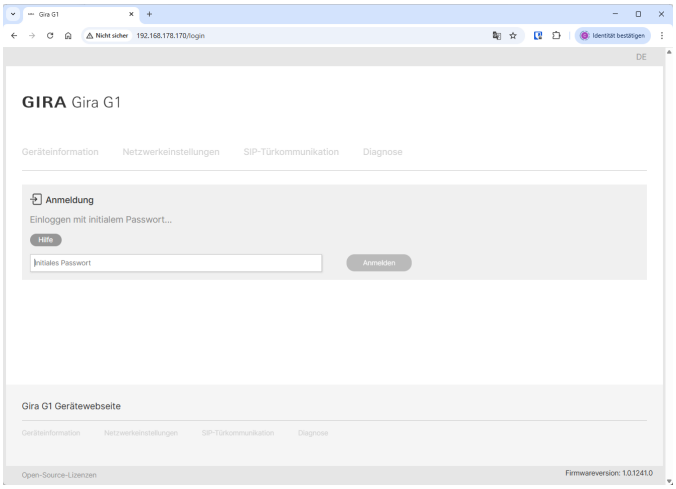
User role	Password
Device	System key (from GPA project)

Device website functions

The device website contains the following information, settings and functions:

- Under [Device information], you can see device-specific data and carry out a restart of the home station.
- If necessary, you can adjust the network configuration under [Network settings].
- You can configure the home station for SIP door communication under [SIP door communication].
- The [Diagnostics] page provides information about memory usage, system utilisation, and device details. You can also perform the following functions:
  - Restart
  - Factory reset
  - Log files that can be downloaded in the event of an error or during servicing and forwarded to the Gira hotline.
  - Extended logging should only be activated upon request by the Gira hotline. In this case, the home station records all information for analysis purposes.

5.4.4 Gira G1 device website



Gira G1 device website

Password for the Gira G1

After accessing the device website, you will be prompted to enter a password. The password is independent of the selected project type:

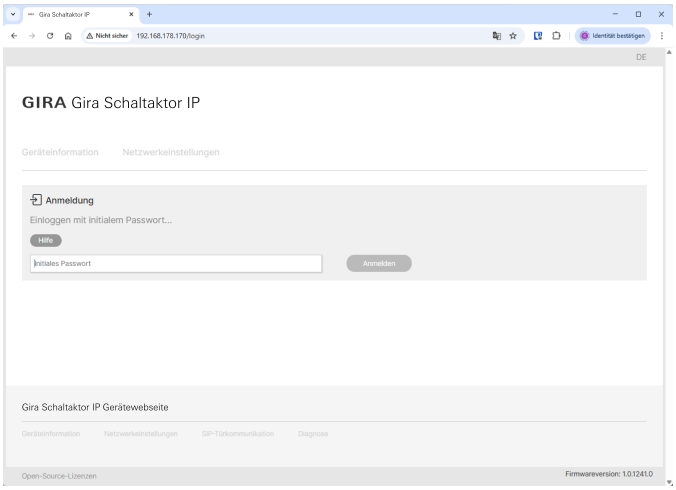
User role	Password
Device	System key (from GPA project)

Device website functions

The device website contains the following information, settings and functions:

- Under [Device information], you can see device-specific data and carry out a restart of the Gira G1.
- If necessary, you can adjust the network configuration under [Network settings].
- You can configure the home station for SIP door communication under [SIP door communication].
- The [Diagnostics] page provides information about memory usage, system utilisation, and device details. You can also perform the following functions:
  - Restart
  - Factory reset
  - Log files that can be downloaded in the event of an error or during servicing and forwarded to the Gira hotline.
  - Extended logging should only be activated upon request by the Gira hotline. In this case, the Gira G1 records all information for analysis purposes.

5.4.5 IP switching actuator device website



IP switching actuator device website

Password for the IP switching actuator

After accessing the device website, you will be prompted to enter a password. The password is independent of the selected project type:

User role	Password
Device	System key (from GPA project)

Device website functions

The IP switching actuator device website has the following sections:

- Under [Device information], you can see device-specific data and carry out a restart of the switching actuator.
- If necessary, you can adjust the network configuration under [Network settings].

5.5 Set up Concierge software



Concierge software

The Concierge software enables professional call transfer between visitors and residents in residential complexes.

Install Concierge software

You can always find the latest version of the Gira Concierge software on the Gira homepage, under Downloads.

You can find the system requirements and the download link at the following address:

- partner.gira.com/en/service/download/

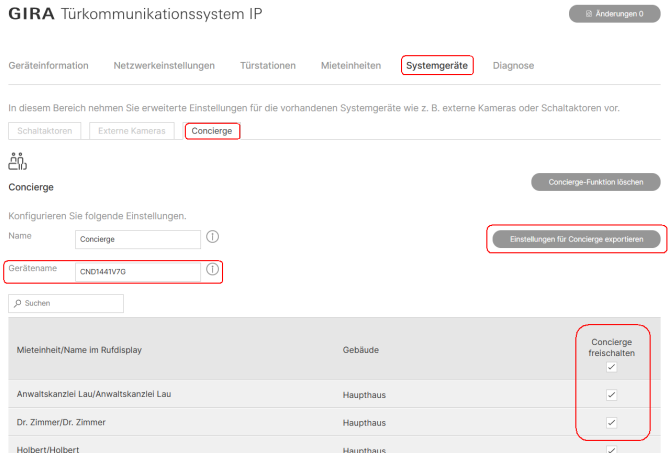
To install, run the previously downloaded “setup.exe” file.

Then follow the on-screen instructions provided by the installation wizard to complete the process.

Importing DCS settings

The settings for your door communication system must be imported into the Concierge software using a configuration file whenever the software is set up for the first time or if changes have been made to your system (e.g. due to different tenants living at the property). You can download this configuration file from the door station device website after you have configured all the settings.

Setting up Concierge on the device website



Device website

1. Commission your door communication system in the GPA.
2. Open the device website of the commissioning door station by entering the IP address of the door station in the address bar of your Internet browser.
   You can find your door station’s IP address in the GPA in the “Devices in the network” view.
3. Open the “System devices -> “Concierge” view on the device website.
4. Enter the device name of the PC on which the Concierge software will be installed.
5. Enable the Concierge for all or selected rental units.
6. Transfer all changes to the door station.
7. Export the settings of your door communication system.
   This configuration file is located in the “Downloads” folder on your PC.

Importing configuration file into the Concierge software

1. Open the Concierge software.
2. When you launch the Concierge software for the first time, you will be directly prompted to import the DCS settings.
   To open the dialogue box for importing the configuration file manually, click on the button .
3. Select “Import DCS settings”.
4. Select the configuration file containing the DCS settings and click “Open”.
5. Enter the password that was provided to you with the configuration file.

5.5.1 Important information about the Concierge software

General information

- By default, call connections to the call destinations (door stations and rental units) are initially disabled.
  The call connections are enabled via the device website of the commissioning door station. The “Select all” function may lead to large number of activities running in the background (e.g. if there are several hundred rental units), meaning the functioning of the device website may be impaired for a short period of up to one minute.
- In an IP door communication system, only one PC with the Concierge software can be used.
- The Concierge software may only be operated on a PC that is exclusively connected to the building network of the door communication system. Additional network connections, for example via WLAN, to a hotspot or another network, must not be active. Otherwise the functionality of the Concierge software may be affected.
- Third-party IP cameras are not supported.
- Door station cameras cannot be activated unless a door call is in progress.
- The Concierge software can only be operated with DNS servers – operation with mDNS is not possible. Static IP addresses can be used.
- If you are using software such as “MicroSIP”, the “Append primary and connection-specific DNS suffixes” option must be enabled in Windows.
- If the dialogue box is closed without action being taken, the configuration parameters can be imported later via the “Settings” menu.
- If the Concierge software is running on a virtual machine, video playback issues may occur. Using a virtual machine is therefore not recommended.

Audio settings

- When using a headset, the “Echo Cancellation” option should be disabled in the Concierge software. Failure to do so may result in choppy audio transmission and reduced intelligibility of speech.

Concierge function in conjunction with mobile forwarding

- Concierge calls to a rental unit are not forwarded to a mobile phone, as a Concierge call is considered an internal call.
- A door call transferred from the Concierge to a rental unit is not forwarded to a mobile phone, as the Concierge is always involved in the call transfer as an internal caller.

Door call transfer in connection with third-party call stations

- If the Concierge transfers a call to a rental unit with a third-party call station, the transferred door call is also signalled on the third-party client but cannot be accepted by the latter.
- A transferred door call cannot be accepted by a Gira G1 if it is configured as an SIP client

5.6 Setting up mobile forwarding

Forwarding to your smartphone allows you to conveniently answer door calls while on the go. This is set up via the Gira DCS mobile app. Use of the app is a chargeable service for which monthly or annual fees apply.



Gira DCS mobile app

The Gira DCS mobile app is available here:

For iOS devices:

- Gira DCS mobile app for iOS devices

For Android devices:

- Gira DCS mobile app for Android devices

Configuring forwarding

Forwarding is configured in the IP video home station or in the Gira G1:
You can find the forwarding configuration in the devices under Settings > [Advanced settings] > Door communication [Forwarding to smartphone] section.

Then, follow the instructions in the devices.

Enabling/disabling forwarding

If forwarding is set up, you can enable and disable it on the IP video home station or on the Gira G1. This can be done on the devices under Settings > [Advanced settings] > Door communication [Manage forwarding] section or – in the menu bar depending on the configuration.

Active forwarding is marked in the devices’ status bar with .

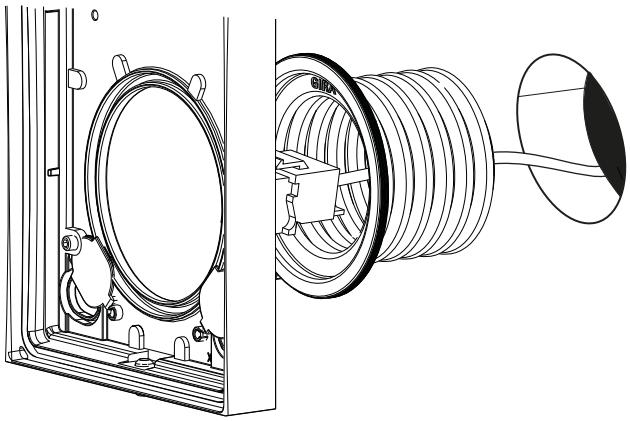
Notes on mobile forwarding

- Mobile forwarding can be set up on any home station of an apartment/rental unit.
- Each home station can be configured to forward calls to only one smartphone; multiple forwarding to the same smartphone is not possible.
- If two different call buttons are assigned to one home station, their door calls cannot be forwarded to the same smartphone.
- If several call buttons with an identical designation are created in a “Single-family home – IP” project, they appear in the home station as one call button.
  In this case, calls from different call buttons can be forwarded to the same smartphone.
- It is permissible to set up multiple forwarding from different home stations to one smartphone.

6 Installation

The following sections describe the basic steps for mounting and connecting the devices. For details, please refer to the operating instructions supplied with the individual devices.

Installation space extension



Installation space extension

The installation space extension provided with the IP intercom module increases the space available when mounting the System 106 surface-mounted housing.

In this way, the installation space extension replaces the seal cap in the surface-mounted housing.

Flush-mounted box required

A commercially available flush-mounted device box (deep box recommended) is required to mount the System 106 IP with the installation space extension.

No seal is required between the flush-mounted box and the surface-mounted housing.

6.1 IP door station in the System 106 surface-mounted housing



IP door station surface-mounted installation

Installation video

The video on mounting the surface-mounted housing can be found here:

- https://bda.gira.de/system106montage

Installation

1. Align the drilling template with the markings for cable entry according to the mounting type (horizontal/vertical) and mark the drill holes (diameter 6 mm).
2. Cut the connection cable to length approx. 10 cm from the wall surface.
3. Remove the seal cap from the surface-mounted housing. The installation space extension provided with the IP intercom module is used to install the IP modules.
4. On the installation space extension, pierce the cable feed-through opening with a round tool.
5. Feed the connection cable through the opening and strip the individual wires and the shield in accordance with the mounting instructions of the Modular Jack used.
6. Connect the Modular Jack to the network cable.
7. Insert the installation space extension into the surface-mounted housing and mount the surface-mounted housing. Any unevenness in the mounting surface can be levelled out using the mounting levelling screws (from 2-gang housing).
8. Insert the modules into the function carrier and lock the turning bolts using a flat-head screwdriver.
9. Connect the terminating resistors and the system cables to the function carrier with the modules. Always connect a terminating resistor to the first and last module on the system cable.
10. Insert the patch cord into the RJ45 pin jack of the intercom module of the door station and connect it to the Modular Jack.
11. Wind excess cable material (connection cable and patch cord) together with the Modular Jack into a loop and store in the installation space extension.
12. Insert the function carrier into the surface-mounted housing.
13. Close the door station.
    To do so, grip the centre of the function carrier, press firmly on the surface-mounted housing while at the same time screwing in the locking screw using the bit holder provided.
    The door station is correctly closed when the top of the function carrier is flush with the surface-mounted housing and the locking screw at the bottom is fully screwed in.

6.2 IP door station flush-mounted in the System 106 façade module



IP door station flush mounting

Installation video

The video for flush mounting the surface-mounted housing can be found here:

- https://bda.gira.de/VideoSys106EinbauWDVS

Installation

Note

The façade module must be mounted horizontally on site prior to mounting the housing. Subsequent alignment is not possible.

1. Cut the connection cable at a distance of approx. 10 cm from the mounting surface of the façade module.
2. Remove the seal cap from the surface-mounted housing. The installation space extension provided with the IP intercom module is used to install the IP modules.
3. On the installation space extension, pierce the cable feed-through opening with a round tool.
4. Feed the connection cable through the opening and strip the individual wires and the shield in accordance with the mounting instructions of the Modular Jack used.
5. Connect the Modular Jack to the network cable.
6. Insert the installation space extension into the surface-mounted housing.
7. Mount the housing so that the distances between the housing and the façade module are symmetrical.
   Any necessary height compensation can be carried out using the mounting levelling screws.
8. Insert the modules into the function carrier (observe TOP mark) and lock the turning bolts using a flat-head screwdriver (4 x 0.8 mm).
9. Connect the terminating resistors to the function carrier with the modules, followed by the system cables. Always connect a terminating resistor to the first and last module on the system cable.
10. Insert the patch cord provided into the RJ45 pin jack of the intercom module of the door station and connect it to the Modular Jack.
11. Wind excess cable material (connection cable and patch cord) together with the Modular Jack into a loop and store in the installation space extension.
12. Close door station.
    To do so, grip the centre of the function carrier and press firmly on the housing while at the same time gently tightening the locking screw using the locking key provided. The application angle is 90°.
    The door station is correctly closed when the top of the function carrier is flush with the housing.

6.3 IP door station flush-mounted in the System 106 installation housing



IP door station mounting in a metal front

Installation video

The video on flush-mounting installation can be found here:

- https://bda.gira.de/VideoSys106EinbauMetall

Installation

Notes on mounting

The installation box can be bonded to unpainted stainless steel, aluminium or brass surfaces with a surface quality (Ra) of 0.5 µm–0.7 µm.
Mounting can take place at temperatures between 15°C and 25°C.
For a permanent adhesive bond, clean and degrease the bonding area on the front plate using the cleaning cloth provided.

Requirement:
The installation box fits into the customer-supplied front plate cut-out.

1. Remove the protective film from the adhesive tape on the installation box.
2. Press the installation box firmly against the back of the front plate. The plastic mounting corners help the installer to align the components correctly.
3. Do not apply any pressure to the adhesive bond for at least 15 minutes. The final strength of the bond is reached after 72 hours.
4. Remove the mounting corners and keep them with the mounting screws as they will be used later.
5. Ensure that the eight positioning screws used to position the System 106 housing protrude no more than 1 mm into the front plate opening.
6. Remove the seal cap from the surface-mounted housing. The installation space extension provided with the IP intercom module is used to install the IP modules.
7. On the installation space extension, pierce the cable feed-through opening with a round tool.
8. Insert the mounting screws of the mounting corners through the openings of the housing.
   If the front plate is thicker than 1 mm: to adjust the height of the front plate, slide washers onto the mounting screws and use an O-ring to secure them.
9. Pass the connection cable completely through the installation box and housing openings, insert the housing into the installation box and tighten the mounting screws (but not so tight that the housing cannot be moved).
10. Insert the modules into the function carrier (observe TOP mark) and lock them in place.
11. Pivot the function carrier into the housing. When installing 3- to 5-gang housings, pay attention to the additional catch mechanism.

12. Using the locking key, slightly tighten the screw for locking the housing (0.6 Nm) at an application angle of 90°.
13. Use the locking key to adjust the installation box positioning screws so that the gap between modules and the front plate is symmetrical. Then tighten all positioning screws.
14. Disengage the function carrier and put the function carrier plus modules to one side.
15. Tighten the mounting screws of the housing.
16. Press the wall fitting plugs firmly into the groove and check that they are positioned correctly.
17. Strip the sheathing from the connection cable and strip the individual wires and the shield in accordance with the mounting instructions of the Modular Jack used.
18. Connect the Modular Jack to the network cable.
19. Connect the terminating resistors to the function carrier with the modules, followed by the system cable. Always connect a terminating resistor to the first and last modules on the system cable.
20. Insert the patch cord provided into the RJ45 pin jack of the intercom module of the door station and connect it to the Modular Jack.
21. Wind excess cable material (connection cable and patch cord) together with the Modular Jack into a loop and store in the installation space extension.
22. Close door station.
    To do so, grip the centre of the function carrier and press firmly on the housing while at the same time gently tightening the locking screw using the locking key provided. The application angle is 90°.
    The door station is correctly closed when the top of the function carrier is flush with the housing.

6.4 Mounting location of a door station with IP camera module

If the Gira IP door communication system is to include video functionality, this can be implemented via the IP camera module. When mounting the IP camera module, please note the following:

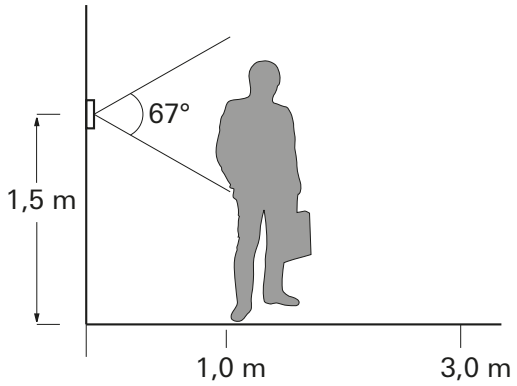
- No cable routing behind the IP camera module:
  Never plan the cable feed-through for the connection cable at the height of the camera module! For vertical mounting, use the lower opening on the System 106 housing for cable feed-through.
- The IP camera module must always be installed directly next to the IP intercom module.

Mounting location

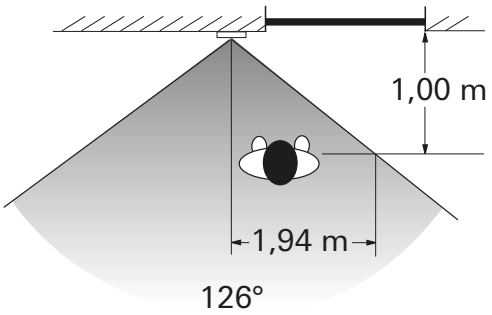
When selecting the mounting location, the geometries shown below must be taken into account to ensure that visitors are clearly visible.

To ensure that the cameras display high-quality images, the following additional factors should be avoided when selecting the mounting location:

- No backlighting: Do not aim the camera lens at strong backlighting, such as a street lamp or garden lighting.
  Do not expose the lens to direct sunlight.
- Image background: Do not aim the camera at extremely bright backgrounds or backgrounds with high contrast.
- Lighting: Additional lighting in the entrance area should not shine directly into the camera lens from the front.
- Mounting height: 1.50 m (recommended).
- Detection angle: 126° horizontally, 67° vertically.

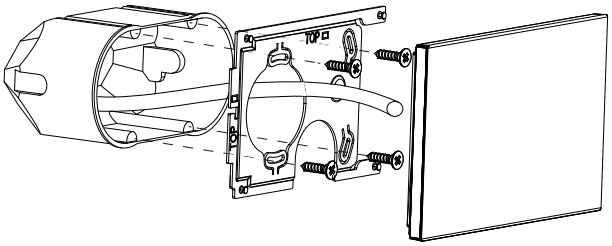


Mounting height of the IP camera module



Detection angle of the IP camera module

6.5 IP video home station



IP video home station mounting

The IP video home station is mounted on a 2-gang device junction box.

Mounting height

We recommend that the IP video home station is mounted at a height of 1.5 m.

Mounting sequence

The IP video home station should be installed as follows:

1. Prepare the cables
2. Install the mounting plate on the two-gang box
3. Connect the home station
4. Connect the home station to the mounting plate

Connection of the floor-call button

The floor-call button is connected via the cable set provided.

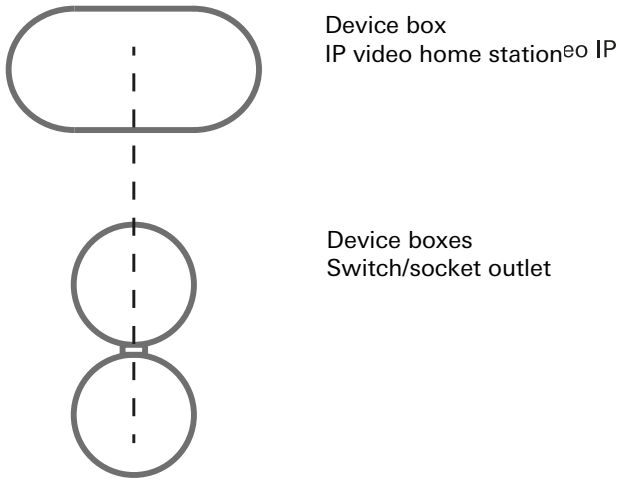
Please note the following:

Green:	Channel 1 (floor-call button)
	Channel 2
Yellow:	Channel 3
	Channel 4
Brown:	Reference potential (COM)

The floor-call button is connected to channel 1 (green) and COM (brown).

Mounting instructions

To ensure that the IP video home station is later positioned centrally above the planned switches or socket outlets, the device boxes must be mounted in accordance with the position shown in the image.



Central mounting of the IP video home station

7 System management and diagnostics

7.1 Firmware update

Firmware updates are generally installed via the GPA. The update process varies depending on the type of project.

Single-family home – IP project type

For this type of project (and also in rental units with Smart Home functions), the update is carried out on each device individually.

Multi-family home/large property – IP project type

For this type of project, the GPA sends the software updates for all devices included in the project to the commissioning door station. From there, the firmware update is automatically transferred to the devices.
The update progress is displayed on the diagnostics page of the commissioning door station.
The system is functional during the update, but performance may differ from the normal state (e.g. sluggish device response during operation).
The devices will restart after the firmware update; the system downtime is no longer than 60 minutes.
Configuration changes should not be implemented via the device website of the commissioning door station until the installation and/or update is complete.

General information about firmware updates

- Performing firmware updates via remote access through the Gira S1 is not recommended.
- Use a LAN connection:
  During the update, unstable WLAN connections (e.g. due to the connection dropping out or fluctuating bandwidth) can cause errors.
  In such cases, the GPA outputs various error messages, such as StreamingError.
  The GPA computer should thus be operated via a LAN connection to ensure reliable communication with the devices. A wired connection is significantly more stable than WLAN and reduces the risk of transmission errors.

7.2 Factory reset

In certain cases, it may be necessary to reset the door communication system devices.
After a factory reset, the devices return to their factory default state. The devices will not be configured following a factory reset, but will retain the mostly recently downloaded firmware.

Factory settings can be restored either via the GPA, via the device website or directly on the device.

The project should be backed up before the factory reset is carried out.

Factory reset for "Single-family home – IP" projects

In a single-family home/Smart Home rental unit, devices that have been reset to factory settings after commissioning can only be integrated into the system by recommissioning with the GPA.

Factory reset for "Multi-family home/large property – IP" projects

For "Multi-family home/large property – IP" projects, the specific device(s) can be reset via the device website of the commissioning door station.

The commissioning door station itself can only be reset via the GPA or directly on the device.

⊕ Important

A factory reset of the commissioning door station will reset all devices in the project to factory settings.
When using a Gira F1, any existing KNX programming is also reset.

All devices of the IP door communication system should have been booted up for at least two minutes before the factory reset. This ensures that the factory reset command can be received and executed by all devices via the commissioning door station. Otherwise, only part of the system may be reset.

Individual devices that have been reset to factory settings after commissioning can be recommissioned by creating and transferring a configuration change on the device website of the commissioning door station.
This automatically triggers the recommissioning process for devices restored to factory settings.

Factory reset on the Gira F1 for "Multi-family home/large property – IP" projects

If the Gira F1 is reset to factory settings for a "Multi-family home/large property – IP" project, both the multi-family home and the Smart Home project components must be recommissioned using the Gira F1 for full functionality. This also applies to any existing KNX programming.

If the Gira F1 remains part of the system (no device replacement), the home stations in the Smart Home rental unit can connect to the Gira F1 as soon as the multi-family home component has been commissioned (registration interval five minutes). Door calls and internal calls become possible again as a result. The Smart Home component is not automatically restored; recommissioning is required here.

7.2.1 Performing a factory reset via the GPA

A factory reset can be triggered in the GPA via the “Devices in the network” view.

1. Start the GPA.
2. Open the [Devices in the network] view in the main menu.
3. This view shows all the devices in your network.
   Note:
   For “Multi-family home/large property – IP” projects, only the commissioning door station is displayed.
4. Select the desired device and click on the gearwheel icon.
5. Select [Factory reset] in the menu.

7.2.2 Performing a factory reset via the device website

All devices, with the exception of the IP switching actuator, can be reset to factory settings via the respective device websites:

1. Call up the device website and log in
2. Open the [Diagnostics] page and click the [Factory reset] button.

7.2.3 Performing a factory reset on the device

Each device can be reset to factory settings via a specific operating procedure on the device itself.

Gira G1 and IP video home station

1. In the menu, tap ⚙ >
   [Show advanced settings] >
   [System] >
   [Factory reset]

Door station with call-button module

1. Connect supply voltage.

✓ The LED flashes green for 30 s.

2. During this time, press and hold any button for more than 10 s until a long acknowledgement tone sounds and the LED lights up green for 3 s.
3. Release the button.

✓ After approx. 90 s, the factory reset is complete and the LED flashes green.

Door station with IP call display

1. Connect supply voltage.

✓ The call display shows the start-up process and the LED flashes green for 30 s.

In addition, 🔧 is displayed on the call display.

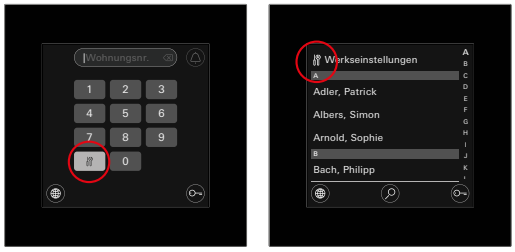
2. During this time, tap 🔧, enter the PIN “1230”, and confirm with OK.

✓ After approx. 90 s, the factory reset is complete, the LED flashes green and “Not configured” is shown on the call display.

Important:

Depending on the configuration, the symbol 🔧 can be displayed at different positions on the call display. This does not affect the function.

Examples:



Factory reset symbol on the IP call display

7.3 Information about the system time

For reliable operation of the Gira IP door communication system, it is essential that all components display the correct time.

The devices in the door communication system obtain their time via various mechanisms:

- If the device is connected to the Internet, the time is automatically synchronised with an external NTP server.
- Without an Internet connection, the devices access their internal real-time clock (RTC).
- When commissioning via the Gira Project Assistant (GPA), all devices receive the current time directly from the GPA.

Depending on the different types of configuration, there are differences in the system time.

7.3.1 System time in a single-family home – IP

When configuring as a single-family home, each device has its own time after commissioning. Time information comes initially from the GPA.

The devices can obtain the time in two different ways:

- Devices with an Internet connection:
  An external NTP server can be specified for each device via the GPA.
- Devices without an Internet connection:
  The devices only use their internal real-time clock (RTC).

Special features of time management

IP door stations:

- The time can be set manually via the device website.
- Margin of error: Up to ±6 minutes per year.
- Power reserve: Power failures of up to 24 hours are bridged.

IP home station/Gira G1:

- The time can only be set via the GPA. It is not possible to set the time via the device website.
- Following a power failure, the time is invalid.

IP switching actuators:

- Obtain their time from the assigned door station.

Behaviour in the event of time loss

If the door station detects a time loss:

- Time-restricted access is blocked locally.
- There is no automatic system-wide blocking as in “Multi-family home/large property – IP” projects.

Tip:
In some cases, it may be useful to configure single-family homes with pure door communication systems as “Multi-family home/large property – IP” projects, since in this case the commissioning door station is automatically set up as a time server for all devices in the system.

Troubleshooting by restarting

It is recommended to restart the affected devices, or all devices, in the event of other time synchronisation problems (e.g. after a restart due to a power failure).
The restart can be performed via the device website of the devices in question.

7.3.2 System time for multi-family home/large property – IP

When configuring a multi-family home/large property – IP system, the commissioning door station serves as a time server for all devices in the project.
The following devices obtain their time from there:

- Other IP door stations, IP switching actuators and directly connected home stations (i.e. without Gira F1).
- Standard rental units (without Smart Home functions) that are connected via a Gira F1, including home stations on the private interface
- The Gira F1 of a Smart Home rental unit.

⊕ Time on the private interface

In Smart Home rental units, the devices on the private interface of the Gira F1 do not obtain their time from the commissioning door station, but via other mechanisms (see below).

The commissioning door station can obtain the time in two different ways:

- Door station with Internet connection:
  Automatically via an external NTP server.
- Door station without Internet connection:
  Manually via the device website.
  Note: If the time is set manually, a margin of error of up to six minutes per year must be taken into account.

Behaviour in the event of time loss

The door station’s internal real-time clock has a power reserve that can bridge power failures for up to 24 hours.
If the time is lost (e.g. due to a power failure) for more than 24 hours and the time is missing after the restart, an error is output no later than 15 minutes after power is restored.
In this case, time-restricted access is blocked at all door stations on the system for security reasons.

Behaviour when the Internet connection is interrupted

If the commissioning door station obtains its time via an external NTP server, a warning (sync error) will be displayed on the diagnostics page of the commissioning door station in the event of a prolonged interruption to the Internet connection.
Since the time is still valid, it has no functional effect on time-restricted access codes.

7.3.3 System time in rental units with Smart Home project

For rental units that are connected via a Gira F1, the Gira F1 obtains the time from the commissioning door station.

7.4 Security of device communication

Communication between the devices of the Gira IP door communication system is always encrypted for all types of project. However, depending on the project type, the certificates are handled differently:

- Single-family home – IP:
  Encryption is carried out via manufacturer-specific certificates.
- Multi-family home/large property – IP:
  Certificates valid for a period of 24 months are used here. These are automatically renewed by the system.
  However, if a device is without power for an extended period and the certificate has expired when it is recommissioned, it will no longer be recognised as a functional component of the system for security reasons. In this case, the device must be reset to factory settings and recommissioned.

Remote access to the IP door communication system

For secure remote access to the IP door communication system, it is recommended to use the Gira S1, as this ensures protected access.

7.5 Error messages on the IP video home station

Error messages are indicated by a symbol in the status bar. The majority of errors are caused by a lost network connection.

Therefore, you should first check the network connection of the home station.

Possible error messages

- "The network connection has been interrupted."
  Check the home station connection to the network.
- "The connection to the [Name] door station has been lost."
  Please ensure that the door station is in good working order and check the network connection to the door station.

7.6 Diagnostics in multi-family home/large property – IP projects

Note

The following diagnostic functions are only available in “Multi-family home/large property – IP” projects.
These functions are not available in “Single-family home – IP” projects.

Diagnostics via the device website of the commissioning door station

The commissioning door station offers extended diagnostic options for all devices that are part of the project. Devices in Smart Home rental units that are connected via a Gira F1 are also included.

The device website lists all devices and their associated status. The status is indicated by colour coding. If a device is not marked as green, there is an anomaly.

All project devices are listed with their current status. The status display is colour-coded:

- Green = device has no errors
- Orange = warning as a temporary display for a maximum of 15 minutes, e.g. login has not yet taken place
- Red = error, e.g. home station not reachable/offline
- Grey = update/configuration

In addition to the colour coding, a message text is displayed, which may include recommended actions to resolve the problem.
The status of commissioning and a firmware update can also be seen here.

Additional diagnostic functions:

- Call recordings for error analysis:
  This function allows you to analyse problems with door calls.
  After activating the function, you must wait 120 seconds before a door call can be triggered.
  When viewing and sharing the data, comply with data protection regulations and local provisions.
  This data is used exclusively for internal Gira analysis.
- Device identification
- Restart device
- Resetting devices to factory settings
  A factory reset of the commissioning door station can only be performed via the GPA.
  Important: a factory reset of the commissioning door station resets the entire system
- Targeted triggering of calls for rental units
- Read out and reset the volume settings of the home stations in a rental unit

7.6.1 Diagnostic codes

Table overview of the error messages that are displayed in the Diagnostics section on the device website of the commissioning door station:

Keys Code	Meaning
Shutdown	Unexpected restart
FatalError	Serious error
InternalError	Internal error
CaCreationFailed	Creation of certificate authority failed
CaNotReachable	Certificate authority unreachable
UpdateFailed	Update failed. Perform a factory reset and then restart commissioning, including the update.
MissingCredentials	Gira Device Key missing. Add the data in the GPA project and restart the commissioning process.
InvalidCredentials	Gira Device Key invalid. The device may still be in the configuration state. Perform a factory reset.
MissingHostname	Hostname could not be generated. Contact Gira Support.
HostNotFound	Device is not recognised by the DNS server. Check the assignment of the device to the rental unit and your network, or contact your network administrator.
MDnsLookupFailed	Device could not be found via mDNS. Check the device and contact your network administrator.
DeviceUnreachable	Device cannot be reached. Check the device and contact your network administrator.
GdsApiConnectionFailed	Connection to device failed. Check the device or the associated switching actuators.

Keys Code	Meaning
SetupFailed	Device could not be assigned. Perform a factory reset and then restart the commissioning process. If the problem persists, contact Gira Support.
ProjectUploadFailed	Project could not be transferred. Perform a factory reset and then restart the commissioning process. If the problem persists, contact Gira Support.
SPM_UNDEFINED_ERROR	Unknown error
SPM_OVERTEMPERATURE	Overheating
SPM_TAMPER_ALARM	Tamper alarm
SPM_LOST_TIME_INFORMATION	Connection to NTP server interrupted
SPM_FADT_BUS_SHORTED	Error on the FADT bus
SPM_LOSS_OF_TIME	Loss of time
SIP_MEMBER_NOT_AVAILABLE	SIP device cannot be reached. Check your network.
SIP_COMMUNICATION_ERROR	Error in SIP communication. Check your network.
DISP_UPDATE_FAILED	Update failed
DISP_DISTANCE_SENSOR_POLLUTED	Proximity sensor dirty/covered
DISP_DISTANCE_SENSOR_ERROR	Proximity sensor error
CAM_UPDATE_FAILED_MAINBOARD	Camera update failed (motherboard)
CAM_UPDATE_FAILED_SENSOR	Camera update failed (sensor)
PIC_UPDATE_FAILED_FOR_UNKNOWN_DEVICE	Update failed: device not found.
ACT_UPDATE_FAILED	Firmware update failed
WEBSITE_UPDATE_FAILED	Device website of the switching actuator cannot be loaded.
SSL_ERROR	SSL error when establishing a connection from the intercom module to the switching actuator.
AUTH_ERROR	Authentication of the switching actuator failed: Login with initial device password or system key not possible.

8 FAQs

8.1 General

8.1.1 Notes on media storage

If multiple home stations are operated in one rental unit, the media storage should only be activated on one home station.

If there are multiple home stations in one rental unit, there is no media storage synchronisation. As a result, missed door calls may be displayed even though they were accepted at another home station.

If automatic door opener is activated, no door call screenshots are stored in the media storage.

8.1.2 What measures must be carried out in the event of a change of tenant?

In the event of a change of tenant, the following settings and data should be reset/changed for the respective rental unit:

Via the device website of the commissioning door station

The "Change tenant" menu item is available on the device website of the commissioning door station. With this function, the individual settings of a rental unit are reset to the values set when it was last commissioned.

The following settings are reset, among others:

- For the door stations via which the rental unit in question can be reached (if supported):
  - Name of the call button
  - Access codes for the rental unit (if assigned)
  - Any virtual call buttons additionally created are deleted.
  - The designation of the fixed call button can be changed during the reset.
  - Numerical codes stored for the door opener are deleted.
- For the intercom units (if supported):
  - Sounds and volumes
  - Mute
  - Language selection
  - The media storage and the list of missed door calls are deleted.
  - Forwarding and connections to the Gira DCS mobile app
  - PIN protection is removed if it was not set by the GPA.
  - Private network settings (e.g. WLAN)
  - Automatic door opener (if fitted)
  - Favourites
  - Display brightness

The basic functions of door communication, such as door calls and door opening, are retained.

On the home station in the rental unit

When moving out, tenants can delete their individual user settings and personal data from the home station via the "Reset user settings" menu item. Note that this must be done separately on each device.

The following settings will be reset to default:

- Sounds and volumes
- Mute
- Language selection
- Display brightness
- Media storage
- Favourites
- Forwarding and connections to the Gira DCS mobile app
- PIN protection (if set directly on the home station)
- Automatic door opener (if fitted)

8.1.3 What needs to be taken into account when replacing a device?

Recommissioning after replacing a defective device is always carried out via the GPA.

The project should be backed up before the device is replaced.

General information about replacing devices

- Replacement devices should always be in the default state to ensure fault-free commissioning.
- Replaced devices that have been removed from the GPA project must be removed from the system immediately. These devices must be removed before recommissioning with the modified system configuration.

Depending on the type of project, there are further aspects that must be considered.

Device replacement in "Single-family home – IP" projects

- When replacing a device, you must first delete the device assignment in the GPA, then enter the new device key and lastly carry out commissioning.
- After that, all devices in the project must be recommissioned. The reason for this is the automatic "Search and add communication partners" feature.

Device replacement in "Multi-family home/large property – IP" projects

- Runtime changes are automatically taken into account when devices are replaced.
- If only one door station is available in a multi-family home project that acts as a commissioning door station, upon its replacement the GPA can read out the current runtime changes from other devices in the system and compare them with the initial project.
- If the commissioning door station is replaced, a new initial operator password (device website login) must then be generated in the GPA.

8.1.4 Forgotten password – what now?

If the operator has forgotten their password in a "Multi-family home/large property – IP" project, this can be reset in the GPA on the "Operator login details" page. The project then needs to be commissioned.

8.1.5 What must be taken into account when replacing a door station?

When replacing a door station within a project, note that an IP switching actuator connected to the door station must be reset to factory settings.

After replacing the door station and restarting, the new door station can detect the existing switching actuator and automatically reconfigure it.

This measure is required for both single-family home and multi-family home projects.

Info:
The IP switching actuator must be reset to factory settings, as a unique security key is exchanged and saved between the door station and the IP switching actuator. This key is not recorded by the system security and is therefore not transferred to a replacement door station. Without a factory reset, the new door station does not know the key stored in the IP switching actuator and therefore cannot establish communication with the IP switching actuator. After reset, the new door station can reconnect to and configure the IP switching actuator.

8.2 Third-party devices

8.2.1 How are IP telephones connected?

IP telephones can only be integrated into the Gira IP door communication system as a client in combination with a Gira F1. This requires a private network separate from the building network.
Please note that the Gira F1 provides 10 slots for the assignment of call stations (IP video home station, Gira G1 and third-party devices such as IP telephones).

The configuration of the IP telephones depends on the manufacturer and is usually carried out via the IP telephone's web interface. You can obtain the login data (user name + password) via the respective slot on the Gira F1 device website. The corresponding documents for configuring selected IP telephones are available in the Gira download area.

⊕ Note on mixed operation

If devices from the Gira IP door communication system are used together with devices from third-party providers as call stations within a project (e.g. IP telephones), please note the following information regarding the configuration of third-party devices:

Third-party devices must always be integrated into the IP door communication system via the Gira F1. The Gira F1 provides 10 slots for this purpose. During the automatic assignment of home stations, the slots are assigned in ascending order (starting with slot 1).

To prevent overlapping, when manually configuring the third-party devices, the slots should be used in descending order (starting with slot 10).

⊕ Note on the IP switching actuator

No switching action can be triggered on the IP switching actuator via an IP telephone.
When used with an IP telephone, the IP switching actuator can only be used for the door opener function.

8.2.2 How are IP telephone systems integrated?

IP telephone systems can only be integrated into the Gira IP door communication system in combination with a Gira F1. This requires a private network separate from the building network.

Two modes of operation are available for integration:

- Gira F1 as registrar/main unit
- Gira F1 as an SIP Client/auxiliary unit

Gira F1 as registrar/main unit

In this mode of operation, the Gira F1 assumes the function of the SIP registrar. Configuration is manufacturer-dependent and usually takes place via the IP telephone system web interface. The access data required for login (user name and password) is displayed on the Gira F1 device website for the respective SIP slot.

Gira F1 as an SIP Client/auxiliary unit

In this mode of operation, the Gira F1 logs on to the IP telephone system as a SIP subscriber. In order for door calls to be forwarded to the telephone system, the login data for the telephone system must be stored on the Gira F1 device website.

The documents for configuring selected IP telephone systems are available in the Gira download section.

8.2.3 Can IP door stations from other providers be used?

No, IP door stations from third-party providers cannot be combined with the Gira IP door communication system. However, regardless of the Gira IP door communication system, the Gira G1 with the SIP function can be operated together with the Gira F1 with IP door stations from other manufacturers.

Instructions for implementing this solution are available in the Gira download area.