

Operation and installation manual  
**KNX RF/TP Coupler 672**

(Art. # 5333)  
 Compact KNX RF/TP Coupler



KNX RF/TP Coupler 672

**Application**

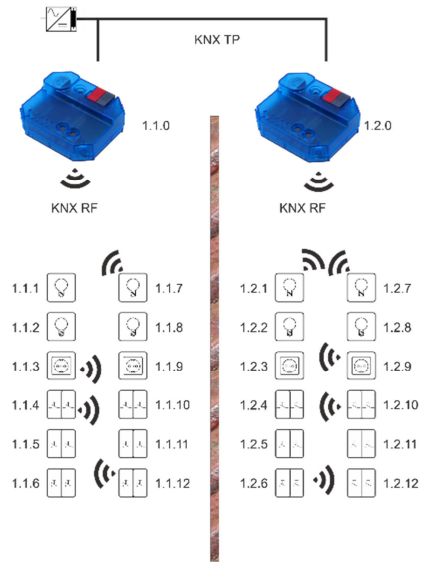
The KNX RF/TP Coupler 672 is a compact KNX radio coupler. It connects KNX RF devices of a radio line with the KNX Bus Twisted Pair.

The device has a filter table for group addresses. The coupler supports long frames and is compatible with the ETS® software ETS5 or higher.

The buttons on the front panel allow disabling the telegram filter for testing purposes. The LEDs indicate operating conditions as well as communication errors on the KNX bus.

The power is supplied via the KNX bus.

**Coupler function**



KNX RF/TP Coupler 672 as line coupler

The individual address assigned to the KNX RF/TP Coupler 672 in the form of x.y.0 (x, y: 1..15) sets up, that the device operates as a line coupler.

The KNX RF/TP Coupler 672 has a filter table and thus contributes to reducing the bus load. The filter table supports the extended group address range (main group 0..31) and is automatically generated by the ETS.

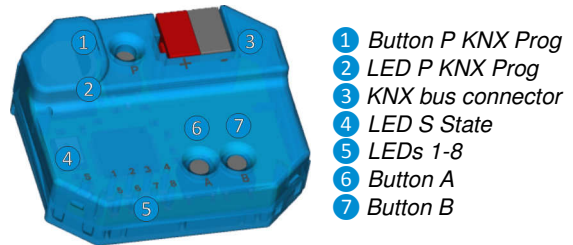
**Installation and Connection**

The device can be flush-mounted, the housing fits into a standard flush-mounted box.

When choosing the installation location the range of RF devices to be associated with the gateway has to be considered. Shielding objects (e.g. metal cabinets) or interfering transmitters (e.g. computers, electronic transformers, ballasts) near the gateway should be avoided.

The connection to the KNX bus is made with a bus connector. The correct polarity of the terminal referred to the printing inside the unit has to be considered.

The KNX RF/TP Coupler 672 features the following controls and displays:



An external power supply is not necessary as the device is powered by the KNX bus.

**i** The device is not working without bus power.

**KNX Programming mode**

The KNX programming mode is activated/deactivated by pressing the KNX programming button 1. When the programming mode is active, the programming LED 2 lights red.

A gateway ex-factory has the default individual address 15.15.0.

**Manual operation and status display**

The State LED 4 lights up if the device is successfully powered by the KNX bus. This LED blinks red, when the application is not running, e.g. after a failed ETS download. The State LED 4 lights up orange to indicate that manual operation is active.

The LEDs 1-4 5 show TP traffic.

The LEDs 5-8 5 show RF traffic.

**Manual operation TP**

Pressing button A 6 short, enters the manual operation for TP mode.

By pressing button A 6, routing runtime telegrams (group telegrams) will be enabled/disabled. This will be indicated by LEDs 1 and 2 5.

By pressing button B **7**, routing management telegrams (individual addressed and broadcast telegrams) will be enabled/disabled. This will be indicated by LEDs 3 and 4 **5**.

Press button A **6** or button B **7** long to exit the manual operation mode.

### Manual operation RF

Pressing button B **7** short, enters the manual operation for RF mode.

By pressing button A **6**, routing runtime telegrams (group telegrams) will be enabled/disabled. This will be indicated by LEDs 5 and 6 **5**.

By pressing button B **7**, routing management telegrams (individual addressed, broadcast and system broadcast telegrams) will be enabled/disabled. This will be indicated by LEDs 7 and 8 **5**.

Press button A **6** or button B **7** long to exit the manual operation mode.

### Factory default settings

The following configuration is set by factory default:

Individual device address:	<b>15.15.0</b>
Routing TP->RF:	
Individual addressed telegrams:	<b>Filter</b>
Group addressed telegrams:	<b>Filter</b>
Routing RF->TP:	
Individual addressed telegrams:	<b>Filter</b>
Group addressed telegrams:	<b>Filter</b>

### Reset to factory device settings

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

- Disconnect the KNX Bus connector **3** from device
- Press the KNX programming button **1** and keep it pressed down
- Reconnect the KNX Bus connector **3** of device
- Keep the KNX programming button **1** pressed for at least another 6 seconds
- A short flashing of the all LEDs **2**, **4** and **5** visualizes the successful reset of the device to factory default settings.

## ETS database

The ETS database (for ETS 5) can be downloaded from the product website of the KNX RF/TP Coupler 672 ([www.weinzierl.de](http://www.weinzierl.de)) or from the ETS online catalogue.

## ETS parameter dialogue

The following parameters can be set using the ETS.

### Description

The first page shows general information about the device.

### General settings

### Device name (30 Characters)

An arbitrary name can be assigned for the KNX RF/TP Coupler 672. The device name should be meaningful, e.g. "Living Room".

### Manual operation on device

This parameter sets the duration of the manual mode. Upon completion the normal display mode is restored.

### Repeater

**Disabled:** Received telegrams will not be repeated.

**Enabled:** Received telegrams will be repeated to extend the RF range.


## Routing TP->RF

Description	Group telegrams	Filter
General settings	Individual addressed telegrams	Filter
Routing TP->RF	System broadcast telegrams	<input checked="" type="radio"/> Block <input type="radio"/> Route
Routing RF->TP	Broadcast telegrams	<input type="radio"/> Block <input checked="" type="radio"/> Route
	Acknowledge (ACK) of group telegrams	<input type="radio"/> Always <input checked="" type="radio"/> If routed
	Acknowledge (ACK) of individual telegrams	<input type="radio"/> Always <input checked="" type="radio"/> If routed

### Group telegrams

**Block:** No group telegrams are routed to the RF line.

**Route:** All group telegrams are routed to the RF line independent of the filter table.


 *This setting is for test purpose only.*

**Filter:** The filter table is used to check whether or not the received group telegram should be routed to the RF line.

### Individual addressed telegrams

**Block:** No individually addressed telegrams are routed to the RF line.

**Route:** All individually addressed telegrams are routed to the RF line.

 *This setting is for test purposes only.*

**Filter:** The individual address is used to check whether the received individually addressed telegram should be routed to the RF line.

### System broadcast telegrams

**Block:** No received system broadcast telegrams are routed to the RF line.

**Route:** All received system broadcast telegrams are routed to the RF line.

### Broadcast telegrams

**Block:** No received broadcast telegrams are routed to the RF line.

**Route:** All received broadcast telegrams are routed to the RF line.

### Acknowledge (ACK) of group telegrams

**Always:** A acknowledge is generated for every received group telegram (from the TP line).

**Only if routed:** A acknowledge is only generated for received group telegrams (from the TP line) if they are routed to the RF line.

### Acknowledge (ACK) of individual addressed telegrams

**Always:** A acknowledge is generated for every received individually addressed telegram (from the TP line).

**Only if routed:** A acknowledge is only generated for received individually addressed group telegrams (from the TP line) if they are routed to the RF line.


## Routing RF->TP

Description	Group telegrams	Filter
General settings	Individual addressed telegrams	Filter
Routing TP->RF	System broadcast telegrams	<input checked="" type="radio"/> Block <input type="radio"/> Route
Routing RF->TP	Broadcast telegrams	<input type="radio"/> Block <input checked="" type="radio"/> Route
	Management telegrams	<input type="radio"/> Ignore <input checked="" type="radio"/> Accept
	Repetition of group telegrams	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
	Repetition of individual addressed telegrams	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
	Repetition of broadcast telegrams	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled

### Group telegrams

**Block:** No group telegrams are routed to the TP line.

**Route:** All group telegrams are routed to the TP line independent of the filter table.


 *This setting is for test purposes only.*

**Filter:** The filter table is used to check whether or not the received group telegram should be routed to the TP line.

### Individual addressed telegrams

**Block:** No individually addressed telegrams are routed to the TP line.

**Route:** All individually addressed telegrams are routed to the TP line.

 *This setting is for test purposes only.*

**Filter:** The individual address is used to check whether the received individually addressed telegram should be routed to the TP line.

### System broadcast telegrams

**Block:** No received system broadcast telegrams are routed to the TP line.

**Route:** All received system broadcast telegrams are routed to the TP line.


### Broadcast telegrams

**Block:** No received broadcast telegrams are routed to the TP line.

**Route:** All received broadcast telegrams are routed to the TP line.

### Management telegrams

**Ignore:** All management telegrams with destination address of coupler from the RF line will be ignored.

 *With this setting ETS cannot access the coupler from RF line!*

**Accept:** All management telegrams from the RF line will be accepted.

### Repetition of group telegrams

**Disabled:** The received group telegram is not resent to the TP line in case of a fault.

**Enabled:** The received group telegram is resent up to three times in case of a fault.

### Repetition of individual addressed telegrams

**Disabled:** The received individually addressed telegram is not resent to the TP line in case of a fault.

**Enabled:** The received individually addressed telegram is resent up to three times in case of a fault.

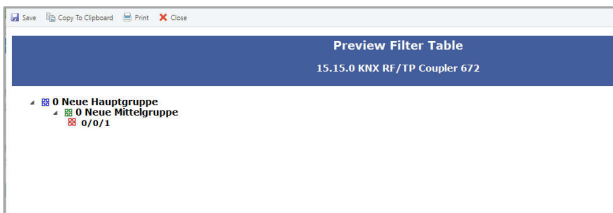
### Repetition of broadcast telegrams

**Disabled:** The received broadcast telegram is not resent to the TP line in case of a fault.

**Enabled:** The received broadcast telegram is resent up to three times in case of a fault.

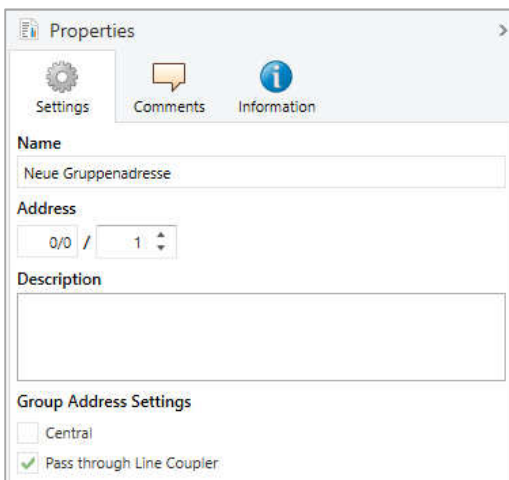
### Filter table

The filter table is automatically created by the ETS. The group addresses of the telegrams which shall be forwarded via the coupler are added to the filter table. The contents of the filter table can be displayed via the preview:



Preview of the filter table

The filter table can be extended by manually adding group addresses. This requires activating "Pass through Line Coupler" in the property window of the corresponding group address.



Property window of a group address



### WARNING

- The device must be mounted and commissioned by an authorized electrician.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.



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