



PAIROT

Manual

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Screenshots in this manual and the actual screens on your computer can be different. Updates are made to the website and the products on a regular basis.

More information can be found at www.xxter.com/pairot

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Welcome

With Pairot, from xxter, you can control the KNX installation of a home with HomeKit and/or Alexa. Pairot should not be used in commercial or public spaces.

This manual explains the configuration and initialization for the installation professional, as well as the pairing of the Pairot with HomeKit and Alexa for the end-user. The manual expects the installation professional, who has knowledge of the KNX home automation protocol, to be responsible for the KNX installation.

More information on the use of HomeKit can be found on the Apple website.

More information on the use Alexa can be found on the Amazon website.

For more information, please visit www.xxter.com/pairot.

1. Registration

The Pairot product has to be registered before use. After registration, the installation professional can configure the Pairot and the end-user can pair the device with HomeKit or Alexa.

For the registration of the Pairot, please follow the registration help on: <http://www.xxter.com/register>

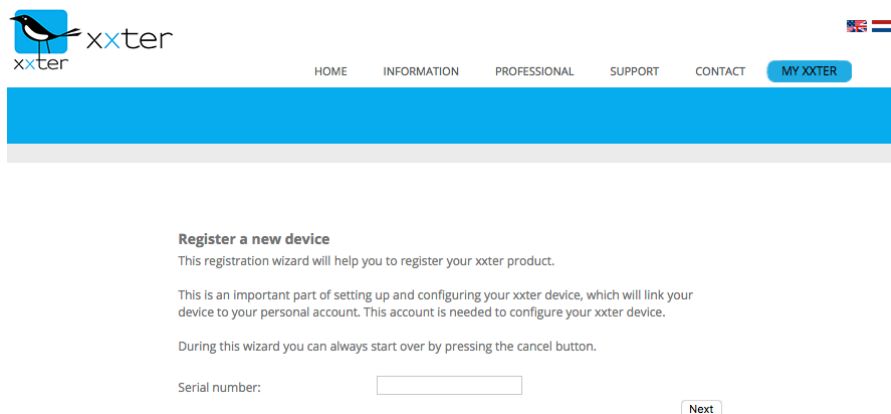
The image shows a web browser displaying the registration page for the xxter brand. At the top left is the xxter logo, which consists of a stylized bird icon and the text 'xxter'. To the right of the logo is a navigation menu with links for 'HOME', 'INFORMATION', 'PROFESSIONAL', 'SUPPORT', and 'CONTACT'. Further right is a button labeled 'MY XXTER' with a small flag icon. Below the navigation bar is a large blue header section. The main content area has a light gray background. It starts with the heading 'Register a new device' in bold. Below this is a paragraph: 'This registration wizard will help you to register your xxter product.' followed by another paragraph: 'This is an important part of setting up and configuring your xxter device, which will link your device to your personal account. This account is needed to configure your xxter device.' and a third paragraph: 'During this wizard you can always start over by pressing the cancel button.' Below these paragraphs is a form field labeled 'Serial number:' with a text input box. To the right of the input box is a button labeled 'Next'.

Image 1: Registration help

Please remember the usernames and passwords well, because they are needed for the rest of the installation.

The serial number of the device can be found on the device itself and on the packaging.

2. Configuring KNX components

A project consists of components. Every component has a type, a name and group addresses to identify the component. The type of the component has to correspond with the characteristics of the home-automation component that is used. For an overview and explanation of the different component types, see addendum A.

The name of a component is important for identification by the end-user, so he or she understands which component was intended, for instance 'Kitchen table ceiling light'.

For the technical identification of the component, group addresses are used:

- The sending group contains the group address to which a telegram should be sent. There is a maximum of one sending group address per component
- The status group(s) contains one or more group addresses to display the status of that component. Often the sending group address is also a status group.

For the configuration of pairrot, the KNX group addresses will have to be transferred into the project. The easiest way to do this, is by exporting the KNX configuration in ETS as a 'KNXproj' extraction and then import it in the project in my xxter, <http://www.xxter.com/myxxter>. Here you can easily transfer the relevant components from the ETS configuration to the Pairrot configuration.

The screenshot displays the Pairrot configuration interface. On the left, under the 'Groupaddresses' tab, a tree view shows a hierarchy of addresses: 0 - Licht bel etage, 1 - Licht 1ste etage, 2 - Sturingen, 3 - Centraal (selected), 3/0 - Centraal, 3/1 - Scenes, 6 - ttt, 13 - 13, and 14 - data. A 'Filter' box is present next to the tree. On the right, the 'Import KNXproj file' dialog is open. It shows 'Selected:' as '3 - Centraal'. Fields for 'Name:', 'Sub-group name', 'Send:', and 'Status:' are visible. The 'Send:' field contains '3/*'. The 'Status:' field contains '*depending on group*'. There is a checkbox for 'Add additional status group' which is unchecked. Below these fields are radio buttons for 'No group' (selected), 'Group by main and middle groups', 'Group by building plan', and 'Group manually'. A 'Group name:' field is empty. There is a checkbox for 'Allow in scenarios and schedulers:' which is checked. An 'Add as:' dropdown menu is set to 'Switch contact'. An 'Add' button is at the bottom right of the dialog.

Image 2: Example of Pairrot configuration

3. Connecting the device

The Pairot has to be connected with the UTP cable to the (internal) network. The Pairot should be able to connect to the Internet to be able to download the configuration and for future firmware updates.

Connect the bus cable to the black and red KNX connector. Subsequently connect the power adaptor to the 5 VDC adaptor port or other power to the 5-36 VDC white yellow plug.



Image 3: Pairot device

4. Set-up

The following settings need to take place on the Pairot device itself. Access the device on the local network with your web browser using the IP address it has received. When the device has started successfully and was able to connect to the Internet, you can find the IP address under the link to local settings on *My xxter* at the devices page.

Normally xxter will automatically receive an IP-address through DHCP. You can look up the IP-address that was given out on the DHCP-server or router, after the xxter device has fully started.

In case the Pairot could not reach a DHCP server, it will assume it is a 'zeroconf' network. In such a network, the Pairot should be accessible in the browser through <http://pairot.local>.

To continue the set-up, follow the Pairot configuration help:

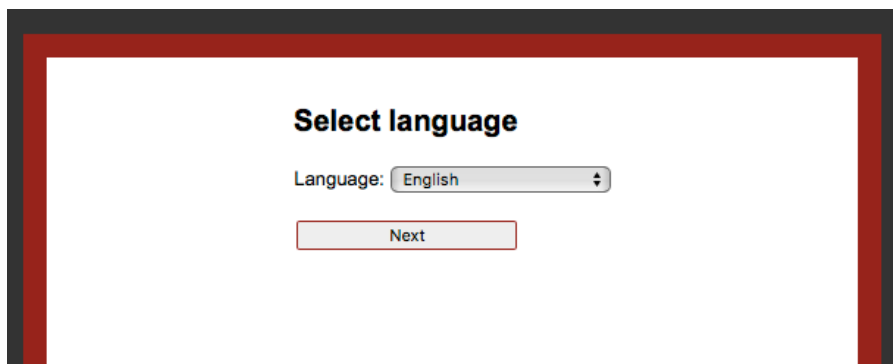


Image 4: configuration help

After the basic settings are completed, the KNX specific settings need to be set. On the Pairot device, open the *Settings – Protocols* page.

In case the Pairot device is directly connected to the KNX bus, the KNX protocol should be enabled with the connection method set to 'Direct'. Verify whether the KNX physical address is not used on the KNX bus by another component. We advise you to reserve this address in ETS as a dummy component, to prevent the address to be used by another KNX device in the future.

In case the Pairot device is connected through IP to another KNX gateway, there are two options. In case you are using the KNXnet tunnel protocol, enter the IP address of the KNX/IP module. In case you are using the KNXnet routing protocol, set this feature to "on" and verify the standard Multicast IP address.

When you open the *Status* page, you can verify whether KNX is connected correctly

On the *Settings – Protocols* page you can also select whether you want to be able to control the Pairot with Amazon Alexa.

5. Download configuration

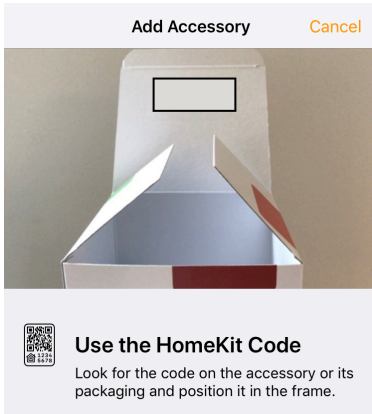
Now the installation and configuration is complete, it can be loaded onto the Pairot device. Access the device on the local network with your web browser using the IP address of the device and log in. Press the button *Load configuration* in the top left-hand corner of the menu.

After the configuration has been loaded successfully, the technical installation is complete. Now the Pairot can be paired with HomeKit or Alexa.

Please note: every time changes are made in the project (see chapter 2), these changes need to be downloaded on the Pairot device to make them available.

6. Pairing with HomeKit

To connect the Pairot to Apple HomeKit, open the Home app on your tablet or smartphone and tap “Add accessory”.



Select your *Pairot*, which has been automatically detected in your home network, and scan the unique HomeKit code of your device. You can find this code on the sticker on the device or on the sticker on the inside of the packaging.

If you are unable to scan the code, you can also enter the code manually.

Image 5: Apple HomeKit

When the pairing is successful, you can add all components that are configured in the Pairot to the Home app. All switches and dimmers will show a short light response to make clear which component you are adding.

In case new components are added to Pairot in a later stage, the Home app will automatically detect this and add them to the home.


Controlling this HomeKit-enabled accessory automatically and away from home requires an Apple TV with tvOS 10.x or later or an iPad with iOS 10.x or later set up as a home hub.

7. Pairing with Alexa

In case you want to use Amazon Alexa, make sure this is enabled on the *Settings – Protocols* page of the Pairot device (see chapter 4).

To pair the Pairot with Amazon Alexa, open the Alexa app on your tablet or smartphone. Here you can search for the smarthome skill Pairot and add this to your account.

Amazon Alexa



Login to link your pairot account to your Amazon Echo.

Username:

Password:

LOGIN

You will be requested to log in. You can use your end-user login and password, which was created during registration (see chapter 1).

If applicable, you will be asked which Pairot you would like to pair with Alexa.

Image 6: Amazon Alexa

After the pairing is successful, you can control all components that are configured on the Pairot device.

In the Alexa app, under *Smarthome, Devices*, you can find all available components.

In case new components are added to Pairot in a later stage, you can use the *Discover* option in the Alexa app, to make these available for Alexa.

8. Updating firmware

Sometimes new versions of the xxter firmware will be released. These releases can add new features, but can also contain bug fixes or improvements. On the xxter website the latest version of the firmware is listed.

The Pairot device itself can verify whether new firmware is available. Access the device on the local network with your web browser using the IP address of the xxter device. You can find this IP address on the devices page of *My xxter*. Log in and open the *Settings – system* page and in the *Firmware* section press the *Check* button to check for firmware updates. In case a new version is available, you will be prompted to update the firmware.

By selecting *update firmware*, the device will download and install the new firmware. This can take some time. After the firmware is successfully updated, the device needs to be restarted. This can be done by clicking *Reboot*.

Important: never turn off the Pairot device while it is updating the firmware!

After updating the firmware, we always advise to reload the configuration by pressing the button *Load configuration* in the top left-hand corner of the menu.

9. Reset options and status LEDs

In case of any problems, the Pairot device can be reset in several different ways, see also image 7:

R1	Hold during boot	Reset to factory defaults
R1	Press shortly	Full restart
R1	Press long (longer then 3 sec.)	Reset to factory defaults
R2	Press shortly	Reset application (soft restart)

When the Pairot device is connected to power, the system status can be seen using the LED indicators:

OK	green slow flashing	Currently booting or shutting down
OK	green continuous	Application started and ready for use
NETWORK	green slow flashing	Normal operation - OK
NETWORK	yellow slow flashing	No connection to KNX
NETWORK	red quick flashing	LAN problem, no network
NETWORK	red / green intermittent	No Internet connection, only LAN connection*

*) the Internet connection is only verified during boot and when the *Check Internet connection* button is pressed on the status page of the device.



Image 7: Pairot device

10. Service and support

In case of problems or questions, please always contact the installation professional of your KNX installation first.

Answers to frequently asked questions can be found on:

<http://www.xxter.com/faq>

On our forum you can exchange information with other users:

<http://www.xxter.com/forum>

Additional support can be found on:

<http://www.xxter.com/support>

In case you are unable to resolve the issue here, you can contact us on support@xxter.com. Please always include the serial number of the device it concerns.

Addendum A (component types)

In this addendum we supply a short explanation for the project configuration of the supported components.

Switch contact refers to a relay or switch actor and can only be turned on or off.

Dimmer refers to a dimming actor and can be set to a scale of 0 to 100%, but also as a switch contact that can be turned on or off.

Blind refers to a blind, shutter or curtain. This has three sets of addresses:

- Open and close control
- Start/stop motion status
- Set exact position

Temperature (only for HomeKit) is a sensor value for the current temperature, only has status addresses.

Light intensity (only for HomeKit) is a sensor value for the current light intensity, only has status addresses.

Humidity (only for HomeKit) is a sensor value for the current humidity, only has status addresses.

Occupancy sensor (only for HomeKit) detects whether someone is present, can be used in HomeKit to control other components.

Motion sensor (only for HomeKit) detects movement, can be used in HomeKit to control other components.

Thermostat has different display and setting options:

- Current temperature (only status addresses)
- Set point temperature (preferred temperature)
- Heating on/off (heating status)
- Cooling on/off (cooling status, if applicable)
- Humidity (humidity status, if applicable)

Push button (only for HomeKit) refers to a manual switch in the automated home that can be controlled, can be used in HomeKit to control other components.

Technical specifications

Size (lxwxh):	90x72x60mm
Type:	DIN-module (4 MW)
Weight:	100 grams
Voltage:	5-36 VDC
Power consumption:	1W (avg.)
Cooling:	passive

Accessories:

- Power plug adaptor 5VDC
- UTP cable (1 m)
- Installation leaflet

Communication between iPhone, iPad or iPod touch and the HomeKit-enabled Pairot is secured by HomeKit technology.

Use of the Works with Apple HomeKit logo means that an electronic accessory has been designed to connect specifically to iPod touch, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.