KNX IP Interface 730   EN

Operating and installation manual

Application

The KNX IP Interface 730 can be used as an interface for accessing the KNX/EIB via IP, replacing an RS232 or USB interface.
The device supports 5 simultaneous KNXnet/IP tunneling connections.
There are two ways to assign an IP-address to the KNX IP Interface 730: get the IP-address from a DHCP-server or configure it with the ETS (as ETS parameter).
It requires an external 12 V to 24 V power supply (AC or DC) or can alternatively be powered via Power-over-Ethernet (IEEE 802.3af).

ETS database

The following parameters can be set on the ETS:

General:
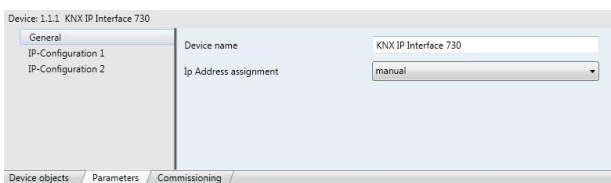
Device name:
The KNX IP Interface can be assigned a name of your choice. The device name should be descriptive (e.g. Line TF). It is used to search for and recognize a device.
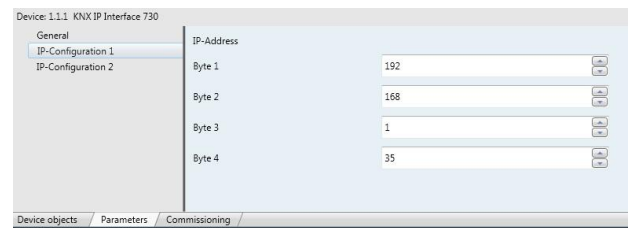
IP address assignment:
Automatic
(DHCP):   The IP address is automatically assigned on the DHCP, i.e. additional settings are not required. To be able to use this function, there must be a DHCP server in the LAN (many DSL routers have an integrated DHCP server).
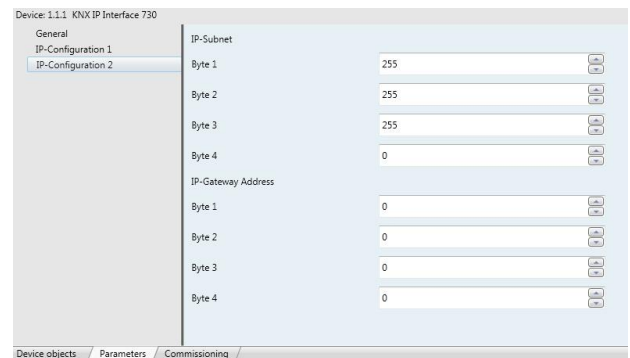*Manual:*   In this case, the IP address, the subnet and the gateway IP address must be entered manually.

IP configuration:

IP address:
This is the IP address of the KNX IP Interface 730.

IP subnet:
Enter the subnet mask here. The device uses the values entered in this mask to determine whether there is a communications partner in the local network. If there is no partner in the local network, the device will not send the telegrams directly to the partner but to the gateway that routes the telegram.

IP gateway address:
Enter the IP address of the gateway here.
Note: If the KNX IP Interface will only used in the local LAN, the entry of 0.0.0.0 can remain unchanged.

Example of assigning IP addresses:
A PC is to be used to access the KNX IP Interface 730.
IP address of the PC: `192.168.1.30`
Subnet of the PC: `255.255.255.0`
The KNX IP Interface 730 is located in the same local LAN, i.e. it uses the same subnet. The subnet constrains the IP addresses that can be assigned. In this example, the IP address of the IP interface must be 192.168.1.xx, where xx can be a number from 1 to 254 (with the exception of 30, which is already in use). It must be ensured that no numbers are assigned twice.
IP address of the IP interface:`192.168.1.31`
Subnet of the IP interface: `255.255.255.0`

ETS Connection Manager

If the IP-configuration of the KNX IP Interface 730 is valid the device can act as an interface to KNX/EIB. The following configuration is necessary:

Select the button Settings and the tab Communication in the main window of ETS4. All available connections are listed by Configured connections. Select the desired connection.
The button Local settings enables the configuration of the individual address, which is used for bus access.
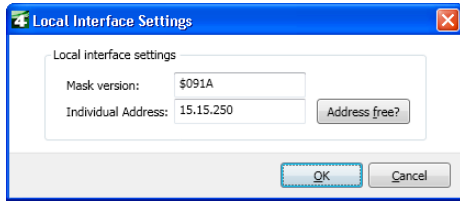
A dummy device may be created in the ETS-project to reserve this address.
The KNX IP Interface 730 device supports up to 5 connections simultaneously. An additional physical address has to be reserved for every connection.
The first additional physical address is allocated (as shown above) to the connection in the ETS. The remaining additional addresses can be assigned directly by the device, in which cast the learn button should be pressed for at least one second. The automatic address allocation is performed as: Connection 2 contains the next higher address from Connection 1, Connection 3 the next higher from Connection 2 etc..
For example:
Connection 1 uses the additional individual address 15.15.250. Connection 2 is automatically set to 15.15.251, connection 3 is 15.15.252, connection 4 is 15.15.253 and connection 5 is 15.15.254.
The assignment of the additional individual addresses is shown by a fast blinking learn led.

Note: It is necessary to check whether the addtitional individual addresses are unused before they are assigned.

For new devices (i.e. in the factory settings state), only the additional individual address of the first connection is active with the address 15.15.250. To support multiple concurrent connections the additional address assignment is required.

Installation and connection

The KNX IP Interface 730 is designed for installation in a rack with a depth of 2 units. It contains the following display and control elements:
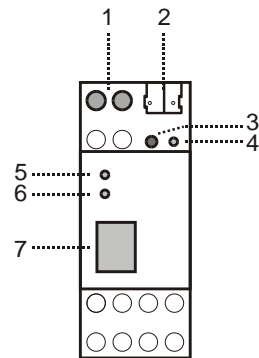
1: Connector for external power supply (12 V to 24 V AC/DC)
2: Connector for KNX/EIB with a bus terminal
3: Learn key
4: Learn LED (red)
5: LED (green):
- Lights up to indicate bus voltage on KNX/EIB
- Flashes to indicate telegram traffic
6: LED (green):
- Lights up to indicate an Ethernet connection
- Flashes to indicate telegram traffic
7: RJ 45 socket for connecting an Ethernet patch cable

An external power supply only needs to be connected if the switch in use does not support Power-over-Ethernet.

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