WEINZIERL

KNX IP Interface 740 *wireless*

Operating and installation manual

Application

The KNX IP Interface 740 *wireless* is a WLAN interface to the KNX bus. It can be used instead of a USB or wire-bound IP interface, e.g. for ETS3. Utilising the wireless technology the installer can now move unhindered throughout the building.

The KNX IP Interface 740 *wireless* contains an integrated Access Point which provides the direct connection to the device via a WLAN network. It has an external 9V power supply.

This device functions according to the KNXnet/IP specification. It is compatible with ETS from version 3.0c.

Client

WLAN

EIB/KNX
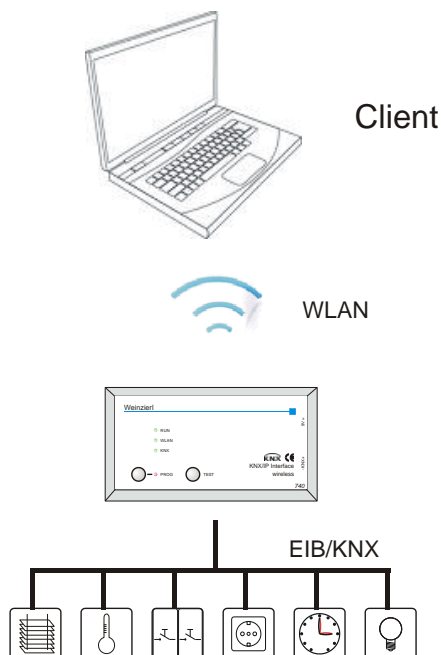
ETS Database

The following parameters can be configured with ETS:

General:
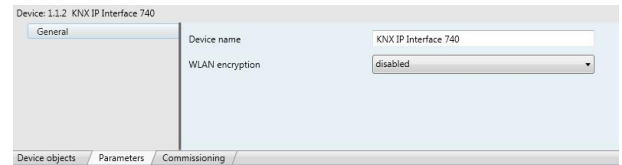
Device Name:
The KNX IP Interface 740 can be assigned a name of your choice. The device name should be descriptive. It is used to search for and recognize a device. For example, the device name appears in the dialog of the ETS Connection Manager. Additionally the device name is used for WLAN-network identification (SSID, Service Set Identifier).

WLAN-Encryption:
By default, the WLAN-Encryption is disabled. That is, the Installer can initially connect to the WLAN network without entering a password. The configuration attribute "enabled" activates the WLAN-connection encryption.

WLAN-Encryption:
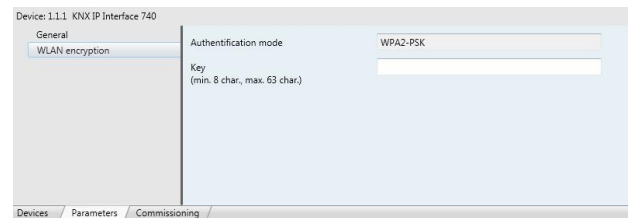
Encryption standard:
WPA2-PSK (Wi-Fi Protected Access 2, pre-shared-key) is supported.

Encryption Key:
This is where you enter the encryption key (in ASCII characters, max. 63 Zeichen). It is also possible to enter the key during the initial connection setup phase from a PC.

Example:
Herbert15985
VGVwdv36fhe468415v1weerh3zf73b8JKB45SUsqmf

To ensure a high degree of security it is advised to use a longer key.

WLAN Connection Initiation

To create a WLAN connection from a PC or Laptop a WLAN adaptor is required. Most new computers have an integrated WLAN adaptor. To create a WLAN connection to the KNX IP Interface 740 *wireless* the device must first be found by the wireless connection manager. The dialog window „Wireless Network Connection" from Windows® lists all available wireless networks. This can be found under „Control Panel / Network Connections / Wireless Network Connection". It is also possible to open if from the corresponding "Wireless networks" icon on the taskbar.
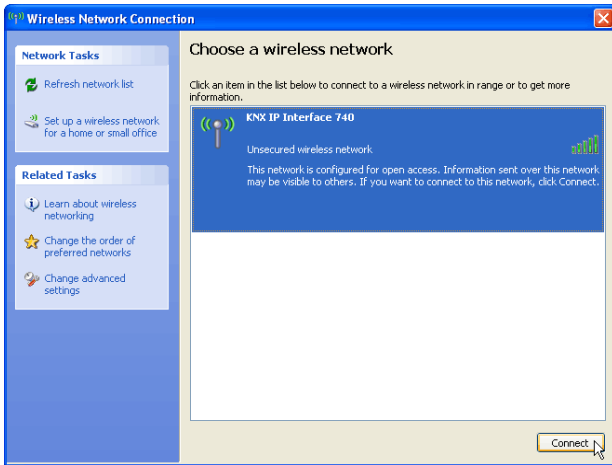
The KNX IP Interface 740 wireless contains an integrated DHCP-Server which will automatically assign the PC an IP Address. For most laptops this is the standard setting.

To view/modify the wireless network connection configuration select „Interne Protocol (TCP/IP)" and press the „Properties" button.

In the following window „Obtain an IP address automatically" should be selected.
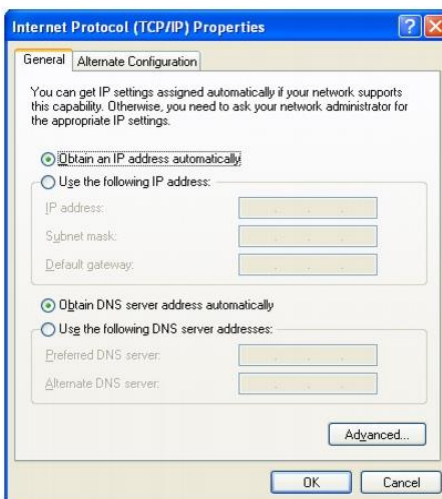

ETS Connection Manager

After a successful creation of a wireless connection the KNX IP Interface 740 *wireless* acts as an interface to the KNX bus.

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 KNX IP Interface 740 *wireless* supports up to 5 simultaneous tunneling connections. Each connection uses its own physical address. The address of the first tunneling connection can be changed within the 'Local Interface Settings'.
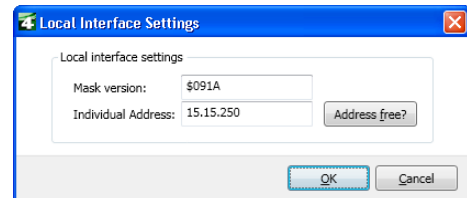
Physical addresses of the additional tunneling connections can be assigned directly on the device.

This is done by pressing the programming button on the device (7) longer than one second. After that, the programming mode LED will start blinking, which indicates that the assignment of the additional addresses was successful.

The additional addresses are assigned as follows:

Tunneling connection 2 receives the next higher address than tunneling connection 1, tunneling connection 3 the next higher address than tunneling connection 2 etc..

For example:
Device address: 1.1.255 (address within ETS topology)
Connection 1:   1.1.250 (address within local settings)
Connection 2:   1.1.251 (assigned by programming button)
Connection 3:   1.1.252 (assigned by programming button)
Connection 4:   1.1.253 (assigned by programming button)
Connection 5:   1.1.254 (assigned by programming button)

All addresses have to be unique and valid within the sub line of the interface. Note: be careful not to assign the same address as the device address for a connection. The device address can be changed within the topology view of the ETS software.

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 additional address assignment is required.

Installation and connection

The housing of the KNX IP Interface 740 *wireless* has the following dimensions: 125 x 67 x 31 mm.
It has the following connectors, display elements and buttons:
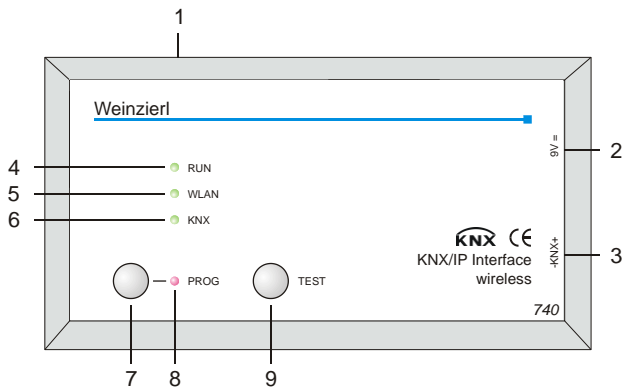
1: Antenna Terminal
2: External power supply connection (9V DC)
3: Connector for KNX with a bus terminal
4: RUN LED (green):
   - Blinks quickly during the startup phase (aprrox. 40 Seconds)
   - Lights up to indicate the device is operational
5: WLAN LED (green):
   - Flashes to indicate telegram activity
6: KNX LED (grün):
   - Lights up to indicate the KNX is available
   - Flashes to indicate telegram traffic
7: Programming Button
8: Programming Mode LED (red)
9 Test mode button:
   While this button is depressed the device goes into Test mode. In Test mode the display elements have the following meaning:
   - RUN LED: blinks slowly and indicates the device is in Test mode
   - WLAN LED: off
   - KNX LED: on when an active connection is available, otherwise off.

The connection to the mains (230 V~ / 50 Hz) is done via the enclosed wall power supply.

The KNX IP Interface 740 wireless is delivered in a plastic case with the following content:
   - Wall power supply (Primary: 230 V~ / 50 Hz, Secondary: 9 V=)
   - Antenna (SMA-R connector)
   - Plugable srewing terminal for the connection of the KNX bus
   - Documentation

Factory reset

Factory default configuration:

Physical device address: **15.15.255**
Number of configured tunneling connections: **1**
Physical address of tunneling connection 1: **15.15.250**
IP address allocation: **DHCP**

It is possible to reset the device to its factory settings.

Resetting to the factory state:

- Disconnect the power supply to the device (9V=)
- Press and hold down the programming button (7).
- Reconnect the power to the device.
- Hold down the programming button (7) for at least 6 seconds.
- A blinking of all LED (4, 5, 6, 8) indicates the successful restore of the factory configuration.