

DaliControl Service and Comisioning Wizard Version 1.1

Softwaretool

User Manual

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1. Overview

First of all we would like to thank you for choosing IPAS hard and software. The **DaliControl Service and Commissioning Wizard** is a powerful software tool for commissioning IPAS DALI Gateways from the DaliControl product range. The usage of the tool is optional. All IPAS DaliControl devices can also be commissioned directly on the device without software tool. In addition to the **DaliControl Service and Commissioning Wizard** the EIB Tool Software (ETS) is also required for commissioning in order to be able to program the physical addresses of the gateways, allocate group addresses and set device specific parameters.

The software tool makes the commissioning of DALI installations easier, particularly with regard to the identification and allocation of connected lights with electronic control gear (ECG). As the gateways used for connecting EIB and DALI are implemented in distributor or switch cupboards and the lights are therefore usually not directly visible from the device, the identification of the lights is often problematic. By using the tool, the identification can now be undertaken locally at the installation site. All that is required is an EIB access, to which a serial interface is temporarily connected. As EIBnet/IP devices can also be used as communication interface, the possibility exists to use radio communication via a wireless local area network (WLAN connection) for commissioning. The commissioning technician can thereby move around with a notebook within the installation and carry out the work.

This handbook describes the softwaretool **DaliControl Service and Commissioning Wizard** in detail and serves as reference for all implemented functions.

2. Installation

2.1. Installation requirements

The software tool DaliControl Service and Commissioning Wizard can be installed on any PC with either Windows 2000 or Windows XP operating system. The required space on the hard drive is around 15 MByte. Please ensure before beginning the installation that enough space is available on the hard drive. We recommend devices with at least 1GHz tact frequency and 256MB RAM processor.

2.2. Requirements for DALI commissioning

The software tool DaliControl Service and Commissioning Wizard has been developed solely for commissioning IPAS DALI-Gateways from the DaliControl product range. Devices from other product ranges or devices by other manufacturers are not supported by the software.

At present the product range includes the following devices:

- DaliControl SC16 Order number: 3927-145-01

It needs to be remembered that the tool only functions fully for devices from firmware version 1.5 upwards. Devices with the older firmware versions 1.1 to 1.4 can only be operated with the tool to a limited extent. Reading out older devices of this type (for backup), however, is possible without limitations.

Devices with firmware version 1.0 must not be used with the tool. The respective version of the DALI-Gateways is shown on the device display after connecting to power supply.

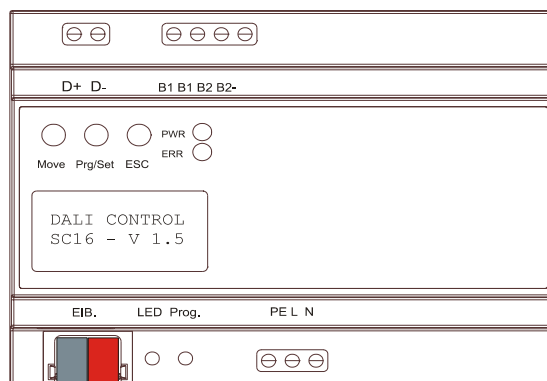


Figure 1 – DALI Gateway, firmware version information

The tool is connected with the gateway via the EIB by means of a connected interface. At present any RS232 interfaces and USB interfaces as well as EIB/Net-IP interfaces (e.g. IPAS ComBridge -NCI) are supported.

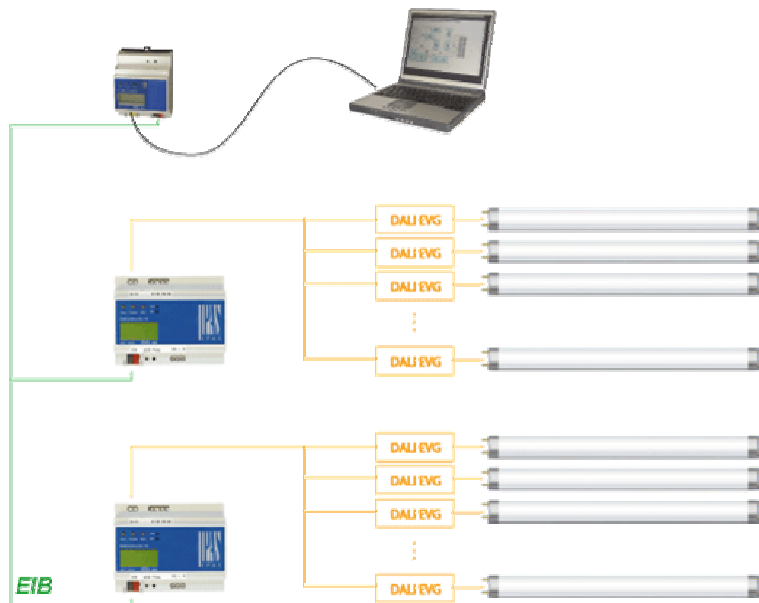


Figure 2 – Communication via connected interface

If an EIBnet/IP interface is used for communication, the connection to the notebook can also be made via a WLAN radio connection. In addition to the interface and the notebook with WLAN card this also requires a suitable WLAN router. Please see the advice of the respective manufacturers for the exact procedure.

2.3. Setup

A simple installation setup is available for the installation of the software tool DaliControl Service and Commissioning Wizard. The setup can be downloaded directly from the Customer Center on the IPAS Homepage www.ipas-products.com. Alternatively you can order an installation CD with the setup under order number 3927-32-01.

If you are using the download version of the software, please copy the file **Setup_DALIControlSCW_10000.exe** to your hard drive. Create a new directory, e.g. **c:\install\dali**. Initiate the setup by double-clicking Windows Explorer. If you are using the CD version of the software, the setup can be started directly from the installation CD. After initiating the setup the software will guide you through the installation process.

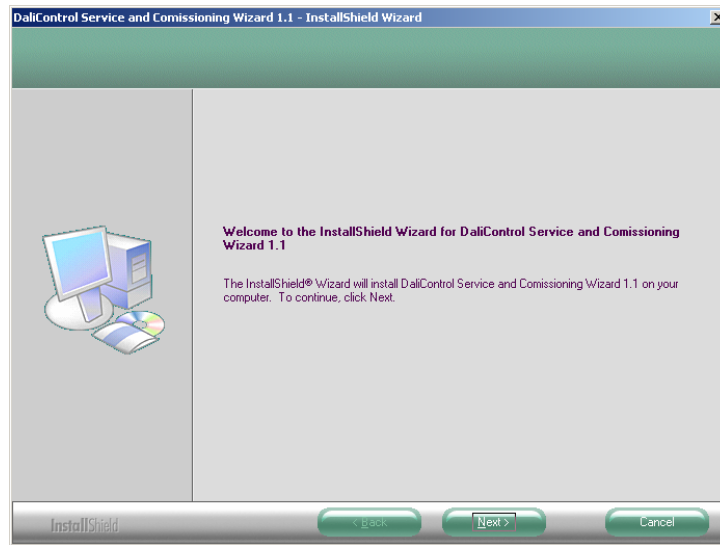


Figure 3 –DaliControl Service and Comissioning Wizard, setup initiation

We recommend using the standard installation (Typical) for the software. A specifically adapted installation should only be used by experts.

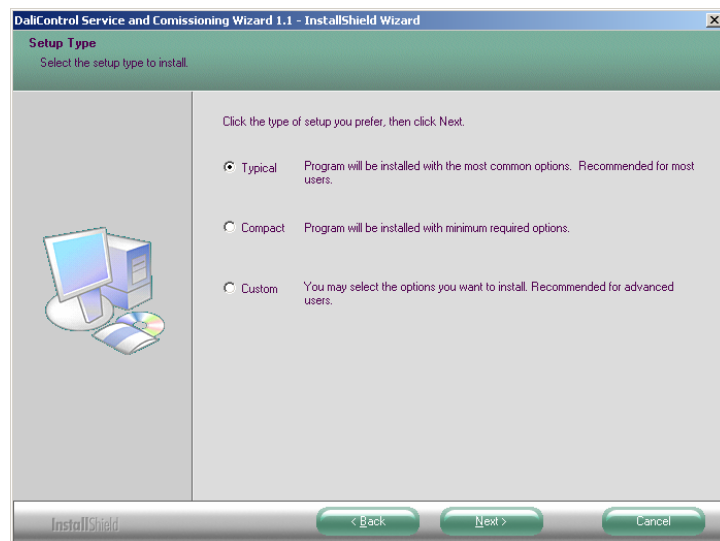


Figure 4 –DaliControl Service and Comissioning Wizard, setup modification

Please close any open programs after completing the installation and restart the computer. After the restart the software tool is ready to use.

3. Working with the tool

3.1. Control Panel

The software tool can be operated and all settings be performed via the control panel which appears after loading the program.

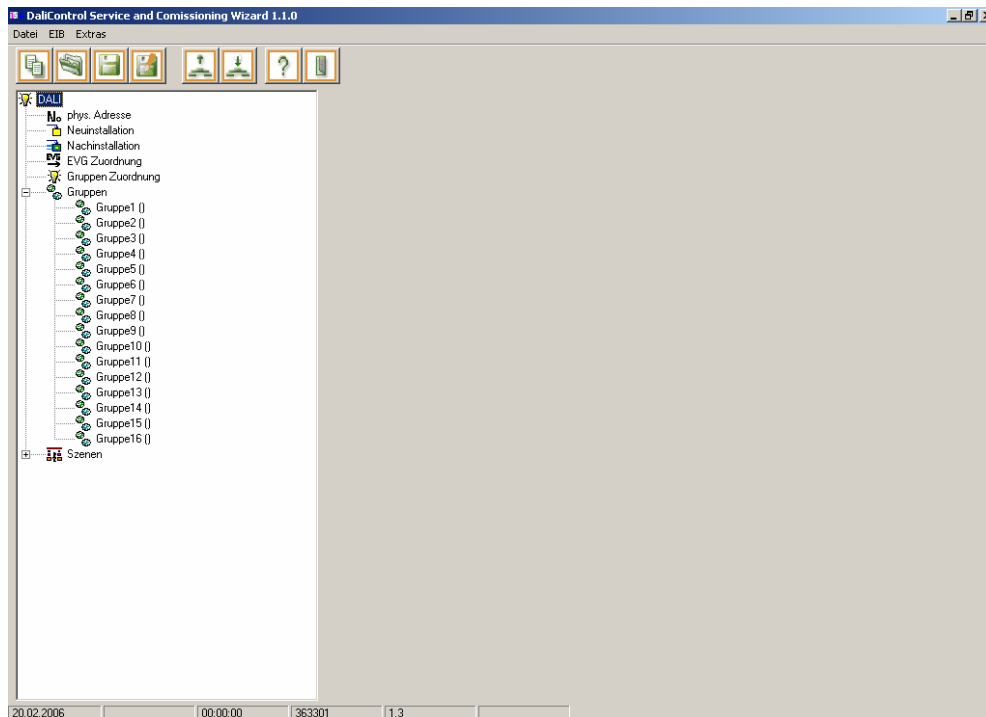


Abbildung 5 –DaliControl Service and Comissioning Wizard, Control Panel

The control panel structure is similar to Windows Explorer and is therefore generally easy to use.

3.2. Menu structure of the control panel

The main menu of the control panel is divided into three menu points with different entries:

3.2.1. File

The menu point File contains the following entries:

- **New**

Creates a new and empty device file. Please remember that all changes in the tool are lost if you use New.

- **Open device file**

Opens an existing device file

- **Save device file**

Saves the device file under the existing file name

- **Save device file as**

Saves the device file under a new file name

- **End**

Closes the control panel and ends the program

3.2.2. EIB

The menu point EIB contains the following entries:

- **Program DALI PC → EIB**

Loads the read-out or changed device data into the DALI Gateway with the respective physical address.

- **Read DALI EIB → PC**

Reads out device data from a connected DALI Gateway with the respectivr physical address.

3.2.3. Extras

The menu point Extra contains the following entries:

- **Interface**

Under this menu point you can set the possible interfaces for connecting the tool with the EIB. At present four different interface types are available: RS-232 interface standard, RS-232 interface FT1.2, USB interface, EIBnet/IP interface

- **Version**

This menu point informs about the currently installed version of the software tool.

- **Language**

This menu point allows setting the language of the tool. Presently available languages are: English, German and Spanish

3.3. Action-Toolbar of theControl Panel

The most important program functions can be directly performed via the action tool bar. The functions are visualized by self-explanatory ICONS. If the cursor remains above an ICON for a certain amount of time, a brief explanation of the function appears (Tool-Tip). The following functions are available:



- **Create new file**

This function creates a new and empty device file. Please remember that all changes in the tool are lost if you use this function.



- **Open file**

This function opens an existing device file.



- **Save file**

This function saves under the existing file name.



- **Save file as**

This functions saves under a new file name.



- **Read device EIB → PC**

This menu point allows the readout of device data from a connected DALI Gateway with the set physical address.



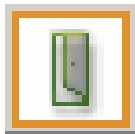
- **Program device PC → EIB**

This menu point allows the loading of read or changed device data into the DALI Gateway with the set physical address.



- **Info**

This function informs about the currently installed version of the software tool.



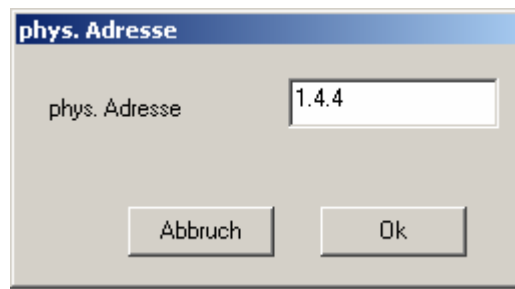
- **Exit**

This function closes the control panel and ends the program.

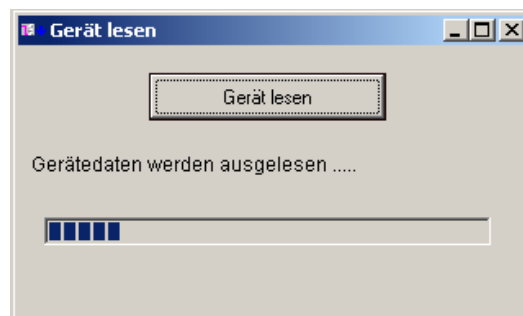
3.4. DALI-Data back up with the tool

An important function which is performed by the software tool DaliControl Service and Comissioning Wizard is the readout of DALI device data from an existing, already programmed IPAS DALI-Gateway for data backup. The readout can be performed from any Gateway (from firmware version 1.1 upwards) independent of whether it has been previously commissioned with the software tool or directly on the device. The data can be saved in the device file. In case of a device exchange the data can be used to program a new device. Thereby the cumbersome process of new installation and group allocation of the DALI segment can be avoided. To save the data, you should proceed as follows:

First choose the menu point Physical Address from the function tree. Please enter the physical address of the desired DALI-Gateway in the now open window:



The readout can be started via the action tool switch **Read device EIB → PC**.



After completing the reading process the window is closed automatically. You can now enter the device data under a suitable file name, e.g. Office_Dali_1_4_4.dal.

The device file is now saved and in case of a necessary exchange of the DALI-Gateways the data can be imported into the new Gateway with the function **Program device PC → EIB**.

3.5. DALI-Commissioning with the tool

As an alternative to commissioning the DALI-Segments through the buttons and display of the device, the segments can also easily be commissioned by using the software tool DaliControl Service and Commissioning Wizard. Commissioning with the tool has the advantage that it can be performed anywhere within the EIB installation in the building, where a serial interface (also temporary) is connected.

Please remember that the communication with the connected gateways is performed on basis of the physical addresses of the devices. This means that before working with the tool the physical addresses of the DALI Gateways need to be allocated with ETS as usual. The parametered application programs can also be loaded into the gateways with ETS before commissioning DALI. You need to ensure that all DALI – ECGs have been connected to the respective DALI segment and are ready to use.

In order to install DALI, proceed as follows:

3.5.1. Setting the correct interface

First set the correct connected interface type and the communication parameter via the menu point Extras → Interface:

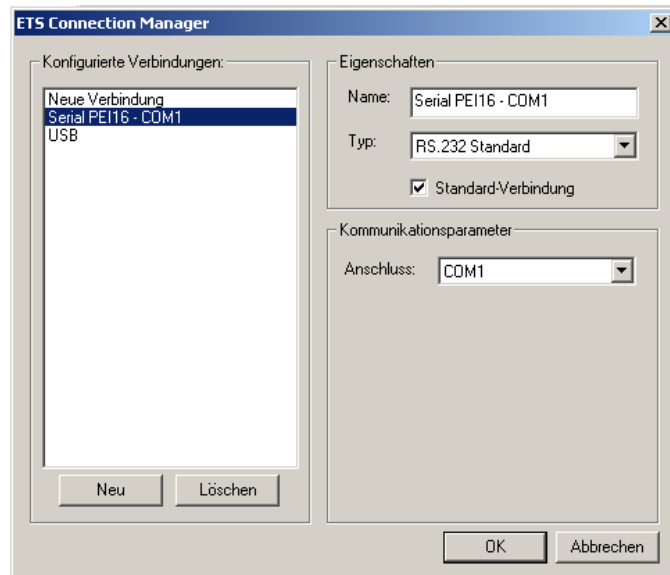
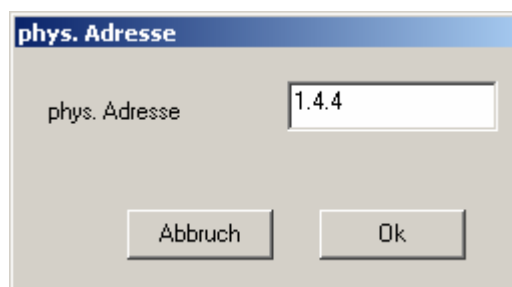


Figure 6 –Setting the interface and communication parameter

3.5.2. Setting the physical address

Now choose the menu point physical address from the function tree. Enter the physical address of the desired DALI gateway in the now open window:



3.5.3. Starting the DALI-ECG new installation

Choose the menu point new installation from the function tree and start the installation process. Please remember that all data which may have been saved in the ECGs previously (group allocation, group parameter, scenes, etc) will be lost through the new installation. The sequence of ECGs in the DALI segment is reordered through a new installation. **Therefore, please only perform the new installation when it is absolutely necessary.**

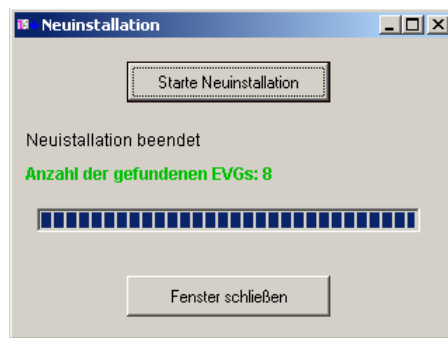


Figure 7 – DALI new installation

During the new installation process the DALI segment is searched for the connected ECGs. After completing the search, the number of ECGs found is displayed. Please check whether the number of ECGs found corresponds to the one actually installed. Should there be any discrepancies, please check your installation.

3.5.4. Identification and allocation of ECGs

During the new installation process the ECGs are arranged according to a random internal number (ECG1 up to max. ECG64). The identification of the devices and the allocation to the 1 up to 16 DALI groups is performed via the function **ECG allocation**.

If this function is invoked, the following allocation window appears:

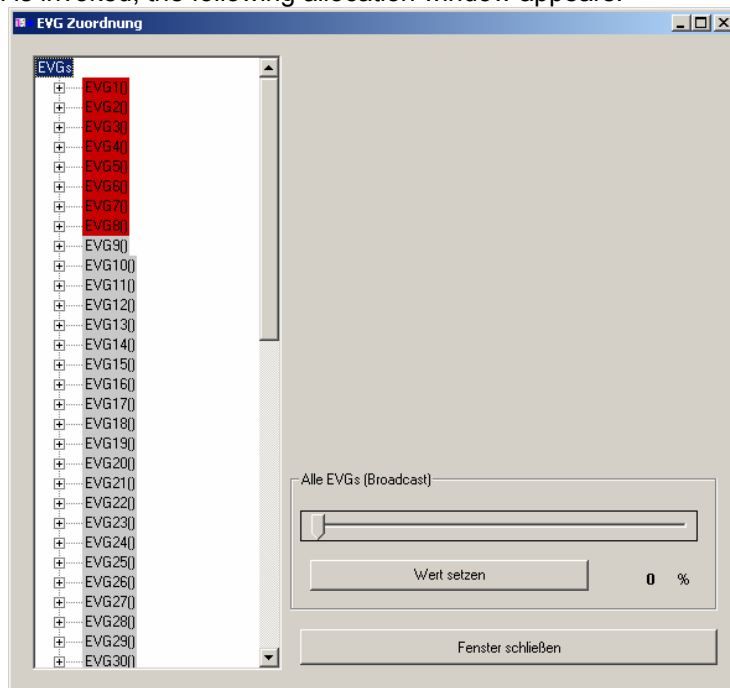


Figure 8 – ECG allocation, Overview after new installation

The ECGs found during the new installation, which have not yet been allocated to any group are highlighted in red. The grey-coloured ECGs do not exist. If you select the individual ECGs by mouse click, an additional entry field appears in the right part of the ECG allocation window.

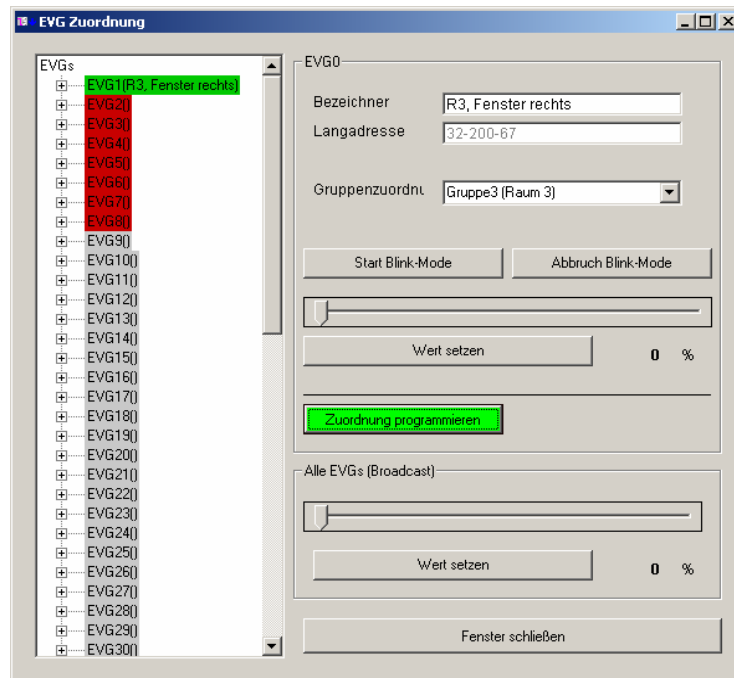


Figure 9 – EVG allocation of individual ECGs

There are different ways of identifying the selected ECG and naming the ECG or light after identification.

The usual way in DALI technology is to bring the ECG into a blink-mode. This is done with the tool via the “Start Blink-Mode – key”. After the optical identification of the blinking light, the blink-mode can be stopped by pressing the key “Stop Blink-Mode“. The blink-mode of the lights also stops automatically 30 seconds after activation. Especially in installations in which the lights of the DALI segment are spread over several rooms or difficult to see, the identification via the blink-mode can be difficult. It may therefore, potentially, be more appropriate to use an identification strategy in which the lights are switched on (100%) first by using the „Set all ECGs’ value“ button. After this the selected ECG can be switched off (0%) by pressing the individual „Set value“ button. Now it is easy to check which one is the concerned light.

The window also displays the Long Address which shows the manufacturer-specific random address of the ECG. This address cannot be changed by the user and has therefore only an informational function.

After identifying and entering a suitable name, the ECG can be directly allocated from the open window to one of 16 possible groups. Select the desired “group allocation” and click on the button “Program allocation” with the mouse. Depending on the interface used the allocation may take a few seconds. Please wait until the program confirms the successful allocation before you continue.

Once an ECG is allocated to a group, the respective colour changes from red to green.

As described above, ECGs can be allocated to individual groups directly from the ECG allocation window during identification. However, especially in installations in which many lights need to be allocated to few groups, we recommend a different allocation strategy. In such systems you should first only identify and name the ECGs. After identifying and naming all ECGs, please close the window and change to the function “group allocation”.

The following window opens:

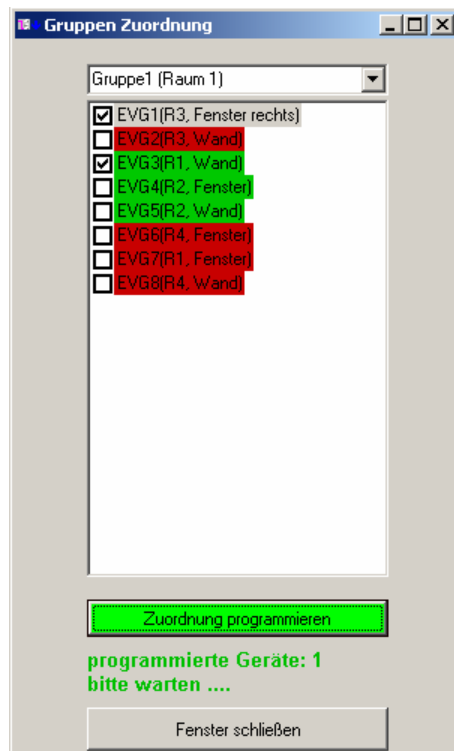


Figure 10 –Group allocation

In this window several ECGs can be selected by ticking the respective boxes and can be allocated all together to the group set in the upper part of the window. As in the other windows, already allocated ECGs are green and non-allocated ECGs red. Please remember that the individual ECGs are programmed sequentially and that the programming process may therefore take a few seconds depending on the number of the

ECGs programmed. The window may only be closed when the “please wait” sign has disappeared.

Once the ECG group allocation is completed, the system structure is displayed in the lower part of the function tree under the “group” function.

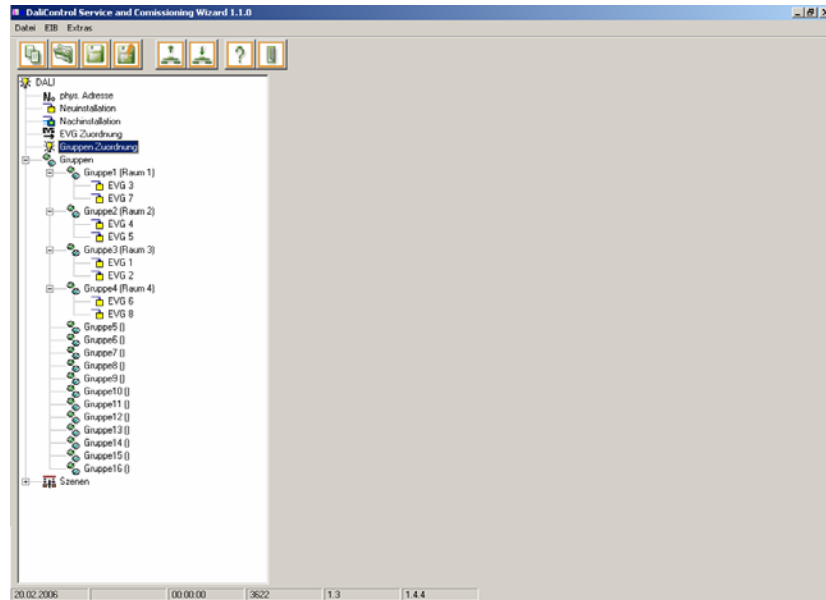
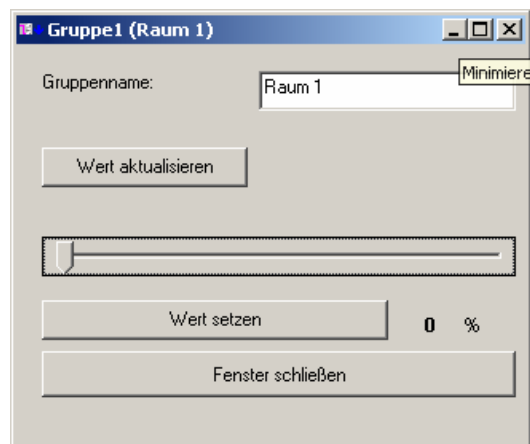


Figure 11 – Control Panel with allocated groups

If one of the groups within the function is selected, a group name can be allocated in the now open window and a test of the respective group be carried out.



After pressing the „Up-date value“ button, the currently set value of the group is displayed. The value can be changed by means of the “Set value“ button.

3.6. DALI subsequent installation with the tool

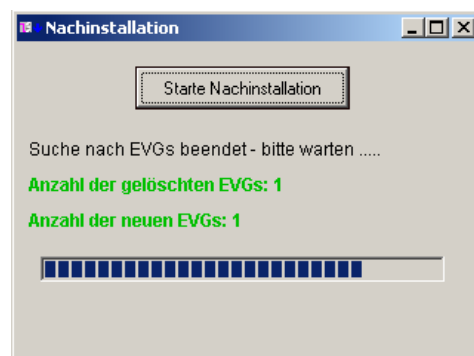
In addition to commissioning a new system, the tool can also be used effectively for subsequent installations in case of ECG exchanges or system amplification. You should first load – if available – the file corresponding to the respective device. If this file is not available as the first installation was not carried out with the tool or if you have doubts about the device file being up-to-date, download the current device data from the respective device via the action toolbar switch:



- **Read device EIB → PC**

If you carry out an installation with an invalid device file, all ECGs may be deleted from the segment and a totally new installation may become necessary.

Start the function Subsequent Installation from the function tree. The respective DALI segment is compared with the device data. ECGs that no longer exist are deleted and newly added ECGs are entered. After carrying out the installation the tool responds with the number of deleted and newly found ECGs:



If any new ECGs were found, these must still be identified and allocated to a group. The identification and group allocation is done as described under point 3.5.4.

3.7. DALI scene programming and scene testing with the tool

By means of the the software tool DaliControl Service and Commissioning Wizard you can also save and recall DALI light scenes.

In order to save a scene you first need to set the desired light situation in the respective groups. The setting can be performed either on the operating elements connected to the EIB or with the tool itself. If you wish to use the tool, open the group functions in the function tree and set the desired light value.

After setting the light situation which is to be saved in the scene, choose the desired scene from the function tree and open the following window through double-click:

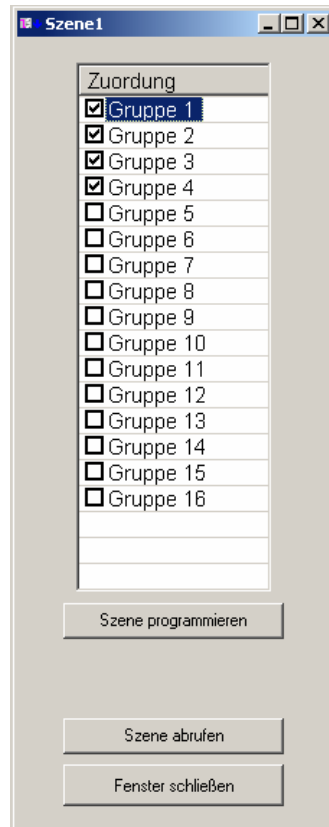


Figure 12 – Scene allocation

In this window groups can be allocated to the respective scenes by ticking the corresponding box. If you press the “Program scene” button, the set light situation is saved in the selected scene.

The respective scene can be tested by means of the “Recall scene” button.

3.8. DALI documentation with the tool

The documentation function has not been implemented in version 1.1 of the DaliControl Service and Commissioning Wizard. It will be added in one of the next versions. Please see

the news section on the IPAS homepage www.ipas-products.com where you find information about all innovations and improvements.

4. Error solution

4.1. Frequent problems and their causes

Problem:

- The setup cannot be installed.

Possible causes:

- The necessary system requirements are not met by your system (outdated operating system). Please use a permitted operating system: Windows 2000, Windows XP
- An older version of the software is already installed on your PC. Please de-install the old version.

Problem:

- The software tool does not work in the desired language.

Possible causes:

- The language setting was changed before last leaving the program. Please set the desired language under: Extras → Language and re-start the program.

Problem:

- When performing a function the window "You have not entered a valid physical address" appears.

Possible causes:

- You have not set a physical address. The tool works with reference to an address. Before you invoke specific functions, you first need to set the address or open a saved device file.

Problem:

- A function or a DALI Gateway cannot be accessed and the window "Communication Error" appears.

Possible causes:

- The interface cable is not connected to the interface or the interface is not connected to the EIB. Please check and revise all connections and wiring.
- The connection to the Gateway cannot be made because the interface has not been set correctly. Please check all settings under Extras → Interface. The set type and properties of the interface need to correspond to the connected interface.
- The set physical address has not been assigned. Please check whether the set physical address corresponds to the one of the Gateway which is to be programmed. Program the correct address with the ETS into the DALI Gateway and try again.

Problem:

- When performing the new installation function no ECGs are found

Possible causes:

- The ECGs could not be contacted by the Gateway. Please check the DALI wiring and make sure the mains supply of the ECGs is ok.

Problem:

- When performing the new installation function not all connected ECGs are found.

Possible causes:

- One or more ECGs could not be contacted by the Gateway. Please check the DALI wiring. Ensure that all ECGs are connected correctly to the respective DALI segment and no circuits are interrupted
- One or more ECGs could not be contacted by the Gateway. Please check whether all ECGs are supplied with power.
- One or more ECGs could not be contacted by the Gateway. Please check whether the cable cross sections have been laid correctly and whether the cable length is within the range prescribed by DALI.

4.2. Technical Support

For all problems and queries, which cannot be solved by using chapter 4.1, please contact the technical support team at IPAS GmbH: support@ipas-products.com .