

TJA470 domovea expert TJA670 domovea basic



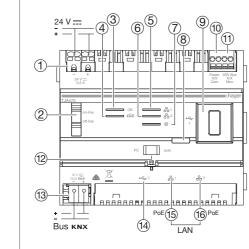


Safety instructions

Device must only be installed by an electrician according to the installation standards applicable in the country.

Do not install this module outside a building.

# **Device components**



Picture 1: device components

- Connection for the external power supply (24 V DC)
- Switch for using the server (on-line/off-line)
- 3 On-off LED (OK)

## **Function**

The TJA470/TJA670 server is a server for controlling KNX products. It involves the use of two applications, the first being the Hager configuration application, Pilot, and the second being the application for the end user, domovea.

(4) LED for bus status (KNX)

LED for port 1 network connection (뭄1)

(10) Connection for the 2-wire bus / connection on the side of the outdoor panel (video input:

Connection for the 2-wire bus / connection on

the side of the indoor station (video output:

(12) Network mode selection switch (DHCP) (PC/

(13) Connection for the KNX bus (30V DC)

(15) Connection to the local network (LAN) via

16 Connection to the local network (LAN) via

6 LED for port 2 network connection ( 2 2)

8 Push-button to check KNX Bus power

(7) LED for internet connection (@)

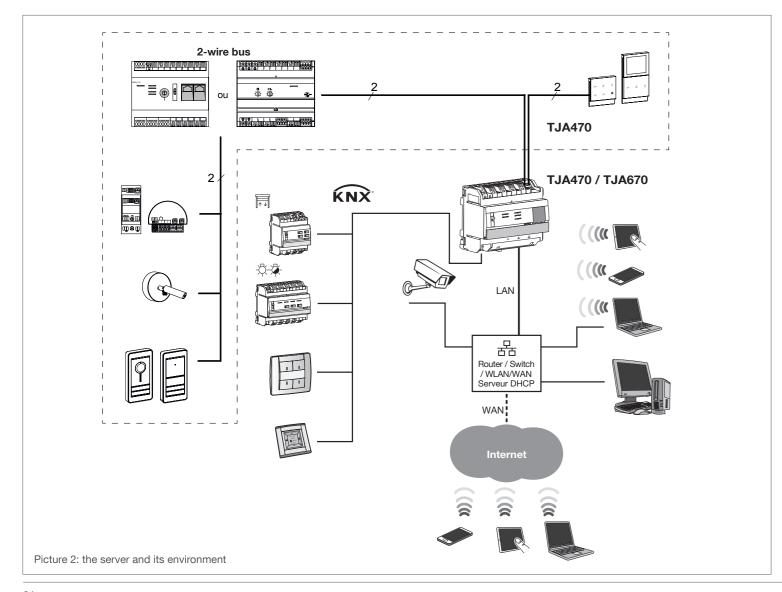
9 USB port for updates (--)

2DV Bus X/X Mon)

port 1 RJ45 (器1)

port 2 RJ45 (옮2)

(14) USB port (←←2)



#### Network interface behaviour (depending on the switches)

The 2 Ethernet ports can be used interchangeably to connect the server to the local network. These 2 ports are 2 switched ports connected to the same logical interface on the TJA470/TJA670 (switch).

Network interface (Ethernet ports (15) and (16))  This is the normal operating mode for the TJA470/TJA670 when it is connected to an external router	Internet connection status	2-wire bus status
This is the normal operating mode for the TJA470/TJA670 when it is connected to an external router		
(ISP box). The interface is configurable with a DHCP client or fixed IP address.  • With a client DHCP (default factory set mode), the TJA470/TJA670 waits for an IP address coming from a DHCP server connected to the network (the router). If, after 40 seconds, no address has been attributed, the TJA470/TJA670 automatically takes the fallback address: 192.168.0.253 / 255.255.255.0.  • With a static IP address, the TJA470/TJA670 immediately recognises the settings defined in the "Configuration-Network" tab in the configurator settings menu:  - interface IP address  - sub-network mask  - default server address	active	
N.B. with a fixed IP address, the module does not automatically switch to the fallback address if there is an IP address conflict on the network (other device already using the IP address defined).		
To use when a PC is directly connected to the TJA470/TJA670. This mode activates the DHCP server built into the module. The 2 ports are interchangeable and configured with the following parameters:  Interface IP address: 192.168.0.253 Sub-network mask: 255.255.255.0 Default server address: 192.168.0.1 range of IP addresses that can be attributed by the TJA470/TJA670 DHCP server: 192.168.0.10 to		
13-11-11-11-11		
	The interface is configurable with a DHCP client or fixed IP address.  • With a client DHCP (default factory set mode), the TJA470/TJA670 waits for an IP address coming from a DHCP server connected to the network (the router). If, after 40 seconds, no address has been attributed, the TJA470/TJA670 automatically takes the fallback address: 192.168.0.253 / 255.255.255.0.  • With a static IP address, the TJA470/TJA670 immediately recognises the settings defined in the "Configuration-Network" tab in the configurator settings menu:  - interface IP address  - sub-network mask  - default server address  N.B. with a fixed IP address, the module does not automatically switch to the fallback address if there is an IP address conflict on the network (other device already using the IP address defined).  To use when a PC is directly connected to the TJA470/TJA670. This mode activates the DHCP server built into the module. The 2 ports are interchangeable and configured with the following parameters:  • Interface IP address: 192.168.0.253  • Sub-network mask: 255.255.255.0  • Default server address: 192.168.0.1  • range of IP addresses that can be attributed by the TJA470/TJA670 DHCP server: 192.168.0.10 to 192.168.0.50  This mode is a fallback mode in which the TJA470/TJA670 interface is configured in DHCP client mode.	(ISP box). The interface is configurable with a DHCP client or fixed IP address.  • With a client DHCP (default factory set mode), the TJA470/TJA670 waits for an IP address coming from a DHCP server connected to the network (the router). If, after 40 seconds, no address has been attributed, the TJA470/TJA670 automatically takes the fallback address: 192.168.0.253 / 255.255.255.0.  • With a static IP address, the TJA470/TJA670 immediately recognises the settings defined in the "Configuration-Network" tab in the configurator settings menu:  - interface IP address  - sub-network mask  - default server address  N.B. with a fixed IP address, the module does not automatically switch to the fallback address if there is an IP address conflict on the network (other device already using the IP address defined).  To use when a PC is directly connected to the TJA470/TJA670. This mode activates the DHCP server built into the module. The 2 ports are interchangeable and configured with the following parameters:  • Interface IP address: 192.168.0.253  • Sub-network mask: 255.255.255.0  • Default server address: 192.168.0.1  • range of IP addresses that can be attributed by the TJA470/TJA670 DHCP server: 192.168.0.10 to 192.168.0.50  / This mode is a fallback mode in which the TJA470/TJA670 interface is configured in DHCP client mode.  • If no IP address is attributed by a DHCP server after a wait of 40 seconds, the TJA470/TJA670

#### Operating status indicators

LED function	LED ref.	Status	Description
Power	3	Off	No power
		Blinking green	Product start-up phase
		Lit green	Product on
		Blinking red	Product powered by reserve (10 s. max.)
		Lit red	Software loading error
Ethernet 1 and 2	(5) and (6)	Off	No network (or operating on power reserve (10 s. max.))
		Blinking green	No DHCP server detected, operating on fallback IP address
		Lit green	Network detected and IP address allocated
		Lit red	IP address conflict
		Blinking red	Waiting for IP address allocation
Remote access	7	Off	No remote connection (deactivation via software)
		Blinking green	Attempt to establish remote connection
		Lit green	Remote connection operational
		Lit red	Error in establishing remote connection

#### Connection with no indoor station(1)

If the 2-wire bus intercom system is not equipped with an indoor station, and operates only from a mobile device (Smartphone, touch screen) via the elcom access application, then you must connect a termination resistance onto the access gate. This resistance is supplied as part of the maintenance set Ref. No. REH109X, and provided with the access gate.

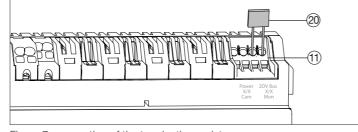


Figure 7: connection of the termination resistance

- (11) Connection terminal: 2DV Bus X/X Mon
- 20 Termination resistance

# Assembly and electrical connection

Powered by PoE or via an external power supply, the TJA470/TJA670 server connects to an ethernet switch to join an IP network via a router.

#### Assembling the device

- Preferably install the TJA470/TJA670 in your installation's VDI box. Should the installation not include a VDI box, make sure you observe the strong/ weak current separation.
- Rail-mounting in compliance with EN60715 standard.
- Only suitable for indoor use in a dry environment (IP20 / IP30 depending on the conditions).

#### Connecting the device power supply

- The server power supply may either be PoE or an external power supply.
- PoE power supply: the server must be connected to a PoE Ethernet switch according to IEEÉ 802.3af, e.g. the Hager switch TN530 (8-port 1 Gbit/s modular switch including 4 PoE ports).
- External power supply: the server must be connected to a Hager TGA200 type power supply unit. The TGA200 power supply unit is solely for powering one server and can under no circumstances power another product in the installation

## Connection to the IP network

### Configuration

The TJA470/TJA670 server connects to the local IP network via one of the two Ethernet ports (5) or (6). The server is integrated between an IP environment and a two-wire door interphone system through the hager Pilot application, a centralised configuration unit for the intelligence built in to the server and hager cloud infrastructure for the system's operation. To access this configuration interface, you must:

1. find and download the hager Pilot application from the AppStore or Google Play Store

2. connect the server to a WIFI router,







Picture 3: connection to the IP network

3. on your mobile device, go to the WIFI settings menu and select the WIFI router to which the server has just been connected

We strongly recommend the installer has their own DHCP router (Wifi + 3G/4G) to

perform the configuration and tests on the system locally (via Wifi) or over the Internet (via

- 4. launch the hager Pilot application and a selection window will be displayed: • select the installation's TJA470/TJA670-XXXXXX server,
- the connection window will be displayed on the screen.
- 5. Enter your login to connect to the server. Login: admin and Password: 1234 are the default values.

🛮 A document to help configure the system is available to the installer in the server settings menu (🥳)

The server enables users to establish a link with the KNX system from the local network (LAN) and from the Internet, via the domovea application.







### OS compatibility:

Applications are available for download in the appropriate store (App Store, Google Play Store) for both the Hager Pilot and for domovea. You can always find an up-to-date description of the version of the operating system from which the app can be used.

#### **Technical features**

KNX bus SELV 30 V .... KNX power supply Consumption on the bus line 10 mA max - 30 V === External power supply (1) or PoE (15)(6) 24 V → 30 V = via Hager SELV power supply TGA200 type or via PoE Standard/Standby consumption on the 2-wire bus 35 mA / 12 mA - 24 V ===

Max consumption on the auxiliary power supply Standby consumption on the 24 V Ethernet and non-connected USB

Maximum dissipation (24 V output) PoE power supply consumption

Ethernet network communication Max 24 V power cable length Bus connection (10(11)

Power supply socket 1 Ethernet/IP network socket(15)(16)

Operating temperature

Storage temperature Width (REG) Dimensions (I x H x P)

USB2 (9)(14) interface Installation method

Operating altitude Pollution level Surge voltage

> Protection ratings Impact resistance

760 mA max - 24 V === 10 W without USB, 15 W with 2 USB max PoE Class 3: 13 W 2 x 100/1000 Base T 0.2 mm<sup>2</sup> - 1.5 mm<sup>2</sup> 0.75 - 2.5 mm<sup>2</sup> -5 °C **⇒** + 45 °C - 20 °C **⇒** + 70 °C 106 x 90 x 67 mm DIN rail (EN60715) • box: IP20 box under faceplate: IP30

330 mA

10 m

2 x RJ45

< 2000 m

4 kV

How to dispose of this product (electrical and electronic equipment waste). (Applicable in European Union countries and other European countries with selective waste collection systems). This symbol on the product or its documentation indicates that it must not be disposed of with other household waste at the end of its life cycle. As disposing of waste inappropriately may harm the environment or human health, please separate it from other types of waste and recycle it responsibly. In this way you will contribute to the sustainable re-use of material resources. Individuals should contact the retailer who sold them the product or contact their local council to find out where and how they can dispose of this product for recycling in an environmentally friendly manner. Companies should contact their suppliers and read the terms of their sales contract. This product must not be disposed of with the other commercial waste.

Can be used anywhere in Europe and Switzerland

(1) Function is no longer actively supported in Germany!

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