

# IP Touch Panel

## KNX configuration with an IP Router (IPR/S 3.x.1)

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### BUILDING AND HOME AUTOMATION SOLUTIONS

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This document serves the sole purpose of providing additional, technical information and possible application and use cases for the contained products and solutions. It **does not** replace the necessary technical documentation required for planning, installation and commissioning of the product. Technical details are subject to change without notice.



Despite checking that the contents of this document are consistent with the current versions of the related hard and software of the products mentioned within, deviations cannot be completely excluded. We therefore assume no liability for correctness. Necessary corrections will be introduced as and when new versions of the document are generated.

### Introduction

This document explains step by step how to integrate an IP Touch Panel in a KNX installation. In particular, it explains how to connect one or more IP Touch Panels to an ABB IP Router (IPR/S 3.1.1) and IP Router Secure (IPR/S 3.5.1).

Note: The configuration (except for the multicast function) is also applicable for the IP Interface (IPS/S 3.1.1) and IP Interface Secure (IPS/S 3.5.1).

## Objectives of the document

- KNX commissioning, IP Touch Panel and IPR/S 3.1.1
- KNX commissioning, **multiple** IP Touch Panels with **one** IPR/S 3.1.1
- KNX commissioning, IP Touch Panel and IPR/S 3.5.1  Secure Router
- KNX commissioning, **multiple** IP Touch Panels with **one** IPR/S 3.5.1  Secure Router

## Content

### Basic information

The prerequisite for KNX commissioning is an existing network connection on the panel. The KNX IP Router or IP Interface and IP Touch Panel must be on the same network.

To communicate with a KNX IP Router, IP Touch Panels need a point-to-point tunneling connection or multicast. To use **multiple** IP Touch Panels with **one** IP Router, you need a master/slave configuration. The steps below explain how to set this up.

Please note that in order to connect to **KNX**, the LAN/WLAN device variants must be connected to the WLAN interface on the existing network.

This applies to:

**IP Touch 7** LAN/WLAN → H8236-4B-03, H8236-4W-03

**IP Touch 10** LAN/WLAN → H8237-4B-03, H8237-4W-03

### KNX commissioning, IP Touch Panel and IPR/S 3.1.1

First, re-check that the panel is connected to the network, by looking at the LAN or WLAN icon in the toolbar at the bottom of the screen.



Fig. 1 Panel toolbar

If there is no connection, check the panel's network settings.

Next, to establish a connection to an IPR/S 3.1.1, you need to specify the panel as a master device. To do this on the panel, go to, the "System" page → "Engineering settings" (default password "345678") → "Local settings", "Mode select" and select Master mode.

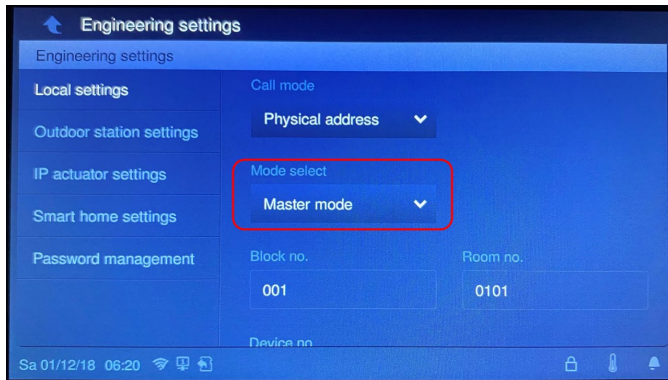


Fig. 2 Master mode selection

Next, go to "Smart home settings" and select "KNX" mode.



Fig. 3 KNX selection

Now enter the IP address of the IPR/S 3.1.1 or the multicast address. The ABB i-bus® tool ([link](#)) can be useful for determining/verifying the IP address of the IPR/S 3.1.1.

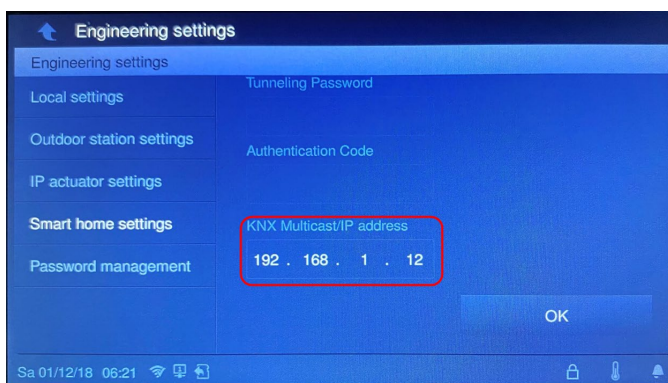


Fig. 4 Entering the IP address

Save your input/changes by pressing "OK" at the bottom of the screen.

The KNX connection is now established.

## **KNX commissioning, multiple IP Touch Panels with one IPR/S 3.1.1**

In KNX configurations with multiple IP Touch Panels, it is essential to specify a master device. All the other panels must be set as slaves. For clarification, see the communication path in the diagram below.



Fig. 5 Master/Slave topology

To specify and set the master device, follow the steps in **KNX commissioning, IP Touch Panel and IPR/S 3.1.1**. The settings for the master device are now complete.

### **Slave settings**

For the slave device as for the master, first re-check that the panel is connected to the network. by looking at the LAN or WLAN icon in the toolbar at the bottom of the screen.



Fig. 6 Panel toolbar

If there is no connection, check the panel's network settings.

To specify a slave device on the panel, go to, the "System" page → "Engineering settings" (default password "345678") → "Local settings", "Mode select" and select Subsidiary mode.

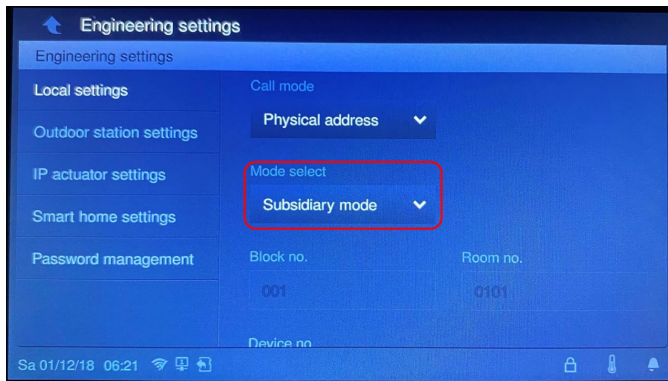


Fig. 7 Subsidiary (Slave) mode selection

It is also important to give each slave device an individual device number. Slave device 1 → device no. 2, slave device 2 → device no. 3, etc.

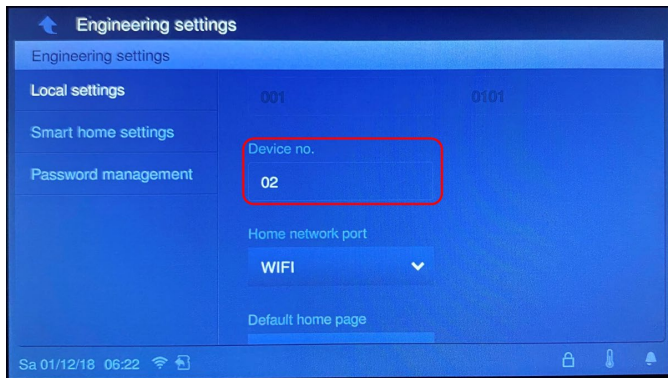


Fig. 8 Specifying the device number

To complete the settings, go to "Smart home settings" and make sure that the IP address field is **empty**.

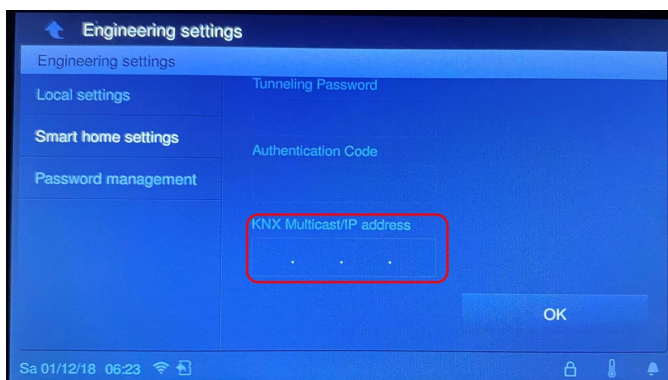


Fig. 9 Setting the IP address on the panel

Save your input/changes by pressing "OK" at the bottom of the screen.

The slave panel KNX connection is now established.



## **KNX commissioning, IP Touch Panel and IPR/S 3.5.1 **Secure Router****

The prerequisite for commissioning is a fully set up IP Router Secure IPR/S 3.5.1. For a brief description of how to do this, see our [Engineering Guide Database](#).

The steps required to establish communication between the IP Touch Panel and an IPR/S 3.5.1 Secure Router are virtually the same as for an "unsecured" connection to the IPR/S 3.1.1.

- Check that the panel is configured on the network.
- Specify the panel as the master device.
- Select Smart Home mode → "KNX"

For details of these steps, see → [KNX commissioning, IP Touch Panel and IPR/S 3.1.1](#).

The difference in this setup is in the "System" → "Engineering settings" (default password "345678") → "Smart home settings". Here, select the "KNXnet/IP secure" checkbox.

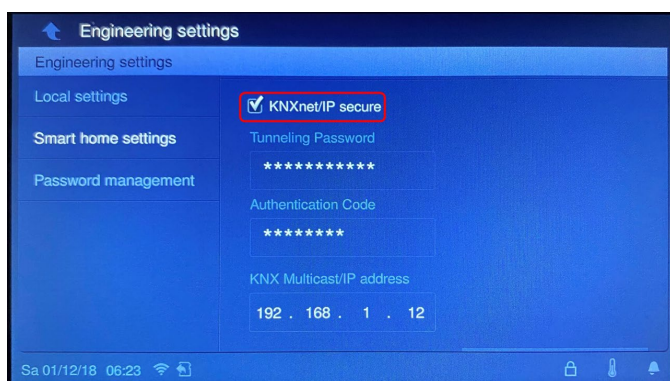


Fig. 10 Setting the KNXnet/IP secure on the panel

If you are using a secure tunneling connection, enter the relevant password in the panel.

The passwords for the IPR/S 3.5.1 tunneling connections are specified in ETS. The IPR/S 3.5.1 authentication code is also specified in ETS and must be entered in the panel accordingly (see diagram below).

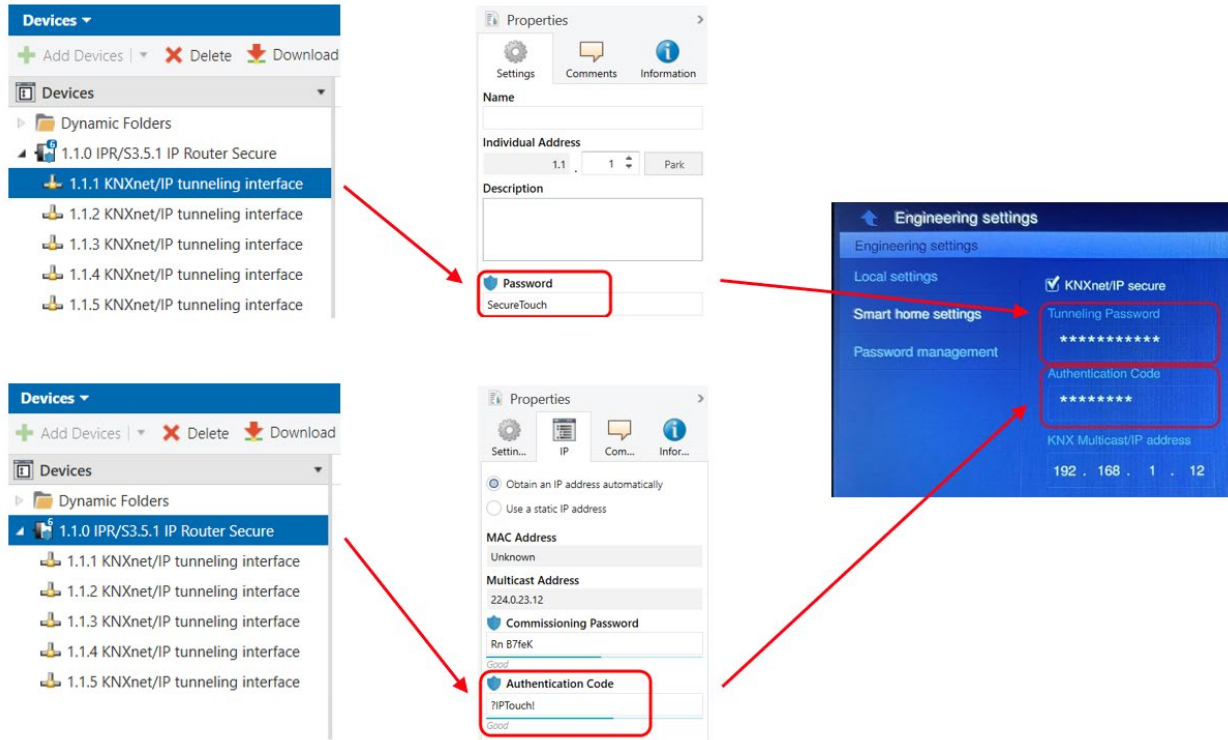


Fig. 11 Assigning the password and authentication code in ETS

To complete the configuration, enter the IP address of the IPR/S 3.5.1 or the multicast address in the field below, and save the configuration by pressing "OK."

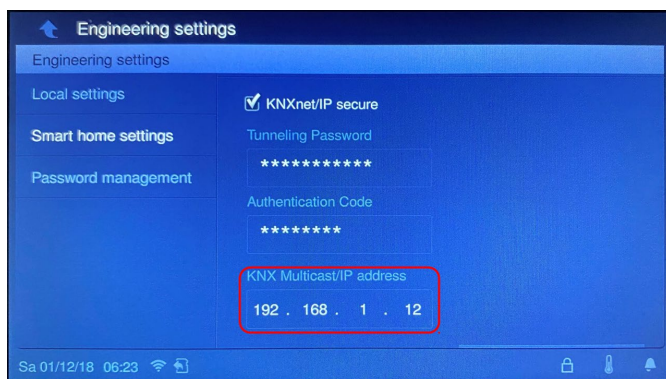


Fig. 12 Entering the IP address

The secure connection is now established.

## **KNX commissioning, multiple IP Touch Panels with one IPR/S 3.5.1 Secure Router**

The prerequisite for commissioning is a fully set up IP Router Secure IPR/S 3.5.1. For a brief description of how to do this, see our [Engineering Guide Database](#).

The steps required to establish communication between the IP Touch Panel and an IPR/S 3.5.1 Secure Router are virtually the same as for an "unsecured" connection to the IPR/S 3.1.1.

- Check that the panel is configured on the network.
- Specify the first panel as the master device and all other panels as slaves
- Select Smart Home mode → "KNX"

For details of these steps, see → [KNX commissioning, IP Touch Panel and IPR/S 3.1.1](#).

The difference in this setup is in the "System" → "Engineering settings" (default password "345678") → "Smart home settings." Here, select the "**KNXnet/IP secure**" checkbox.

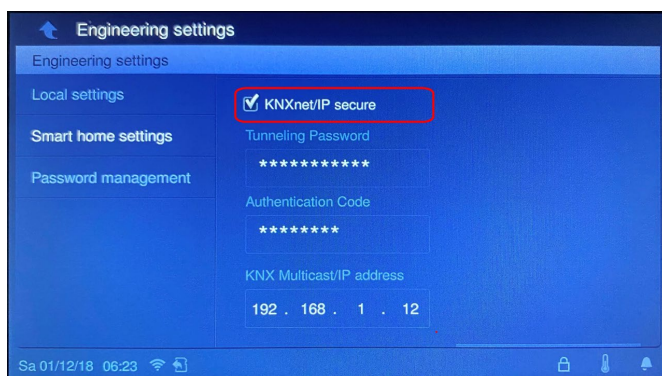


Fig. 13 Setting the KNXnet/IP secure on the panel

If you are using a secure tunneling connection, enter the relevant password in the panel.

**Caution:** Select a separate tunneling connection for each IP Touch Panel (the IPR/S 3.5.1 has five tunneling connections). Make sure you enter the corresponding password. (Each tunneling connection should have a unique password. See screenshot below.)

The tunneling passwords for the IPR/S 3.5.1 are specified in ETS. The IPR/S 3.5.1 authentication code is also specified in ETS and must be entered in the panel accordingly (see diagram below).



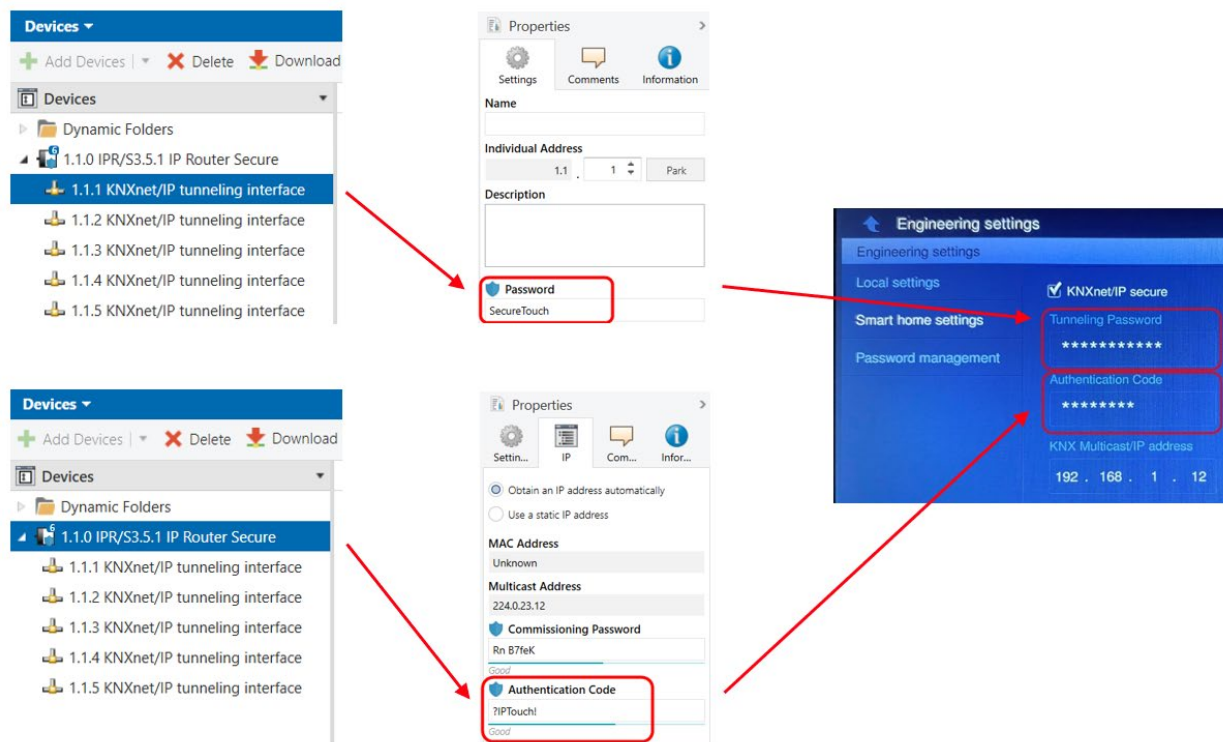


Fig. 14 Assigning the password and authentication code in ETS

Finally, enter the IP address of the IP Router Secure in each IP Touch Panel.  
The secure connection to multiple IP Touch Panels is now established.

### References to other documents

- [FAQ Home and Building Automation](#)
- [Engineering Guide Database](#)

