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CONTROL YOUR LIVING SPACE

Gateway configuration manual
DALI – KNX
EK-BP1-TP

Indice

Scope of the document

This document describes the gateway (protocol converter) DALI – KNX TP. The gate is the interface between the KNX installation in the building and a digital DALI lighting system. This product belongs to a broad line of Ekinex® gateways designed to meet the needs for integration of the building automation most widely used protocols, based on serial, Ethernet or proprietary infrastructures. For further informations about the available technical solutions, please visit http://en.ekinex.com/.

1 Product description

The gateway DALI ekinex® EK-BP1-TP is a Converter so you can connect a DALI net (like a light system etc...) with a KNX network (like light switches, actuaros etc…) in order to exchange informations between the nets.

With it, up to 64 lights in max. 16 groups can be switched, and complex scenes, up to 16 scenarios, and dynamic light effects can be realised via the KNX system. The expanded functionality provides a great deal of freedom in designing individual lighting concepts. Various dynamic sequences and light effects can be saved and called up.

Using DALI converters Ekinex any light source, including incandescent lamps, fluorescent lamps, high-intensity discharge lamps and even LEDs, can be controlled irrespective of whether they are installed in an office, opern-space, production halls, display windows etc...

Configuration is performed through a PC application software which communicates through the integrated Ethernet port. The application software CGEKBP1TP is available for download at http://en.ekinex.com/.

1.1 Main functions

The main features of Ekinex DALI are:

- Control of up to 64 DALI devices in up to 16 groupse and 16 scenery
- Broadcast function
- Addressing individual, group or central
- Suitable for operation in emergency lighting systems
- Lightscenes
- Ability to read status of the DALI device via KNX (eg brightness or device error)
- Web interface and compositor program for programming

1.2 Technical data

Characteristic	Value
Power supply	8…24 Vac 12…35 Vdc
Power Absorption	A 24 Vdc: 3,5 VA
Application area	dry indoor environment
Environmental conditions	• Operating temperature: - 40 ... + 85°C • Stock temperature: - 25 ... + 55°C • Transportation temperature: - 25 ... + 70°C • Relative humidity: 93% non-condensing
Programming elements	1 pushbutton
Display elements	4 status LEDs + 1 Ethernet connector LED
Configuration elements	1 1-way microswitches • Microswitch A: OFF normal mode; ON Boot mode
Safety class	II
Installation	35 mm DIN rail (according to EN 60529)
Protection degree	IP20
Dimensions (WxHxD)	82 x 75 x 35 mm
Ethernet interface (IEEE 802.3)	
Connector	RJ45, minimum cable category: 5E
DALI interface	
Communication port	DALI, electrically isolated from power supply and KNX communication port
Baud rate	1200 bps
DALI voltage	9.5 V – 22.5 V (typical 16 V)
Maximum cable length	300 m (1.5 mm2 wire)
Number maximum DALI device	64
Number maximum DALI group	16
Number maximum DALI scenes	16
Interfaccia KNX TP	
Communication port	KNX TP (twisted pair), electrically isolated from power supply and Ethernet communication port
Power supply	SELV 30 Vdc through bus KNX
Current absorption from bus	< 12 mA

1.3 Supply

The supply includes the device and terminal blocks to connect to the KNX bus. An instruction sheet is also supplied within the package.

1.4 System requirements for configuration software

Configuration and commissioning of the ekinex® gateway must be performed using the application program CGEKBP1TP, available for download at http://en.ekinex.com/.

The PC where the application program is installed must meet the following requirements:

- Desktop o laptop PC with Ethernet IEEE 802.3 port.
- 32/64 bit operating system, Microsoft Windows® XP, 7, 8.0, 8.1 e 10.

NET Framework 4.0 system library installation is required.

1.5 Certifications

Compliance with the European directives is certified by the CE symbol on the product label and on the documentation.

2 Switching, display and connection elements

The device is equipped with a pushbutton and a KNX programming LED, with a status LED, terminal blocks for KNX network connection and port DALI. A port for RJ45 connector and device configuration via Ethernet as well as one 1-way microswitch are also present..

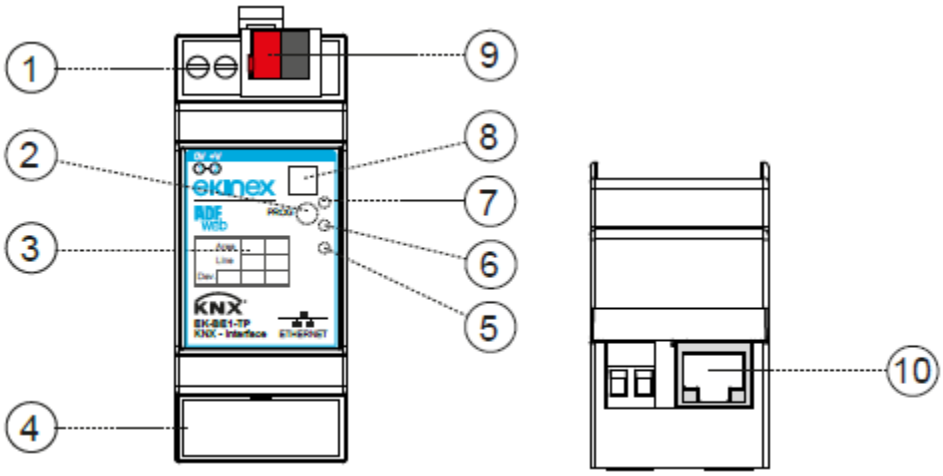

Figura 1 - - Switching, display and connection elements

1) Power supply terminal blocks (1-2)
2) KNX programming pushbutton
3) Registration physical address
4) DALI terminal blocks (3-4)
5) DALI communication LED
6) KNX communication LED
7) Device satus LED
8) 1-way microswitch
9) KNX bus line terminal blocks KNX
10) Connector RJ45 with integrated LED
11) Device error LED

Command elements

- Pushbutton that switches between normal mode and KNX physical address programming.

1-way microswitches

The device has got two functions mode depending of the position of the ‘Dip1 of Dip-Switch A’:

- The first, with ‘Dip1 of Dip-Switch A’ at “OFF” position, is used for the normal working of the device.
- The second, with ‘Dip1 of Dip-Switch A’ at “ON” position, is used for upload the Project and/or Firmware.

Dip-switch su “OFF”: funzionamento ordinario

Dip-switch su “ON”: programmazione apparecchio

Display elements

The device has got five LEDs that are used to give information of the functioning status. The various meanings of the LEDs are described in the table below.

LED	Normal Mode	Boot Mode
LED green (7) – Device State	Blinks slowly (~1Hz)	**Blinks quickly**: Boot state **Blinks very slowly (~0.5Hz)**: update in progress
LED yellow (5) – DALI communication	Blinks when DALI communication is running	**Blinks quickly**: Boot state **Blinks very slowly (~0.5Hz)**: update in progress
LED yellow (6) – KNX communication	Blinks when KNX communication is running	**Blinks quickly**: Boot state **Blinks very slowly (~0.5Hz)**: update in progress
LED yellow (11) – DALI error	Turns ON when the DALI device is not present	**Blinks quickly**: Boot state **Blinks very slowly (~0.5Hz)**: update in progress
LED green (10) – Ethernet Link	**ON:** Ethernet cable connected **OFF:** Ethernet cable disconnected	**ON:** Ethernet cable connected **OFF:** Ethernet cable disconnected

In the current version of the device, both KNX physical address programming and configuration download must be performed through the configuration program: for KNX physical address please refer to “Communication parameters” paragraph, “*ID Device*” parameter.

3 Configuration and commissioning

The device configuration requires the following tools:

- CGEKBP1TP application software to properly configure the gateway.
- Knowledge of the ETS automation project, with particular attention to communication objects and group addresses passing on the bus during the multicast communication between sensors and actuators.

Configuration and commissioning of the Ekinex® gateway require specialized skills about KNX networks and knowledge of the specific ETS automation project. In order to acquire such skills, it is essential to attend trainings and workshops organized at KNX-certified training centers. For further information: www.knx.it.

4 DALI protocol general informations

DALI is an international standard protocol conforms to standard IEC-62386 which guarantees the interchangeability of dimmable electronic ballasts from different manufacturers. For the standardization of other devices such as sensors, power stations, etc. he is still working.

The DALI system can control up to 64 addressable luminaires. This address is stored within the reactor. There are several methods to provide an address to a reactor. All settings (including address) are stored permanently.

The units are grouped into groups (group addresses) 16 different groups may overlap, the group membership is stored inside the reactors.

Creating and saving light scenes, fades (ability to manage the transition time from one scene to another), emergency lighting (in case of bus failure), level of illumination.

In the DALI command module, the routines of detection and addressing of the connected components are largely automatic; the user simply complete the settings through the control elements. In addition, with the same ease you can change the functions and to adapt to new situations.

5 Configuration software

The Ekinex® configuration software CG-EK-BP1-TP allows you to perform the following operations:

- Selection of physical address of the device over the KNX TP network;
- Selection of Ethernet parameters (dedicated exclusively to the configuration downloading to your device);
- KNX network: communication objects definition and relative group addresses to be sent over the KNX network;
- Firmware and/or configuration update.

The application program consists in multiple modal windows called “forms”: each form must be closed before accessing the following form. The buttons on the main form (see Figure 2 – Main form of the application program) are ordered according to the proper sequence to follow in order to perform a correct configuration.

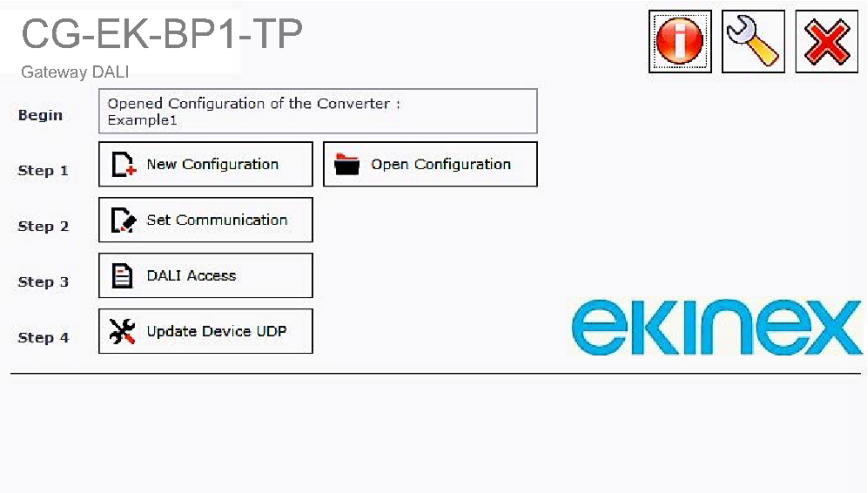

Figura 2 - Main form of the application program

Starting from the main form, by accessing the About... window, you can check the current version of the installed program.

Figura 3 - Form About

Please visit the section about communication gateways on http://en.ekinex.com/ in order to i check the current version of the application program and download the latest version

5.1 Creating a new project or modifying a saved project

The application program allows you to create a new configuration or open an existing one using the buttons called New Configuration and Open Configuration (see Figure 2 – Main form of the application program): the configuration files are stored on the hard drive in XML format. A device's configuration can also be imported or exported:

- To clone the configurations of a Programmable "KNX / DALI - Converter" in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;
- To clone a project in order to obtain a different version of the project, it is sufficient to duplicate the project folder with another name and open the new folder with the button "Open Configuration".

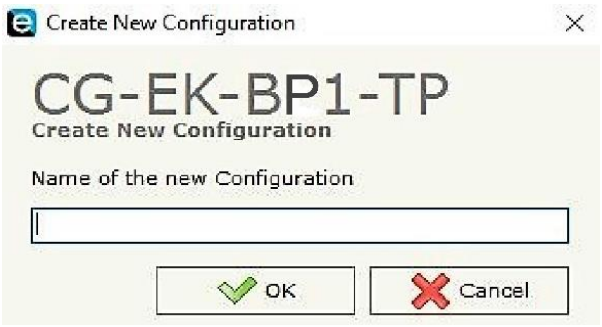

Figura 4 - Create new configuration form

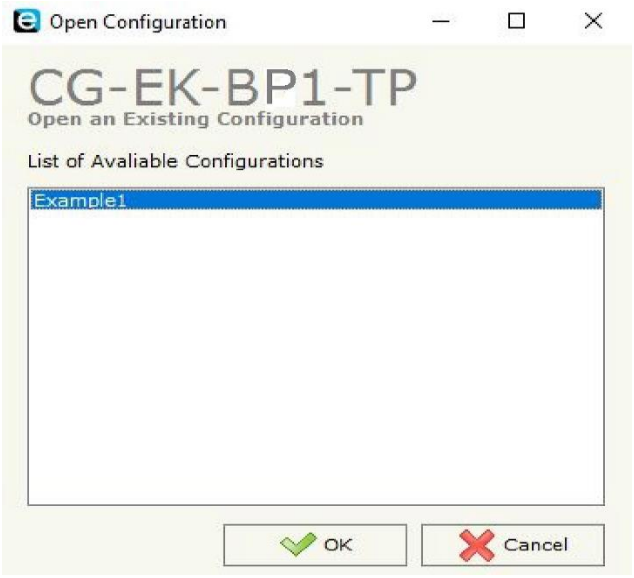

Figura 5 - Open new configuration form

In order to duplicate an existing project, you must find the project folder containing the XML files and copy them in a new folder. Project files can be found by the following path:

"C:\Program Files(x86)\Ekinex\ Compositor_CG-EK-BP1-TP\Projects".

Once the project has been duplicated, simply restart the application program and open the form Open configuration (see Figure 6 - Open configuration form): you will see the name of the duplicated project in the list of available configurations.

5.2 Software Options

By pressing the “Settings” button there is the possibility to change the language of the software and check the updatings for the compositor.

In the section “Language” it is possible to change the language of the software.

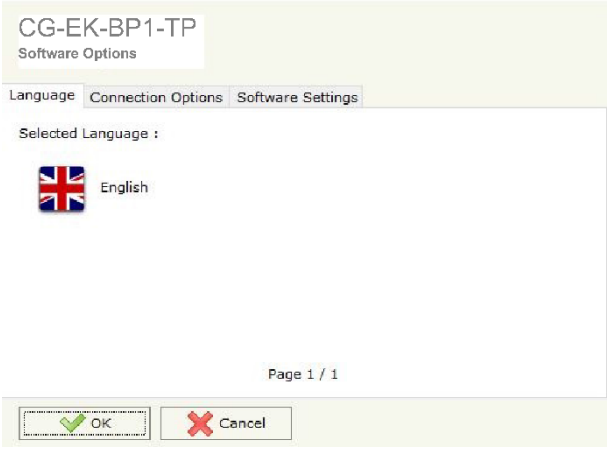

Figura 6 - Options form, Language tab

In the section “Connection Options”, it is possible to check if there are some updatings of the software compositor in ADFweb.com website.

Checking the option “**Check Software Update at Start of Program**”, the CG-EK-BP1-TP check automatically if there are updatings when it is launched.

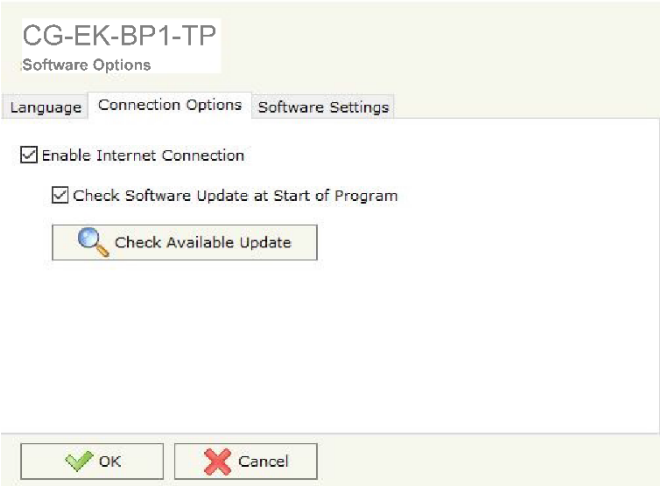

Figura 7 - Options form, Connection Options tab

In the section “Software Settings”, it is possible to enable/disable some keyboard’s commands for an easier navigation inside the tables contained in the different sections of the software.

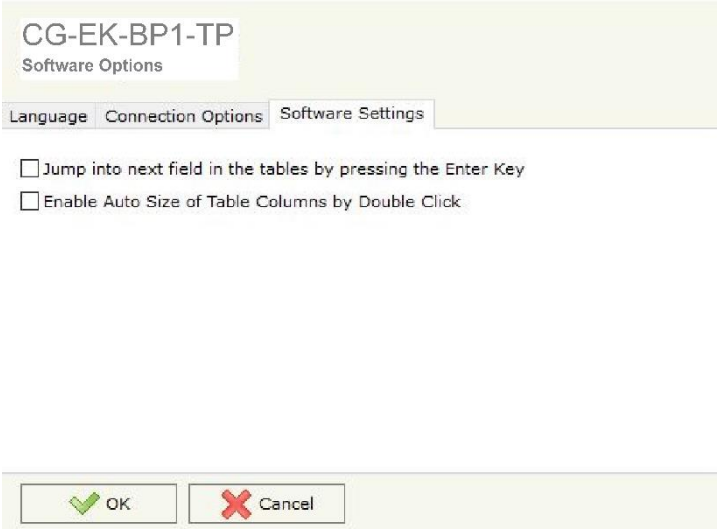

Figura 8 - Options form, Software Settings tab

5.3 Communication parameters

In this section we define the basic communication parameters for the KNX TP network and for Ethernet connection. Ethernet connection is required in order to both perform the configuration update on the device and for DALI communication.

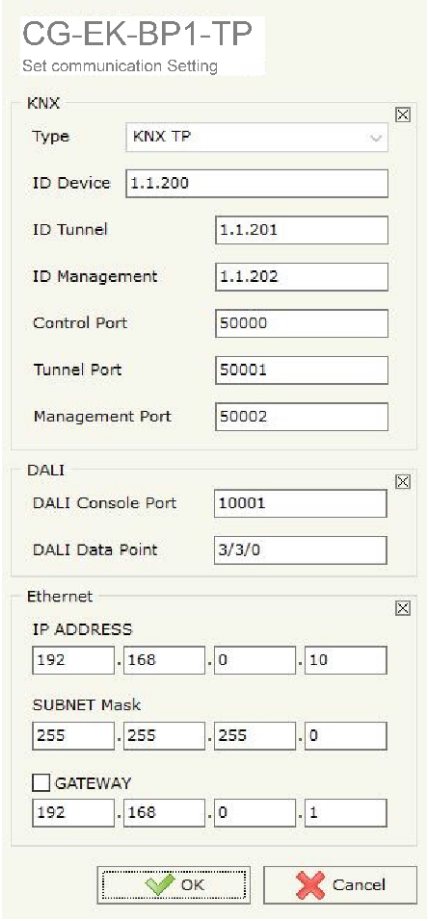

Figura 9 - Set communication form

You can access the form by pressing the *Set Communication* button in the main form (see Figure 2 – Main form of the application program).

Description of fields in *Set communication* form.

Parameter name	*Values*	*Description*
KNX		
Type	**KNX TP**	Type of connection used for KNX communication. The parameter has a constant value "KNX TP". The device supports KNX communicaton over a twisted pair communication cable.
ID Device		This parameter identifies the physical address assigned to the KNX device. The format requires the use of a dot "." as a separator beween the 3 fields: area, line and device address. Here are the conventions used for physical addressing and the values used for each field: Area field: = 0 reserved for backbone, values [1...15] Line field: = 0 reserved for main line, values [1...15] Device address field: = 0 reserved for coupler, values [1...255], range [1..64] for devices belonging to the line, above 64 for device belonging to extensions or other segments of the line. Example: 1.3.5: Area = 1; Line = 3; Device address = 5.
DALI		
Dali Consol Port		The port for the Ethernet communication with the DALI Console software is defined
Baudrate	1200	Baudrate whit serial communication
DALI Data Point		The number of stop bits to be added to the transmission/reception of a byte
Ethernet		
IP ADDRESS		IP Address (4-octet format) assigned to the device. Each octet is set in an Edit box. Default IP Address is: 192.168.2.205. This is the address assigned to the device before the first configuration or after a complete restore.
SUBNET Mask		Subnet mask assigned to the device.
GATEWAY		Gateway address used for Ethernet communication. The gateway can be enabled or disabled through the control check-box placed at the right side of the field.

By pressing the "DALI Access" button from the main window for CG-EK-BP1-TP (Fig. 2) the window "Select the DALI Device Present in the Network" appears (Fig. 10). This section is used to define the DALI devices connected to the converter. It is enough to check/uncheck the connected/unconnected DALI devices.

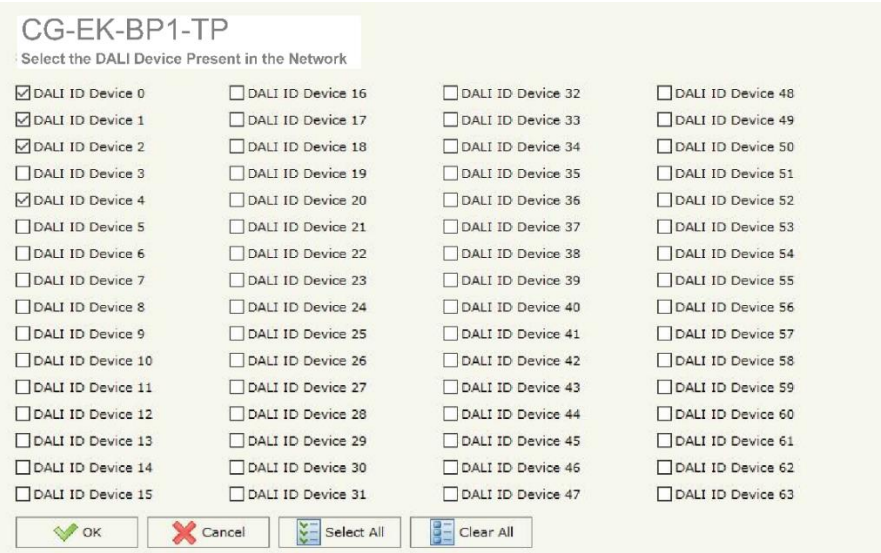

Figura 10 - DALI Access window

5.4 Configuration update

The implemented configuration and possibly the updated firmware can be downloaded by pressing the Update Device button in the main form of the application program (see Figure 2 – Main form of the application program).

There can be 2 possible update sequences, the first in case the IP address assigned to the device is unknown, the second in case the IP address is known.

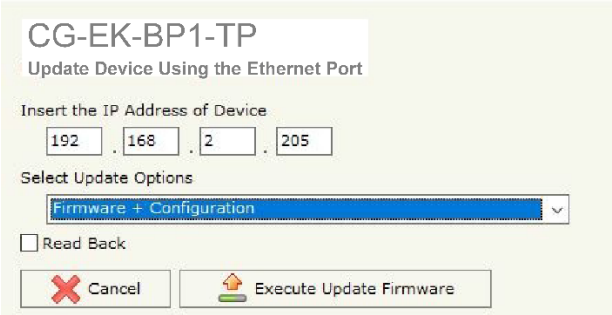

Figura 12 - Update configuration form

Sequence to follow in case of unassigned or unknown IP address:

- Power off the device;
- Set the 1-way microswitch A (see Figure 1 – Switching, display and connection elements) to ON position
- Power on the device;
- Connect PC and device by means of an Ethernet cable. Make sure that the PC's network parameters are consistent with the IP address assigned to the device in Boot Mode 192.168.2.205. Otherwise, change the PC's network settings;
- Write the IP address 192.168.2.205 inside the Update Configuration form (see Figure 12 – Update configuration form);
- Press Execute update firmware button, to start the upload;
- When all operations are completed (see Figure 13 – Update in progress) shut down the device
- Set the 1-way microswitch A (see Figure 1 – Switching, display and connection elements) to OFF position
- Power on the deviceA

If the sequence is successful, this means that firmware and/or configuration has been correctly downloaded on the device.

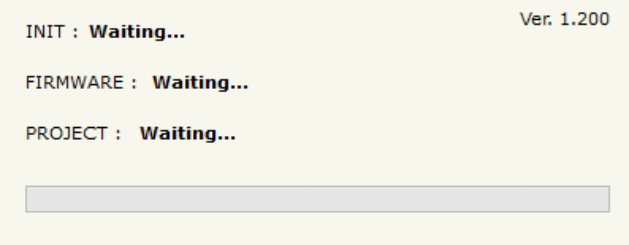

Figura 13 - Update in progress

Sequence to follow in case of known IP address:

- Power on the device with PC and device connected by means of an Ethernet cable
- Provide the device IP address (see Figure 12 – Update configuration form). Make sure that the PC's network parameters are consistent with the IP address assigned to the device. Otherwise, change the PC's network settings
- Select which operations you want to do;
- Press the "Execute update firmware" button to start the upload;
- When all the operations are "OK" the device automatically goes at Normal Mode.

If the sequence is successful, this means that firmware and/or configuration has been correctly downloaded on the device.

It is recommended to update the firmware when a new version of the application program is installed or when configuring the device for the first time.

In case the update procedure goes into PROTECTION mode (see Figure 14 – Update error, "Protection" mode), you may want to check the following:

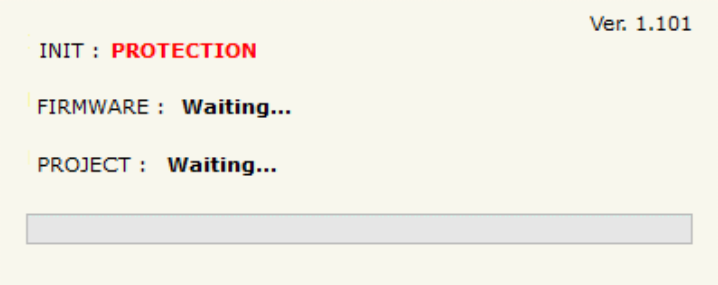

Figura 14 - – Update error, "Protection" mode

- Repeat the update sequence
- Reboot your PC
- When running the program on a Virtual Machine, close it and rerun the program using the primary OS
- When using Windows 7 or later, make sure the user has administrator privileges
- Pay attention to firewall settings
- Check LAN configuration

In case of manual firmware update, replace "Sim67814.sim" file in the system folder "C:\Program Files (x86)\Ekinex\Compositor_CG-EK-BP1-TP". After replacing, open Update configurazione form (see Figure 12 – Update configuration form) in the application program and start the proper sequence.

5.5 Configurazione DALI console

To configure DALI network and test the communication, it is possible to use the available software that runs with Windows called “DALI Console”. It is downloadable on the site http://en.ekinex.com/ and its operation is described in this document. *(This manual is referenced to the last version of the software present on our web site)*. The software works with MSWindows (XP, Vista, Seven, 8, 10; 32/64bit).

When launching the DALI Console, the window below appears (Fig. 7).

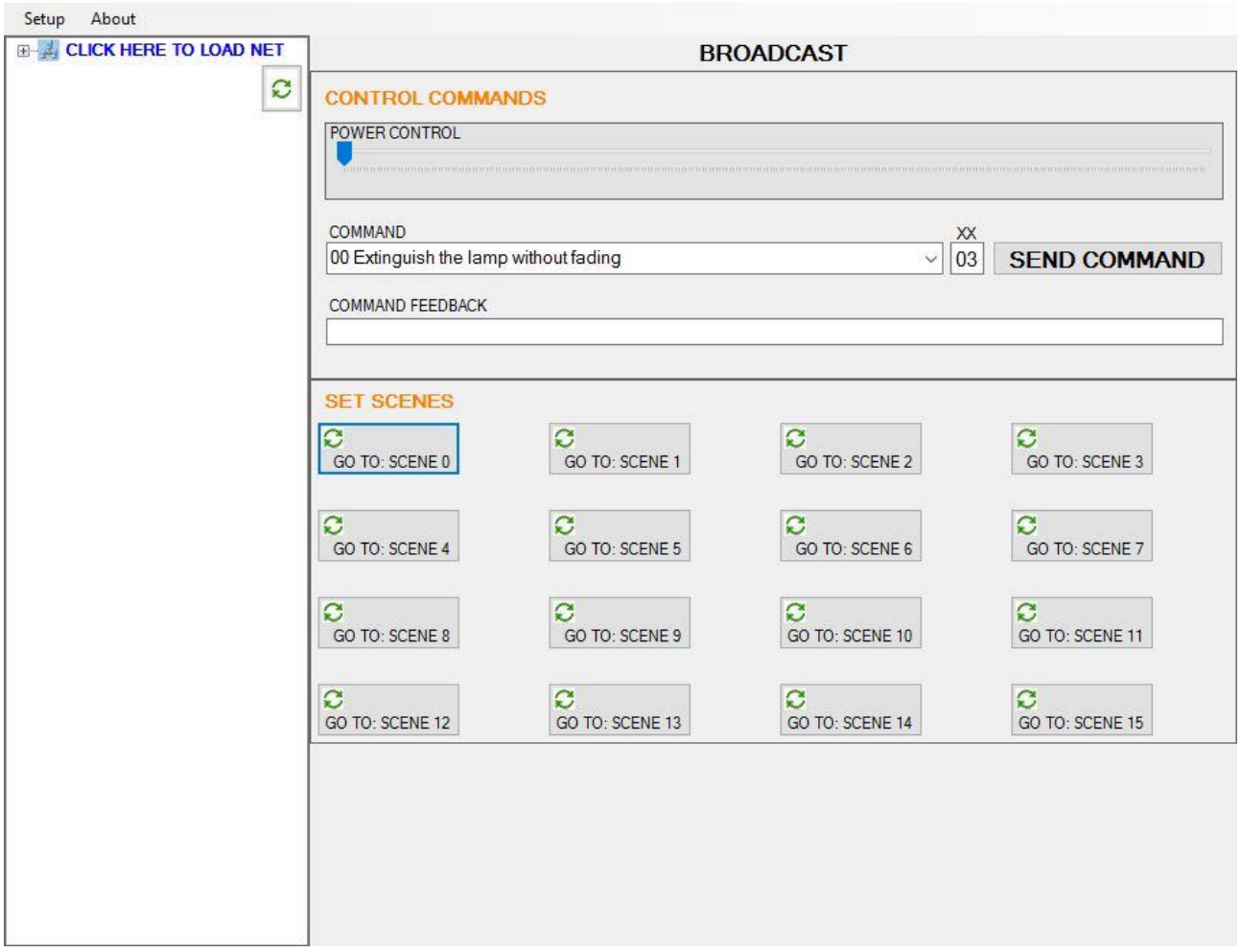

Figura 15 – Main window for DALI Console

5.6 Structure of the sotware

The software layout is very simple and it is structured in this way:

- “Menu bar” (Fig. 16, Point 1): it is possible to open the setup window and see the informations about the DALI Console software;
- “Network view” (Fig. 16, Point 2): it is possible to see all the DALI devices connected to the HD67822 converter, the groups and the scenes set;
- “Settings / commands view” (Fig. 16, Point 3): it is possible to set and manage the parameters to the single DALI device, to the groups or for the full network.

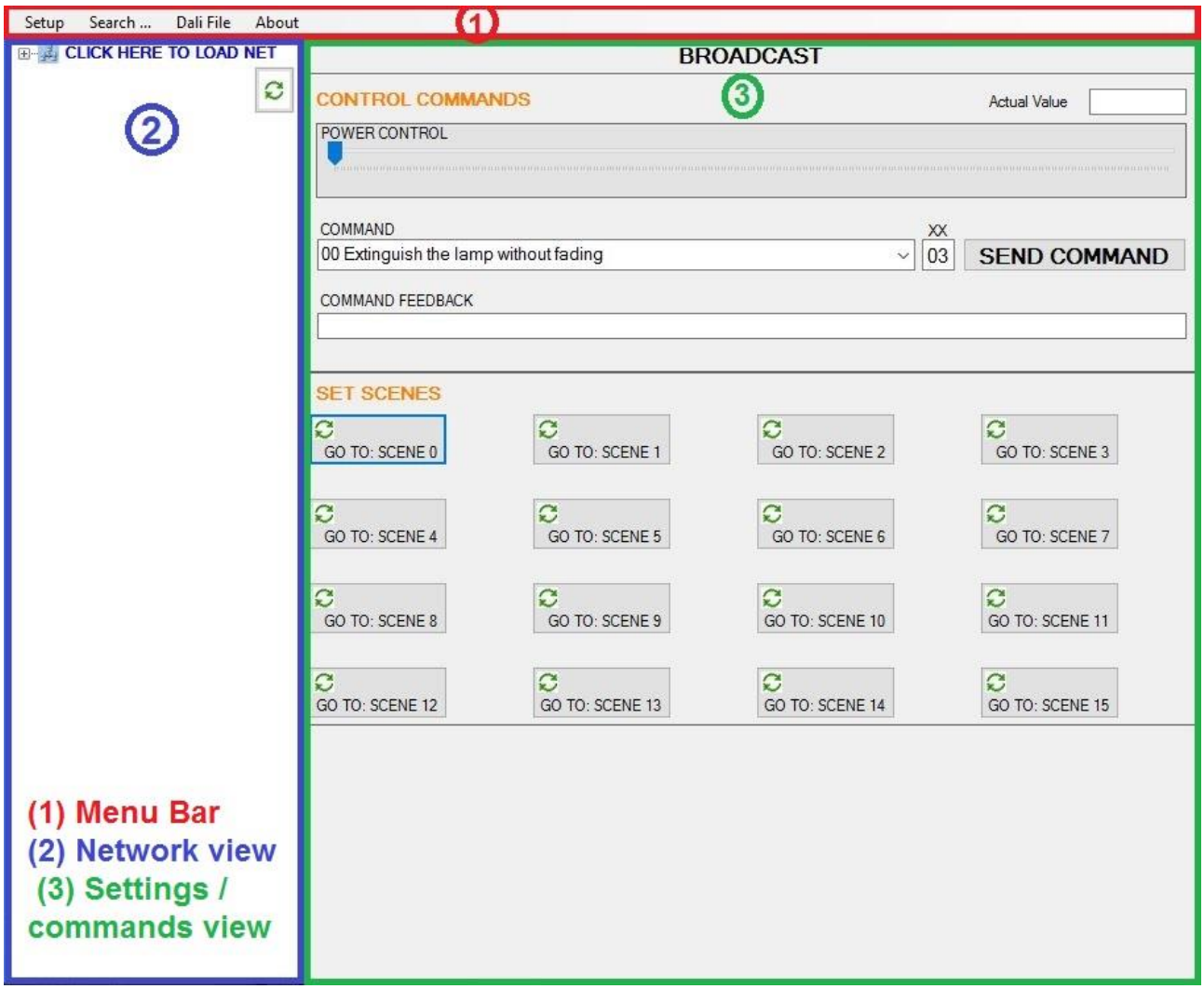

Figura 16 – Structure of DALI Console software

SETUP

This section defines the connection's parameters to the Ethernet side of the DALI converter.

By Pressing the "Setup" button from the menu bar of the DALI Console software, the "SETUP" window appears (Fig. 17).

Figura 17 – Finestra Principale struttura software del DALI Console

The means of the fields for the "SETUP" window are:

- In the field "DEVICE IP ADDRESS" insert the IP address set inside the converter;
- In the field "PRG PORT" insert the communication port used for the Ethernet communication with the converter (the one programmed);
- By pressing "SET ADDRESS ON DEVICE" button, it is possible to program the ID of the DALI node connected to the converter.

SEARCH

This section defines the devices that are mapped directly to the line connected to the DALI converter. Pressing the "Search" button from the menu bar of the DALI Console software, having entered the IP address, the device addressing is automatic (Fig. 18).

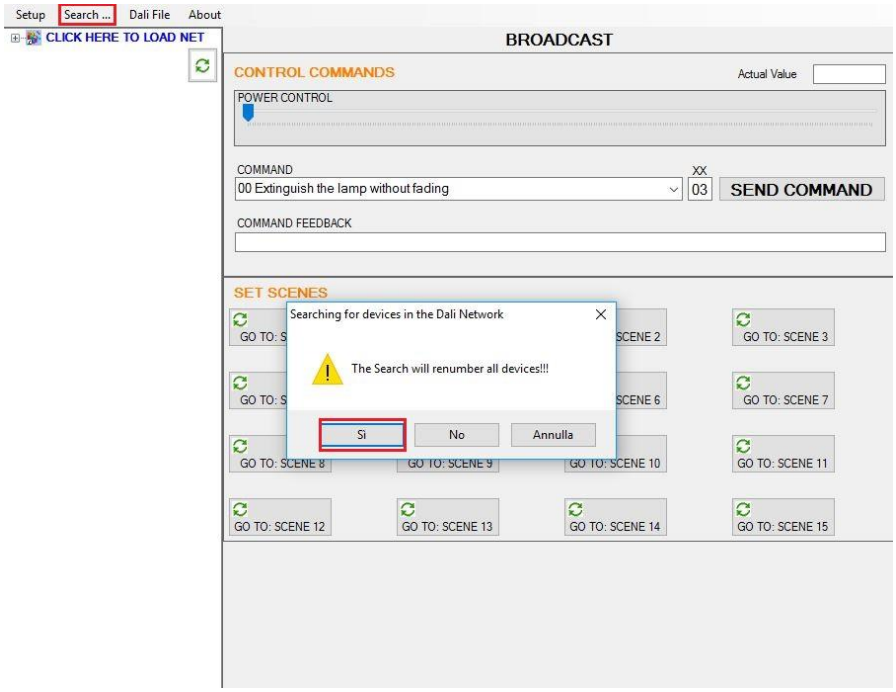

Figura 18 – Structure of DALI Console software

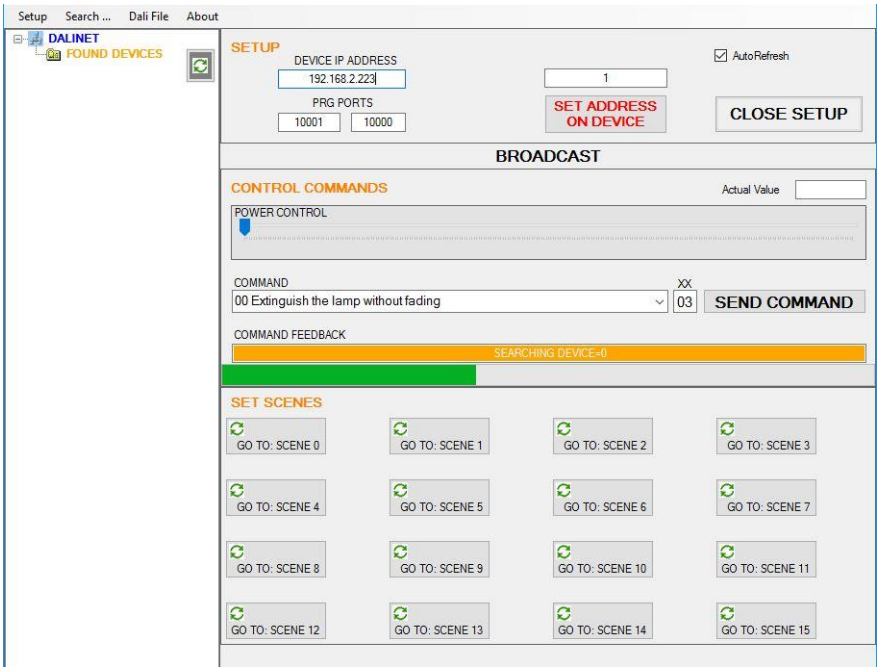

Figura 19 – Structure of DALI Console software

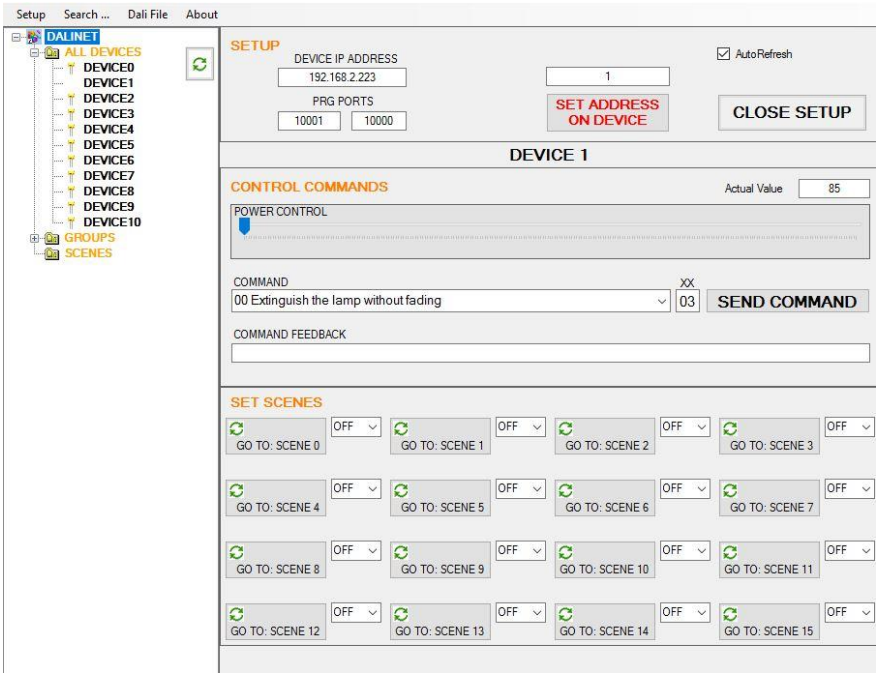

Figura 20 – Structure of DALI Console software

DALI FILE

This section defines the configurations that can be imported or saved. The saved file will be in ".txt". Pressing the "Search" button on the menu bar of the DALI Console software, you can choose "Save on File" to save the configuration or "Load from File" to import the configuration.

NETWORK SETTINGS

By pressing the button in the Network view, it is possible to scan the full DALI network and find all the DALI devices, the groups set and the scenes configured.

By selecting the single DALI devices found, the single groups, the single scene or the entire DALI network, it is possible to manage and test the functioning of the network.

DEVICE

The means of the fields for “DEVICE INFO” are:

- In the field “Device Type” the type of DALI device is printed;
- In the field “Software version” the software version of the DALI device is printed;
- In the fields “Power Range” the Min value, Actual Value and Max Value of the ADV of the DALI device is printed;
- In the fields “DEVICE STATUS” the actual status of the DALI device is printed.

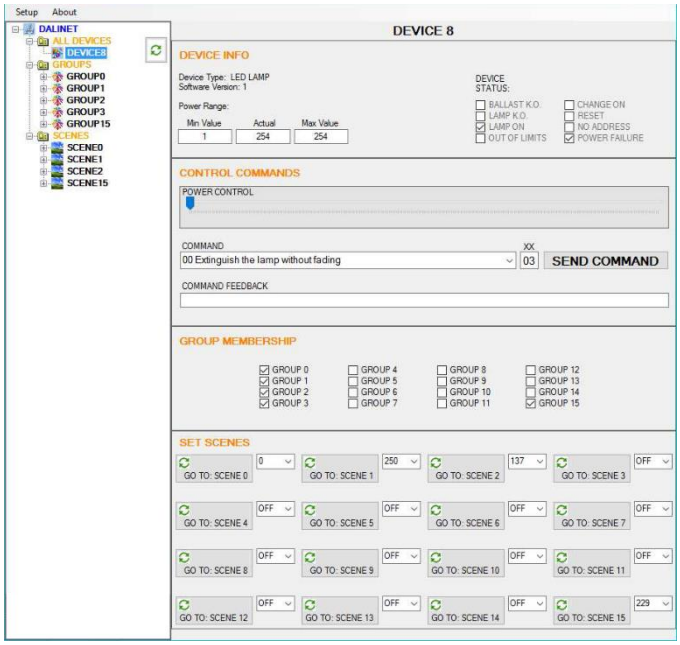

Figura 21 – “Device settings” window

This section is in Reading and it is used just to monitor the actual status of the selected DALI device.

The means of the fields for the "**CONTROL COMMANDS**" section are:

- In the "POWER CONTROL" bar it is possible to change the actual ADV of the selected DALI device;
- In the field "COMMAND" it is possible to select a DALI command to send to the selected DALI device. For set commands, it is possible to insert the value to set in the field "xx". As soon as the command to send is selected, the command is sent: in order to send the same command more times, it is possible to press the "SEND COMMAND" button;
- In the field "COMMAND FEEDBACK" the response from the DALI device is printed.

This section is used to test the functioning of the DALI device in the network and to set specific parameters if ned (like new Minimum or Maximum ADV value).

In the "**GROUP MEMBERSHIP**" section it is possible to see the Groups which the selected DALI device is in. The checked checkboxes mean that the device is in the correspondent groups, the unchecked checkboxes mean that the device is not included in the correspondent groups.

It is possible to change the group settings for the selected DALI device by checking/unchecking the correspondent checkboxes.

In the "**SET SCENES**" section it is possible to see the programmed scenes of the selected DALI device, program new ones and activate them:

- By pressing the buttons "GO TO: SCENE X" it is possible to activate the correspondent scene inside the selected DALI device; the programmed ADV for the selected scene is defined in the drop-down list on the right;
- By selecting a value into the drop-down lists next to the "GO TO: SCENE x" buttons, it is possible to set the ADV associated to the correspondent scene. It is possible to select:
    - o Value between 0 and 255: the scene will have the defined value of ADV;
    - o ACT: the scene will take the programmed ADV value into the "POWER CONTROL" bar;
    - o OFF: the scene is disabled.

GROUPS:

The means of the fields for the "CONTROL COMMANDS" section are:

- In the "POWER CONTROL" bar it is possible to change the actual ADV of the selected DALI group;
- In the field "COMMAND" it is possible to select a DALI command to send to the selected DALI group. For set commands, it is possible to insert the value to set in the field "xx". As soon as the command to send is selected, the command is sent: in order to send the same command more times, it is possible to press the "SEND COMMAND" button;
- In the field "COMMAND FEEDBACK" the response from the DALI group is printed.

This section is used to test the functioning of the DALI groups in the network.

In the "SET SCENES" section it is possible to activate the programmed scenes to the selected group:

- By pressing the buttons "GO TO: SCENE X" it is possible to activate the correspondent scene inside the selected DALI group.

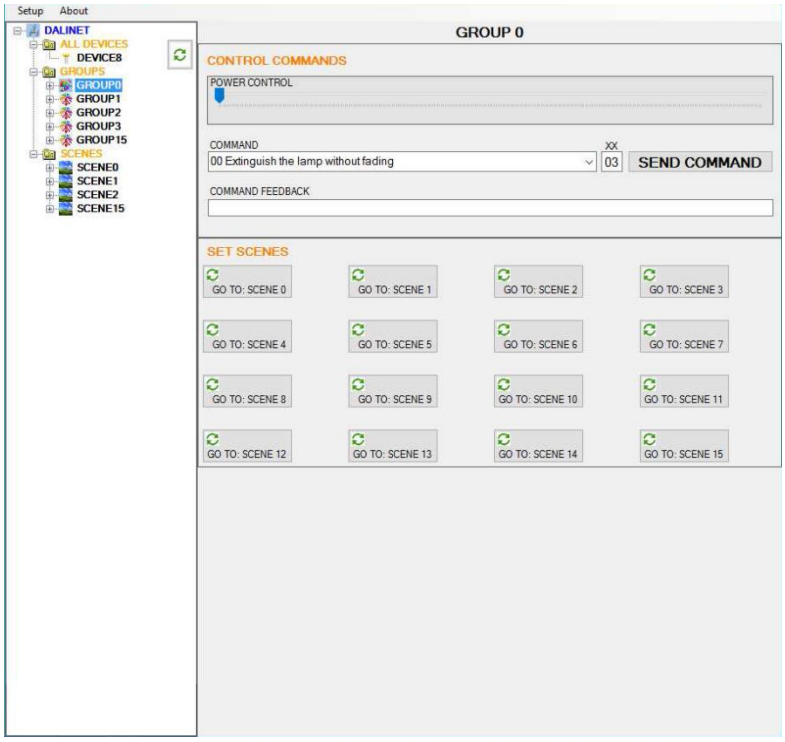

Figura 22 – "*Groups settings" window*

SCENES:

By selecting a DALI scene from the Network view, it is possible to see the devices that have programmed the selected scene. It is also possible to activate it by pressing the "ACTIVATE SCENE X" button.

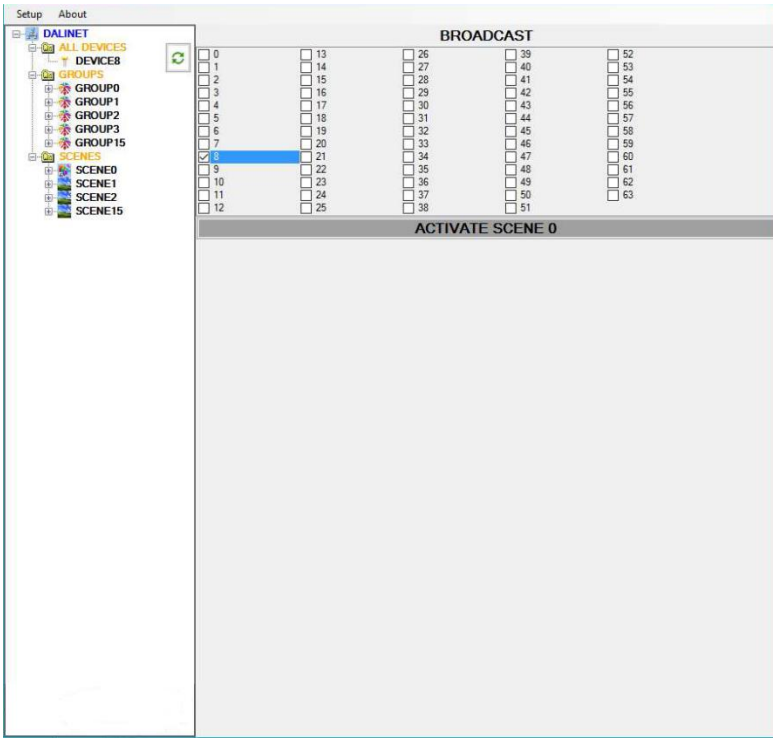

Figura 23 – "*Scenes settings" window*

ALL DEVICES (BROADCAST)

The means of the fields for the "**CONTROL COMMANDS**" section are:

- In the "POWER CONTROL" bar it is possible to change the actual ADV of the entire DALI network;
- In the field "COMMAND" it is possible to select a DALI command to send to the entire DALI network. For set commands, it is possible to insert the value to set in the field "xx". As soon as the command to send is selected, the command is sent: in order to send the same command more times, it is possible to press the "SEND COMMAND" button;
- In the field "COMMAND FEEDBACK" the response from the DALI network is printed.

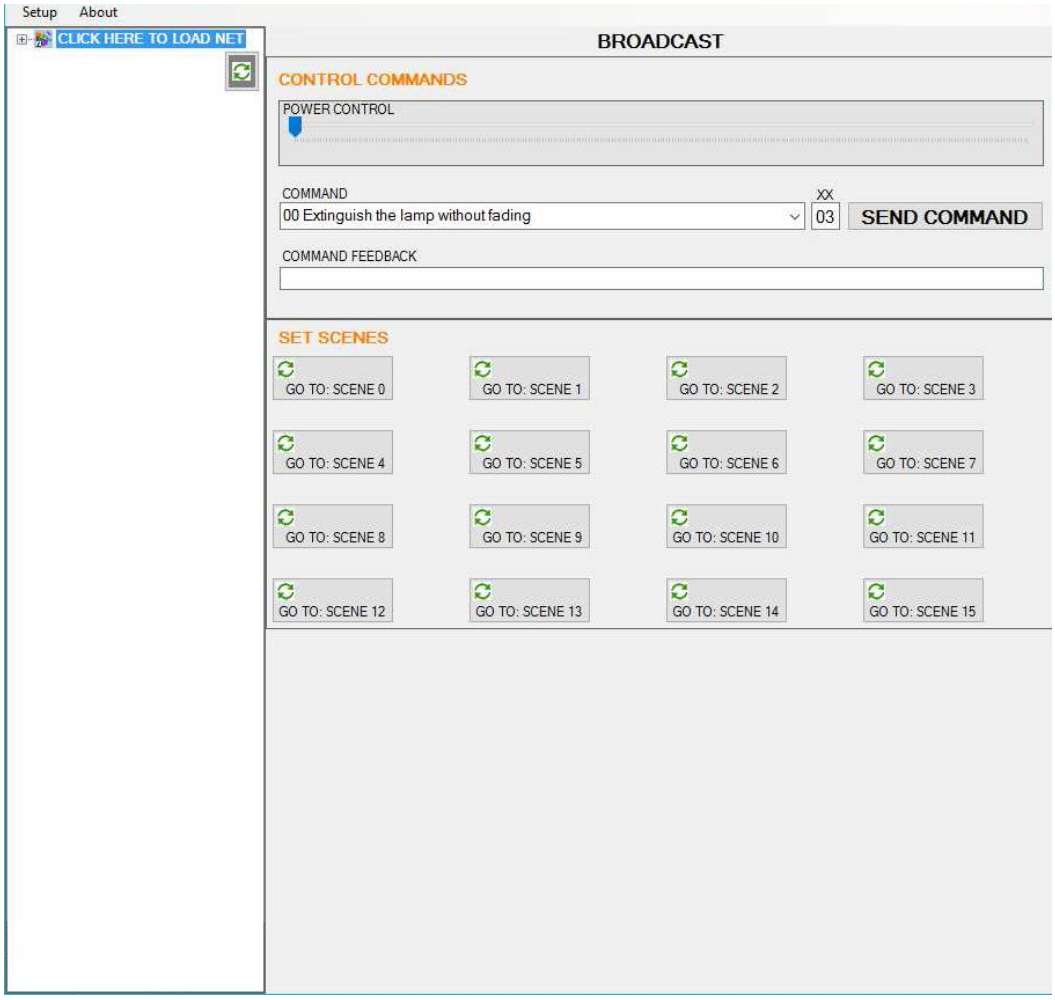

Figura 24 – "Broadcast settings" window

This section is used to test the functioning of theDALI network.

In the "SET SCENES" section it is possible to activate the programmed scenes into all the DALI devices that have them:

- By pressing the buttons "GO TO: SCENE X" it is possible to activate the correspondent scene in the DALI network. Only the devices that have it will accept the command.

DATA MAPPING

Using the "DALI Data Point" field in the "Set Communication" section of the DALI gateway, you can define the KNX group address of the converter used to manage the DALI network.

KNX Map Structure in OUT (readable by KNX)

Starting from the first data point KNX, the converter creates KNX points that will contain the ballast information inside the DALI lamp.

- You can activate the datapoint by writing the intensity directly (datapoint type 5.001)
- You can activate the datapoint by writing the intensity in dimmer mode (datapoint type 3.007)
- You can activate the datapoint by writing the intensity in switching mode (datapoint type 1.001)

You will then be able to enter group addresses in this configuration

- Individual Ballast ID: 0-63 or 128 -191
- Group IDs: 64-79 or 192-207
- Broadcast IDs: 80 or 208

Please note

The values that I can assume group addresses from *0 to 80* can be data type 5.001 (then direct value from 255) or datapoint type 1.001 (ON / OFF switching)

The values that can assume group addresses from *128 to 208* can be either datapoint type 3.007 (dimmer) or datapoint type 5.001 (then direct value from or 255)

You can read with a KNX read request

ADV READING FOR SINGLE DALI NODES	
Offset	**Description**
0 o 128	ADV to set on DALI node 0
1 o 129	ADV to set on DALI node 1
2 o 130	ADV to set on DALI node 2
3 o 131	ADV to set on DALI node 3
4 o 132	ADV to set on DALI node 4
5 o 133	ADV to set on DALI node 5
6 o 134	ADV to set on DALI node 6
7 o 135	ADV to set on DALI node 7
8 o 136	ADV to set on DALI node 8
9 o 137	ADV to set on DALI node 9
10 o 138	ADV to set on DALI node 10
11 o 139	ADV to set on DALI node 11
12 o 140	ADV to set on DALI node 12

13 o 141	ADV to set on DALI node 13
14 o 142	ADV to set on DALI node 14
15 o 143	ADV to set on DALI node 15
16 o 144	ADV to set on DALI node 16
17 o 145	ADV to set on DALI node 17
18 o 146	ADV to set on DALI node 18
19 o 147	ADV to set on DALI node 19
20 o 148	ADV to set on DALI node 20
21 o 149	ADV to set on DALI node 21
22 o 150	ADV to set on DALI node 22
23 o 151	ADV to set on DALI node 23
24 o 152	ADV to set on DALI node 24
25 o 153	ADV to set on DALI node 25
26 o 154	ADV to set on DALI node 26
27 o 155	ADV to set on DALI node 27
28 o 156	ADV to set on DALI node 28
29 o 157	ADV to set on DALI node 29
30 o 158	ADV to set on DALI node 30
31 o 159	ADV to set on DALI node 31
32 o 160	ADV to set on DALI node 32
33 o 161	ADV to set on DALI node 33
34 o 162	ADV to set on DALI node 34
35 o 163	ADV to set on DALI node 35
36 o 164	ADV to set on DALI node 36
37 o 165	ADV to set on DALI node 37
38 o 166	ADV to set on DALI node 38
39 o 167	ADV to set on DALI node 39
40 o 168	ADV to set on DALI node 40
41 o 169	ADV to set on DALI node 41
42 o 170	ADV to set on DALI node 42
43 o 171	ADV to set on DALI node 43
44 o 172	ADV to set on DALI node 44
45 o 173	ADV to set on DALI node 45
46 o 174	ADV to set on DALI node 46
47 o 175	ADV to set on DALI node 47
48 o 176	ADV to set on DALI node 48
49 o 177	ADV to set on DALI node 49
50 o 178	ADV to set on DALI node 50
51 o 179	ADV to set on DALI node 51
52 o 180	ADV to set on DALI node 52
53 o 181	ADV to set on DALI node 53
54 o 182	ADV to set on DALI node 54
55 o 183	ADV to set on DALI node 55
56 o 184	ADV to set on DALI node 56
57 o 185	ADV to set on DALI node 57

58 o 186	ADV to set on DALI node 58
59 o 187	ADV to set on DALI node 59
60 o 188	ADV to set on DALI node 60
61 o 189	ADV to set on DALI node 61
62 o 190	ADV to set on DALI node 62
63 o 191	ADV to set on DALI node 63

For example:

Assuming that the "DALI Data Point" set is '3/3/0', to write a value on the BALLAST DALI 27, you need to enter the value at the group address KNX 3/3/27 (Data Point + DALI Offset = 3/3/0 + 27 = 3/3/27).

To handle groups, you can write within KNX groups (such as 1 byte):

You can read with a KNX read request

ADV SETTING FOR GROUPS	
Offset	**Description**
64 o 192	ADV to set on Group 0
65 o 193	ADV to set on Group 1
66 o 194	ADV to set on Group 2
67 o 195	ADV to set on Group 3
68 o 196	ADV to set on Group 4
69 o 197	ADV to set on Group 5
70 o 198	ADV to set on Group 6
71 o 199	ADV to set on Group 7
72 o 200	ADV to set on Group 8
73 o 201	ADV to set on Group 9
74 o 202	ADV to set on Group 10
75 o 203	ADV to set on Group 11
76 o 204	ADV to set on Group 12
77 o 205	ADV to set on Group 13
78 o 206	ADV to set on Group 14
79 o 207	ADV to set on Group 15

ADV SETTING (BROADCAST)	
Offset	**Description**
80 o 208	ADV to set

For example:

Supposing that the “DALI Data Point” set is ‘3/3/0’, in order to write the ADV of the DALI node 27, it is necessary to write the KNX Group Address 3/3/27 (DALI Data Point + Offset = 3/3/0 + 27 = 3/3/27).

If we want to write the Group 2, it is necessary to write the KNX Groups Address 3/3/66.

SCENE CONTROL	
Offset	**Description**
81	Scene 0 management's KNX group address
82	Scene 1 management's KNX group address
83	Scene 2 management's KNX group address
84	Scene 3 management's KNX group address
85	Scene 4 management's KNX group address
86	Scene 5 management's KNX group address
87	Scene 6 management's KNX group address
88	Scene 7 management's KNX group address
89	Scene 8 management's KNX group address
90	Scene 9 management's KNX group address
91	Scene 10 management's KNX group address
92	Scene 11 management's KNX group address
93	Scene 12 management's KNX group address
94	Scene 13 management's KNX group address
95	Scene 14 management's KNX group address
96	Scene 15 management's KNX group address

For example:

Supposing that the "DALI Data Point" set is '3/3/0', in order to write the set the scene 4 in the group 5, it is necessary to write the value '68' into the KNX Group Address 3/3/85.

6 Warning

- Installation, electrical connection, configuration and commissioning of the device can only be carried out by qualified personnel.
- Opening the housing of the device causes the immediate end of the warranty period.
- Ekinex® KNX defective devices must be returned to the manufacturer at the following address:

SBS S.p.A. Via Circonvallazione s / n, I-28010 Miasino (NO) Italy.

7 Other information

- This application manual is aimed at installers, system integrators and planners
- For further information on the product, please contact the ekinex® technical support at the e-mail address: support@ekinex.com or visit the website http://en.ekinex.com/
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