



Product: EKINEX KONNECT4
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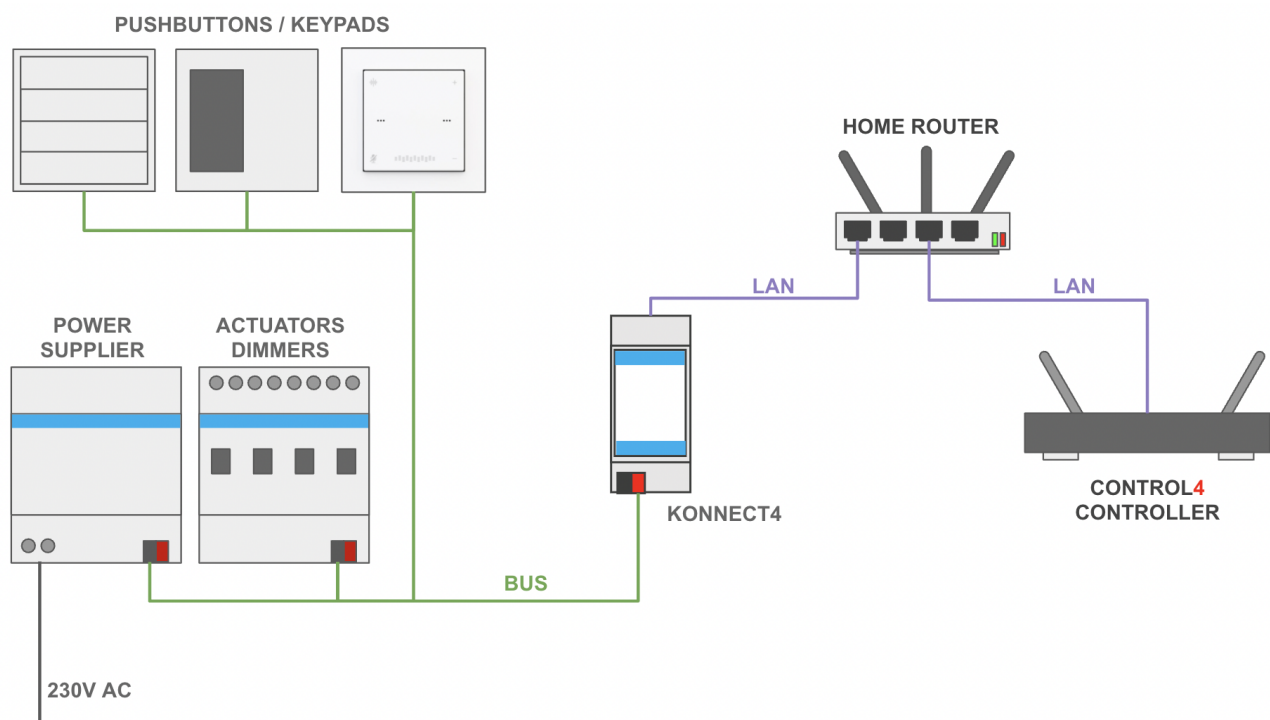
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OVERVIEW

INTRODUCTION

EKINEX specific devices can be configured in COMPOSER PRO and used in combination with a CONTROL4 controller, by means of the KONNECT4 gateway.

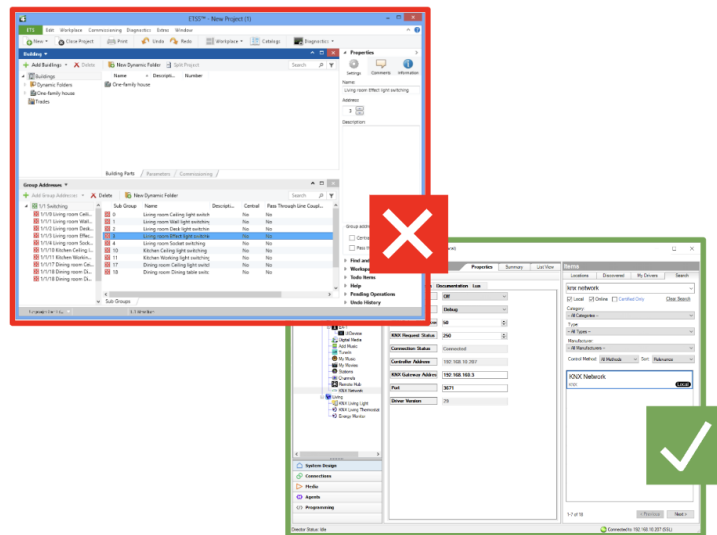
The devices must be connected with a KNX certified cable (the “BUS”), with at least one power supply unit; the bus cable must be connected to KONNECT4 too, which interacts with CONTROL4 controllers over the local IP network, as shown in the following diagram:



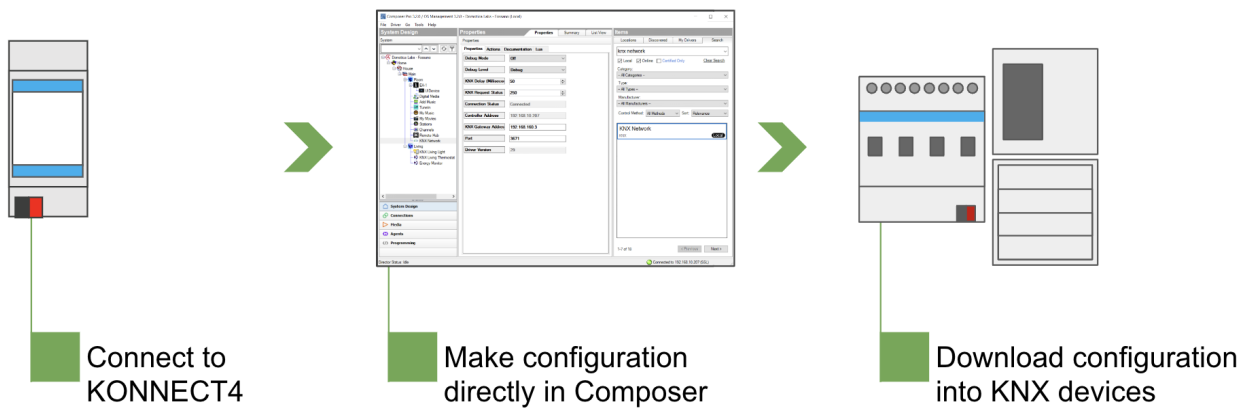
EASY AND ETS MODE

Although they are based on the KNX standard, these EKINEX devices can be configured directly in COMPOSER PRO thanks to KONNECT4, without the need for an ETS PROFESSIONAL license or any knowledge of KNX technology.

This configuration, called EASY MODE, is simpler than ETS, thanks to a reduced number of parameters and options to choose from; just follow the procedure described later in this manual, to discover and add the device drivers with SDDP.



In EASY MODE, KONNECT4 does all the configuration in a single-step procedure:



The specific DEVICE DRIVERS can still be used in ETS MODE, by adding the manually to the project (outside the guided procedure of KONNECT4); in such a case, the devices must be preliminarily configured with ETS PROFESSIONAL, and their KNX group addresses must be entered manually in the PROPERTIES section of the corresponding driver. In ETS MODE, KONNECT4 acts as a pure IP interface, putting in communication the CONTROL4 controller with the bus.

The following EKINEX devices are supported by DEVICE DRIVERS in the two configuration modes:

FAMILY	CODES	FUNCTIONALITY	ETS MODE	EASY MODE
Keypads	EK-ED2-TP EK-E20-TP EK-E13-TP EK-EV2-TP	Short / long press on buttons	X	X
		LED control		
		Integrated thermostat monitoring		
ON/OFF actuators	EK-FA1-TP EK-FB1-TP EK-FE1-TP EK-FF1-TP	Generic switch relay control	X	
		ON/OFF lighting management		
		Shutters / blinds management		
		Load control (in combination with energy meters)		
Dimmer actuators	EK-GA1-TP EK-GC1-TP EK-GF1-TP	Dimming lights management	X	

The following minimum firmware versions are required for compatibility with the EASY MODE configuration:

SERIE	CODES	MINIMUM VERSION	NOTES
FF Serie	EK-ED2-TP	05.015 or higher	Refer to printed product label
20Venti Serie 4+8 buttons	EK-E20-TP-4T	05.018 or higher	Refer to printed product label
	EK-E20-TP-8T		
71 Serie	EK-E13-TP	05.015 or higher	Refer to printed product label
Signum	EK-EV2-TP	1.2 or higher ¹	Refer to the INFO page on screen

Other device models are supported in ETS MODE by CONTROL4 KNX generic drivers and by the integrated ENERGY MONITORING management of KONNECT4, as explained later.

¹ SIGNUM devices equipped with previous firmware versions can be updated with EKINEX TOOL app by following the corresponding instructions in the user guide

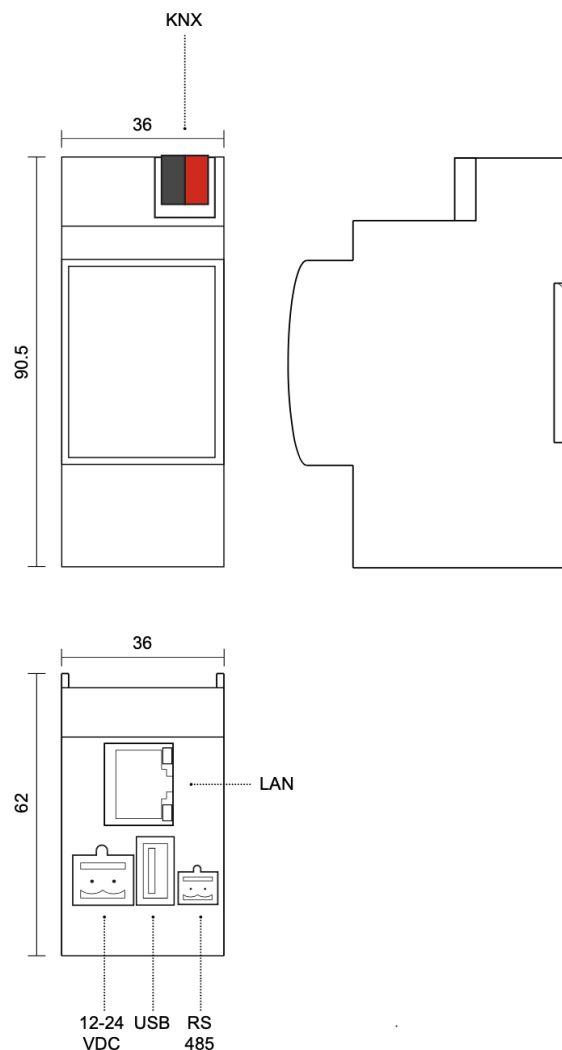
SETUP

INSTALLATION

KONNECT4 is designed to be installed on a DIN rail, by requiring a 2 module-size free space. The following connections are required:

- 24 V DC power supply
- Ethernet connection to LAN
- KNX (standard red-black TP 2-wire connector)

The server offers also an USB and RS485 port, prepared for future use (not available at the present moment in the configuration process).



KONNECT4 is expected to be connected to the same LAN as the CONTROL4 controller(s); in case of different installations, please refer to the IT manager in order to ensure proper communication. The front LEDs offer the following signaling:

- POWER: indicates the presence of 12-24 Vdc power supply at terminals
- SERVICE: Normally off, steady or flashing during recovery sequences

DRIVERS INSTALLATION

Before starting the configuration, the following drivers must be added to COMPOSER PRO:

NAME	TYPE	DESCRIPTION	ETS MODE	EASY MODE
KONNECT4	GATEWAY	Main driver for KONNECT4	X	X
KEYPAD	DEVICE DRIVER	Allows the configuration of pushbuttons and integrated thermostat of EKINEX keypads in EASY MODE ²	X	X
ACTUATOR	DEVICE DRIVER	Allows the configuration of ON/OFF actuators for RELAY and SHUTTER / BLIND control	X	
DIMMER	DEVICE DRIVER	Allows the configuration of dimmer actuators	X	
THERMOSTAT	GRAPHIC PROXY	Brings the integrated HVAC controller of EKINEX keypads into visualization		X
SHUTTER	GRAPHIC PROXY	Allows the control of ACTUATOR drivers which channels are configured in SHUTTER / BLIND mode	X	
ON/OFF LIGHT	GRAPHIC PROXY	Allows the control of ON/OFF lights in combination with the ACTUATOR driver	X	
DIMMER LIGHT	GRAPHIC PROXY	Allows the control of dimmable lights in combination with the ACTUATOR or DIMMER driver	X	



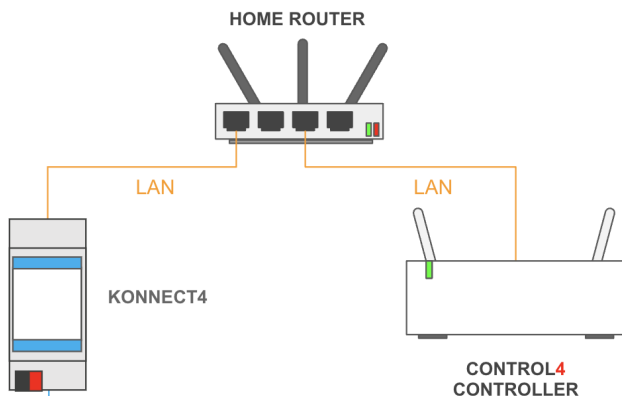
Please check that all drivers are updated to the latest version available. Older drivers could not work properly with your device. Pay attention that the downloaded files have the original name, otherwise they don't work properly.

² Thermostats and the integrated HVAC regulator of pushbuttons are not supported in ETS MODE; please use the CONTROL4 KNX UNIVERSAL THERMOSTAT instead.

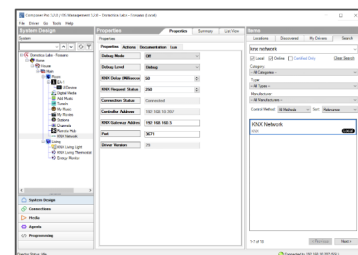
KONNECT4 DRIVER INIT

SDDP DISCOVERY

As soon as KONNECT4 is connected to the local network, it can be found in the DISCOVERED section in COMPOSER PRO:



Connect Konnect4 to the same LAN of the Control4 controller



Double-click on SDDP discovery to add Konnect4 driver to the project

Double-click on the discovered item, to add the main KONNECT4 driver to the project.

PROPERTIES

The first time after adding the KONNECT4 to the project, it is recommended to open its PROPERTIES tab; the following screen is shown:

Properties

Properties

Summary

List View

Advanced Properties

Configuration

Properties

Actions

Documentation

Lua

Driver details

Debug Mode

Print and Log

Driver version

2

Working mode

Mode

EASY

Connection details

IP address

192.168.10.117

Notification refresh time (Seconds)

30

Status

Connected

The following items are available in this screen:

IP ADDRESS	<p>Address of KONNECT4 in the local network.</p> <p>Automatically filled by SDDP; change it only in case of manual configuration</p>
STATUS	Indicates if the driver is communicating with KONNECT4 device

CONFIGURATION

The CONFIGURATION tab contains all the info and functions needed for the EASY MODE configuration; it offers a graphical user interface similar to the following example picture:

System Design

System

EA1

House

Man

Test Konnect4

E20 - 01

E20 - 01

E20 - Thermostat

Konnect4

Office

Man

Room

EA1

UCDevice

Digital Media

Manage Music

TuneIn

My Music

My Movies

Stations

Channels

KNX Tunneling Gateway

KNX Routing Gateway

E20 - Old

E20 - Old

Remote Hub

System Design

Connections

Media

Agents

Programming

Properties

Properties

Summary

List View

Advanced Properties

Configuration

Properties

Actions

Documentation

Lua

General actions

SETTINGS

SYNC ALL

DOWNLOAD ALL

RELOAD DRIVERS

RESET CONFIGURATION

Devices

NAME

TYPE

MODEL

DEVICE ID

ADDRESS

STATUS

Device 1

Pushbutton

EK-E20-TP

1

1.1.1

Download needed

Device 2

Pushbutton

EK-ED2-TP

2

1.1.2

Download needed

DISCOVERY

Locations

Discovered

My Drivers

Search

Locations

Sites

Home

Work

Corporate

Buildings

House

Building

Office

Floors

Man

First

Second

Basement

Rooms

Theater

Foyer

Living

Dining

Kitchen

Laundry

Bathroom

Bedroom

Front

Garage

Room

Connected to 192.168.10.70 (SSL)

ACTIONS

The ACTIONS tab of the KONNECT4 driver offers a list of commands that can be sent to the driver. The following actions are available:

ACTION	DESCRIPTION
COPY DRIVER CONFIGURATION BY ID	Use this action to quickly duplicate settings among DEVICE DRIVERS of the same typology
PRINT GLOBALS	Use this action only when requested by EKINEX technical support, to print debug information during the driver usage



NETWORK CONFIGURATION

By default configuration, KONNECT4 obtains an IP address automatically by the DHCP server in the network.

It can be switched to static IP configuration by entering its NETWORK setting page, which can be reached by pressing the SETTINGS button in the CONFIGURATION tab. The following form is presented:

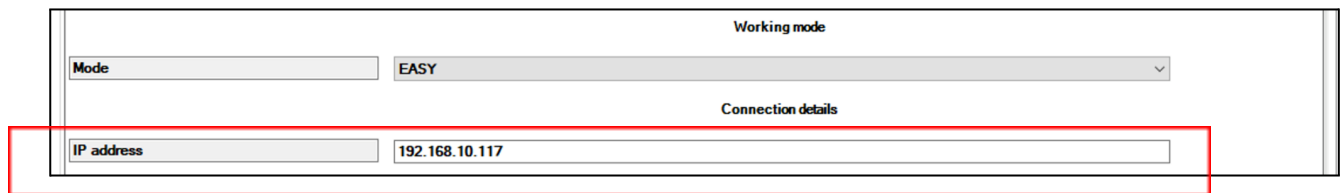
LAN ●	
MAC Address	80:1f:12:52:23:72
Addressing	Static
IP	192.168.10.117
Netmask	255.255.255.0
Default gateway	192.168.10.1
Primary DNS	8.8.8.8
Secondary DNS	8.8.8.8
<div><div>SAVE</div><div>CLOSE</div><div>REFRESH</div><div>RESTART</div></div>	

Fill the requested information as follows:

ADDRESSING	Select if a DHCP or STATIC IP has to be entered In case of DHCP, all the other settings are disabled
IP	IP address to be assigned to KONNECT4
NETMASK	Address mask of the IP network. Default: 255.255.255.0
DEFAULT GATEWAY	Normally the IP address of the router in the LAN
PRIMARY DNS SECONDARY DNS	IP addresses of the primary and secondary DNS. Default values (provided by Google): 8.8.8.8 / 8.8.4.4

Once entered the desired configuration, please press SAVE and keep waiting until the new addressing becomes active; the driver screen typically has to be closed.

In case of static IP addressing, **the new address must be also manually entered** in the PROPERTIES tab:



The screenshot shows a network configuration window. At the top, there's a 'Working mode' section with a 'Mode' dropdown menu currently set to 'EASY'. Below this is a 'Connection details' section. The 'IP address' field in this section is highlighted with a red rectangular box and contains the text '192.168.10.117'.

The other buttons in the network configuration page offer the following functionality:

CLOSE	Closes the network configuration page
REFRESH	Reads again the network settings from KONNECT4
RESTART	Restarts network communication services without changes of the configuration



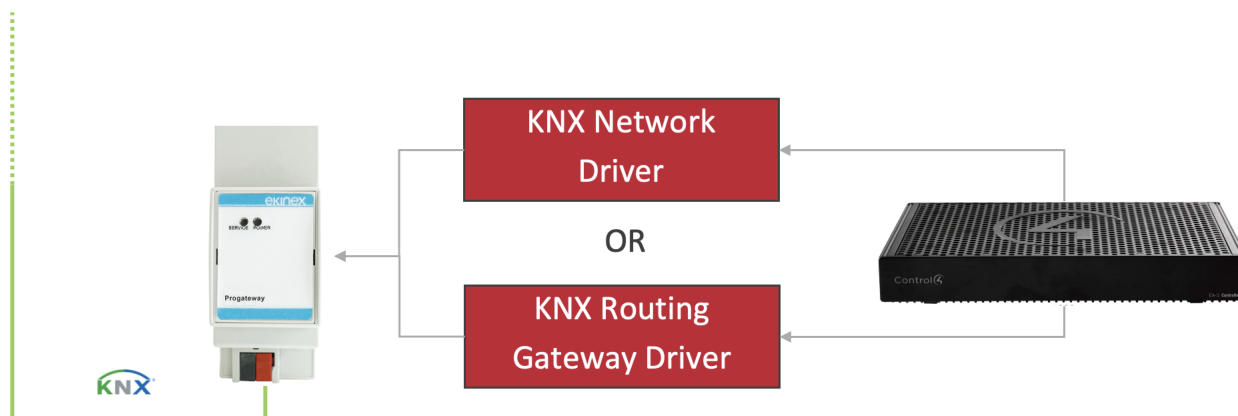
After a change of IP address of KONNECT4, if the DISCOVERED section in COMPOSER PRO still shows the old address, please shutdown and power on again the CONTROL4 controller, due to its internal caching.

COMMUNICATION DRIVER

KONNECT4 and EKINEX devices use the KNX standard protocol to communicate with each other, and to exchange information and commands with CONTROL4.

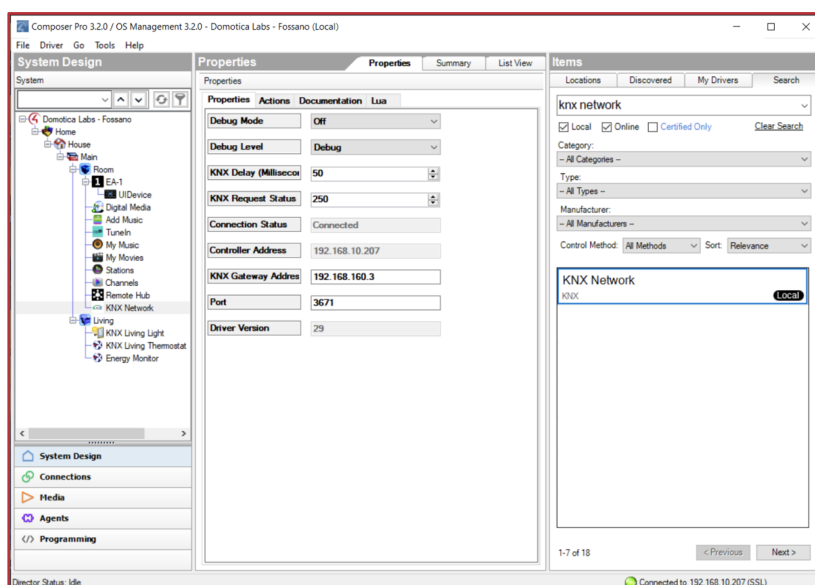
One of the following CONTROL4 KNX communication drivers must be preliminarily added to the

project, before proceeding with the configuration as described in the following chapters:

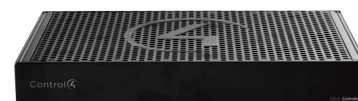


KNX NETWORK DRIVER

The first driver that can be used is called KNX NETWORK and can be found in the online DRIVER SEARCH (manufacturer: CONTROL4):



Communication



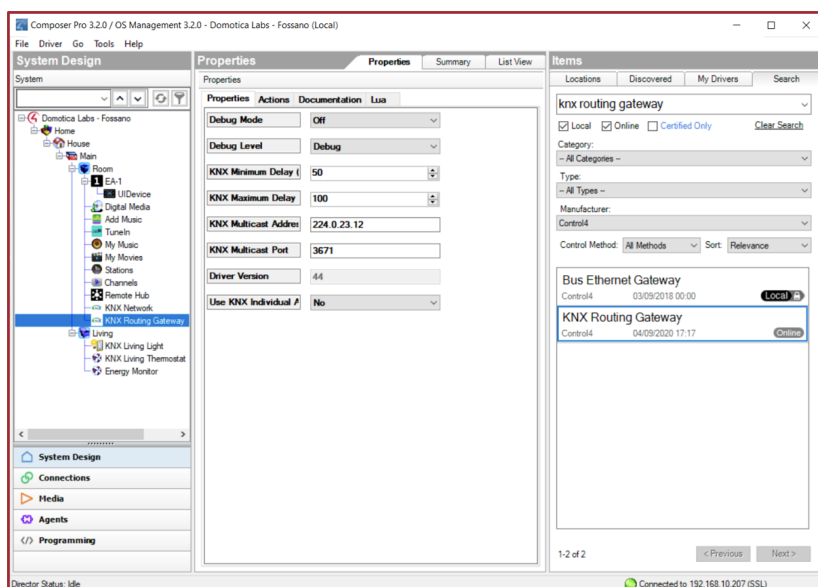
The IP address of KONNECT4 must be (manually) entered in the KNX GATEWAY ADDRESS field; once entered, the driver attempts a connection and, if successful, updates the CONNECTION STATUS to CONNECTED.

The KNX NETWORK operates in point-to-point mode; a single connection is supported in this mode by KONNECT4 webserver.

KNX ROUTING GATEWAY

An alternative solution is offered by the KNX ROUTING GATEWAY, operating in multicast on the LAN; this driver offers a more reliable connection, not being connection-based and influenced by other connections opened with the KONNECT4 by other devices (e.g. in case of multiple CONTROL4 controllers in the same installation).

The configuration in COMPOSER PRO of this driver is even simpler, being not necessary to insert any information at all:



Communication



The KNX MULTICAST ADDRESS parameter, in fact, is the default multicast address used for communication, and must not be changed.

In order to make the KNX ROUTING GATEWAY work with KONNECT4, the routing protocol must be enabled, by pressing the CONFIGURE COMMUNICATION button and enabling the flag “ENABLE INTEGRATED KNXNET/IP ROUTER” (press the SAVE button after the change).



It is highly recommended to add the KNX NETWORK or KNX ROUTING GATEWAY drivers to the project BEFORE any other DEVICE DRIVER. Otherwise, the automatic binding with those drivers does not happen.

EASY CONFIGURATION

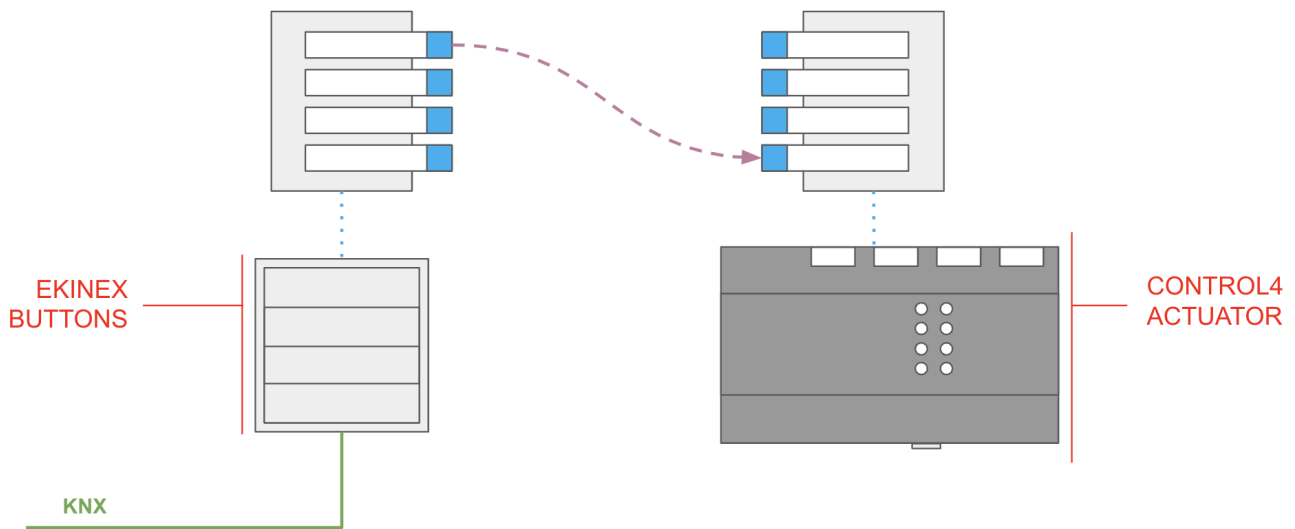
INTRODUCTION

KONNECT4 can be used as a gateway between EKINEX pushbuttons and CONTROL4, with a simplified configuration in COMPOSER PRO (no need of ETS PROFESSIONAL software).



At the present moment, only EKINEX pushbuttons can be used in EASY MODE. Please refer to the OVERVIEW chapter earlier in this document for more details.

Thanks to the EASY MODE configuration, EKINEX pushbuttons can be used to command and show the state of CONTROL4 or third party actuators:



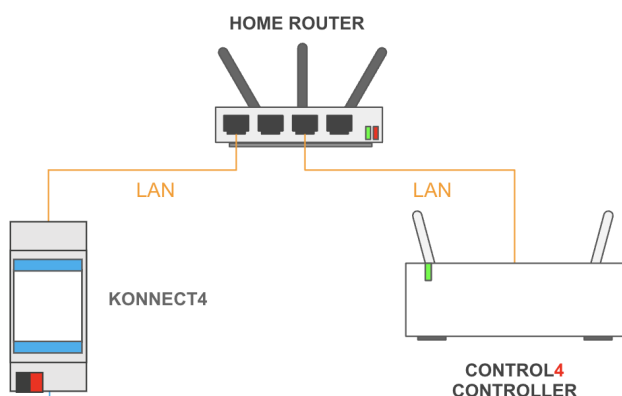
The association with actuators or any other devices supported by CONTROL4 is done with CONNECTIONS, as better described later.

Additionally, the integrated thermostat of EKINEX keypads can be used in combination with external actuators for the visualization and heating / cooling management in CONTROL4.

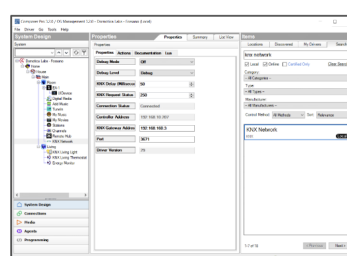
CONFIGURATION OVERVIEW

STEP 1: CONNECTION

As already described in the previous chapter, the first step consists in connecting KONNECT4 to COMPOSER PRO to the same LAN of CONTROL4, find it in the SDDP discovery panel of COMPOSER PRO, and add it to the project with a double-click:

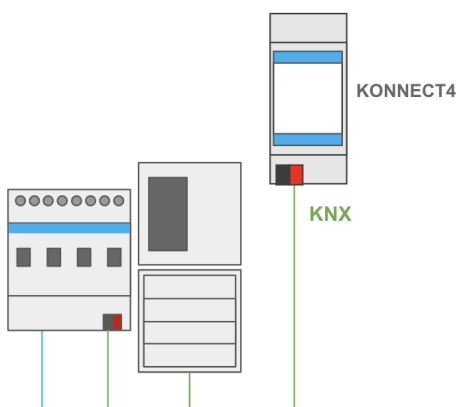


1a Connect Konnect4 to the same LAN of the Control4 controller

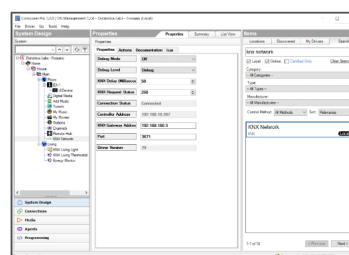


1b Double-click on SDDP discovery to add Konnect4 driver to the project

STEP 2: DISCOVERY



2a Connect the devices one-by-one and press the programming button

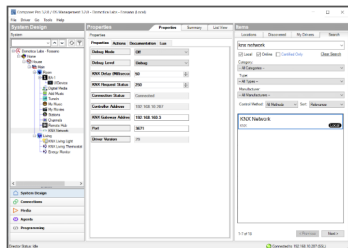


2b Double-click on SDDP discovery to add the device drivers to the project

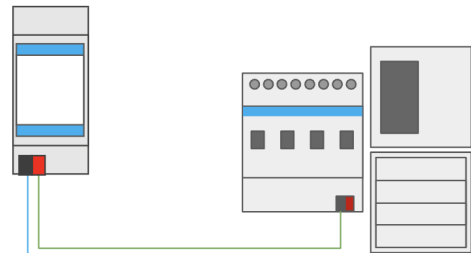
In the next step, the other devices can be connected to the bus; KONNECT4 addresses them automatically and adds them in the SDDP discovery panel of COMPOSER PRO.

STEP 3: CONFIGURATION

The device drivers can be used to configure the behavior of the corresponding product; once done, the configuration is automatically downloaded into the devices by KONNECT4:



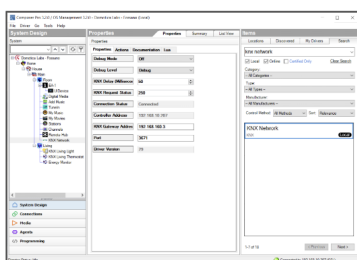
3a Adjust settings for each device (e.g. keypad LEDs, long press time etc...) in the **property panel** of the corresponding driver



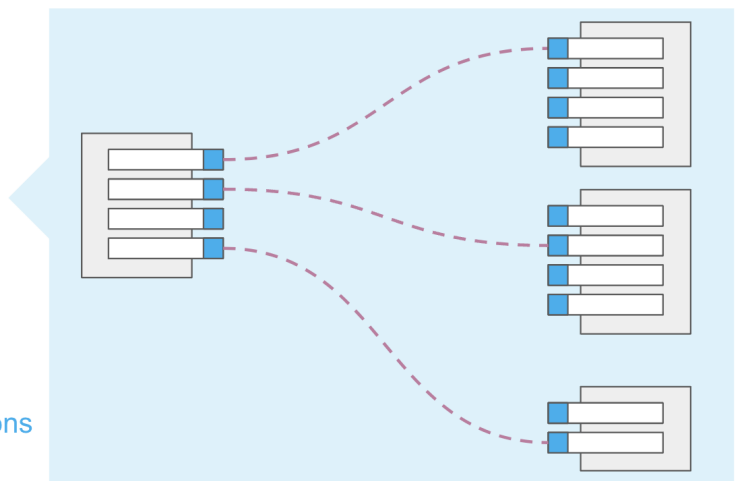
3b **Download** automatically parameters and addressing into the devices

STEP 4: BINDING

Finally, EKINEX devices can be combined with other devices to make them work together; this is done by binding their connections, or by handling events in the PROGRAMMING section of COMPOSER PRO:

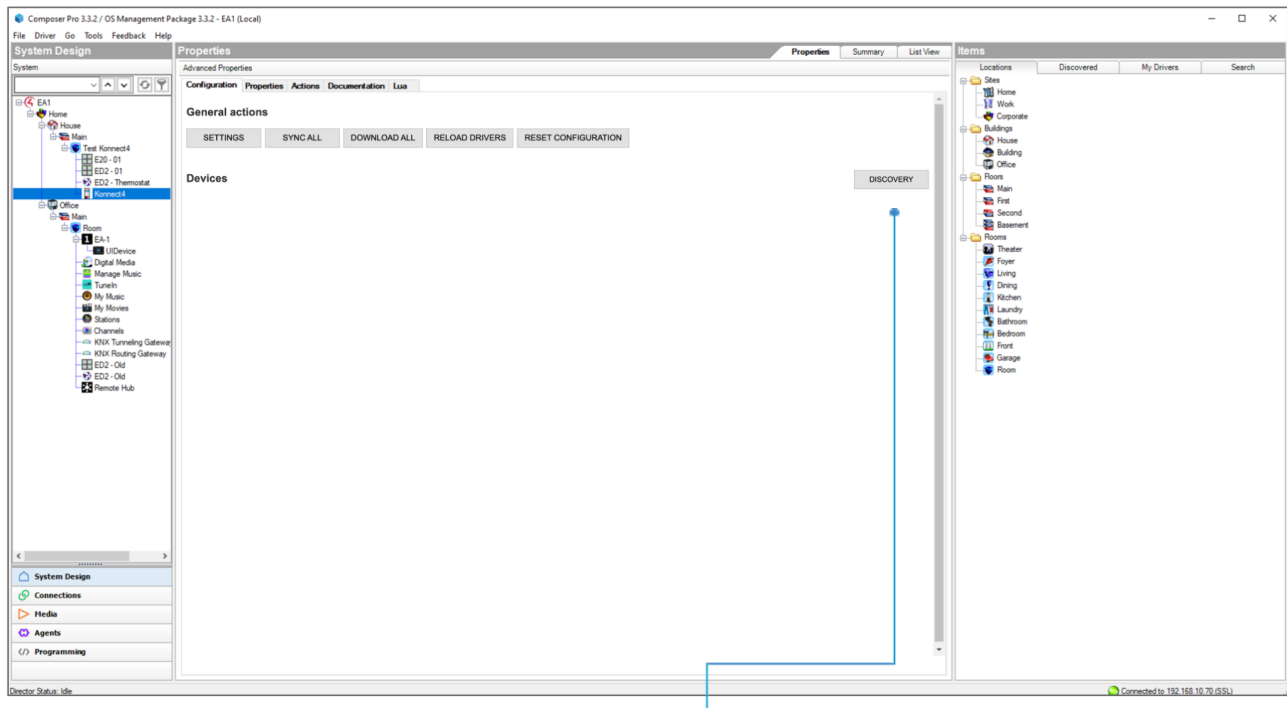


4 Bind the **BUTTON_LINK** connections of the device drivers together, in order to obtain the desired functionality



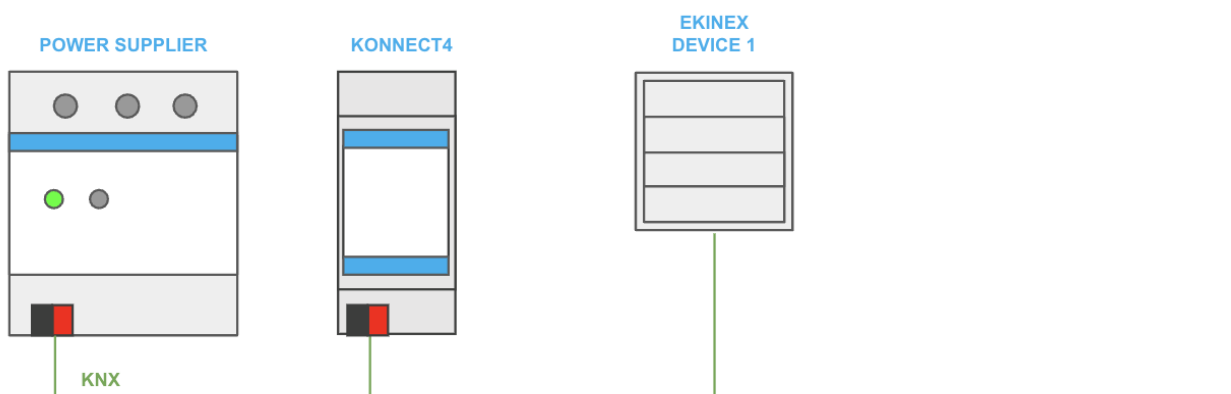
DISCOVERY

Open the KONNECT4 driver in COMPOSER PRO and select the CONFIGURATION tab; a screen similar to the following picture is shown:

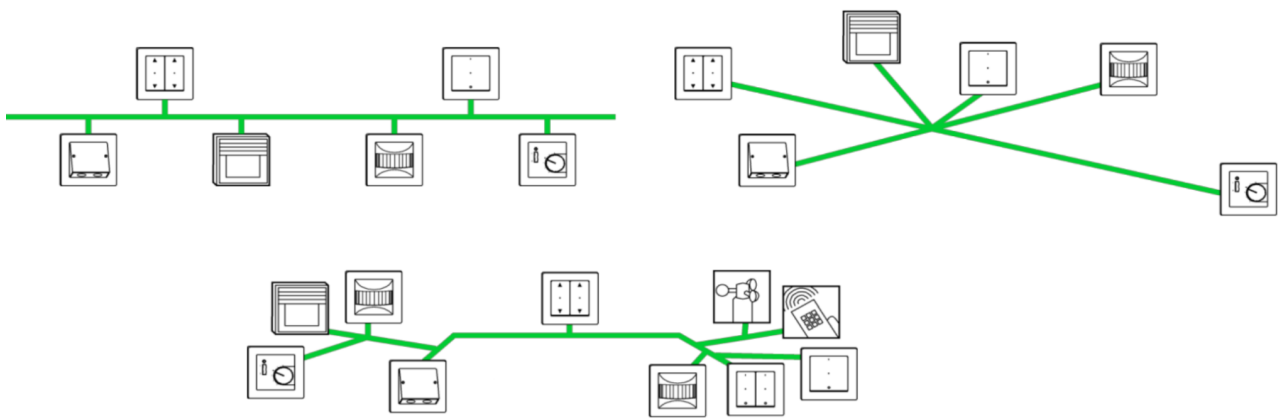


DISCOVERY BUTTON

Press the DISCOVERY button, and connect the first device to the same bus, where the power unit and KONNECT4 are already connected:



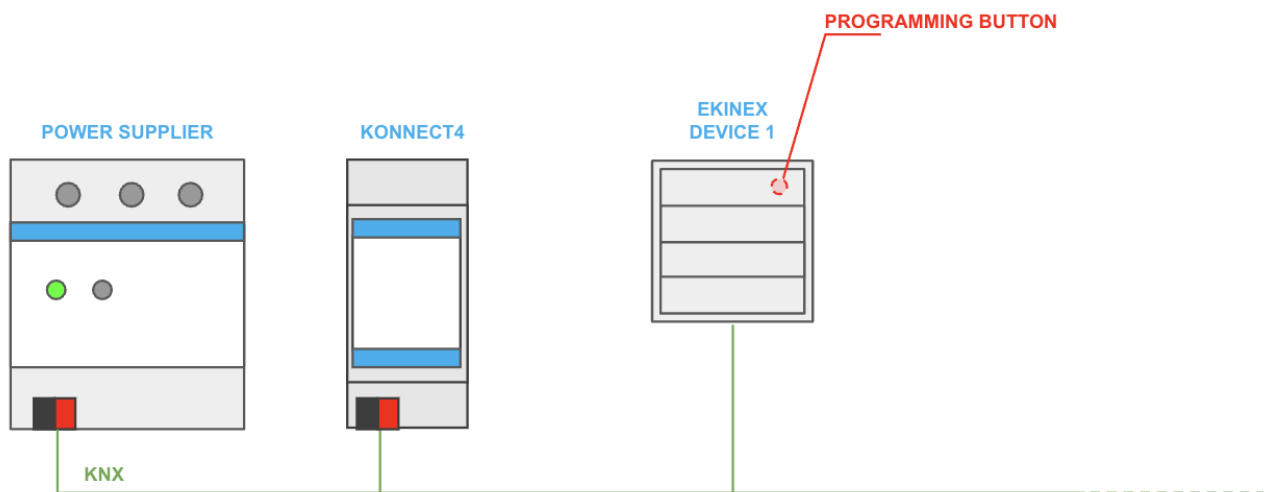
Different *topologies* can be used to connect the devices; the only important thing to remember, is to avoid closing a *ring* with the bus cable:











A maximum of 63 devices can be connected to the bus in EASY MODE with a single power supply unit and KONNECT4 gateway

A certified KNX cable must be used to connect the devices; the provided red-black connector can be used to enter and eventually exit with the cable.

Once done, press its programming button, or the combination of front buttons that makes it enter in programming mode (please refer to the user manual of the specific product for more details):



After some seconds, KONNECT4 recognises the new device, assigns it a unique address, and shows it in the DEVICES list:

Devices							DISCOVERY
	NAME	TYPE	MODEL	DEVICE ID	ADDRESS	STATUS	
  	Device 1	Pushbutton	EK-E20-TP	1	1.1.1	 New	
  	Device 2	Pushbutton	EK-ED2-TP	2	1.1.2	 New	









Each line in the list corresponds to a device, and shows the following information:

NAME	Label assigned to the device (can be changed later)
TYPE	Typology of the device (at the moment only pushbuttons are supported)
MODEL	Product family of the device
DEVICE ID	Progressive number assigned to discovered devices
ADDRESS	Unique address assigned to the device on the bus
STATUS	Programming state of the device

The STATUS can be one of the following:

NEW	Device discovered but not already added to the project
UNSYNCED	Device added to the project, not already configured, or with changes in the configuration that need to be synchronized in KONNECT4
DOWNLOAD NEEDED	Device with a configuration correctly synchronized in KONNECT4, that must be downloaded into its memory
DOWNLOADING	Device with a configuration download in progress
DOWNLOADED	Device with a correct configuration downloaded in its memory and operative
BAD CONFIGURATION	Device with an incorrect configuration. Must be configured, synchronized and downloaded again.

As soon as a new device is addressed, it is listed to the DISCOVERED panel in COMPOSER PRO. To add it to the project, simply double-click on it; the corresponding line in KONNECT4 drivers changes to UNSYNCED status:

Devices						DISCOVERY
	NAME	TYPE	MODEL	DEVICE ID	ADDRESS	STATUS
  	Device 1	Pushbutton	EK-E20-TP	1	1.1.1	 Unsynced
  	Device 2	Pushbutton	EK-ED2-TP	2	1.1.2	 Unsynced

Repeat the same procedure by keeping the discovery active, until the last device has been added. At that point, press the STOP button and wait until the DISCOVERY button is displayed again.



The device drivers can be removed from the project, after being added to it; in such a case, they return available in the DISCOVERY panel.

It is important to avoid removing the KONNECT4 main driver when at least one device driver is still in the project; eventually, remove ALL drivers from the project and start configuration again from the beginning.

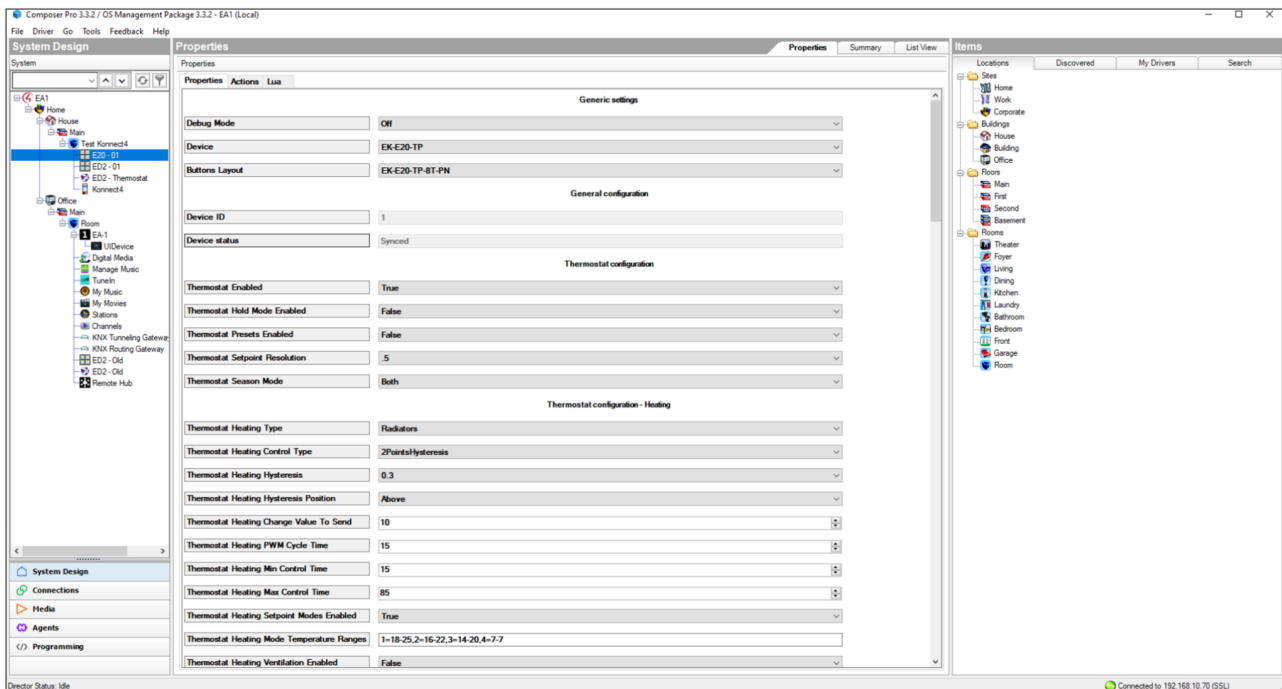
Once added to the project, the device drivers can be renamed with the context menu (right click) in COMPOSER PRO, in order to identify it in an easier way. We recommend renaming drivers as soon as they are added to the project, to avoid the risk of confusing similar products.

CONFIGURATION

Device drivers can be used to determine the behavior of the corresponding device. Typically the configuration requires the following steps:

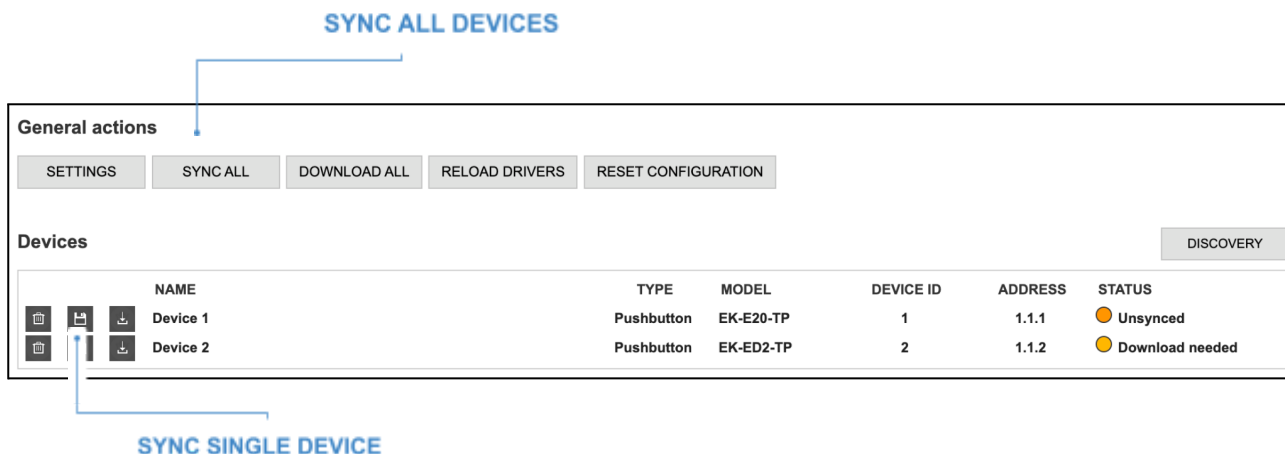
- Selection of the correct BUTTONS LAYOUT
- Configuration of the integrated thermostat
- Configuration of the short/long press and LED behavior for each button

The following picture shows an example of the properties for a device driver:

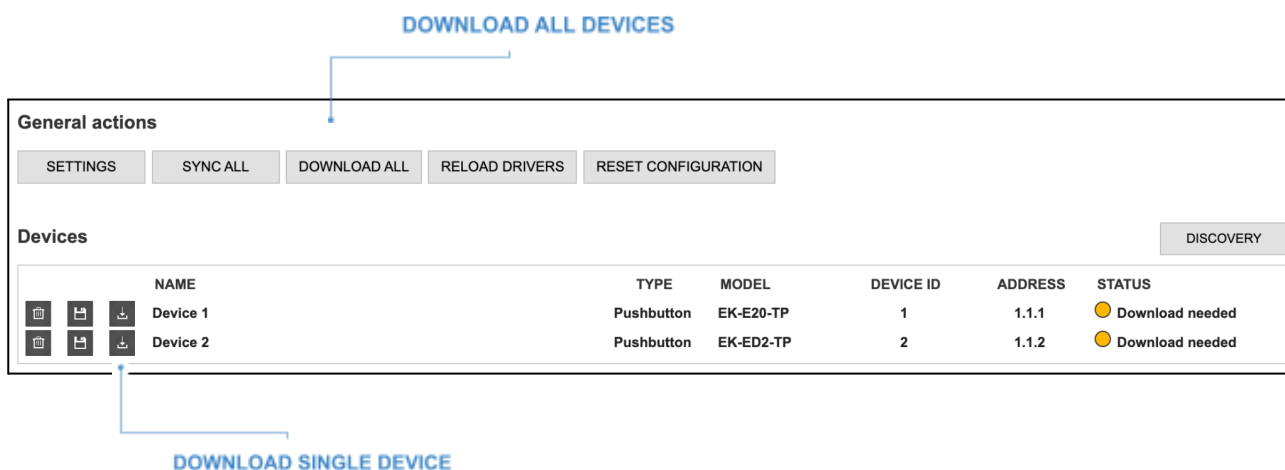


For more details about settings for the specific products family, please refer to the DEVICE DRIVERS dedicated chapter later in this document.

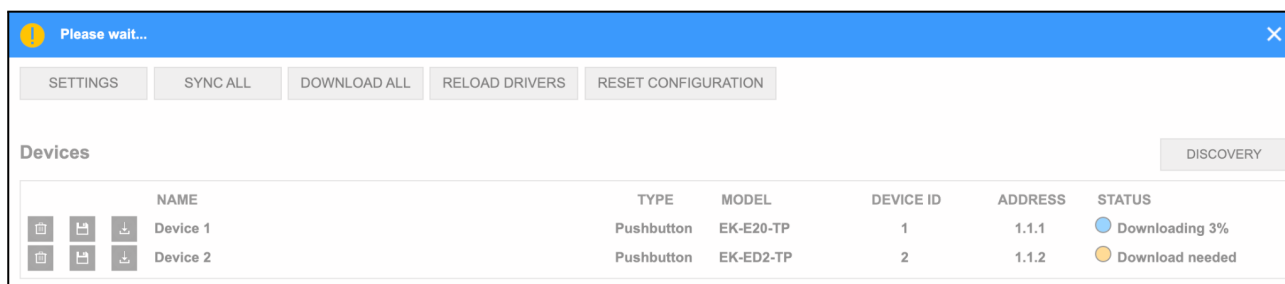
Once the configuration has been done for all the drivers, it is required to open the KONNECT4 driver again. The devices with changes in the configuration will appear in UNSYNCD status; press the specific SYNC button, or the SYNC ALL button on the top of the list, to synchronize KONNECT4 with the changes that have been made in the drivers in COMPOSER PRO:



Finally, the new configuration must be downloaded into the devices' memory. Press the single DOWNLOAD button, or the DOWNLOAD ALL button on the top of the list, to start the operation; the download process can take up to a minute for each device, depending on the configuration.



During the download process, no other operation can be done in KONNECT4 driver.



When the download procedure ends, the devices can be used accordingly with their configuration, as better explained later in this document.

In case of errors during the download procedure, the corresponding device assumes the ERROR

status, like in the following example:

General actions

SETTINGS

SYNC ALL

DOWNLOAD ALL

RELOAD DRIVERS

RESET CONFIGURATION

Devices

DISCOVERY

	NAME	TYPE	MODEL	DEVICE ID	ADDRESS	STATUS
<div><div></div><div></div><div></div></div>	Device 1	Pushbutton	EK-E20-TP	1	1.1.1	<div></div> Downloaded
<div><div></div><div></div><div></div></div>	Device 2	Pushbutton	EK-ED2-TP	2	1.1.2	<div></div> Download error

If this occurs, check the physical connection to the device, and try again.

DUPLICATION

It is possible to duplicate the entire configuration of a KEYPAD device driver to another, by means of the COPY DRIVER CONFIGURATION BY ID action (available in the ACTIONS tab of the KONNECT4 driver):

System Design

System

Test - EA1

House

Main

Theater

Remote Hub

EA1

UI Device

Digital Media

Manage Music

TuneIn

My Music

My Movies

Stations

Channels

Laboratory

Control4 Components

Bus Power Supply

Bus Ethernet Gateway

8-Channel Relay

Configurable Keypad (Wired)

Office Sonos

Office Sonos Connections

Sonos Network

2N Doornstation

2N IP Intercom

2N IP Camera

Laundry

KNX Switch

KNX Tunneling Gateway

KNX Routing Gateway

test

Konnect4

Device - Keypad

e20-8

Properties

Advanced Properties

Configuration Properties Actions Documentation Lua

EASY - Copy driver configuration by ID

ETS - Discovery scenes

ETS - Start polling notifications

ETS - Stop polling notifications

ETS - Remove all connections

ETS - Remove all scenes

GENERAL - Clear cache

GENERAL - Print globals

Action Parameter List

Source ID

2

Destination ID

3

OK

Cancel

Fill the fields required in the popup as follows:

SOURCE ID	Number of the DEVICE DRIVER to be copied. The number can be obtained in the DEVICES list of the KONNECT4 driver (column DEVICE ID) or inside the interested driver (DEVICE ID property)
DESTINATION ID	Number of the DEVICE DRIVER that must receive the configuration

Once done, open again the destination driver; change eventually the properties, and do again the SYNC and DOWNLOAD procedure, as previously explained.

CONNECTIONS

According to the configuration entered in the SYSTEM DESIGN view of COMPOSER PRO, each DEVICE DRIVER offers a list of CONNECTIONS that can be bound with other drivers.

Here are some examples of functions that can be obtained by binding connections:

- Command relays of a CONTROL4 actuator by pressing a button on an EKINEX keypad
- Set the status of an EKINEX keypad's LED with the state of another device, or a logic condition
- Send commands to actuators according to the heating and/or cooling demand of the integrated thermostat of EKINEX keypads

In order to make bindings between connections, do as follow:

- Enter the CONNECTIONS view in COMPOSER PRO
- Select an EKINEX DEVICE driver
- Identify the desired connection and select it
- Drop the connection over a compatible connection of another driver, choosing among the ones listed in the bottom part of the screen

For a more detailed description of all the available connections of EKINEX DEVICE DRIVERS, please refer to the dedicated chapter following in this document.

PROGRAMMING

It is possible to interact in a more flexible way with EKINEX devices in the PROGRAMMING area of COMPOSER PRO. Please refer to the dedicated chapter later in this document.

DEVICE DRIVERS

INTRODUCTION

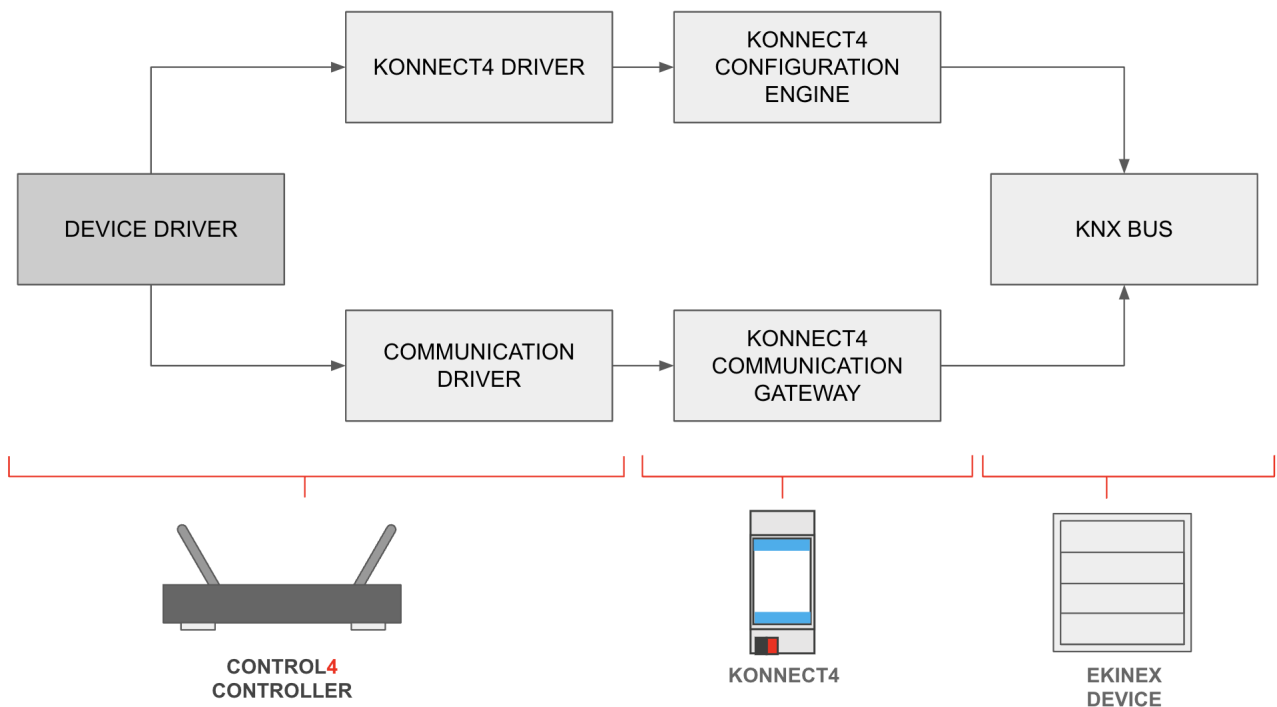
DEVICE DRIVERS identify an EKINEX product inside COMPOSER PRO.

As previously mentioned, DEVICE DRIVERS can be added to the project in two different ways:

EASY MODE	Automatically discovered with SDDP by KONNECT4 In this configuration mode, the DEVICE DRIVERS are useful to set parameters determining the behavior of the corresponding products
ETS MODE	Manually dropped into the project In this configuration mode, KNX group addresses must be manually entered according to the programming previously done in ETS PROFESSIONAL

In EASY MODE, DEVICE DRIVERS rely on two different drivers to communicate with the devices:

- The KONNECT4 DRIVER during configuration
- The KNX COMMUNICATION DRIVER³ at runtime



³ Please refer to the SETUP chapter for more details about KNX NETWORK and KNX ROUTING GATEWAY drivers, that must be added to the project before adding DEVICE DRIVERS

In ETS MODE, only the second route is used for communication, being the configuration already done externally in ETS PROFESSIONAL.

When used in ETS MODE, it is required to enter manually the KNX group addresses used by the device for the bidirectional communication on the bus; these addresses must be retrieved from the ETS PROFESSIONAL project.

In EASY MODE, as opposite, there is no need for manual addressing, being it managed automatically by KONNECT4.

KEYPAD

INTRODUCTION

The KEYPAD driver can be used in both EASY and ETS MODE to manage EKINEX pushbuttons.

In ETS MODE, only the buttons can be managed with this driver; the integrated thermostat can be handled separately with CONTROL4's UNIVERSAL KNX THERMOSTAT driver:

The screenshot shows the ETS software interface with the following components:

- System Design Panel (Left):** Displays a hierarchical tree of the project structure. The 'Living' room is selected, showing a 'KNX Living Thermostat' and an 'Energy Monitor'.
- Properties Panel (Middle):** Shows the configuration for the selected device. The 'Properties' tab is active, displaying settings for temperature units (Celsius), remote sensor usage, button status (Unlocked), and advanced properties like driver version, debug mode, and thermostat model (EK-ED2-TP). A red arrow points from the 'Setpoint Adjustment Method' dropdown (set to 'Absolute for currently') to the 'Items' panel.
- Items Panel (Right):** Lists discovered devices. The search filter is set to 'universal'. The first item, 'KNX Universal Thermostat', is highlighted with a red box. Other items include 'DC Universe (Universal)', 'NeoPro Legacy Universal', 'Universal SIP Phone (Communication)', 'Universal GC Device', 'NeoPro 2G Universal', and 'PBS (Universal)'.

The KNX group addresses configured in ETS PROFESSIONAL for the functioning of the thermostat, must be inserted in this driver, in order to instruct CONTROL4 to send the appropriate commands and monitor the status addresses used by the heating and/or cooling controller.

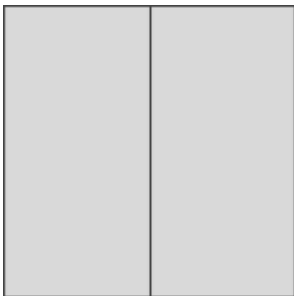
PROPERTIES

GENERIC SETTINGS

When entering the PROPERTIES tab of the DEVICE DRIVER for a keypad, the following fields must be filled according to the specific model and layout of the corresponding product:

DEVICE	Product model Note: this field is automatically filled in EASY MODE
BUTTONS LAYOUT	Depending on the DEVICE, select the most appropriate choice to inform the driver about the number of physical buttons and their layout (where multiple layouts are available e.g. EK-ED2-TP)

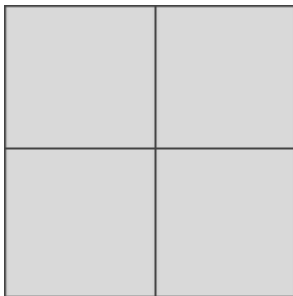
Available layouts for SERIE FF:



**2 RECTANGULAR
ROCKERS**

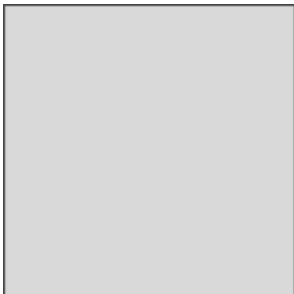


**4 RECTANGULAR
ROCKERS**

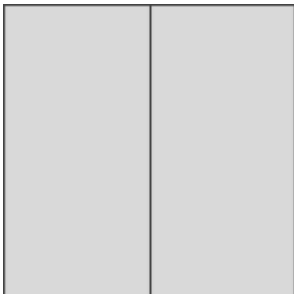


**4 SQUARE
ROCKERS**

Available layouts for SERIE 71:



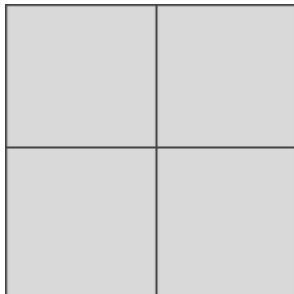
**SINGLE
ROCKER**



**2 RECTANGULAR
ROCKERS**

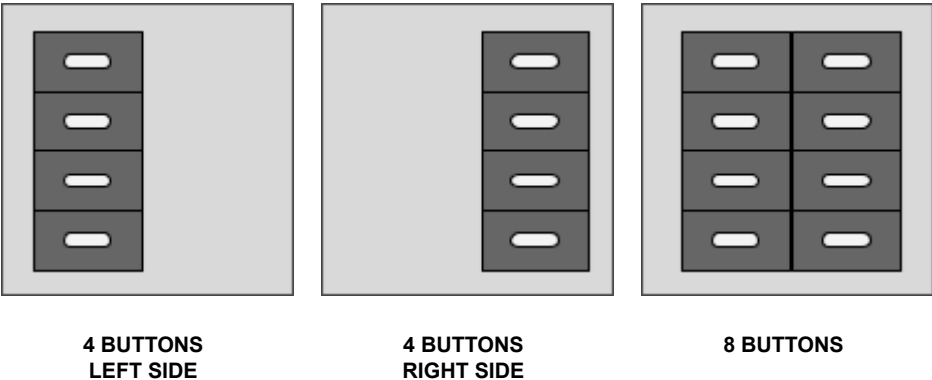


**4 RECTANGULAR
ROCKERS**



**4 SQUARE
ROCKERS**

Available layouts for SERIE 20VENTI:



The configuration of these settings determine the following available settings, therefore it is important to correctly fill them before proceeding.

GENERAL CONFIGURATION

The following read-only fields contain information about the driver status when in EASY MODE:

DEVICE ID	Numeric identifier of the device (corresponding to the devices list in the KONNECT4 driver when in EASY MODE)
DEVICE STATUS	Synchronization status between the driver and KONNECT4

BUTTONS CONFIGURATION

For each button, the following properties must be set:

MODE	Select one of the following options:	
	INACTIVE	Not in use
	PRESS/RELEASE ON/OFF	Press = ON (1) Release = OFF (0)
	PRESS/RELEASE OFF/ON	Press = OFF (0) Release = ON (1)
NAME	Label assigned to the button. It is used also in the CONNECTIONS panel, and helps to understand which is the associated channel	
ENABLE SHORT /	Select ENABLED to discriminate between short and long press.	

LONG PRESS	<p>If enabled, the following sub-properties are shown:</p> <table> <tr> <td>CLICK DELAY</td><td>Minimum time for long press</td></tr> </table>	CLICK DELAY	Minimum time for long press				
CLICK DELAY	Minimum time for long press						
COMMAND TYPE	<p>The BUTTON_LINK connection can transport the following commands:</p> <p>DO_CLICK A toggle effect when you press & release the button typically used to switch ON/OFF a light</p> <p>DO_PUSH The press event on the button</p> <p>DO_RELEASE The release event on the button</p> <p>Not all the drivers support correctly the DO_CLICK event. If nothing happens on short-press of the button, change the COMMAND TYPE property from "CLICK" (default) to "PUSH" or "BOTH".</p>						
LED	Select ENABLED to manage the LED associated to the button						
LED BEHAVIOR	<p>Select one of the following options:</p> <table> <tr> <td>FOLLOW BUTTON STATE</td><td>The LED switches ON when the button is pressed, and OFF when released</td></tr> <tr> <td>FOLLOW CONNECTION</td><td>The LED switches ON and OFF according to the value received on the RELAY connection</td></tr> <tr> <td>PROGRAMMED</td><td>The LED can be controlled in PROGRAMMING section</td></tr> </table>	FOLLOW BUTTON STATE	The LED switches ON when the button is pressed, and OFF when released	FOLLOW CONNECTION	The LED switches ON and OFF according to the value received on the RELAY connection	PROGRAMMED	The LED can be controlled in PROGRAMMING section
FOLLOW BUTTON STATE	The LED switches ON when the button is pressed, and OFF when released						
FOLLOW CONNECTION	The LED switches ON and OFF according to the value received on the RELAY connection						
PROGRAMMED	The LED can be controlled in PROGRAMMING section						
RGB ON COLOR RGB OFF COLOR	<p>Select the desired color for the LED when in ON and in OFF status</p> <p>Note: these settings are available only for EK-E20-TP models</p>						
ENABLE RELAY CONNECTION	Select ENABLED to activate an additional CONNECTION of RELAY type to switch the LED ON and OFF from other drivers supporting this typology of connection						

In ETS MODE, the following properties are additionally required:

ADDRESS	KNX group address (in the format X/Y/Z) where the pushbutton sends the press / release information
---------	--

LED ADDRESS	KNX group address (in the format X/Y/Z) listened by the keypad, where to send 1/0 commands to switch LED ON/OFF
-------------	---

As previously mentioned, these fields are not needed when operating in EASY MODE.

THERMOSTAT CONFIGURATION

The following general settings for the integrated thermostat are available (only in EASY MODE):

THERMOSTAT ENABLED	Select ENABLED to activate the integrated thermostat
HOLD MODE ENABLED	Enables in the visualization the possibility for the user to keep the setpoint for a given amount of time
PRESETS ENABLED	Enables in the visualization the possibility for the user to create autonomously one or more setpoint and mode presets
SETPOINT RESOLUTION	Select the granularity for the temperature setpoints
SEASON MODE	Determine if heating, cooling or both seasons have to be managed

THERMOSTAT CONFIGURATION - HEATING / COOLING

For the heating and cooling season (if activated) the following settings are available:

TYPE	Select the most appropriate typology of heating system controlled by the thermostat				
CONTROL TYPE	<div> <div>Select the desired control strategy used by the thermostat to reach the desired setpoint:</div> <table> <tr> <td>2-POINTS HYSTERESIS</td><td> Heating is kept ON until temperature raises over the setpoint + hysteresis, and remains OFF until temperature falls under setpoint - hysteresis. Similar for cooling. </td></tr> <tr> <td>PWM</td><td> Pulse With Modulation Heating or cooling output switched ON/OFF alternatively with a frequency depending on how far is the setpoint from actual temperature </td></tr> </table> </div>	2-POINTS HYSTERESIS	Heating is kept ON until temperature raises over the setpoint + hysteresis, and remains OFF until temperature falls under setpoint - hysteresis. Similar for cooling.	PWM	Pulse With Modulation Heating or cooling output switched ON/OFF alternatively with a frequency depending on how far is the setpoint from actual temperature
2-POINTS HYSTERESIS	Heating is kept ON until temperature raises over the setpoint + hysteresis, and remains OFF until temperature falls under setpoint - hysteresis. Similar for cooling.				
PWM	Pulse With Modulation Heating or cooling output switched ON/OFF alternatively with a frequency depending on how far is the setpoint from actual temperature				
HYSTERESIS HYSTERESIS POSITION	In case of "2 points hysteresis" control type, select the entity of the hysteresis and the positioning relative to the setpoint				

PROPORTIONAL BAND INTEGRAL TIME PWM CYCLE TIME MIN CONTROL TIME MAX CONTROL TIME	<p>In the case of “PWM” these parameters define how the pulse with modulation controller must work.</p> <p>Please refer to the documentation of the keypad for more details about these parameters.</p>								
SETPOINT MODES ENABLED	<p>Determine if to use multiple setpoints (associated to the operating modes) or not (single setpoint)</p>								
MODE TEMPERATURE RANGES	<p>Min and max temperature ranges for the different operating modes</p> <p>Operating mode numeric legend:</p> <table border="1"> <tr> <td>1</td><td>Comfort</td></tr> <tr> <td>2</td><td>Standby</td></tr> <tr> <td>3</td><td>Economy</td></tr> <tr> <td>4</td><td>Protection</td></tr> </table>	1	Comfort	2	Standby	3	Economy	4	Protection
1	Comfort								
2	Standby								
3	Economy								
4	Protection								
VENTILATION ENABLED	<p>Determine if the ventilation management has to be activated or not</p>								

FANCOIL CONFIGURATION

If the ventilation is enabled, the following properties are added to the list:

VENTILATION CONTROL TYPE	<p>Select the preferred control strategy for the ventilation</p>
VENTILATION THRESHOLD SPEED X	<p>According to the number of speeds, select the numeric value in the range 0-100 associated to each speed</p>
VENTILATION SPEED CONTROL HYSTERESIS	<p>Select the entity of the hysteresis for the ventilation control logic</p>

CONNECTIONS

The following general connections are made available for the KEYPAD driver:

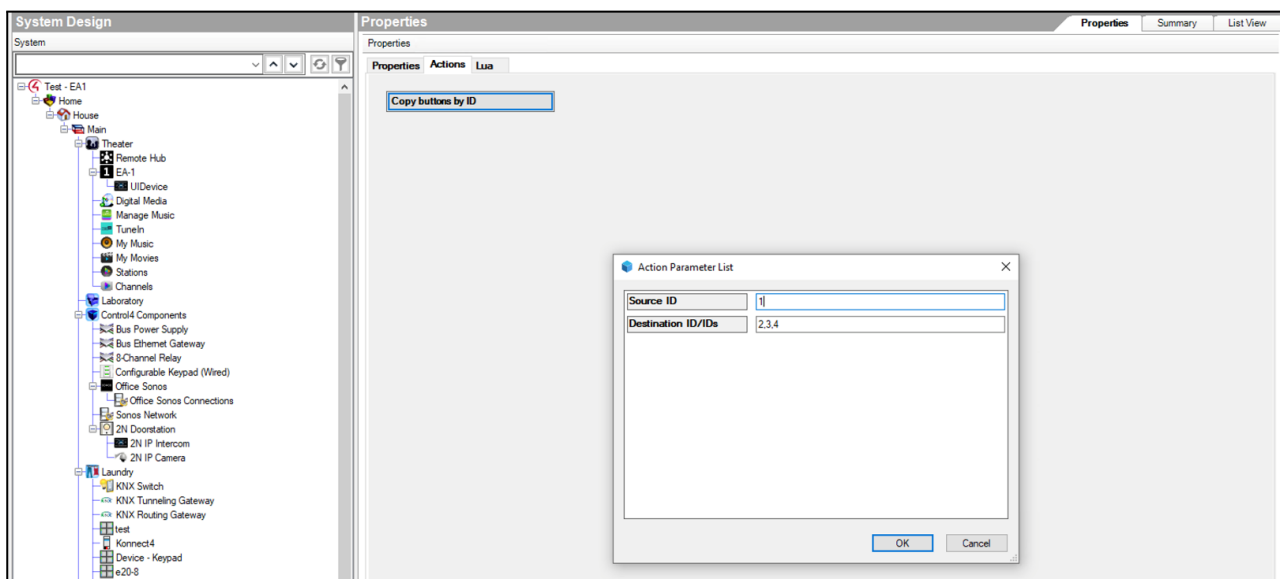
NAME	TYPE	DESCRIPTION
KNX CONTROL	KNX_DEVICE	Must be associated to the KNX communication driver inserted in the project
KONNECT4 CONTROL	KONNECT4	Must be associated to the KONNECT4 driver

For each active channel, the following additional connections are available:

NAME	TYPE	DESCRIPTION
LINK	BUTTON_LINK	Use this connection to bind the pushbutton with another driver e.g. an actuator The behavior of BUTTON_LINK connections is the same as CONTROL4 keypads
RELAY	RELAY	Use this connection in combination with other drivers supporting the RELAY type, to command the LED

ACTIONS

The COPY BUTTONS BY ID action allows the quick duplication of the settings from a channel to one or more channels, of the same drive:



Fill the required fields in the popup as follows:

SOURCE ID	Number of the channel to be copied
DESTINATION ID / IDS	Number of the channel(s) that must receive the same configuration. In case of multiple channels, enter their number separated by comma

ON/OFF ACTUATOR

INTRODUCTION

EKINEX relay actuators can be managed in COMPOSER PRO with the ACTUATOR DEVICE DRIVER. After choosing the product model, each channel can be configured accordingly with the programming previously done in ETS PROFESSIONAL, in order to instruct CONTROL4 about the channel usage (single relay, shutter / blind controller) and the corresponding KNX group addresses.

This driver cannot be used in EASY MODE at the moment.

GENERIC SETTINGS

DEBUG MODE	Activate this option to enable extended logs, when requested by EKINEX technical support for diagnostics
DEVICE	Product model; choose the most appropriate item in the drop-down menu.

CHANNEL CONFIGURATION

CONFIGURATION	Choose among the following options:	
	—	Not in use
	RELAY	Each relay can be managed independently to control switches, ON/OFF lights etc...
	BLIND	Two relays work together to control shutters / blinds, and cannot be used independently
NAME	Label assigned to the channel and used to identify the	

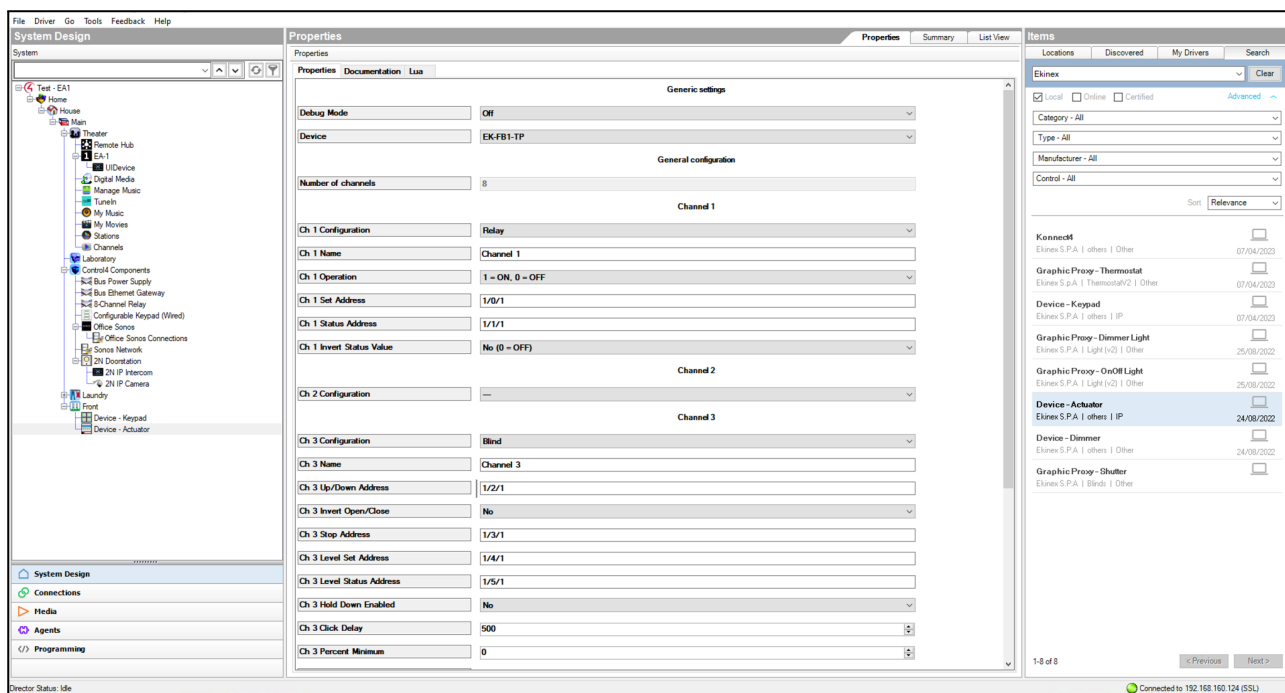
	corresponding connections
--	---------------------------

In case of RELAY configuration, the following properties must be configured:

OPERATION	Association between numeric value 1/0 and relay status. Only available for RELAY configuration.
SET ADDRESS STATUS ADDRESS	KNX group addresses to be used to command and to read the status of the relay
INVERT STATUS VALUE	Enable this field to invert the association between numeric value and relay status (only applies to the status, not the command)

In case of BLIND configuration, the following properties must be configured:

UP/DOWN ADDRESS STOP ADDRESS SET ADDRESS STATUS ADDRESS	KNX group addresses respectively used to: <ul style="list-style-type: none"> • Send UP / DOWN command to the actuator • Send STOP command • Force a given percent position to the shutter / blind • Get the percent position of the shutter / blind
INVERT OPEN/CLOSE	Enable this option to invert the association between the numeric value and the OPEN/CLOSE channel status
HOLD DOWN ENABLED	If enabled, the buttons must be kept pressed during the movement
CLICK DELAY	Minimum press duration to discriminate between short and long press, needed to start the movement
PERCENT MINIMUM	Minimum percent position, if different from 0



CONNECTIONS

The following general connections are made available for the ACTUATOR driver:

NAME	TYPE	DESCRIPTION
KNX CONTROL	KNX_DEVICE	Must be associated to the KNX communication driver inserted in the project
KONNECT4 CONTROL	KONNECT4	Must be associated to the KONNECT4 driver

For each channel configured as RELAY, the following additional connections are available:

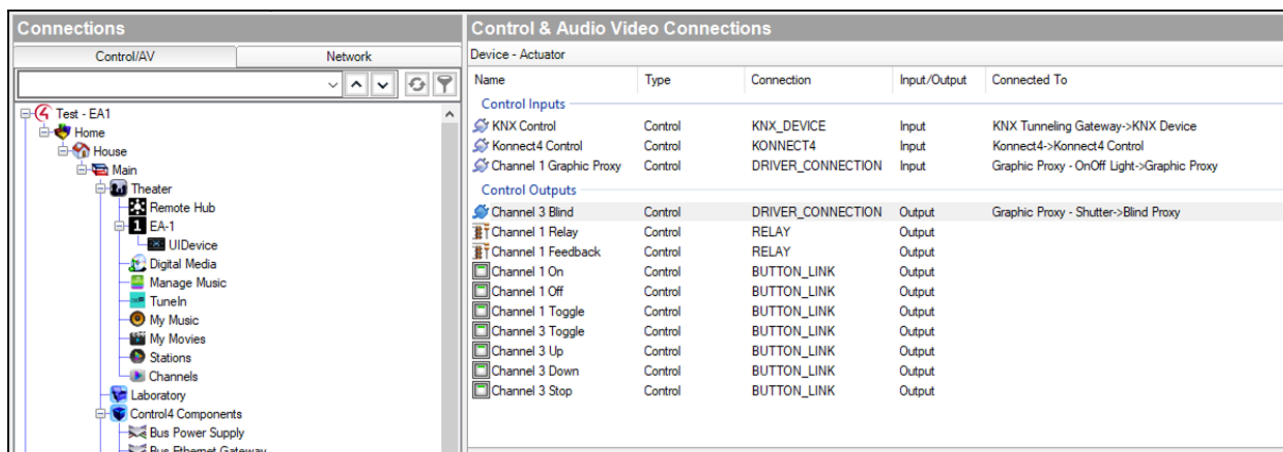
NAME	TYPE	DESCRIPTION
GRAPHIC PROXY	DRIVER_CONNECTION	Use this connection to bind the DEVICE DRIVER with the ON/OFF LIGHT GRAPHIC PROXY. Please refer to the next chapter for further details.
RELAY FEEDBACK	RELAY	Use these connections in combination with other drivers supporting the RELAY type, respectively to command the actuator channel, and to command another driver when the channel status changes (e.g. to switch ON/OFF the LED in a KEYPAD EKINEX driver)

ON OFF TOGGLE	BUTTON_LINK	Use these connections in combination with EKINEX KEYPAD driver, CONTROL4 or 3rd party pushbuttons to command the relay respectively ON, OFF or in TOGGLE (ON > OFF > ON...) mode
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In case of BLINDS, the following connections are available:

NAME	TYPE	DESCRIPTION
BLIND	DRIVER_CONNECTION	Use this connection to bind the DEVICE DRIVER with the SHUTTER GRAPHIC PROXY. Please refer to the next chapter for further details.
UP DOWN STOP TOGGLE	BUTTON_LINK	Use these connections in combination with EKINEX KEYPAD driver, CONTROL4 or 3rd party pushbuttons to command the shutter / blind respectively UP, DOWN, STOP or in TOGGLE (UP > DOWN > UP...) mode

Here follows an example of connections for an actuator with channel 1 configured in RELAY mode, and channel 3 in BLIND mode:

Connections		Control & Audio Video Connections				
Control/AV		Device - Actuator				
		Name	Type	Connection	Input/Output	Connected To
		Control Inputs				
		KNX Control	Control	KNX_DEVICE	Input	KNX Tunneling Gateway->KNX Device
		Konnect4 Control	Control	KONNECT4	Input	Konnect4->Konnect4 Control
		Channel 1 Graphic Proxy	Control	DRIVER_CONNECTION	Input	Graphic Proxy - OnOff Light->Graphic Proxy
		Control Outputs				
		Channel 3 Blind	Control	DRIVER_CONNECTION	Output	Graphic Proxy - Shutter->Blind Proxy
		Channel 1 Relay	Control	RELAY	Output	
		Channel 1 Feedback	Control	RELAY	Output	
		Channel 1 On	Control	BUTTON_LINK	Output	
		Channel 1 Off	Control	BUTTON_LINK	Output	
		Channel 1 Toggle	Control	BUTTON_LINK	Output	
		Channel 3 Toggle	Control	BUTTON_LINK	Output	
		Channel 3 Up	Control	BUTTON_LINK	Output	
		Channel 3 Down	Control	BUTTON_LINK	Output	
		Channel 3 Stop	Control	BUTTON_LINK	Output	

DIMMER

INTRODUCTION

EKINEX dimmer actuators can be managed in CONTROL4 with this DEVICE DRIVER. This driver cannot be used in EASY MODE at the moment.

GENERIC SETTINGS

DEBUG MODE	Activate this option to enable extended logs, when requested by EKINEX technical support for diagnostics
DEVICE	Product model; choose the most appropriate item in the drop-down menu.

CHANNEL CONFIGURATION

ENABLED	Determine if the channel of the actuator is in use or not				
DIMMING MODE	Choose among the following options: <table><tr><td>ON/OFF</td><td>The channel is considered an ON/OFF light</td></tr><tr><td>SET LEVEL</td><td>Percent level of the light can be managed</td></tr></table>	ON/OFF	The channel is considered an ON/OFF light	SET LEVEL	Percent level of the light can be managed
ON/OFF	The channel is considered an ON/OFF light				
SET LEVEL	Percent level of the light can be managed				
NAME	Label associated to the channel				
SET ADDRESS STATUS ADDRESS (ON/OFF)	KNX group addresses respectively to be used to switch the light ON/OFF and to know the ON/OFF status				
OPERATION (ON/OFF)	Association between numeric value 1/0 and ON/OFF light status				
INVERT STATUS VALUE	Enable this field to invert the association between numeric value and relay status (only applies to the status, not the command)				
SET ADDRESS STATUS ADDRESS (SET LEVEL)	KNX group addresses respectively to be used to set and to retrieve the percent value of the dimmed light 1 byte group addresses are expected in these fields				
RAISE / LOWER ADDRESS	KNX group address used to start increase or decrease of the dimming A 4-bit group address is expected in this field				

CLICK DELAY	Minimum press duration to discriminate on buttons between short press (ON/OFF command) and long press (dimming)
-------------	---

CONNECTIONS

The following general connections are made available for the DIMMER driver:

NAME	TYPE	DESCRIPTION
KNX CONTROL	KNX_DEVICE	Must be associated to the KNX communication driver inserted in the project
KONNECT4 CONTROL	KONNECT4	Must be associated to the KONNECT4 driver

For each channel configured, the following additional connections are available:

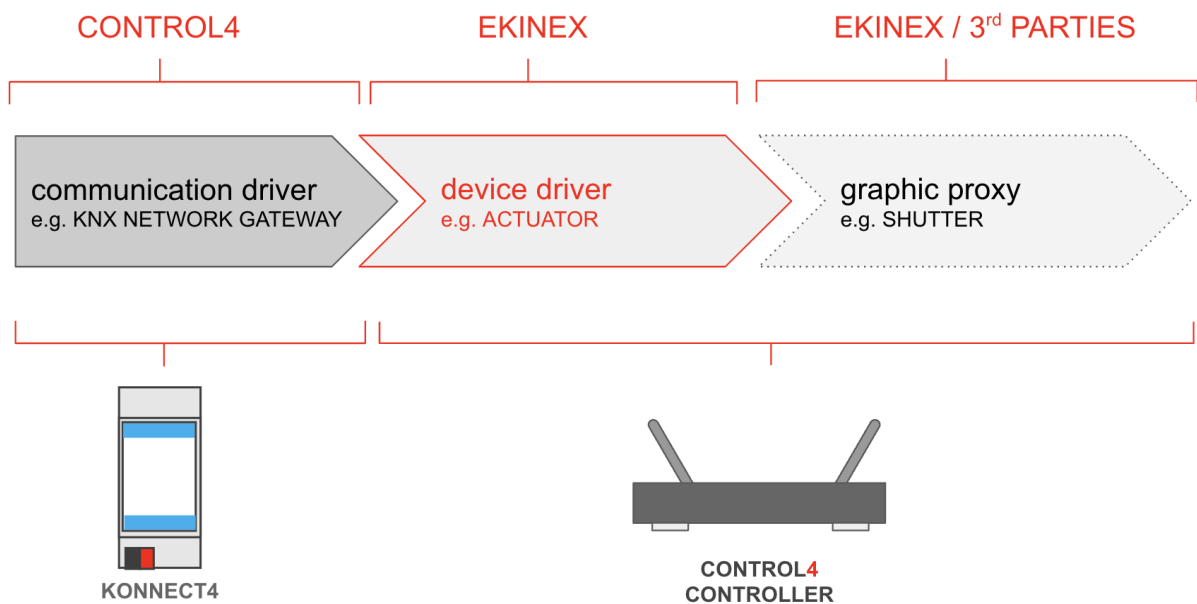
NAME	TYPE	DESCRIPTION
GRAPHIC PROXY	DRIVER_CONNECTION	<p>Use this connection to bind the DEVICE DRIVER with the DIMMER LIGHT GRAPHIC PROXY.</p> <p>Please refer to the next chapter for further details.</p>
FEEDBACK	RELAY	Use these connections in combination with other drivers supporting the RELAY type, in order to command another driver when the channel status changes (e.g. to switch ON/OFF the LED in a KEYPAD EKINEX driver)
ON OFF TOGGLE BRIGHTER DARKER	BUTTON_LINK	<p>Use these connections in combination with EKINEX KEYPAD driver, CONTROL4 or 3rd party pushbuttons to command the relay respectively:</p> <ul style="list-style-type: none"> • ON (light is always switched on) • OFF (light is always switched off) • TOGGLE (ON > OFF > ON...) <ul style="list-style-type: none"> ◦ Short press: switch ON/OFF ◦ Long press: increase / decrease • BRIGHTER (light value is increased when pressing this button) • DARKER (light value is decreased when pressing this button)

GRAPHIC PROXIES

INTRODUCTION

The visualization in CONTROL4 requires a GRAPHIC PROXY for each functionality.

EKINEX DEVICE DRIVERS have to be connected to one or more GRAPHIC PROXIES to be inserted into the visualization; they can be provided by EKINEX or by 3rd parties:



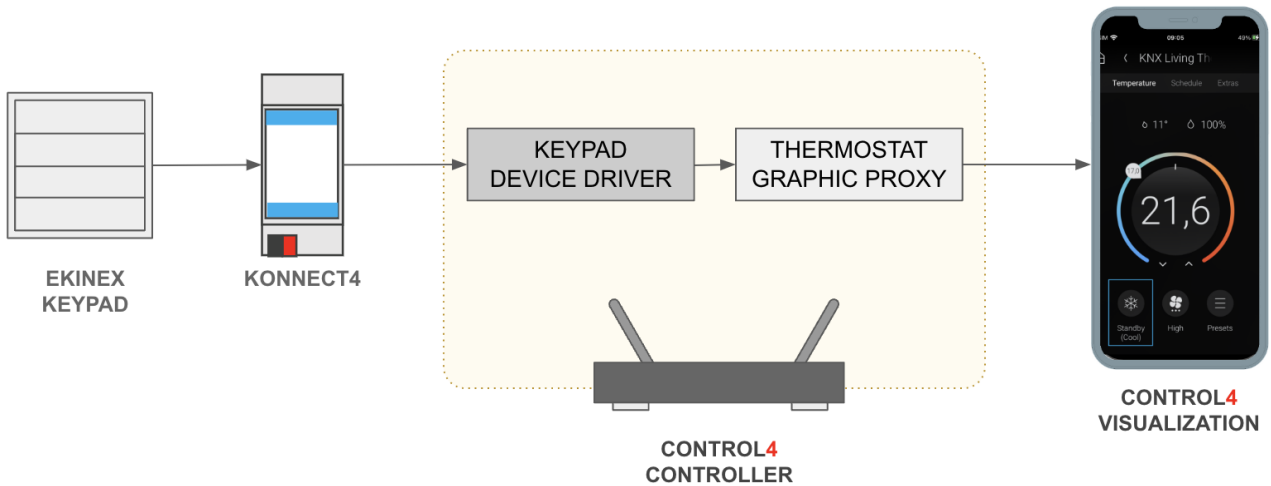
GRAPHIC PROXIES do not typically require configuration, being capable of inheriting parameters from the connected DEVICE DRIVER.

The following table contains the list of GRAPHIC PROXIES to be used in combination with the DEVICE DRIVERS seen in the previous chapter, depending on the configuration and desired result:

DEVICE DRIVER	CONFIGURATION	GRAPHIC PROXY	ETS MODE	EASY MODE
KEYPAD	THERMOSTAT	THERMOSTAT		X
ON/OFF ACTUATOR	RELAY	ON/OFF LIGHT	X	
	BLIND	BLIND	X	
DIMMER	ON/OFF LIGHT	ON/OFF LIGHT	X	
	DIMMED LIGHT	DIMMER LIGHT	X	

THERMOSTAT

In EASY MODE, the KEYPAD DEVICE DRIVER takes control of the HVAC regulator integrated into the devices; in order to handle it in the visualization, the THERMOSTAT GRAPHIC PROXY driver must be added to the project, and connected with the DRIVER_CONNECTION:



The following screenshots give an example of visualization for the heating and cooling seasons, when navigating with a smartphone:



The following picture contains the corresponding visualization for tablets or touch panels:



In ETS MODE the CONTROL4 UNIVERSAL THERMOSTAT DRIVER has an integrated thermostat proxy and therefore can be used for the visualization

SHUTTERS / BLINDS

Channels of an ON/OFF actuator configured in ETS to work as a shutter / blind controller can be represented in the visualization by means of the SHUTTER GRAPHIC PROXY, connected by means of the DRIVER_CONNECTION named "GRAPHIC PROXY":

Connections

Control/AV

Network

Test - EA1

Home

House

Main

Theater

Remote Hub

EA-1

UIDevice

Digital Media

Manage Music

TuneIn

My Music

My Movies

Stations

Channels

Laboratory

Control4 Components

Bus Power Supply

Bus Ethernet Gateway

8-Channel Relay

Configurable Keypad (Wired)

Office Sonos

Office Sonos Connections

Sonos Network

2N Doorstation

2N IP Intercom

Control & Audio Video Connections

Device - Actuator

Name	Type	Connection	Input/Output	Connected To
Control Inputs				
KNX Control	Control	KNX_DEVICE	Input	KNX Tunneling Gateway->KNX Device
Konnect4 Control	Control	KONNECT4	Input	Konnect4->Konnect4 Control
Channel 1 Graphic Proxy	Control	DRIVER_CONNECTION	Input	Graphic Proxy - OnOff Light->Graphic Proxy
Control Outputs				
Channel 3 Blind	Control	DRIVER_CONNECTION	Output	Graphic Proxy - Shutter->Blind Proxy
Channel 1 Relay	Control	RELAY	Output	
Channel 1 Feedback	Control	RELAY	Output	
Channel 1 On	Control	BUTTON_LINK	Output	
Channel 1 Off	Control	BUTTON_LINK	Output	
Channel 1 Toggle	Control	BUTTON_LINK	Output	
Channel 3 Up	Control	BUTTON_LINK	Output	
Channel 3 Down	Control	BUTTON_LINK	Output	
Channel 3 Stop	Control	BUTTON_LINK	Output	

DRIVER_CONNECTION Input Devices

Filters: All Rooms All Connections

Device	Name	Location	Connections
Graphic Proxy - Shutter	Blind Proxy	Front	Device - Actuator->Channel 3 Blind

LIGHTING

The ON/OFF LIGHT GRAPHIC PROXY can be connected to a RELAY channel of an ACTUATOR DEVICE DRIVER to bring to visualization the management of a simple light.

In a similar way, the DIMMER LIGHT GRAPHIC PROXY can be used in conjunction with the DIMMER DEVICE DRIVER to control a light with brightness intensity regulation.

Both the graphic proxies must be connected to the GRAPHIC PROXY DRIVER_CONNECTION of the desired channel, in the CONNECTIONS area of COMPOSER PRO:

The screenshot displays the ETS 3.1.x COMPOSER PRO interface. The left pane shows a project tree with 'Front' selected. The right pane shows 'Control & Audio Video Connections' for 'Device - Dimmer'. A red line connects the 'Channel 1 Graphic Proxy' input to the 'Graphic Proxy - Dimmer Light' output device in the 'DRIVER_CONNECTION Output Devices' table.

Name	Type	Connection	Input/Output	Connected To
KNX Control	Control	KNX_DEVICE	Input	KNX Tunneling Gateway->KNX Device
Konnect4 Control	Control	KONNECT4	Input	Konnect4->Konnect4 Control
Channel 1 Graphic Proxy	Control	DRIVER_CONNECTION	Input	Graphic Proxy - Dimmer Light->Graphic Proxy
Channel 1 On	Control	BUTTON_LINK	Output	
Channel 1 Off	Control	BUTTON_LINK	Output	
Channel 1 Toggle	Control	BUTTON_LINK	Output	
Channel 1 Brighter	Control	BUTTON_LINK	Output	
Channel 1 Darker	Control	BUTTON_LINK	Output	
Channel 1 Dimming	Control	BUTTON_LINK	Output	
Channel 1 Feedback	Control	RELAY	Output	

Device	Name	Location	Connections
e20-8	Thermostat Graphic Proxy	Laundry	
Device - Actuator	Channel 3 Blind	Front	Graphic Proxy - Shutter->Blind Proxy
Graphic Proxy - On/Off Light	Graphic Proxy	Front	Device - Actuator->Channel 1 Graphic Proxy
Graphic Proxy - Dimmer Light	Graphic Proxy	Front	Device - Dimmer->Channel 1 Graphic Proxy

OPERATIONS

The following operations can be done by accessing KONNECT4 with a web browser; when requested, enter the following credentials:

USERNAME	admin
PASSWORD	admin



It is highly recommended to change the admin password with the CHANGE PASSWORD page available in the left side menu

SOFTWARE UPDATE

By entering the

SETUP > SOFTWARE UPDATE

section of the side menu, it is possible to upgrade KONNECT4 to the latest published version.

Once the UPDATE button is pressed, the software upgrade procedure starts, and can take up to 15/20 minutes to complete, according to the starting version and the configuration project. Do not close the browser, do any other operation, or switch off the power supply, to avoid the risk of malfunctioning of the webserver.

BACKUP / RESTORE

It is possible to save the configuration of KONNECT4 and load it later in the same device, or in another server. The page

SETUP > BACKUP / RESTORE

offers the possibility to:

- save a copy of the project into a folder on your PC / MAC
- import a backup previously saved
- restore the initial configuration

In case of restore, any eventual configuration previously done goes lost; the IP configuration, as opposite, is kept saved, not being part of the backup itself (the same in case of import of a backup done in another device).

DATE / TIME

When connected to a LAN with internet access, KONNECT4 automatically updates its internal clock. As an alternative, it is possible to setup date, time and time zone manually, by entering the corresponding details in the following page:

SETUP > DATE / TIME

Once pressed the SAVE button, please wait for the procedure to complete, without closing the browser or switching off the device.

The screenshot shows the 'ekinex KONNECT4' web interface. On the left is a dark sidebar menu with options like Setup, Network, Backup/Restore, Software update, Date/Time (highlighted), Maintenance, Technologies, Scenes, Notifications, Logics, Options, Load control, Users and permissions, and Change password. The main content area is titled 'Configuration of date and time'. It contains several input fields: 'Set time' with the value '08:19', 'Set date' with '27/04/2021', 'Timezone - area' with 'Europe', 'Timezone - city' with 'Rome', 'Ntpdate server' with 'pool.ntp.org', and 'Every (Minutes)' with '20'. Below these fields are two buttons: 'SAVE' and 'CLOSE'. At the bottom of the page, there is a status bar with 'Date/Time' and some system icons.

MAINTENANCE

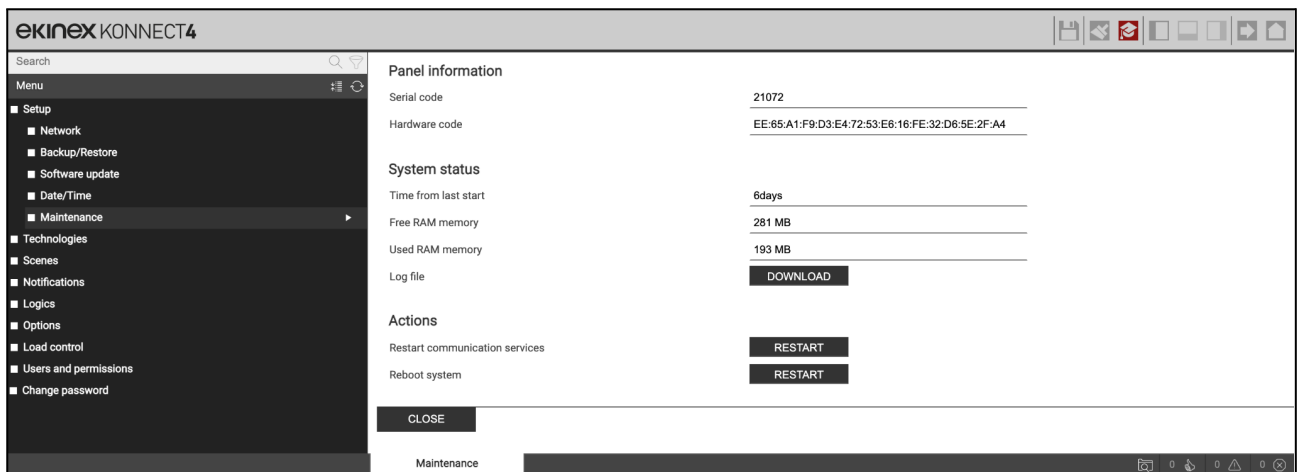
The following page

SETUP > MAINTENANCE

gives an overview of the working state of the device, its serial number and hardware code, and a synthesis of the hardware resources.

Additionally, the following operations can be done:

- Restart the communication services
- Remotely reboot the system



RESET

IP ADDRESS RESTORE

If necessary, you can restore the factory IP address of the server KONNECT4 using the RESET available. Follow the procedure below:

- open the front panel of the server KONNECT4 using a small slotted screwdriver, and exerting a slight leverage effect in one of the side slots
- locate the RESET button on the back of the vertical card
- press the button for at least 10 seconds until the SERVICE LED on the front of the device starts flashing, then release the button.
- within the next 5 seconds, press and release the button for 1 second; within a couple of seconds the front LED will light up solidly for a couple of seconds
- when the LED goes out, the device is reset to the default network configuration.

If the LED goes out after long press (10 seconds) before short press, repeat the whole procedure. This procedure resets the IP address and retains all data relating to the configuration previously carried out on the automation system.

COMPLETE RESTORE

It is possible to restore the factory conditions by resetting the IP address and emptying the configuration project with a different procedure. In such a case, please do the following steps:

- Open the front panel of the server KONNECT4 using a small slotted screwdriver, and exerting a slight leverage effect in one of the side slots
- Locate the RESET button on the back of the vertical card
- Press the RESET button for at least 10 seconds until the SERVICE LED on the front of the device starts flashing, then release the button.
- Within the next 5 seconds, press and hold the button for at least 10 seconds
- When the LED is solidly lit, release the button and wait for it to go out.

- When the LED goes off, remove and restore the power supply

Wait about one minute for the reset to be completed.

OPEN SOURCE

KONNECT4 contains open source software, such as the Linux operating system and its kernel. These software components are subject to various open-source licenses, including:

- GNU General Public License (GPL), <https://www.gnu.org/licenses/gpl-2.0.html>
- GNU Lesser General Public License (LGPL), <https://www.gnu.org/licenses/lgpl-2.0.en.html>



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For further information, please contact the EKINEX technical support service.

REVISIONS

DATE	REF	NOTES
2021-04-30	EKINEX.KONNECT4.MANUAL.EN.001	First release of this document
2023-04-15	EKINEX.KONNECT4.MANUAL.EN.002	Revision for software release 2.0
2023-07-25	EKINEX.KONNECT4.MANUAL.EN.003	Adaptations of the manual for EASY MODE configuration
2023-10-24	EKINEX.KONNECT4.MANUAL.EN.004	Compatibility list for keypads in EASY MODE configuration