Instruction Manual for the eLAN-RF-003

Contents

1. Introduction:

Congratulations on purchasing the eLAN-RF-003 control unit, an element of the RF Control wireless system.

Before you begin
The instruction manual provides information on installing and operating the device. The instruction manual is always a part of the supply. Only perform installation after becoming thoroughly familiar with this User Guide and device functions. Problem-free function of the device also depends on the way it was shipped, stored and handled. If you notice any signs of damage, deformation, malfunction or a missing part, do not install this product and return it to the point of sale. At the end of its service life, the product and its parts must be treated as electronic waste. Before starting the installation, make sure that all wires and connected parts are not under voltage. When assembling and performing maintenance, you must uphold safety regulations, standards, directives and special provisions for working with electrical equipment.

2. Main characteristics:

- The eLAN-RF-003 converter converts commands from the LAN TCP/IP network to an RF signal for controlling RF actuators.
- It enables bidirectional communication between the RF INELS and Ethernet systems.
- It can be used to extend the range of the RF signal via UTP cable (Ethernet network) or WiFi (between individual floors in the house).
- Option of control and reading values from RF actuators (temperature, ON/OFF status) - in the iMM environment.
- Configuration and management of ELAN-RF-003 is performed via:
  - 1) iMM server
  - 2) its own web server
  - 3) configuration SW eLAN-RF-003 Configurator
- For access to eLAN-RF-003 from the Internet, you must connect the eLAN-RF-003 to a Public IP address.
- The device is compliant with standards 802.3/802.3u (Fast Ethernet)
- The device is compliant with standards ISO 802.3/ IEEE 802.3u (10BASE-T)
- Automatic cable crossing detection of Ethernet cable - MDIX
- 10/100BaseT Ethernet, auto-detection
- Option of powering by PoE – maximum voltage 27V / 200mA max. consumption.
- Support for administration and configuration via web interface.
- Supports firmware updates via a web interface.
- It has its own web server
- Aluminum design box in desktop style.

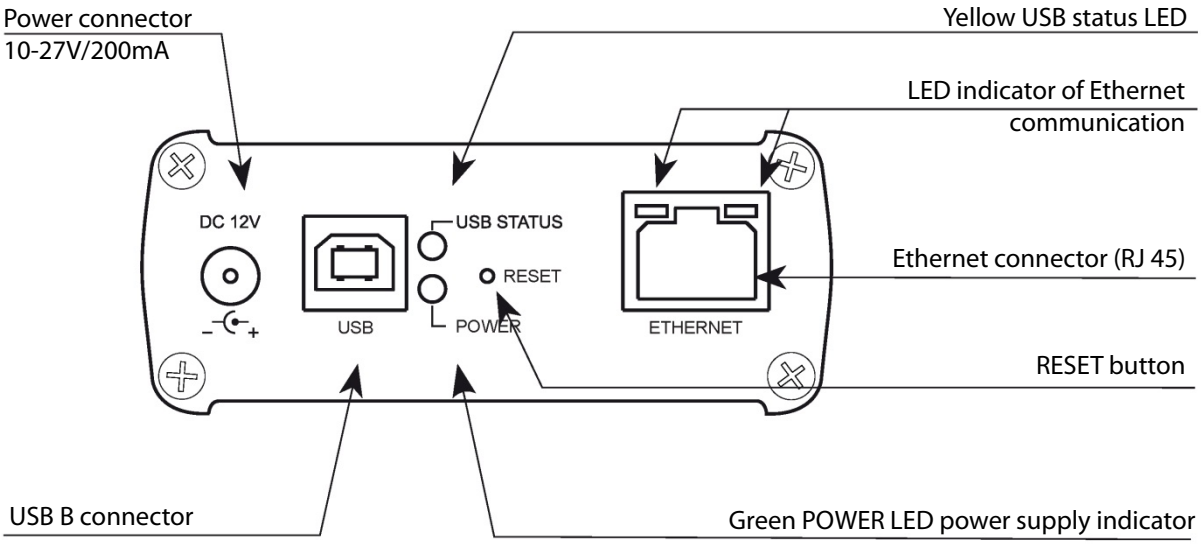
3. Technical parameters:

Interface RF Control	
Communications protocol:	Oasis & RF Touch Compatible
Transmitting frequency:	868 MHz
Signal transmission method	bidirectionally addressed message
Output for antenna:	SMA Connector
Indication of RF communication:	1 x red RF Status LED
Antenna:	1 dB (part of supply)
Range in open areas:	up to 100m
Ethernet Communication	
Operating status indication ETH:	green LED
Communication indication ETH:	yellow LED
Communications interface:	10/100 Mbps (RJ45)
Preset IP address:	192.168.1.1
Supply voltage / jm. Current:	10-27 V DC / 200 mA (safe low voltage)
Power supply PoE	Max. 27V / 200mA max. consumption
Connection:	connector Jack Ø 2.1 mm
Supply voltage indication:	green LED
Other	
Other powering options:	connector USB-B
USB activity indication:	yellow USB Status LED
Button RESET:	restart product / reset product to factory settings
Power source:	230 VAC / 12 V DC part of supply
Working temperature:	-20 .. +55 °C
Storage temperature:	-25 .. +70 °C
Protection class:	IP 20
Pollution degree:	2
Working position:	any
Installation:	free
Design:	design box
Dimensions:	90 x 52 x 65 mm
Weight:	136 g

Factory settings:	
Login:	admin, user
Password:	elkoep
IP address:	192.168.1.1

4. Hardware installation:

4.1 Front panel:

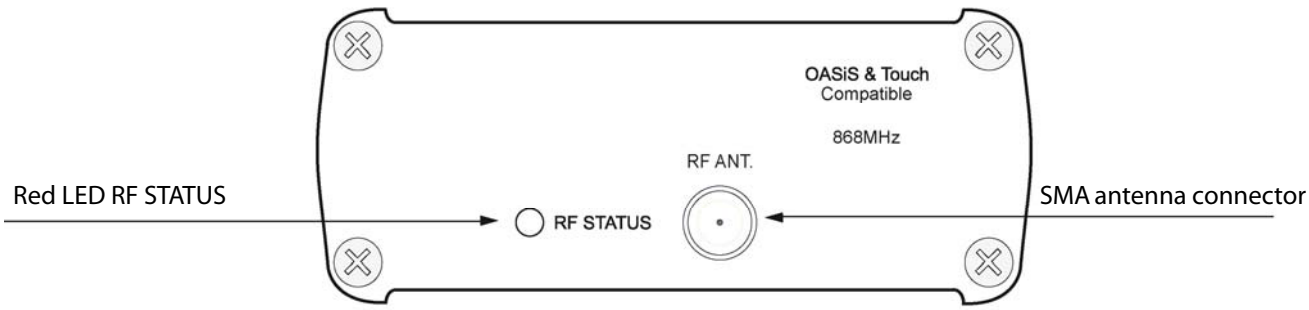


- Power connector DC 12V – Input for connecting supplied power adapter.
- Plug USB B – Used for servicing, (or can be used to power the product).
- Green POWER LED power supply indicator.
- Yellow USB Status LED – displays activity at the USB port.
- Button RESET – used to restart or restore the product to factory settings*.
- Connector Ethernet RJ 45 – used to connect mainly to the local network (LAN) or PC.
- Yellow LED on Ethernet connector - indicates operating status.
- Green LED diode on Ethernet connector - indicates communication.

*By shortly pressing (around 1s) the RESET button in the status where the product is connected to the supply voltage, the product will restart. This restart neither changes nor deletes settings.

RESET to factory settings occurs after pressing and holding the RESET for min. 10s. This restart returns the product to its factory settings, i.e. **the IP adress is set to 192.168.1.1, the user name and password are set at: admin / elkoep, user / elkoep, all learning and assigned IR codes and the created web server control panel are erased.**

4.2 Rear panel:



- Red RF STATUS LED – Displays RF communication – during transmission the RF signal LED diode flashes.
- SMA antenna connector – pro connecting the RF antenna.

4.3 System requirements:

- Functioning iMM Client or PC with functioning Ethernet adapter.
- For PCs, installed web browser (such as Mozilla Firefox,Opera, etc.).
- You must have installed .NET Framework 3.5 and higher.
- Connecting Ethernet cable with RJ45 connectors.

4.4 Requirements for installation environment:

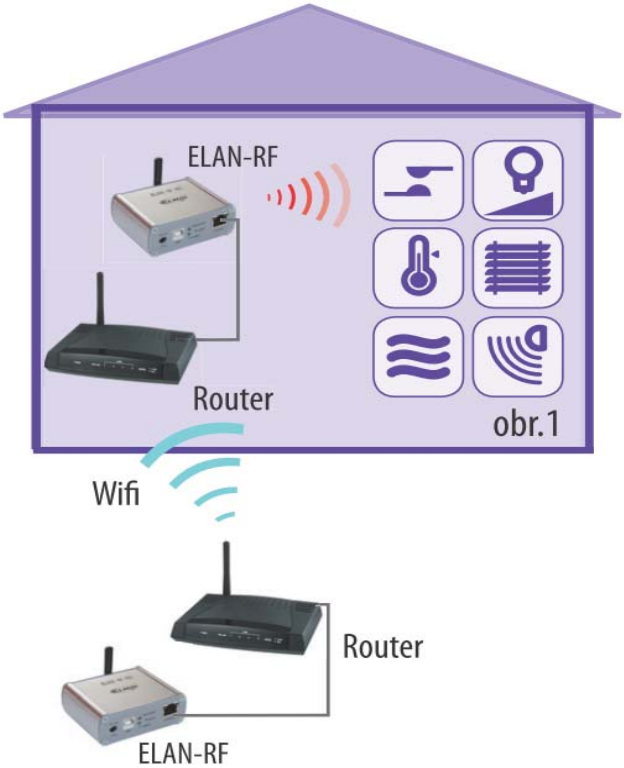
- The product cannot be placed where it is exposed to moisture or excessive heat.
- Place the eLAN-RF-003 at a location where it can be connected to the Ethernet network, power source and its RF antenna will be in sufficient distance from the controlled device.
- For fault-free communication, adhere to the principles of installing the RF device, see RF catalog.

4.5 Examples of use:

- Connect the power supply using the supplied adapter.
- Connect the eLAN-RF-003 device to the Ethernet by a cable to the computer, iMM Client, eLAN-RF-003 or Ethernet hub.(The cable must have an RJ45 connector, the device has an automatic cable crossover detection function - so cable crossover does not present a problem).

Example 1:

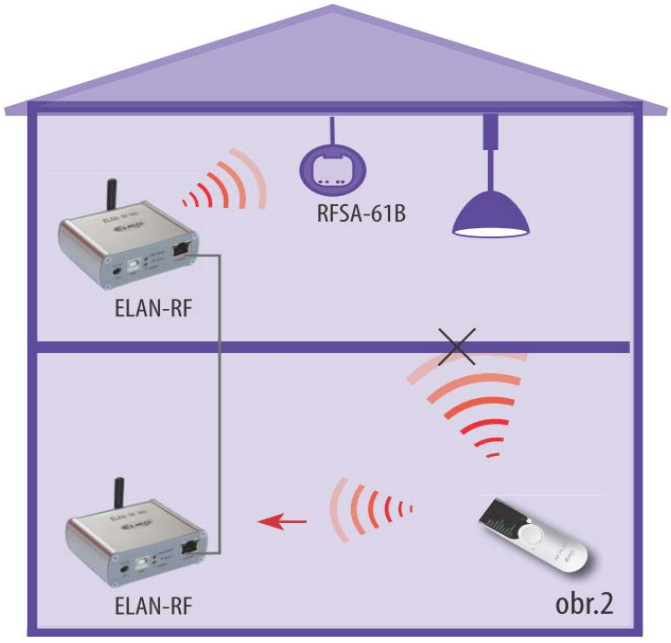
The example of use of two eLAN-RF-003 devices in connection with the WiFi network is advantageous when this network is already in use, and is only augmented with the eLAN-RF-003 device. The eLAN-RF-003 device can function if the WiFi routers are connected to a bridge and both eLAN-RF-003 devices can "see" each other. For this case, it is necessary to set the eLAN-RF-003 to the routing function.



Example 2:

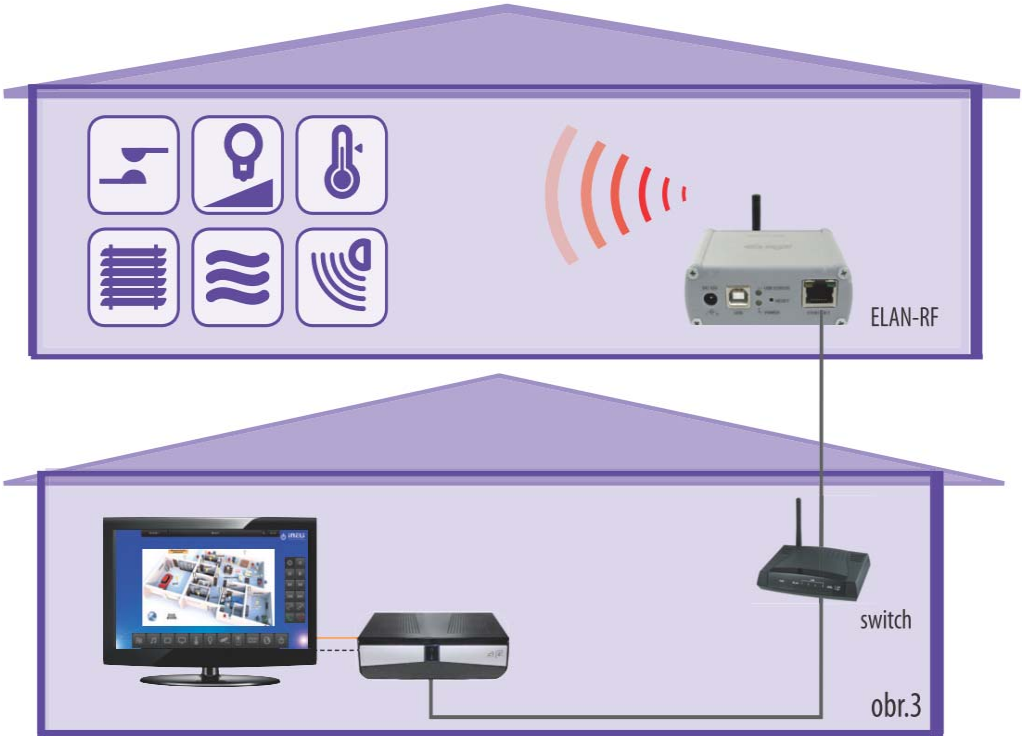
Basic use where the RF controller (RF Touch, RF Pilot, RFRF AP/USB, RF Key) cannot control the RF actuators, due to great distance, and when it is not possible to use the RFRP-20 repeater. By simply connecting to the network or by extending an Ethernet cable, you can extend the maximum range (distance) of RF controllers.

For this case, it is necessary to set the eLAN-RF-003 to the routing function.



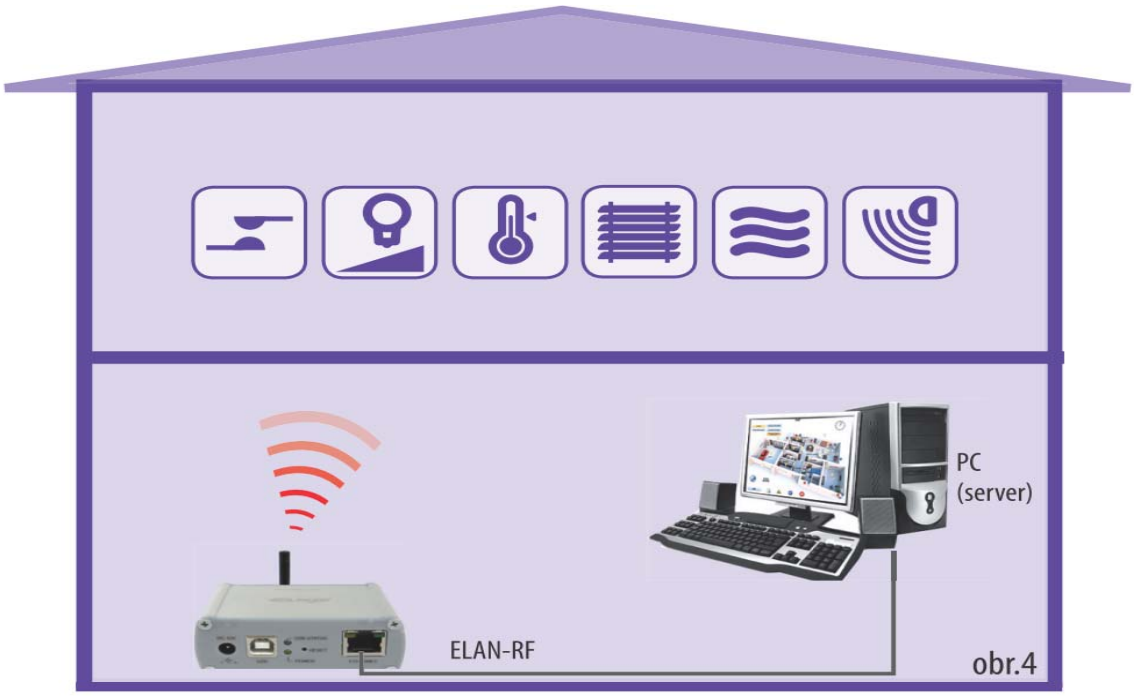
Example 3:

The next example illustrates the case where you already own an iMM Client server and you want to control all the RF actuators and maintain an overview on statuses of all RF actuators found within the range of the eLAN-RF-003.



Example 4:

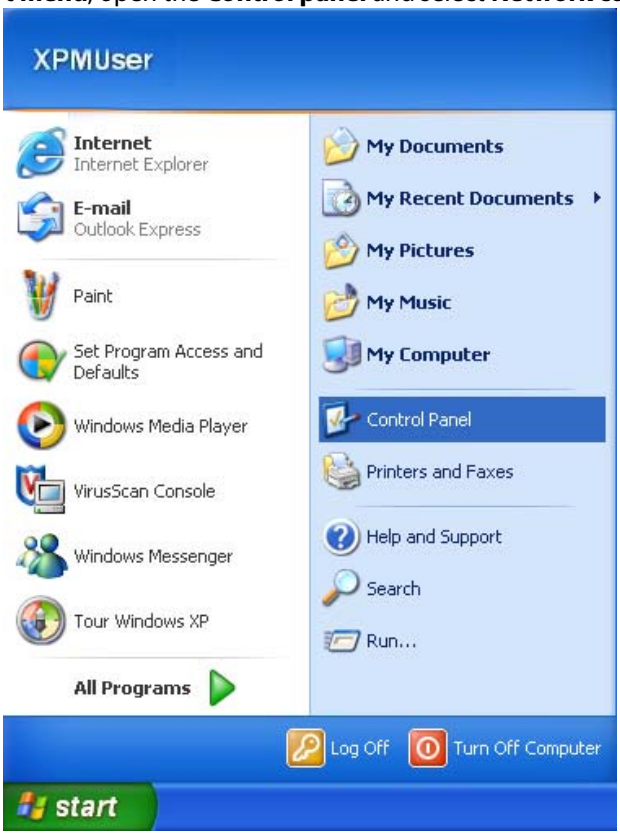
This example is similar to the previous one, except the device works via the PC. Thanks to the web server, it is easy to control the RF actuators.



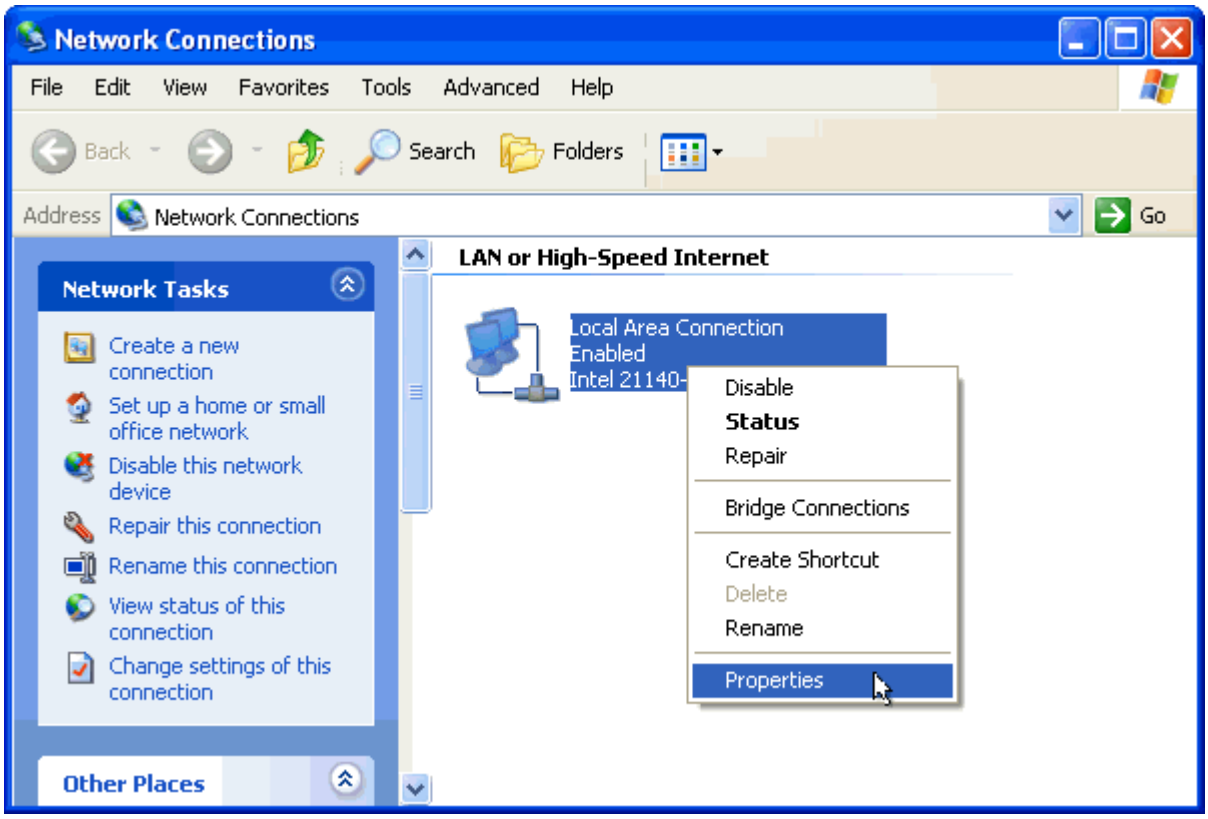
5. Configuration of computer:

- For logging in to the web server or changing the IP address (192.168.1.1).
- Example of configuration in the Windows system, proceed according to the following instructions:

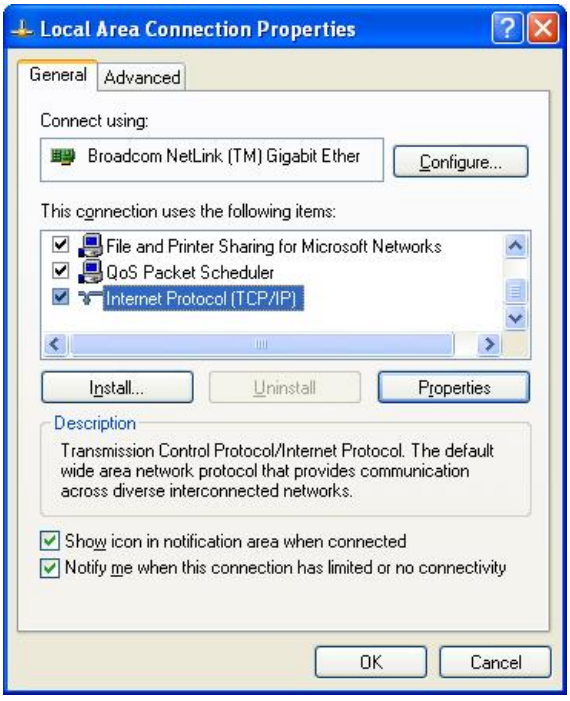
1. In the computer **Start menu**, open the **Control panel** and select **Network connections**.



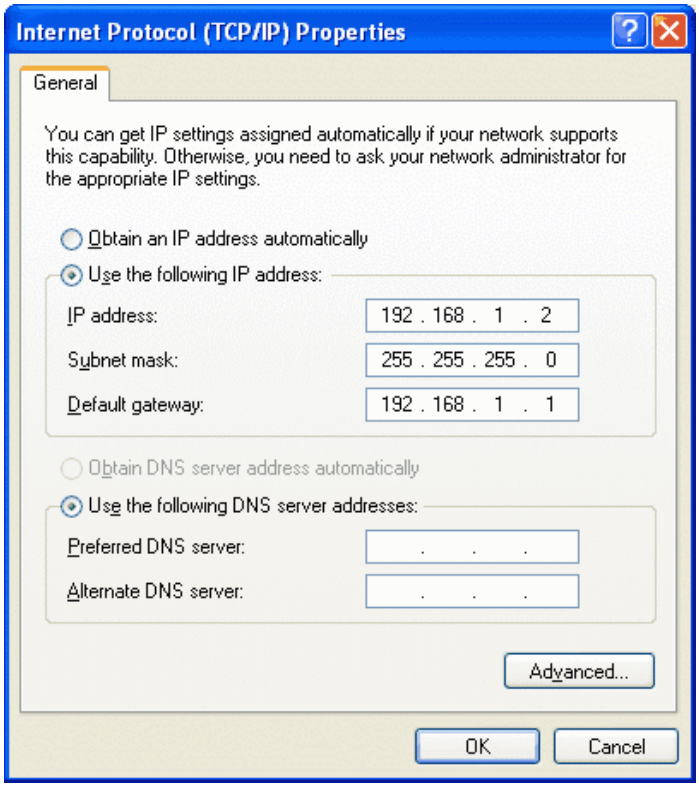
2. In the window **Network connections** right-click on LAN (connecting to local area network), then right-click on Properties.



3. After opening the window: **Connection to local network** in the main dialog window, select "Protocol **Internet network (TCP/IP)**". After choosing this type of protocol by clicking on **Properties**, another configuration window opens.



4. Perform configuration by choosing the tab **Use the following IP address**:



Enter the following settings into the text field:

IP Address: Set the IP address of your computer in dotted decimal notation, ex. 192.168.1.2 (where 2 is any value from 2 to 255).

Subnet Mask: Address code that determines the size of the network. The value 255.255.255.0 is commonly used for the subnet mask.

Default Gateway: Here enter the address of the product IP eLAN-RF-003 in dotted decimal format separated by periods (default setting: 192.168.1.1).

The address of the DNS server need not be entered.

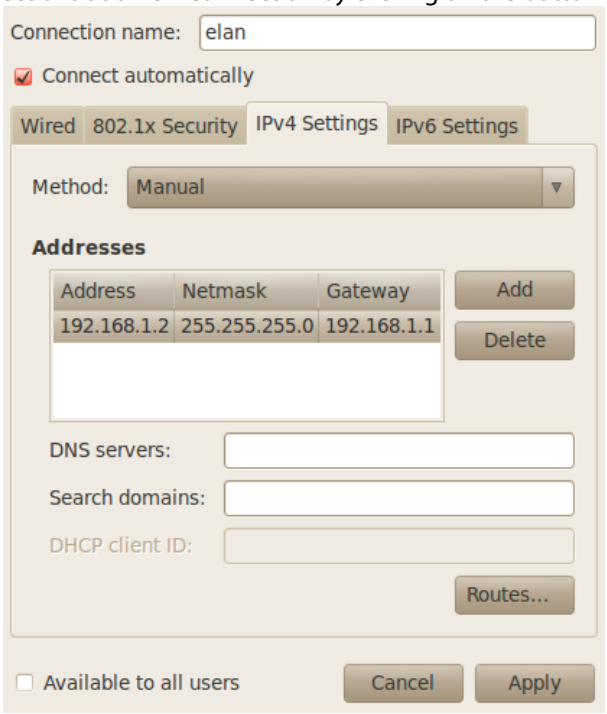
5. Save the settings by confirming - click **OK**

6. Configuring the iMM Client:

To configure the iMM Client in the Linux system, proceed according to the following instructions:

In the main panel in Linux, run the setting "**Connect to a network** ".

In the tab **Wired** connections add new connection by clicking on the button "**Add**".



Give the new connection a name.
Open the tab "**IPv4 settings"** choose the settings method to "**Manual**". After pressing the button **"Add"** write into the dialog window **"Addresses"** the settings of the address, network masks and gateways.

Enter the following settings into the text field:
Address: Set the IP address of your computer in dotted decimal notation, ex. 192.168.1.2 (where 2 is any value from 2 to 255).
Network mask: Address code that determines the size of the network. The value 255.255.255.0 is commonly used for the network mask.
Gateway: Here enter the address of the product IP eLAN-RF-003 in dotted decimal format separated by periods (default setting: 192.168.1.1).
The address of the DNS server need not be entered.
Save the settings by pressing the button**"Apply".**

7. Configuration of the eLAN-RF-003:

The eLAN-RF-003 device can be configured in two ways.

- Configuration via USB and configuration SW (eLAN-RF-003 Configurator)

  Using the configuration SW, as opposed to configuration via Ethernet, you can set the router mode, repeater mode, set the RF address filter and generate RF commands to the web server environment. It is not possible however to create a visualization panel of the eLAN-RF-003 web interface. This must be created in the web server environment.

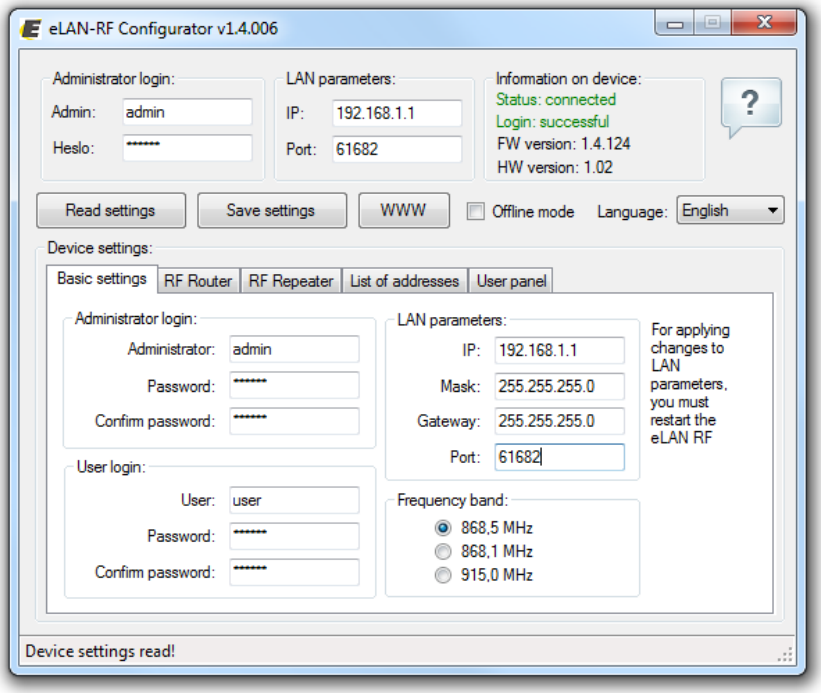
- Configuration via Ethernet connection

  This configuration is sufficient for using a single eLAN-RF-003 device in connection with the iMM Client. In the web server environment you can simply set the visual page of the control panel.

8. Configuring the eLAN-RF-003 using the SW eLAN-RF-003 Configurator:

- By configuring via USB and configuration SW (eLAN-RF-003 Configurator) it is possible to:
  - set the login data
  - set network connection parameters
  - set function of repeater and router + filter limitation to these functions
  - generate RF commands to the web server environment
- Using the Ethernet connection configuration and web server, it is possible to:
  - set the login data
  - set network connection parameters
  - set parameters of the control and visualization panel
  - create an appearance of the visualization panel (inserting and placing icons, etc.)

The configuration software can be downloaded for free from the Website http://www.elkoep.com/download/software/ . The program is used to easily configure the eLAN-RF-003 device. The configuration SW communicates with the eLAN-RF-003 along the Ethernet network. This SW need not be installed; it suffices to simply run it. You need to have the Microsoft package installed to run the SW.



8.1 Administrator login:

In the login dialog window, write in the administrator login data (same as logging in to the web server eLAN-RF-003). If you enter the wrong login data, it will not be possible in the on-line mode to change or read settings from the eLAN-RF-003 device.

8.2 LAN parameters:

In the dialog window of the IP address and port, enter the parameters of the connected product eLAN-RF-003.

Note:

For logging into the program eLAN-RF-003 Configurator, the same rules apply as for logging in to the web server. That means a correctly set-up network and correctly written login data. Successful connecting and correct login may be checked in the information window.

8.3 About the device:

The window About the device indicates the connection status, login and version of SW and HW of the product eLAN-RF-003.

The connection status is not dependent on correct login. The status "Connected!" occurs under the condition of a correct network connection, login "Successful!" occurs after correctly entered login data.

8.4 Buttons:

Read settings:

The button Read settings reads all settings stored in the eLAN-RF-003. Reading will be successful only in the event of successful connection and login.

Save settings:

The button Save settings saves all settings of this configuration program into the product eLAN-RF-003.

Offline mode:

Offline mode is used for easy browsing of the program options or to prepare settings prior to the actual recording into the eLAN-RF-003 device. The settings can be completely prepared in off-line mode, and you then only connect the eLAN-RF-003 device, and by clicking on the button Save settings, you record all of the settings.

Attention! The previous setting will be overwritten.

Language:

Choice of language.

Web server:

The default Internet browser starts with the eLAN-RF-003 web server

Information about the device and program including hypertext links to the product manual and catalog list.

8.5 Device settings:

8.5.1 Basic settings.

Login: the eLAN-RF-003 distinguishes two types of login - administrator and user login. The administrator of this device can change all settings. The user login only serves for the option of controlling the eLAN-RF-003 using the web server visualization panel.

- To change the login data, write the new login name and password into the text fields. You must confirm the password.

LAN parameters:

- To change parameters of the network connection of the eLAN-RF-003, write in the new IP address, subnetwork mask and Epsnet port into the text fields.
- IP address - enter the new IP address of the product eLAN-RF-003 in dotted decimal format separated by periods (default setting: 192.168.1.1).
- Subnetwork mask **-** address code determining the size of the network. The value 255.255.255.0 is commonly used for the network mask.
- EPSNET port settings - is the port of the TCP/IP protocol used by the superior EPSNET protocol. Use the factory preset port 61682. In case of problems with the firewall, we recommend choosing ports in a range of 49152 to 65535.

Frequency band:

- Here the user can choose the transmitting frequency in relation to the standard used for actuators in the country where the eLAN-RF-003 operated. For EU, the frequency is 868.5 MHz, for Russia it is 868.1MHz and for the USA it is 915.0 MHz.

8.5.2 RF Repeater

The RF repeater function is a separate function or addition to the RF Router function.

First use: an eLAN-RF-003 device configured for a repeater can only be connected to the supply voltage, and it will then function just the same as the RFRP-20. Therefore, if it receives a command from an RF key alarm or RF detector, it forwards this command by RF (wireless network). The same function occurs if it receives an **OFFSET*** address from (bidirectionally communicating units) RF Pilot, RF Touch, etc.

Secondary use: as an addition to the RF Router function. If two eLAN-RF-003 devices are network-connected and the Router is required, the second eLAN-RF-003 (SLAVE) can be set as a Repeater. If the eLAN-RF-003 device (set as a repeater) receives a command via Ethernet network or RF network, it evaluates this command (or offsets the address) and sends it via the RF network.

Use for:

Oasis Compatible

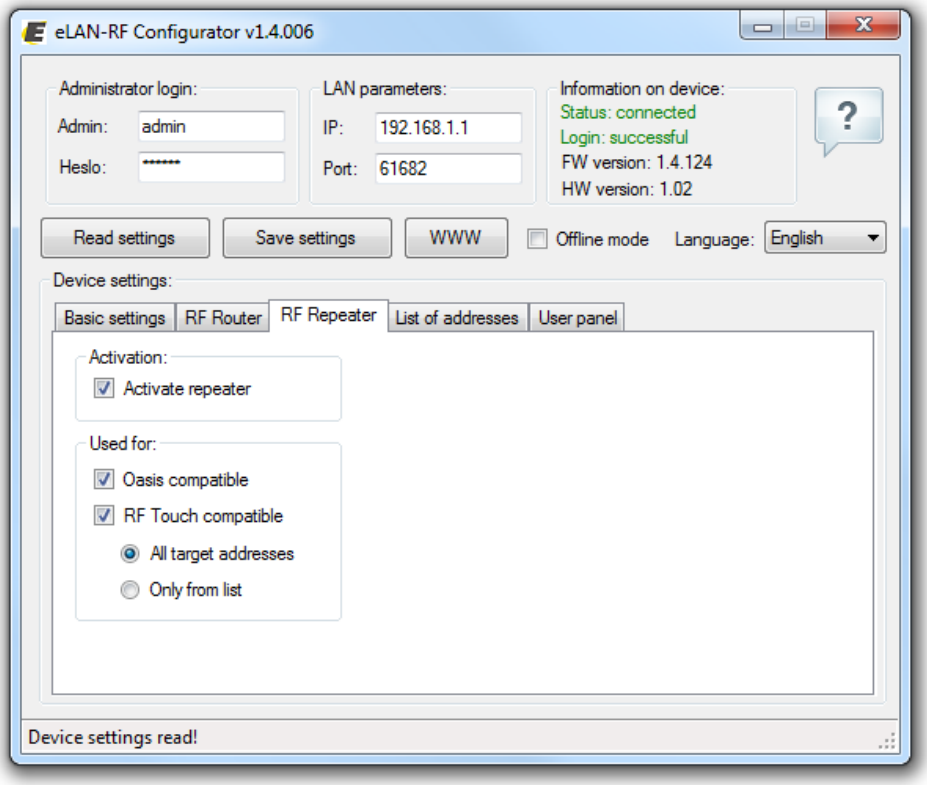
Enables the repeater function to serve unidirectionally communicating units (RF Key, RFWB, detectors, etc.).

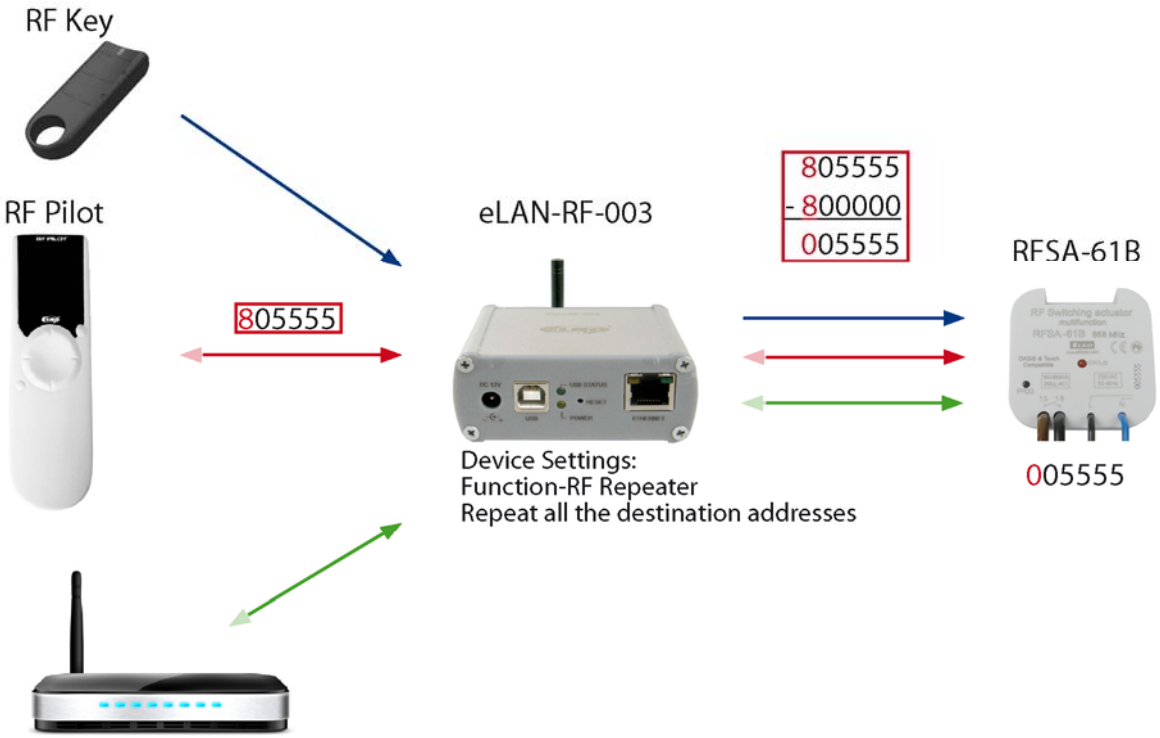
RF Touch Compatible

Enables the repeater function to serve unidirectionally communicating units (RF Key, RFWB, detectors, etc.).

For settings: **RF Touch Compatible** it is also possible to set limitations:

- Repeat all target addresses – the Repeater will repeat all addresses unidirectionally (with offset address) and bidirectionally communicating transmitters.
- Repeat only from list – Repeater will only repeat addresses listed in the list of addresses.


eLAN-RF Configurator v1.4.006
Administrator login:
Admin: admin
Heslo: ******
LAN parameters:
IP: 192.168.1.1
Port: 61682
Information on device:
Status: connected
Login: successful
FW version: 1.4.124
HW version: 1.02
Read settings
Save settings
WWW
Offline mode
Language: English
Device settings:
Basic settings
RF Router
RF Repeater
List of addresses
User panel
Activation:
Activate repeater
Used for:
Oasis compatible
RF Touch compatible
All target addresses
Only from list
Device settings read!


RF Key
RF Pilot
805555
eLAN-RF-003
805555
- 800000
005555
RFSA-61B
005555
Device Settings:
Function-RF Repeater
Repeat all the destination addresses

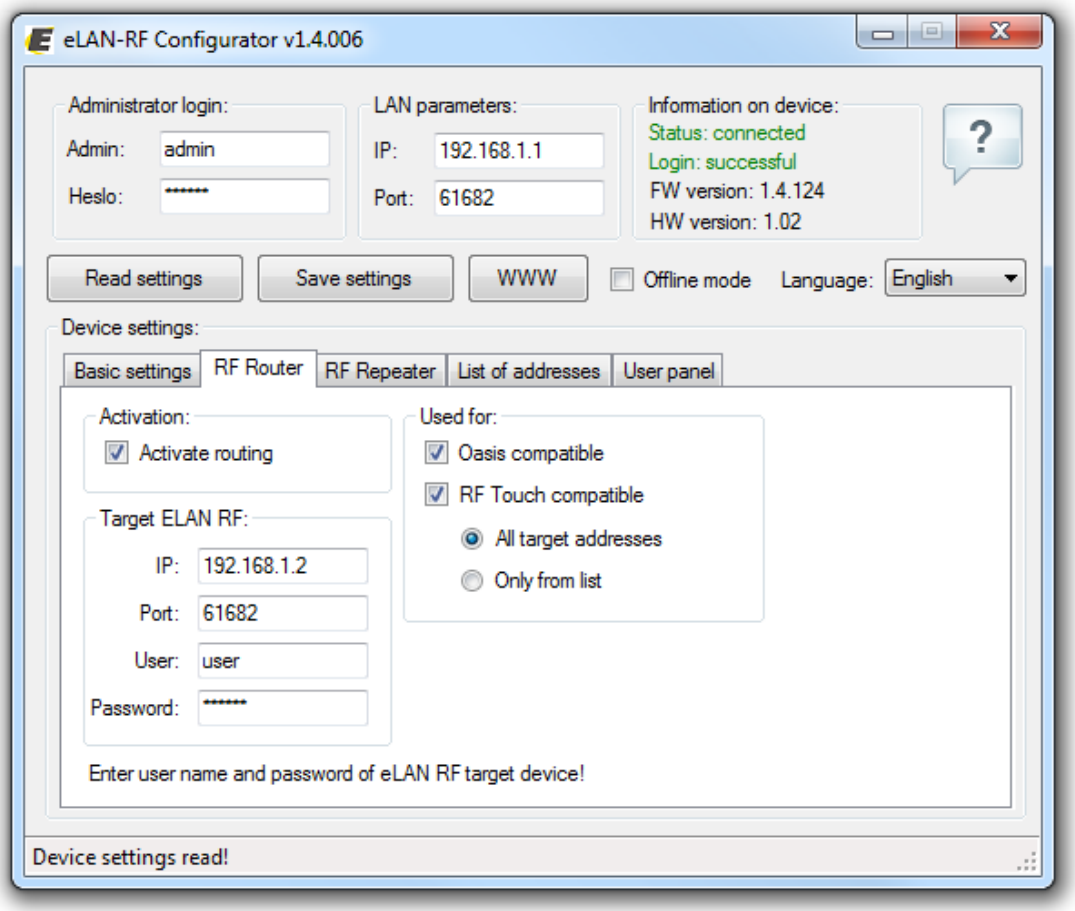
***Offset of address**

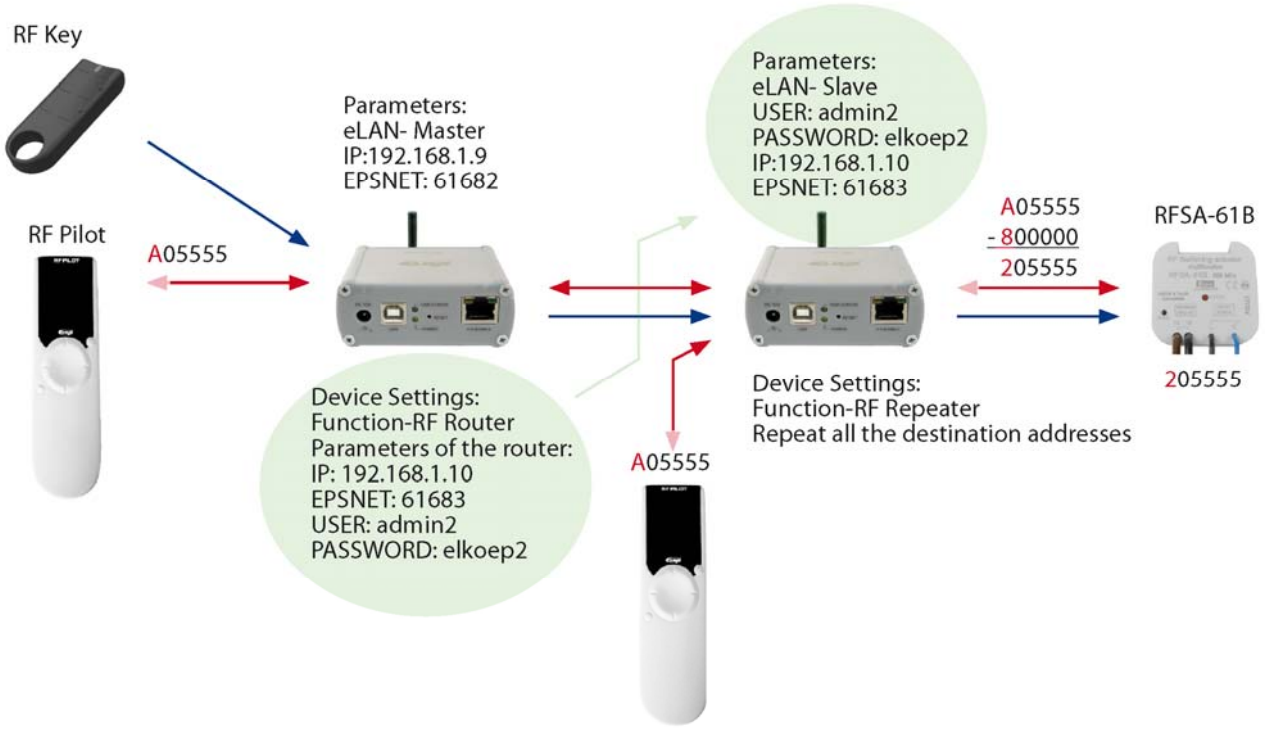
The offset of an address only concerns bidirectionally communicating transmitters (RF Touch, RF Pilot, RFAP, etc.). Enter the address offset by the offset 0x800000 - see table for address conversion.

True unit address	Address offset by the offset for communicating via RFRP
0x xx xx	**8**x xx xx
1x xx xx	**9**x xx xx
2x xx xx	**A**x xx xx
3x xx xx	**B**x xx xx
4x xx xx	**C**x xx xx
5x xx xx	**D**x xx xx
6x xx xx	**E**x xx xx
7x xx xx	**F**x xx xx

Example:
Unit address: **1**57600
Offset address: **9**57600

8.5.3 RF Router





The Router function is a basic use of the eLAN-RF-003 product, designed to extend the distance and control of RF actuators by connecting two eLAN-RF-003 devices to the LAN network. The first eLAN-RF-003, also called the MASTER, receives all RF commands of transmitters via RF. It evaluates limitations and permission of address (i.e. for unidirectionally communicating transmitters, it sends a command to the Ethernet network directly, for bidirectionally communicating transmitters it checks the offset of addresses*), it transfers the offset of addresses and then sends the command to the Ethernet network. The second eLAN-RF-003 in the function of SLAVE listens to this network and evaluates all reports from eLAN-RF-003 MASTER determined for sending via RF. It sends valid messages via RF and waits for the response from the actuator. If a response comes from the actuator, it sends it back to the MASTER.

Therefore, the first eLAN-RF-003 (MASTER) must be set upon configuration to the RF Router function. Where it is necessary to set the LAN parameters of the second eLAN-RF-003 (SLAVE), such as the IP address, port communication and the login data of the second eLAN-RF-003 (SLAVE).

The second eLAN-RF-003 (SLAVE) can be configured in two ways.

- In the function of Repeater – it receives commands via Ethernet network and via the RF network. Settings are appropriate: If a case occurs where thanks to the offsetting of the RF transmitter (control using the RF Pilot from multiple locations) the second eLAN-RF-003 (SLAVE) catches the command, it remains in the function of the RF Repeater (converts the address and sends a command). It does not matter from which eLAN-RF-003 (MASTER or SLAVE) it receives the RF command. It always sends the command via RF network of the eLAN-RF-003 set as a repeater.
- Function Router and Repeater not activated – eLAN-RF-003 is in its basic setting and neither the router nor repeater function is activated (in the SW eLAN-RF-003 Configurator you deactivate the function Router and Repeater). The eLAN-RF-003 set up in this way only listens to commands via Ethernet network, and ignores all commands via RF network.

Target eLAN-RF-003 (SLAVE):

Write into this setting all parameters set to the target eLAN-RF-003 (SLAVE). If these parameters are incorrectly set, the entire router will not function.

Use for:

Oasis Compatible

Enables the Repeater function to serve unidirectionally communicating units (RF Key, RFWB, detectors, etc.).

RF Touch Compatible

Enables the repeater function to serve bidirectionally communicating units (RF Touch, RF Pilot).

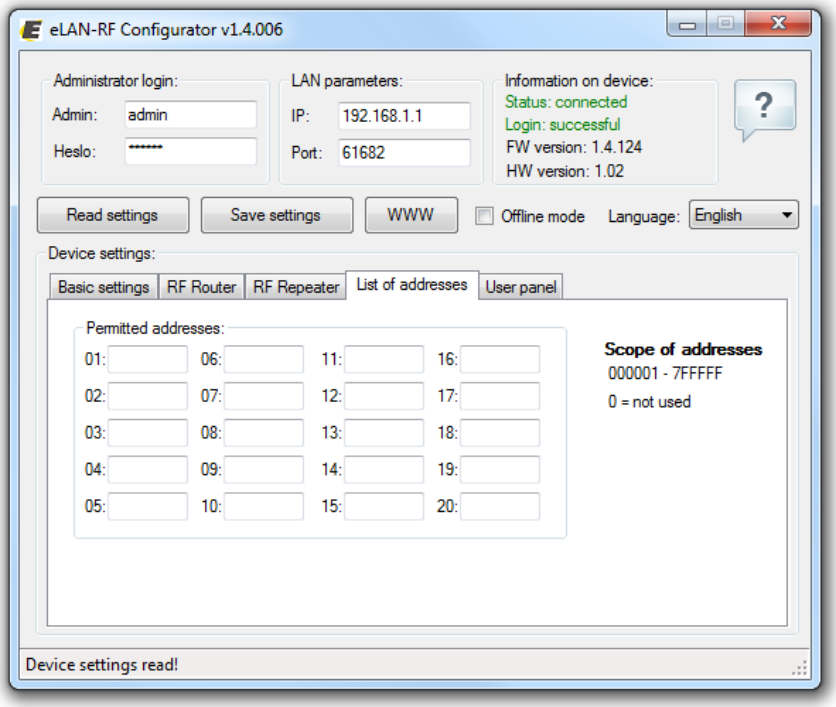
For settings: **RF Touch Compatible** it is also possible to set limitations:

- Repeat all target addresses. The Repeater will repeat all addresses of unidirectionally (with offset address) and bidirectionally communicating transmitters.
- Repeat all target addresses. Repeater will only repeat addresses listed in the list of addresses.

Notice: The eLAN-RF-003 function as a router or repeater **cannot** operate simultaneously in one product. It is thus necessary to create and activate just one function.

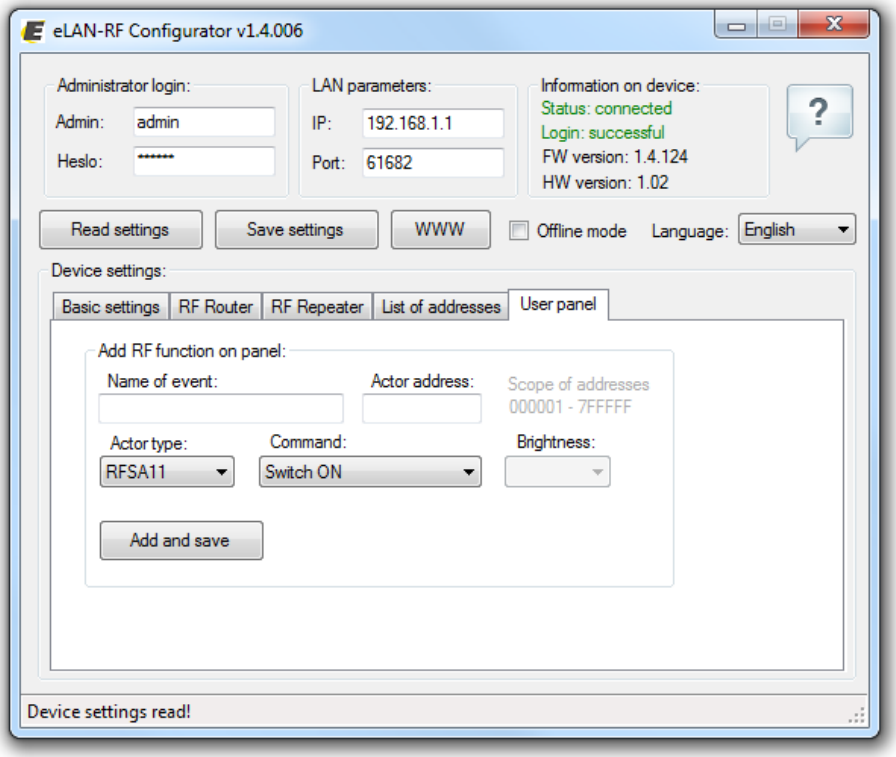
8.5.4 List of addresses:

The list of addresses tab enables choosing a list of addresses of bidirectionally communicating units, which you want to transfer via eLAN-RF-003 repeater or router. Enter address into the address fields just as they are written on individual products that you want to add to the list.



8.5.5 User panel:

The tab user panel is used to generate RF commands that the eLAN-RF-003 will perform using the panel. In this tab, create the RF command and then by clicking on add and save, record it to the eLAN-RF-003 web interface. You can then assign commands formed in this manner to icons on the panel in the web server environment.



Name of action (command): Here you choose the name of the action. The action will appear under this name on the visualization panel of the web server and in the list of commands.

Actuator address: Write into the text field the address of the actuator you want.

Type of actuator: Chose from the list the type of actuator.

Command: Choose command.

- Here in the list, choose the required command. Only the functions to the given actuator will be available. The time function such as delay ON or Off can only be called up. These functions cannot be set in the SW eLAN-RF-003 Configurator, it must already be set in the controlled actuator.

Note:

The action name is limited to 16 characters. The diacritics in the action name will be disabled. Do not use in the action name any special characters. Generated RF commands will be displayed always after updating (rereading) the web server builder page.

9. Configuring the eLAN-RF-003:

- After successful configuration of the computer or iMM Client, run the web browser.
- Write into the panel "**Address**" (in the Internet browser) the set IP address of the product eLAN-RF-003. (Upon the first configuration, enter the factory-assigned IP address: 192.168.1.1)
- After confirming the entered IP address, the web server's login page will come up.
- The initial screed displays the FW version recorded in eLAN-RF-003 (v.x.x) and login windows.
- The factory setting for signing in as administrator is:

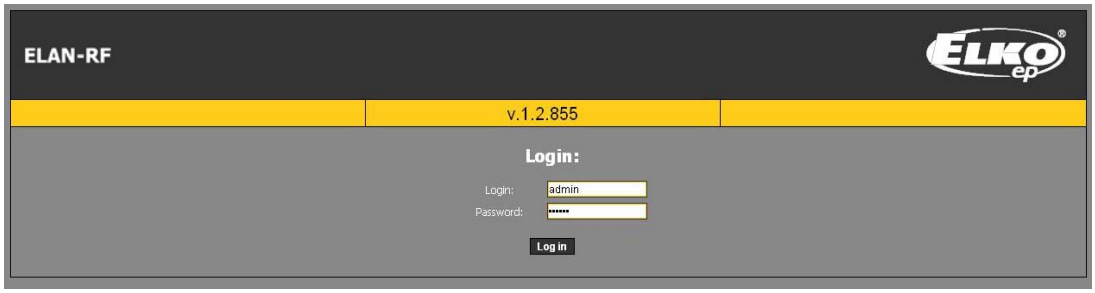
  Login: admin
  Password: elkoep

  - Upon the next user or administrator login, use the newly set login and password.

Login options:

- It is possible to log into the eLAN-RF-003 web interface either as the administrator (admin) with full access to controls and settings, or as the user (user), for whom only the panel itself is displayed. The user thus only has the option of controlling the device (the factory setting of the password for logging in as **admin** and **user** is: **elkoep**).
- Both users log into the same dialog field (Login, password), but each uses his/her own name and password.

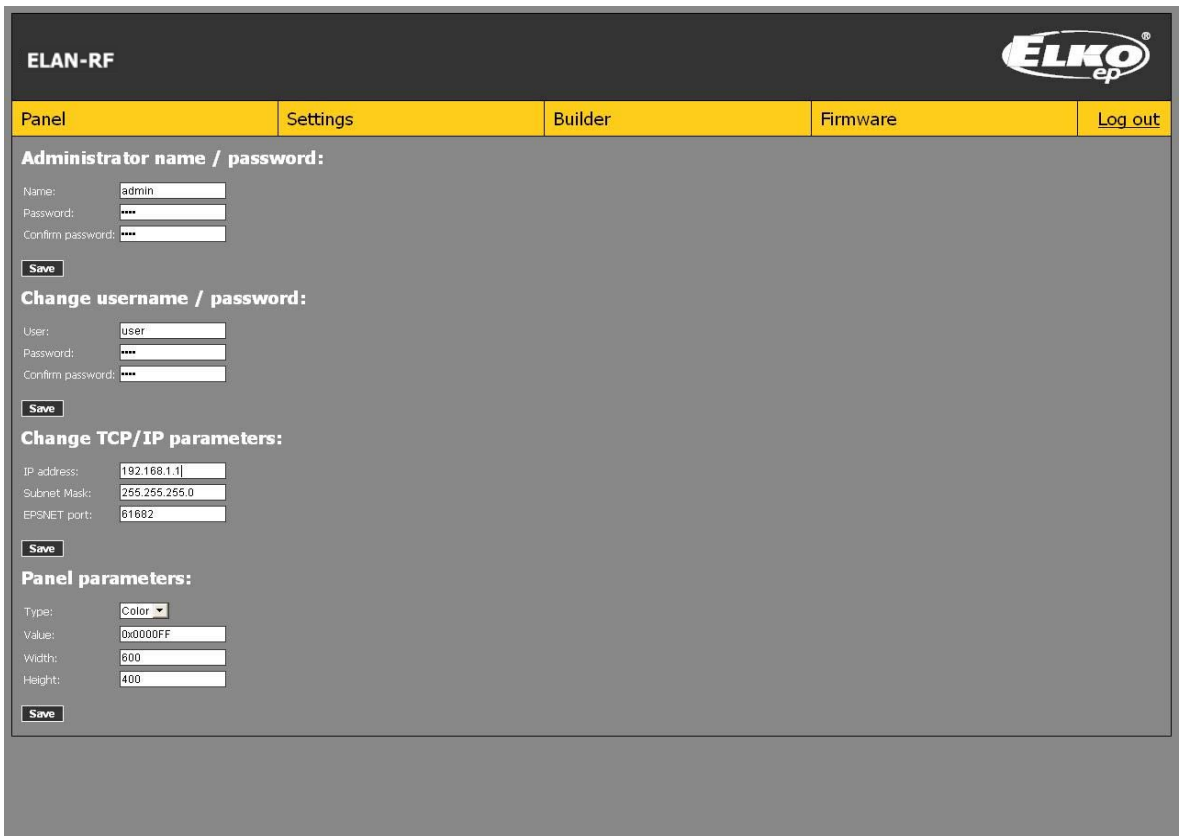
- Confirm login by clicking on **Log in**.



Note: after performing RESET on the device eLAN-RF-003 (by a long press of the button on the device front panel), the IP address and login data are returned to factory settings.

9.1 Settings tab:

The settings tab is used to change the login name, password, network connection and panel configuration.



Change Administrator name / password:

- This login data is used for administrator login. Logging in enables all settings to be changed.
- For changing the login name or password, overwrite in the text fields the original login name and password with the new ones. You must confirm the password in the next window **Confirm password.** The password is saved by clicking on **Save** these settings**.**

Change Administrator name / password:

- This login data is used for administrator login. Logging in only enables control of the device via the panel. After signing in, the user only sees the control panel.
- For changing the login name or password, overwrite in the text fields the original login and password with the new ones. You must confirm the password in the next window **Confirm password.** The password is saved by clicking on **Save** these settings**.**

Changing the TCP/IP parameters:

- To change the network connection parameters, overwrite the original settings with the new ones and then save the settings.
- **IP Address** – enter the new IP address of the eLAN-RF-003 in dotted decimal format (default setting: 192.168.1.1).
- **Subnet Mask –** address code determining size of network. The value 255.255.255.0 is commonly used for the network mask.
- **EPSNET port** - (setting the EPSNET port) - the TCP/IP protocol is used by the superior protocol EPSNET. Use the factory preset port 61682. In case of problems with the firewall, we recommend choosing ports in a range of 49152 to 65535.
- Parameters are saved by clicking on **Save** .

Panel parameters (Change in visualization panel parameters):

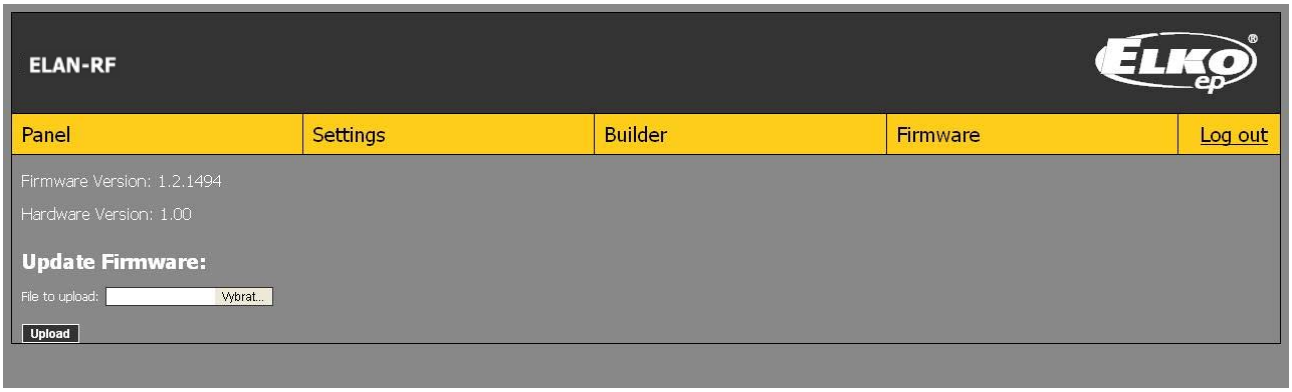
- Type – choose between background types:
  - None – if you choose this background, it is only possible to set the background size. The background color will be white.
  - Color – as opposed to the background "None", this choice enables color selection. You can set the background color by writing in the normalized English term for the color at HTML or according to CSS specifications (ex. Red, DarkSeaGreen, 0x66FF66).
  - File – this setting enables an image to be displayed as the background in the formats *.JPG, *.GIF, *.PGN . The resulting panel size will be based on the size of the imported image.

Note: If you change the IP address, to log into the eLAN-RF-003 you must use the new IP address. If the new IP address that you entered is not in the same subnetwork, the connection will not work if settings are not changed in the connected device (PC,iMM Client) to the same subnetwork.

The panel height and width must be entered for the settings None and Color. Parameters are entered in Pixel units.

The maximum panel resolution is 2000x2000 pixels for background types None, Color and File. Upload background images with maximum resolution of **2000x2000 pixels!**

9.2 Tab Firmware:



This tab is used for easy eLAN-RF-003 firmware updates. New firmware is available at the address http://www.elkoep.com/download/software/ and can be downloaded for free. If the eLAN-RF-003 indicates no difficulties, it is not necessary to download the newer firmware version as long as the new version has no additional function that you would like to use.

When updating the eLAN-RF-003, proceed according to the following instructions:
1. From the website http://www.elkoep.com/download/software/ download the latest firmware version.

2. Click on the **Browse** button and select the file to be downloaded (this file must always include the extension *.bin).

3. Click on the button **Upload**.

Firmware Version – the current firmware version displays (here or on the login page you can check the success of the update).

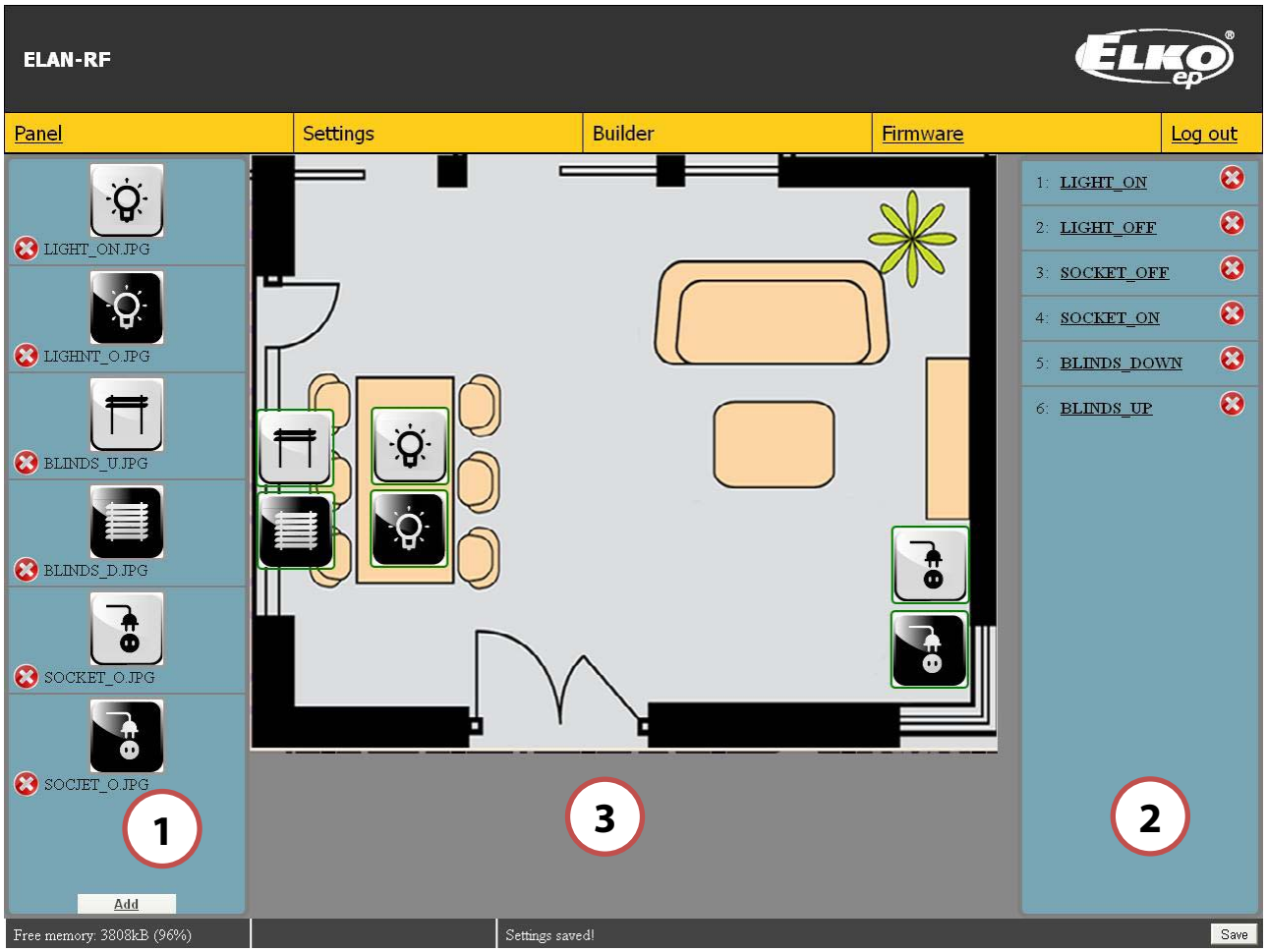
Hardware Version – displays the current hardware version. The hardware version of the updated file must correspond to the existing hardware version.

Note: do not turn off device or use the Reset button when updating the firmware. the eLAN-RF--003 restarts after updating.

Note: After the firmware update, all settings will remain preserved. This means that the set IP, login data, visualization panel will remain the same as with the SW version prior to the update.

9.3 Tab Builder:

This tab is used to configure the control panel. The configuration contains import of icons (downloads on http://www.elkoep.com/download/software/)and assignment of RF commands generated from the program RF Configurator (actual version downloads on http://www.elkoep.com/download/software/).



The **"builder"** tab contains three panels:

1

- The left part is used to import icons. By clicking on Add found in the lower part of this panel, open the dialog window for selecting a file. Here choose the required icon. You can store image files with the extensions *.JPG, * .GIF, *.PGN. Successfully recorded icons appear in the left column. You can delete the recorded icon by clicking on the "x" button in the left lower part of the icon.

2

- The right part is used to manage RF commands. The generated RF command from the configuration software displays in this right part. RF commands read in this way already have a name assigned from the previous generation. The assigned code can also be renamed by right clicking on the name and simply overwriting it. The RF command can be deleted by clicking on "x" on the right side by the RF command name.

3

- Central visual part: In this part, you create the final control panel appearance. The icons that you have already imported into the left column can easily be dragged to the visualization desktop by left clicking and holding the icon, then dragging it to the desktop. If you have all needed icons distributed on the desktop, you can assign RF commands in similar fashion. The icon located on the panel and does not have an assigned RF command is found inside a red frame. Upon successful assignment, the color of the frame changes to green. Delete an icon from the visualization panel by left double clicking on the applicable icon.

Note:

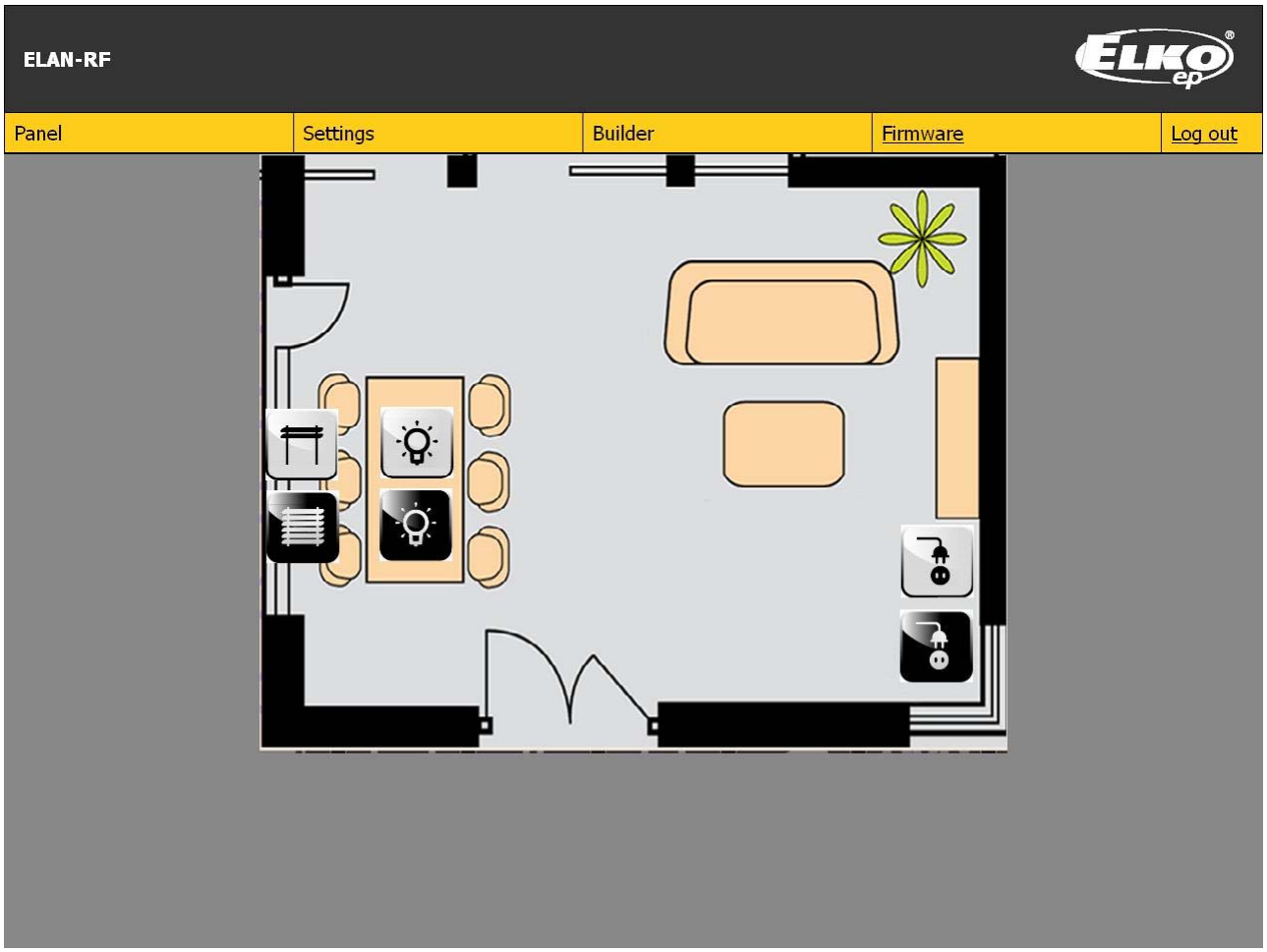
Changes that you make must be stored prior to switching or closing this web tab by clicking on "**Save**" in the lower right corner of the web page.

Only uniquely named icons can be added. If an icon that you want to assign has the same name as an already assigned icon, it will not be assigned.

Record icons that are compressed to the minimum size to save storage space. The size and remainder of memory space is displayed on the indicator in the left lower part of this tab.

9.4 Tab Panel:

You will perform all visualization of this panel in the tab **Builder**. This panel is only used for the actual sending of RF commands. The command is sent by simply left-clicking on the applicable icon. After sending the RF command, a frame appears around the icon. The red frame represents a missing response from the controlled RF actuator, a green frame represents a received response from the controlled RF actuator. You can also check the sending of the RF command by the flashing RF status
LED.



9.5 Tab log out:

After completing settings or administration, log out of the main page by clicking on "Log out".

10. Troubleshooting:

- The product does not communicate (cannot connect to the web server)

Solution:

  - Check the power supply: Check to see that the product is connected to the power supply, and the Power LED on the front panel is illuminated.
  - Check the Ethernet network connection. Check to see if the yellow LED operating status is illuminated, and that the green communication LED is either illuminated or flashing. If something is wrong, recheck the network connection.
  - If there is no problem with the above-mentioned points and all settings are correctly set, perform a restart by briefly pressing the RESET button or by disconnecting and reconnecting the power supply.

- The device does not react to sent RF commands

Solution:

  - Check to see if the Status RF LED is flashing. If the eLAN-RF-003 is connected to the supply voltage and the Ethernet connection functions, the red status LED flashes upon sending the RF command.
  - If the LED diode is flashing but the device does not react, check to see if the product is within the necessary distance from the controlled actuator. Then check the function of the controlled actuator.