Gira HomeServer/FacilityServer
Information on start-up

Gira HomeServer
0529 00

Gira FacilityServer
2075 00

GIRA

1.	**Introduction**	**4**
1.1	Scope of delivery	4
1.2	Interfaces and connection options	4
1.3	System requirements	5
1.4	Area of application	5
1.5	Registration	5
1.6	Software updates	6
2.	**Start-up and installation**	**7**
2.1	Device description	7
2.2	Setup and installation	9
2.2.1	Connecting to the mains voltage	9
2.2.2	Connecting to a network	10
2.2.3	Connecting to the KNX	10
2.3	Connection test	10
2.3.1	Connection test is not successful	11
2.4	Installation of the “HS Expert” start-up program	11
3.	**Operating the Gira HomeServer**	**12**
3.1	Programming a Gira HomeServer	12
3.2	Firmware update	12
3.2.1	Programming the Gira HomeServer	12
3.2.2	Resetting to the factory settings	13
3.2.3	Resetting the firmware to version 4.8	13
3.2.4	Gira HomeServer as a virtual machine	13
4.	**User interfaces**	**14**
4.1	Free visualisation	14
4.1.1	HSClient	14
4.2	QuadClient	14
4.3	Apps	14
5.	**Remote access**	**14**
6.	**Software interfaces**	**14**
7.	**Licences**	**14**
8.	**Link list**	**15**

1. Introduction

The Gira HomeServer is a gateway for visualising and controlling the complete electrical installation of buildings, provided they are equipped with the KNX system. These can be both private and company buildings.

The KNX functions can be monitored and controlled at any time and from anywhere, externally and internally. Monitoring and control is done using smartphone, PC, iPad, iPhone or devices with an Internet browser and app. Faults, measured values and actuator or sensor states can be transmitted via PUSH notification, text message and e-mail.

As the software for the device purchased by you is constantly being further developed and updated, information in this manual may no longer be up-to-date.

The latest product information is always available on the Gira website:

http://www.gira.de

Current software updates and documentation for your product are also available at https://www.download.gira.de.

The information, data, values etc. included in these documents may be changed without notice. The illustrations are likewise subject to change.

Technical modifications reserved!

For easier reading, only the term Gira HomeServer is used in this description. All information relating to the Gira HomeServer applies both to the Gira HomeServer and to the Gira FacilityServer. Properties and functions relating specifically to the Gira FacilityServer are marked accordingly.

1.1 Scope of delivery

The following items are included in the scope of delivery:

– 1 x Gira HomeServer 4 / Gira FacilityServer 4

– 1 x mains cable

1.2 Interfaces and connection options

The Gira HomeServer has the following interfaces and connection options:

– Mains voltage connection 230 V

– RS232 interface for KNX and programming (up to version 4.10.x)

– Network connection for RJ45 Cat 5 Ethernet TCP/IP

1.3 System requirements

To operate the Gira HomeServer, a functional KNX system is required. Communication with the KNX devices, as well as monitoring of all events, is done via the KNX.

The Gira HomeServer is programmed using the “HS Expert” software, which is available free of charge in the download area of the Gira website. This software can be operated on a standard PC with a Microsoft® Windows operating system.

1.4 Area of application

The Gira HomeServer is set up in buildings, in rooms with ‘normal’ humidity and room temperature. Use in damp cellars, for example, may adversely affect the functionality of the device. The device is used for monitoring, visualisation and controlling KNX systems. The software made available in the download area of the Gira website may only be used together with the Gira HomeServer.

Any other use of the device and software is not permitted. Gira shall assume neither legal responsibility nor a warranty of any kind for errors and damage resulting from the improper use of the device or the related software.

1.5 Registration

Please register your device at the site https://geraeteportal.gira.de

Only registered users can access the portal page or receive a new password for accessing the portal page if they have forgotten their old password. You will also receive technical support and regular information about downloads, updates (further developments), additional modules and training offers. The use of other services, e.g. Dynamic DNS or weather forecasts, is also possible via the portal.

1.6 Software updates

Updates eliminate technical problems (bug fixing), and also close possible security gaps. Therefore check the Gira website at regular intervals and register your device (see above).

No automatic device updates are carried out.

Please note that Gira will assume neither legal responsibility nor a warranty of any kind for problems or damage resulting from obsolete firmware or updated firmware.

Important: do not fail to install the updates!

Please install firmware updates at regular intervals, and observe the installation instructions.

Important: back up remanent data before updating the firmware!

Make sure to save the data to the remanent memory of the Gira HomeServer before updating / upgrading / downgrading the firmware.

The backup is carried out using the Expert software. Follow the instructions in the Expert software's help function.

2. Start-up and installation

To start up the Gira HomeServer, a general distinction must be made between two subject areas:

– Setup and connection of the Gira HomeServer

– Function test and start-up

Important: start-up may only be carried out by a qualified electrician!

Connection and start-up of the device may only be carried out by trained and qualified electricians.

Important: check the current software version before installing!

Before installing the Expert setup, it is essential to download the current Expert setup from https://download.gira.de. The software package contains the HS Expert setup software and the firmware for the device.

2.1 Device description

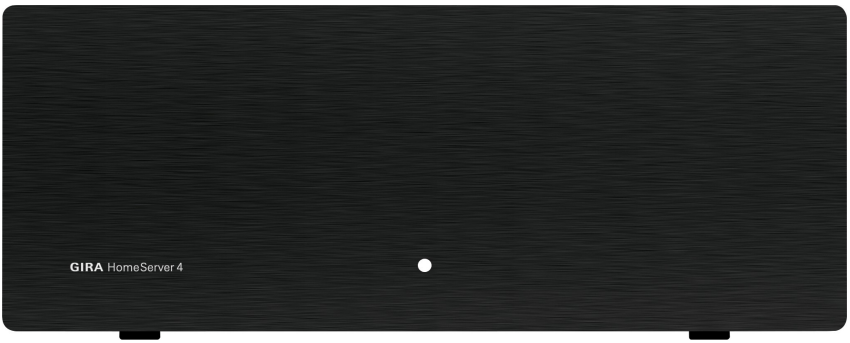

Fig. 1.1: Operating and control elements on the front of the Gira HomeServer

Control elements on the front of the Gira HomeServer and FacilityServer:

– Operating LED that lights up in white when the device is switched on.

Operating element on the front of the Gira FacilityServer:

– Reset button: the Gira FacilityServer is restarted without power interruption.

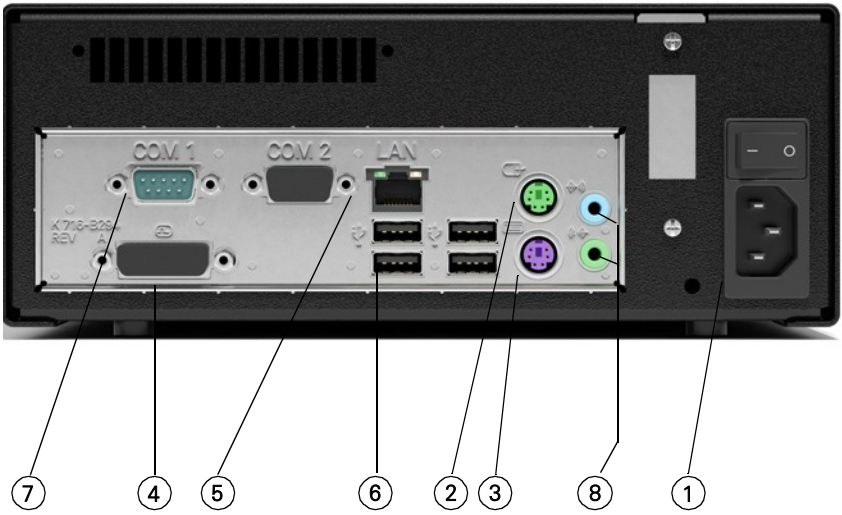

Fig. 1.2: Interfaces on the back of the Gira HomeServer

Interfaces on the back of the Gira HomeServer:

- 230 V mains connection (1) and ON/OFF switch
- PS2 connection for mouse (2), without function
- PS2 connection for PC keyboard (3), for service purposes
- DVI connection for PC monitor (4), for service purposes
- RJ45 network connection (5)
- USB interfaces (6), bus access via USB, USB-ISDN adapter,
- USB keyboard, for service purposes (e.g. firmware update via USB memory stick with version 4.9 and higher)
- RS232 interface (7), no function
- Jack sockets (8), no function

Note: LEDs at the network connection.

The network connection has a green and a yellow LED. Both LEDs light up or flash when there is a network connection to the Gira HomeServer. The LEDs only flash when the Gira HomeServer is switched on. A valid IP address is not required.

2.2 Setup and installation

The Gira HomeServer may only be set up inside buildings. It is not intended and not approved for mobile operation.

Set up the Gira HomeServer at a central location so that connection to the mains voltage, to the network and the KNX is trouble-free. The location should also be 'out of the way' so that the device does not impede other work being carried out and so that one of its connections cannot be accidentally interrupted.

Note: selecting the setup location.

Select a setup location where you can be sure that other work will not cause the power supply, network connection or KNX connection to be accidentally interrupted.

Note: sufficient air circulation.

In order to ensure perfect operation of the Gira HomeServer, a setup location should be chosen that has sufficient air circulation around the device, enabling operation at room temperature.

2.2.1 Connecting to the mains voltage

The Gira HomeServer is connected via the mains cable to the mains voltage (230 V~).

Important: the device starts up immediately when connected to the mains voltage!

The Gira HomeServer starts as soon as it is connected to the mains voltage and the On/Off button on the rear is switched on.

The Gira HomeServer is ready for operation after the three double signal tones have sounded.

Important: carry out lightning protection!

In order to avoid damage to the device, we highly recommend protecting the device from overvoltage in the mains cable, at the network connection, at the ISDN adapter and in the KNX voltage access using appropriate protective devices.

2.2.2 Connecting to a network

You require a network distributor and network cable to integrate the Gira HomeServer into an existing local network (LAN). Please observe that the network distributor and network cable are not included in the scope of delivery.

A start-up PC can also be connected directly to a Gira HomeServer using a so-called cross-over network cable. The cable is not included in the scope of delivery.

The Gira HomeServer supports 10/100/1000 MBit network connections.

2.2.3 Connecting to the KNX

The Gira HomeServer can be connected to the KNX system using the following KNX devices (not included in the scope of delivery):

– via LAN with KNX IP router (order no. 2167 00)

– USB data interface (order no. 1080 00)

– USB data interface (order no. 1070 00)

The Gira HomeServer requires no start-up by the ETS. Any necessary physical address is set using the Expert and must correspond to the physical address of the interface used.

2.3 Connection test

After you have connected the device to your LAN, you can switch on the device. In the state of delivery, IP address issuance occurs via DHCP. Should the device not receive an address using this method, the IP address 192.168.0.11 with the net mask 255.255.0.0 is used after a certain waiting time.

Comment

The address assignment by a DHCP server only takes place on start-up. A change in the DHCP server requires a restart of the device.

Assigning a static IP address

A static IP address can also be assigned via the HS Expert start-up software. “IP address”, “IP subnet mask” and “IP standard gateway” can be set here.

To find the device in your LAN, open the “Network” section in the Windows Explorer of your PC. To do this, first switch on the network detection in the Network and Sharing Centre in the Windows system settings.

The Gira HomeServer should now be visible in the “Network” area of Windows Explorer.

A double-click now opens the index page of the Gira HomeServer.

The following login data is configured on delivery:

User: admin
Password: admin

The connection test is thus complete; the device is now available for programming the specific project. For programming, use the latest HS Expert setup from https://download.gira.de

2.3.1 Connection test is not successful

If the Gira HomeServer is not visible in Windows Explorer, try to address the device via the browser.

To do this, use the information from the DHCP server of your network router to determine the assigned IP address.

If the device is not listed there, use the IP address of the delivery status: https://192.168.0.11 (the net mask is 255.255.0.0).

If the device is equipped with an older firmware, use the IP address of the delivery state: http://192.168.0.11/hs (the net mask is 255.0.0.0).

If the device is not accessible/visible, check your network settings.

If there are still uncertainties regarding the IP address of the Gira HomeServer, a monitor and keyboard can be connected to the Gira HomeServer. The monitor shows, among other things, the set IP address with the net mask. The keyboard is only required to activate the screen.

2.4 Installation of the “HS Expert” start-up program

1. Download the current “HS Expert” version from http://download.gira.de to your PC.
2. Unpack the ZIP file.
3. Perform the setup.
4. A selection menu is created in the Windows start menu under “Gira / HS+FS Expert”. All information and programs for the Gira HomeServer can be accessed via this menu.

3. Operating the Gira HomeServer

3.1 Programming a Gira HomeServer

With the HS Expert software, the Gira HomeServer is individually programmed to the user's requirements. In order to be able to use the program quickly and to its full extent, Gira offers (online) training (https://akademie.gira.de/).

There are also sample projects that can be found on your PC when the HS Expert is installed. Further sample projects are available for download on the http://download.gira.de website.

3.2 Firmware update

The firmware should be updated before programming the Gira HomeServer for the first time:

1. Start the "HS Expert" software.
2. Open the menu item: "HomeServer/Upload firmware".
3. The firmware can be transferred to the Gira HomeServer via LAN or via a USB stick.
4. For transfer via LAN: Enter the IP address of your device.
   With version 4.11 and higher, you can determine the IP address using the "Find device" function (button next to the IP address).
5. Transfer the firmware.

For initial start-up, the login data is

User: admin
Password: admin

The Gira HomeServer restarts and reports with 3 double signal tones after operational readiness.

To find out which version of the firmware is on the device, you can call up the debug page (see "URLs and ports" below): https://HSIP/hsinfo or (for version 4.11 and higher) https://HSIP/.
If access via LAN is not possible, you can connect a keyboard and monitor to the device and read the IP address from the screen.

3.2.1 Programming the Gira HomeServer

1. Start the "HS Expert".
2. Open a sample project.
3. Set DHCP (for version 4.11 and higher) or an IP address in the network settings.
4. Assign a password to every user.
5. In the menu item "Transfer", the project is transferred to the Gira HomeServer.
6. Transfer the project to the Gira HomeServer.

For initial start-up, the login data is

User: admin
Password: admin

The Gira HomeServer restarts and then indicates its operational readiness with three double signal tones.

3.2.2 Resetting to the factory settings

The device can be reset to the factory settings via USB stick. The firmware version is used for this, which is part the scope of the HS Expert installation.

Afterwards, the Gira HomeServer has the login data as for initial start-up.

Note the following: all data on the device is deleted during this process.

For more information, refer to the help for the HS Expert.

3.2.3 Resetting the firmware to version 4.8

Application: for users who want to replace an older device with a new device and do not want to change the project to a newer version.

The device can be reset to the firmware 4.8 factory settings via USB stick.

Afterwards, the Gira HomeServer has the login data as for initial start-up.

For more information, refer to the help for the HS Expert.

3.2.4 Gira HomeServer as a virtual machine

For faster testing of your project programming, an ISO file for creating a virtual machine with VMWare or VirtualBox is included.

For more information, refer to the help for the HS Expert.

4. User interfaces

The following options are available for using the user interface:

4.1 Free visualisation

With the HS Expert, it is possible to visualise the building in the form of e.g. stored floor plans and the positioned actuators and sensors. The free visualisation can be operated using common browsers and the HSClient.

4.2 QuadClient

To use this program, your project must be parametrised with the HS Expert/QuadConfig.

4.3 Apps

For iOS and Android, the “Gira HomeServer/FacilityServer” app is available in the respective App Shop. These apps can only be used in combination with a QuadClient configuration.

5. Remote access

Via the Gira device portal https://geraeteportal.gira.de/ or a module for remote access (e.g. the Gira S1), Gira provides the option of accessing the Gira HomeServer from outside via the Internet. Among other things, a Dynamic DNS service is available.

6. Software interfaces

At https://developer.gira.de/, information is provided for developers. Here, you will find information e.g. for the development of your own logic nodes, the use of program interfaces, the creation of your own user interfaces etc.

7. Licences

In the HS Expert folder, you will find the licence file with all the information about components used.

8. Link list

Addresses on the device:

https://HSIP/ - Device page

https://HSIP/hsinfo - Information on the version used

https://HSIP/hs - Accessing the free visualisation

https://HSIP/hshtm - Accessing the free visualisation in compatibility mode

https://HSIP/hslist - Retrieval of lists (e.g. debug page, data archives etc.)

https://HSIP/hscert - Managing certificates

https://HSIP/hsknxkeys - Managing the KNX key ring (when using KNX Secure)

https://HSIP/opt/hsmonitor/ - Monitoring of K. objects (if configured)

https://HSIP/license - Licences for components used in the firmware

https://HSIP/opt/hsav-gira_en/ - Ajax-Visu

Addresses on the Internet:

https://akademie.gira.de/ - Online training courses for Gira products

https://developer.gira.de/ - Developer information on Gira products

Gira
Giersiepen GmbH & Co. KG
Electrical installation
systems

Industriegebiet Mermbach
Dahlienstrasse
42477 Radevormwald, Germany

PO Box 12 20
42461 Radevormwald

Germany

Tel +49(0)21 95 - 602-0
Fax +49(0)21 95 - 602 -339

www.gira.de
info@gira.de

GIRA

4109 32 11/2022