GIRA

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Gira X1
Order No. 2096 00

Contents

1. Product definition

1.1. Product catalogue
Product name: Gira X1
Design: DRA (series installation)
Order No.: 2096 00

1.2. Accessories
The Gira X1 requires an additional power supply, e.g.:
Additional power supply
Order No.: 1296 00
KNX/EIB power supply 320 mA
Order No.: 1086 00

1.3. Application
The new Gira X1 enables visualisation and automation of single-family homes and similar sized properties with the KNX system. The Gira X1 unites the functionality of a visualisation server and logic module in a single device.

The Gira X1 app turns existing mobile devices into convenient operating elements for intelligent building technology: The Gira X1 app is available from the Apple and Android stores and can be used on smartphones and tablets. The interface of the Gira X1 app is designed so that the KNX installation for a single-family home can be easily and intuitively operated via mobile devices. There are also
options for individualisation. This allows users to create their own start page. The user settings for timers, favourites, etc. are saved on the Gira X1.

Beyond its function as a visualisation server, the Gira X1 also handles numerous automation tasks in the house. This is achieved by programming scenes and timers. In addition, the Gira X1 has integrated the functionality of the Gira L1, making a module library with 36 logic nodes available

Features:
- Visualisation functions:
  Dimmer, switch, button, blind and shutter with and without positioning, heating, scene auxiliary unit, scene set, IP camera, status display, value transmitter, percentage value transmitter, temperature value transmitter
- Up to 250 functions can be controlled via the app for each project.
- Up to 250 function clocks can be set by the user in the app.
- Simultaneous access to the Gira X1 from up to ten mobile devices.
- Intuitive app user interface that can be adapted by the user.
- A range of functions thanks to the node library with 36 logic nodes (e.g. basic mathematical operations, shutters and blind control, temperature control, partition wall control, staircase lighting, random generator)
- Configurable logic nodes (e.g. freely selectable number of inputs)
- Functional expansions and updates via firmware and software updates
- Import function from KNX projects for data point creation
- Easy parameterisation of timers and scenes:
  up to 50 timers with 10 switching times each.
  up to 50 scene sets with 64 scenes each.
- Up to 1450 data points can be used for each project
  (1000 KNX group address data points, 450 discretionary device data points).
- Optimised start-up:
  Fast project changes and updates during operation without the need to restart the device
- Two RJ45 sockets with switch functionality support simple loop-through of the patch cable.

- KNX interface function for starting up the ETS project remotely.
- Remote app access via integrated OpenVPN server.
- Remote maintenance via integrated OpenVPN server.
- A device password protects the Gira X1 against unauthorised access.
- Encrypted TLS data transfer between the Gira X1 app and Gira X1 and between GPA and Gira X1 prevents interception by third parties.
- Readout of current Gira X1 runtime project via GPA.
- Project saving: Saving of a project copy on the Gira X1.
- Start-up:
  The physical address and application are parameterised with the KNX start-up software ETS from the version 4.1.8.
  Further configuration is performed in the Gira Project Assistant (GPA).

1.4. Gira Project Assistant

The Gira X1 is configured with the Gira Project Assistant. Projects can be conveniently parameterised in just a few steps using the intuitive Gira Project Assistant.
Features:

- Intuitive drag&drop operation
- Automatic location of the Gira X1 on the IP network
- Undo/Redo function with change history
- Automatic-save function
- Multi-screen operation: Several project windows can be opened at the same time. A project can be worked on on two screens simultaneously to provide a better overview.
- Convenient project management:
  Several projects can be created and managed (a separate Gira X1 is required for each project).
- Export/import function for external saving or exchanging of projects.
- Creating a building: The desired building is created quickly and easily by drag & drop. Devices and functions can be located in the same manner.
- Designing the interface: Functions of intelligent building technology can be arranged by drag & drop in the order that they will then appear on mobile devices. More than 300 Gira pictographs facilitate the flexible presentation of building parts and functions.
- Graphic logic editor: A library with many powerful logic nodes is available in the logic editor. This library contains parameters and initialisation values/constants which can be utilised to customise the automation logic. An input, logic node, and output are combined easily at the click of a mouse to create it. Suitable connections are highlighted in colour, as are unassigned inputs/outputs. Error messages are bundled and recorded. Double-clicking an error prompt forwards you directly to the source.
- Convenient logic page management: Logic pages can be moved between projects, renamed and assigned keywords
- Simulation function for testing the created logic: Logical functions can be tested in a simulation here before start-up. Values can be set and changed as desired, and functions can be tested for the desired behaviour in this way.
- Device templates enable configuration without the need for a device
- The Gira Project Assistant is available free of charge in the Gira download area

## 2. Installation, electrical connection and operation

2.1. Safety notes

Electrical devices may only be installed and mounted by a qualified electrician. In doing so, the applicable accident prevention regulations must be observed.
Failure to observe the installation instructions can result in damage to the device, fire or other dangers.
Please refer to the operating instructions enclosed with the device for more information.

2.2. Device design

The Gira X1 features 3 status LEDs on the top of the housing and 2 status LEDs each at the network connections. In addition, there is a programming button with which the Gira X1 can be put into programming mode.
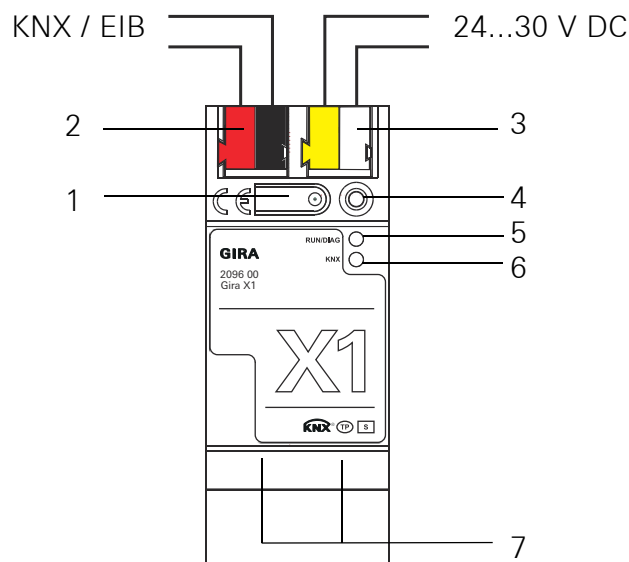
1. Programming button
2. KNX connection
3. External power supply connection
4. Programming LED (red):
   on = programming mode active
5. Operating LED (green):
   on = Gira X1 ready for operation
   flashing slowly = Gira X1 not yet parameterised or parameterised incorrectly
   flashing fast = internal device error
6. KNX-LED (yellow)
   on = connection to KNX system
   off = no connection to KNX system
   flashing = KNX data transfer
7. Network connection with LED (green/yellow)
   green on = data transfer rate 100 Mbit/s
   green off = data transfer rate 10 Mbit/s
   yellow on = connection to IP network
   flashing yellow = no connection to IP network, no data being received from IP network

2.3. Installation and electrical connection

> ⚠ **Danger!**
>
> There is a danger of electric shock if live parts are touched in the installation area.
>
> Electric shock may lead to death.
>
> Isolate before working on the device and cover up live parts in the vicinity!

2.4. Installing the device

Observe the ambient temperature. Ensure sufficient cooling and where necessary, keep at a distance from other devices.

• Snap the device onto a top-hat rail according to DIN EN 60715.
• Connect the external power supply to the connection terminal (3). Recommendation: use a white-yellow connection terminal.
• Connect KNX line with red-black bus terminal (2).
• Attach cover cap over the KNX/external power supply connection.
• Establish network connection by plugging RJ45 plug into RJ socket (7).

2.5. Attach the cover cap

A cover cap must be attached to protect the bus connection from dangerous voltages in the connection area.

• Guide bus line to the rear.
• Attach cover cap over the bus terminal until it engages.
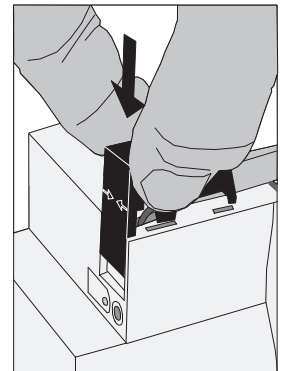
2.6. Removing the cover cap

• Press cover cap on the sides and remove.

2.7. Start-up

After installing the device and connecting the bus line, power supply and Ethernet, the device can be started up.

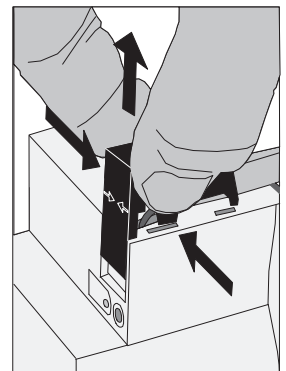## 2.8. Programming a physical address

Programming is done in the programming environment of the ETS (4.1.8 or higher). A connection to the device can be established via IP or KNX.

- Ensure that the device and bus voltage are switched on
- Briefly press the programming button (1) (< 4 seconds).
  Programming LED (4) lights up red.
- Program the physical address using the ETS.
  Programming LED (4) goes out after a successful programming process.
- Label device with physical address.

2.9. Additional individual physical addresses

Using the ETS, 4 additional individual addresses can be configured. These are used among other things for KNX communication of the visualisation.

These individual addresses can be configured in the ETS using the properties of the device and are available after the application program has been downloaded.

When a device is inserted into a line, the addresses are generated automatically. They are given the next available address of the line.

2.10. Programming the application program

After programming the physical addresses, the application program must be imported into the device. A connection to the device can be established via IP or KNX.

- Ensure that the device and bus voltage are switched on
- Parameterise the Gira X1 accordingly in the ETS
- Import the software into the device
- Wait approximately 10 seconds after the download, during which time the device imports the data
- Start-up is complete. Further configuration of the Gira X1 occurs in the Gira Project Assistant.

2.11. Diagnosis codes

The current device status can be concluded using the operation indication (5):

- LED off: Device is not switched on or not yet fully powered up.
- LED on: Device is ready for operation.
- LED flashing slowly (~1Hz): Device is not configured or was configured with impermissible parameters. The LED stops flashing when an ETS download has occurred and commissioning has been carried out via the GPA.
- LED flashing quickly (~4Hz): Internal device error. Please contact support.

2.12. LED status when starting up the device

When the device starts up correctly, the yellow LED (6) flashes when the operating voltage is supplied, thereby signalling the start-up process. As soon as the device has completely started up, the green LED (5) lights up continuously if the device has already beenn parameterised, or flashes according to the diagnosis codes. From this point on the yellow LED (6) indicates the KNX bus status and KNX telegrams.

A self-test is carried out when the device is started up. If an error occurs here, the yellow LED (6) and the green LED (5) flash alternately directly after the operating voltage is supplied. In this case, please contact support.

2.13. Read requests when restarting the device

When starting or restarting the Gira X1, read requests are sent for the data points used in the logic nodes. This occurs independently of the initial value settings in the properties for the data point view. A default value specified there is only used if this read request fails.

2.14. Factory reset

The device can be reset to the factory settings via a sequence during starting.

• Make sure that the device is switched off (pull out the white-yellow connection terminal).

• Press and hold the programming button (1) and switch on the device (plug in the white-yellow connection terminal).

• Press and hold the programming button until the programming LED (4), the operation indication LED (5) and the KNX LED (6) flash slowly simultaneously.

• Briefly release the programming button (1), then press and hold it again until the programming LED (4), the operation indication LED (5) and the KNX LED (6) flash quickly simultaneously

• The factory reset has been carried out.

• Release the programming button.

• The device does not need to be restarted following a factory reset.

The factory reset can be cancelled at any time by interrupting the sequence.

Following the factory reset, the device behaves as it did on delivery. The device is not configured. This can be seen after the device starts up by the slowly flashing green operation indication LED (5).

2.15. IP address

On delivery, the IP address is issued via DHCP. Should the device not receive an address using this method, an auto IP (address range from 169.254.1.0 to 169.254.254.255) is issued after a certain waiting time.

A static IP address can also be issued via the ETS or the Gira Project Assistant. "IP address", "IP subnet mask" and "IP standard gateway" can be set here.

3. Technical data

KNX

KNX medium	TP
Start-up mode	S mode (ETS)
KNX supply	DC 21...30 V SELV
KNX current consumption	typically 10 mA
KNX connection	Bus connection terminal

External supply

Voltage	DC 24...30 V
Power consumption	typically 3 W
	max. 4 W
	(at DC 24 V)
Connection	Connection terminal

IP

IP communication	Ethernet 10/100 BaseT (10/100 Mbit/s)
IP connection	RJ45 jack
Supported protocols	DHCP, AutoIP, TCP/IP, UDP/IP
	(Core, Routing, Tunneling, Device Management),
	ARP, ICMP, IGMP

General

Ambient temperature	0 °C to +45 °C
Storage temperature	-25 °C to +70 °C
Installation width	36 mm (2 HP)

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4. Object table

Number of communication objects: 431
Number of addresses (max):   32767
Number of assignments (max):   32767
Dynamic table management: No
Maximum table length: 65535

Function: General

Object	Function	Name	Type	DPT		Flag*
1	Ready	X1	1 bit	1.011	Status	C, R, T

Description: Object which returns the state of the device. If the object has a value of "1", the device is ready for operation. A "0" means that the device is not yet ready for operation.

Function: General

Object	Function	Name	Type	DPT		Flag*
2	Status	X1	1 byte	5.010	Meter pulses (0...255)	C, R, T

Description: Object for transmitting the current device state.

00 h	Ready	Gira X1 is started up and ready for operation.
01 h	Start up	Gira X1 starting.
02 h	Shut down	Gira X1 will restart and will not be available for a moment
03 h	Configuration	Gira X1 is being configured.

Function: General
Parameter: Display restart = active

Object	Function	Name	Type	DPT		Flag*
3	Restart	X1	1 bit	1.015	Reset	C, W

Description: Object for receiving the restart request.

Function: General
Parameter: Time mode: X1 is the clock

Object	Function	Name	Type	DPT		Flag*
4	Date	X1	3 bytes	11.001	Date	C, R, T

Description: Object for transmitting the current date.

Function: General
Parameter: Time mode: X1 is the clock

Object	Function	Name	Type	DPT		Flag*
5	Time	X1	3 bytes	10.001	Time of day	C, R, T

Description: Object for transmitting the current time

Function: General

Parameter: Time mode: X1 is the timekeeper

Object	Function	Name	Type	DPT		Flag*
◼↹ 6	Accept date	X1	3 bytes	11.001	Date	C, W

Description: Object for receiving the current date.

Function: General

Parameter: Time mode: X1 is the timekeeper

Object	Function	Name	Type	DPT		Flag*
◼↹ 7	Accept time	X1	3 bytes	10.001	Time of day	C, W

Description: Object for receiving the current time

Function: General

Object	Function	Name	Type	DPT		Flag*
◼↹ 8	Runtime (s)	X1	3 bytes	13.100	Time difference (s)	C, R

Object for transmitting the operating time in seconds. Time since last restart.

Function: General

Parameter:Display KNX statuses: Active

Object	Function	Name	Type	DPT		Flag*
◼↹ 50	Programming mode	X1 KNX	1 bit	1.001	Switching	C, W

Description: Object for receiving the programming mode. "1" means programming mode is activated, and "0" means that programming mode is switched off.

Function: General

Parameter:Display KNX statuses: Active

Object	Function	Name	Type	DPT		Flag*
◼↹ 51	Programming mode status	X1 KNX	1 bit	1.001	Switching	C, R, T

Description: Object for transmitting the programming mode. "1" means programming mode is activated, and "0" means that programming mode is deactivated.

Function: General

Parameter: Display KNX statuses: Active

Object	Function	Name	Type	DPT		Flag*
◼↹ 60	Bus voltage present	X1 KNX	1 bit	1.011	Status	C, R, T

Description: Object for transmitting whether the device has access to the bus. "1" means that the device has access to the bus, and "0" means that the device does not have access to the bus.

Function: Timers

Parameter: Number of timers: Use the first five ... all timers in KNX

Object	Function	Name	Type	DPT		Flag*
2000 2002 ... 2098	Triggered	X1 timer 1&(to 50)	1 bit	1.017	Trigger	C, T

Description: Object for transmitting the timer trigger. This trigger is independent of the switching time.

Function: Timers

Parameter: Number of timers: Use the first five ... all timers in KNX

Object	Function	Name	Type	DPT		Flag*
2001 2003 ... 2099	Index of switching time (1 to 10)	X1 timer 1&(to 50)	1 byte	17.001	Scene number	C, R, T

Description: Object for transmitting and reading the switching time for the last triggering of the timer. The index runs from one to ten.

Function: Scene sets

Parameter: Number of scene sets: Use the first five ... all scene sets in KNX

Object	Function	Name	Type	DPT		Flag*
2500 ... 2549	Trigger or teach in scene	X1 scene set 1 (to 50)	1 byte	18.001	Scene control	C, W

Description: Object for receiving whether a scene is to be executed or taught in. Up to 64 scenes can be executed or taught in.

Function: Binary variables

Parameter: Number of binary variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
5000 5002 ...5098	Write value	X1 binary variable 1 (to 50)	1 bit	1.002	Boolean	C, W

Description: Object for receiving the value of the binary variable from KNX for use in the logic of the Gira X1.

Function: Binary variables

Parameter: Number of binary variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
⬛⇄ 5001 5003 ...509 9	Read value	X1 binary variable 1 (to 50)	1 bit	1.002	Boolean	C, R, T

Description: Object for transmitting the value of the binary variable from KNX for use in the logic of the Gira X1.

Function: Unsigned integer variable

Parameter: Number of unsigned integer variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
⬛⇄ 5250 5252 ... 5348	Write value	X1 unsigned integer variable 1 (to 50)	1 byte	5.010	Meter pulses (0...255)	C, W
			2 bytes	7.001	Pulses	
			3 bytes	232.600	RGB value 3x (0...255)	
			4 bytes	12.001	Meter pulses (unsigned)	

Description: Object for receiving the value of the unsigned integer variable from KNX for use in the logic of the Gira X1.

Function: Unsigned integer variable

Parameter: Number of unsigned integer variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
⬛⇄ 5251 5253 ... 5349	Read value	X1 unsigned integer variable 1 (to 50)	1 byte	5.010	Meter pulses (0...255)	C, R, T
			2 bytes	7.001	Pulses	
			3 bytes	232.600	RGB value 3x (0...255)	
			4 bytes	12.001	Meter pulses (unsigned)	

Description: Object for transmitting the value of the unsigned integer variable from KNX for use in the logic of the Gira X1.

Function: Signed integer variable

Parameter: Number of signed integer variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
⬛⇄ 5500 5502 ... 5598	Write value	X1 signed integer variable 1 (to 50)	1 byte	6.010	Meter pulses (-128...127)	C, W
			2 bytes	8.001	Pulse difference	
			4 bytes	13.001	Meter pulses (signed)	

Description: Object for receiving the value of the signed integer variable from KNX for use in the logic of the Gira X1.

Function: Signed integer variable

Parameter: Number of signed integer variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
5501 5503 ... 5599	Read value	X1 signed integer variable 1 (to 50)	1 byte 2 bytes 4 bytes	6.010 8.001 13.001	Meter pulses (-128...127) Pulse difference Meter pulses (signed)	C, R, T

Description: Object for transmitting the value of the signed integer variable from KNX for use in the logic of the Gira X1.

Function: Decimal variables

Parameter: Number of decimal variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
5750 5752 ... 5848	Write value	X1 decimal variable 1 (to 50)	2 bytes 4 bytes	9.x 14.x	2-byte floating point value 4-byte floating point value	C, W

Description: Object for receiving the value of the decimal variable from KNX for use in the logic of the Gira X1.

Function: Decimal variables

Parameter: Number of decimal variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
5751 5753 ... 5849	Read value	X1 decimal variable 1 (to 50)	2 bytes 4 bytes	1.002	Boolean	C, R, T

Description: Object for transmitting the value of the decimal variable from KNX for use in the logic of the Gira X1.

Function: Text variables

Parameter: Number of text variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
6000 6002 ... 6098	Write value	X1 text variable 1 (to 50)	1 byte 14 bytes	4.002 16.001	Character (ISO-8859-1) Character (ISO-8859-1)	C, W

Description: Object for receiving the value of the text variable from KNX for use in the logic of the Gira X1.

Function: Text variables

Parameter: Number of text variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
6001 6003 ... 6099	Read value	X1 text variable 1 (to 50)	1 byte 14 bytes	4.002 16.001	Character (ISO-8859-1) Character (ISO-8859-1)	C, R, T

Description: Object for transmitting the value of the text variable from KNX for use in the logic of the Gira X1.

Function: Date variables

Parameter: Number of date variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
6250 6252 ... 6348	Write value	X1 date variable 1 (to 50)	3 bytes	11.001	Date	C, W

Description: Object for receiving the value of the date variable from KNX for use in the logic of the Gira X1.

Function: Date variables

Parameter: Number of date variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
6251 6253 ... 6349	Read value	X1 date variable 1 (to 50)	3 bytes	11.001	Date	C, R, T

Description: Object for transmitting the value of the date variable from KNX for use in the logic of the Gira X1.

Function: Time variables

Parameter: Number of time variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
6500 6502 ... 6598	Write value	X1 time variable 1 (to 50)	3 bytes	10.001	Time of day	C, W

Description: Object for receiving the value of the time variable from KNX for use in the logic of the Gira X1.

Function: Time variables

Parameter: Number of time variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
▪⇄ 6501 6503 ... 6599	Read value	X1 time variable 1 (to 50)	3 bytes	10.001	Time of day	C, R, T

Description: Object for transmitting the value of the time variable from KNX for use in the logic of the Gira X1.

Function: Date and time variables

Parameter: Number of date and time variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
▪⇄ 6750 6752 ... 6848	Write value	X1 date and time variable 1 (to 50)	8 bytes	19.001	Date/time	C, W

Description: Object for receiving the value of the date and time variable from KNX for use in the logic of the Gira X1.

Function: Date and time variables

Parameter: Number of date and time variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
▪⇄ 6751 6753 ... 6849	Read value	X1 date and time variable 1 (to 50)	8 bytes	19.001	Date/time	C, R, T

Description: Object for transmitting the value of the date and time variable from KNX for use in the logic of the Gira X1.

Function: Percent variables

Parameter: Number of percent variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
▪⇄ 7000 7002 ... 7098	Write value	X1 percent variable 1 (to 50)	1 byte	5.001	Percent (0...100%)	C, W

Description: Object for receiving the value of the percent variable from KNX for use in the logic of the Gira X1.

Function: Percent variables

Parameter: Number of percent variables: Use up to 10 / 20 / 30 / 40 / 50 variables

Object	Function	Name	Type	DPT		Flag*
7001 7003 ... 7099	Read value	X1 percent variable 1 (to 50)	1 byte	5.001	Percent (0...100%)	C, R, T

Description: Object for transmitting the value of the percent variable from KNX for use in the logic of the Gira X1.

*The default values are specified.

5. Parameters

Description	Values	Comments
General		
Time mode	**Not used**	
	X1 is the clock	When "X1 is the clock" is selected, the date and time are transmitted cyclically to the bus every minute. These values can also be read.
	X1 is the timekeeper	When "X1 is the timekeeper" is selected, the date and time of the device can be set via the bus.
		In this case, ensure that the option "Do not use NTP time server" in the device settings on the Gira Project Assistant is selected.
Display restart	Checkbox (**inactive**)	If this parameter is activated, the device can be restarted using a communication object.
Display KNX statuses	Checkbox (**inactive**)	If this parameter is activated, the communication objects are enabled for programming mode and bus voltage. This allows the bus status and the programming button to be queried. The programming mode can also be set using a communication object.
Expanded functions	Checkbox (**inactive**)	If this parameter is activated, the settings for the device variables are made available.
		The device variables can be used e.g. in the logic editor of the Gira Project Assistant.
Timers		
Number of timers	**Do not use timers in KNX**	If "Do not use timers in KNX" is selected, no communication objects will be available to the timers.
	Use the first five timers in KNX	If "Use the first five timers in KNX" is selected, the communications objects of timers one to five will be available in the ETS.
	Use the first ten timers in KNX	If "Use the first ten timers in KNX" is selected, the communications objects of timers one to ten will be available in the ETS.
	…	…
	Use the first 45 timers in KNX	If "Use the first 45 timers in KNX" is selected, the communications objects of timers one to 45 will be available in the ETS.
	Use all timers in KNX	If "Use all timers in KNX" is selected, the communications objects of all 50 times will be available in the ETS.
	Select the number of timers to be used in KNX. Please note the corresponding configuration of the timers in the Gira Project Assistant.	

Scene sets

Number of scene sets	**Do not use scene sets in KNX**	If "Do not use scene sets in KNX" is selected, no communication objects will be available to the scene sets.
	Use the first five scene sets in KNX	If "Use the first five scene sets in KNX" is selected, the communications objects of scene sets one to five will be available in the ETS.
	Use the first ten scene sets in KNX	If "Use the first ten scene sets in KNX" is selected, the communications objects of scene sets one to ten will be available in the ETS.
	...	…
	Use the first 45 scene sets in KNX	If "Use the first 45 scene sets in KNX" is selected, the communications objects of scene sets one to 45 will be available in the ETS.
	Use all scene sets in KNX	If "Use all scene sets in KNX" is selected, the communications objects of all 50 scene sets will be available in the ETS.

Select the number of scene sets to be used in KNX. Please note the corresponding configuration of the scene sets in the Gira Project Assistant.

Binary variables

Number of binary variables	**Do not use variables**	If "Do not use variables" is selected, no binary variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the binary variables one to ten will be available in the ETS in the form of communication objects.
	...	…
	Use up to 50 variables	If "Use up to 50 variables" is selected, the binary variables one to 50 will be available in the ETS in the form of communication objects.

Select the number of binary variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.

Binary variables 1...50	**Not used**	The binary variable N is not used.
	1 bit	The binary variable N is of type 1.002 Boolean.

Unsigned integer variables

Number of unsigned integer variables	**Do not use variables**	If "Do not use variables" is selected, no unsigned integer variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the unsigned integer variables one to ten will be available in the ETS in the form of communication objects.
	...	…
	Use up to 50 variables	If "Use up to 50 variables" is selected, the unsigned integer variables one to 50 will be available in the ETS in the form of communication objects.

Unsigned integer variable 1...50	**Not used**	The unsigned integer variable N is not used.
	1 byte	The unsigned integer variable N is of type 5.010 meter pulses (0...255).
	2 bytes	The unsigned integer variable N is of type 7.001 pulses. The unsigned integer variable N is of type 232.600 RGB value 3x (0...255).
	3 bytes	The unsigned integer variable N is of type 12.001 meter pulses (unsigned).
	4 bytes	

Select the number of unsigned integer variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.

Signed integer variables

Number of signed integer variables	**Do not use variables**	If "Do not use variables" is selected, no signed integer variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the signed integer variables one to ten will be available in the ETS in the form of communication objects.
	…	…
	Use up to 50 variables	If "Use up to 50 variables" is selected, the signed integer variables one to 50 will be available in the ETS in the form of communication objects.

Select the number of signed integer variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.

Signed integer variable 1...50	**Not used**	The signed integer variable N is not used.
	1 byte	The signed integer variable N is of type 6.010 meter pulses (-128...127).
	2 bytes	The signed integer variable N is of type 8.001 pulse difference.
	4 bytes	The signed integer variable N is of type 13.001 meter pulses (signed).

Decimal variables

Number of decimal variables	**Do not use variables**	If "Do not use variables" is selected, no decimal variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the decimal variables one to ten will be available in the ETS in the form of communication objects.
	…	…
	Use up to 50 variables	If "Use up to 50 variables" is selected, the decimal variables one to 50 will be available in the ETS in the form of communication objects.

Select the number of decimal variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.

Decimal variable 1...50	**Not used**	The decimal variable N is not used.
	2 bytes	The decimal variable N is of type 9.x2-byte floating point value.
	4 bytes	The decimal variable N is of type 14.x4-byte floating point value.

Text variables

Number of text variables	**Do not use variables**	If "Do not use variables" is selected, no text variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the text variables one to ten will be available in the ETS in the form of communication objects.
	...	...
	Use up to 50 variables	If "Use up to 50 variables" is selected, the text variables one to 50 will be available in the ETS in the form of communication objects.
	Select the number of text variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.	

Text variable 1...50	**Not used**	The text variable N is not used.
	1 byte	The text variable N is one character in size and of type 4.002 character (ISO-8859-1).
	14 bytes	The text variable N is 14 characters in size and of type 16.001 character (ISO-8859-1).

Date variables

Number of date variables	**Do not use variables**	If "Do not use variables" is selected, no date variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the date variables one to ten will be available in the ETS in the form of communication objects.
	...	...
	Use up to 50 variables	If "Use up to 50 variables" is selected, the date variables one to 50 will be available in the ETS in the form of communication objects.
	Select the number of date variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.	

| Date variable 1...50 | **Not used** | The date variable N is not used. |
| | 3 bytes | The date variable N is of type 11.001 date. |

Time variables

Number of time variables	**Do not use variables**	If "Do not use variables" is selected, no time variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the time variables one to ten will be available in the ETS in the form of communication objects.
	...	...
	Use up to 50 variables	If "Use up to 50 variables" is selected, the time variables one to 50 will be available in the ETS in the form of communication objects.

Select the number of time variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.

| Time variable 1...50 | **Not used** | The time variable N is not used. |
| | 3 bytes | The time variable N is of type 10.001 day time. |

Date and time variables

Number of date and time variables	**Do not use variables**	If "Do not use variables" is selected, no date and time variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the date and time variables one to ten will be available in the ETS in the form of communication objects.
	...	...
	Use up to 50 variables	If "Use up to 50 variables" is selected, the date and time variables one to 50 will be available in the ETS in the form of communication objects.

Select the number of date and time variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.

Date and time variable 1...50	**Not used**	The date and time variable N is not used.
	8 bytes	The date and time variable N is of type 19.001 date/time.

Percent variables

Number of percent variables	**Do not use variables**	If "Do not use variables" is selected, no percent variables will be available in the ETS in the form of communication objects.
	Use up to 10 variables	If "Use up to 10 variables" is selected, the percent variables one to ten will be available in the ETS in the form of communication objects.
	...	
	Use up to 50 variables	...
		If "Use up to 50 variables" is selected, the percent variables one to 50 will be available in the ETS in the form of communication objects.

Select the number of percent variables to be available in KNX. The variables are used in the Gira Project Assistant and are provided by the Gira X1.

Percent variable 1...50	**Not used**	The percent variable N is not used.
	1 byte	The percent variable N is of type 5.001 percent (0...100%).

Default values are marked in **bold**