



Zennio DALI Tool

ETS APP

Application program version: [1.0]
User manual edition: [1.0]_a

www.zennio.com



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1 INTRODUCTION

Zennio DALI Tool is an ETS application which offers an advanced system to set a DALI installation managed by a KNX-DALI Interface, such as, **inBOX DALI 16**. Hereinafter referred to as **KNX-DALI Interface**.

The main features are:

- Ballast commissioning for a DALI line.
- Location of the ballast in the installation.
- Assigning and exchanging addresses on detected ballasts.
- Group assignment.
- Importing the current device configuration.
- Reset the line to make a new configuration.
- Enabling/Disabling ECG automatic detection.
- Dimming control.
- Execution and saving scenes.
- Execution and display of test results for emergency ballasts.

2 INSTALLATION

The installer file can be obtained for free at my.knx.org, in the *ETS Apps* shop section. After the purchase process, the download file will be available in the **My Account** area, in the **Products** section.

To install the application in **ETS5**, follow next steps:

1. In the ETS main window, at the right bottom, select the "Apps" checkbox. A pop-up similar to the following will appear:

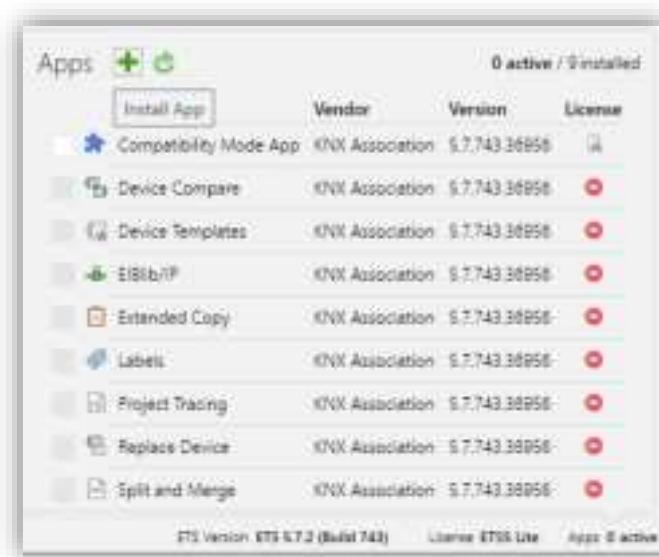



Figure 1. Installation in ETS5

2. Click on the button:  ("Install App") and select the file "**Zennio_DALI_Tool.etsapp**".

To install the application in **ETS6**, follow next steps:

1. In the ETS initial window, press "Settings" and select the "ETS Apps" checkbox. A pop-up similar to the following will appear:

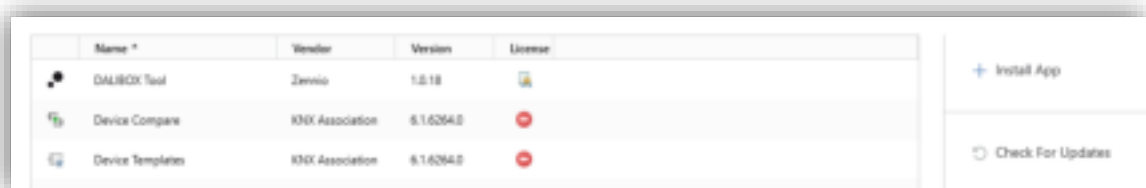


Figure 2. Installation in ETS6

2. Click on the button: "+ Install App" and select the file "**Zennio_DALI_Tool.etsapp**".

Once the application is installed, it will appear in the list of applications as shown in Figure 3, and will be available in the **Apps** tab of the toolbar of any project on ETS5 and in the **ETS Apps** section of the configuration menu on ETS6.

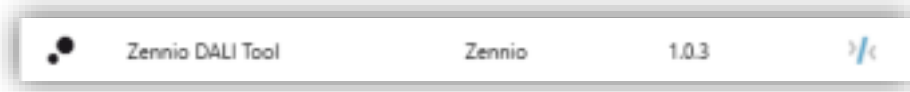


Figure 3. Complete installation

3 FUNCTIONALITY

Once the application is installed, it is accessed from an additional tab called DCA. This tab appears when DALI BOX Interface device is selected: **Devices** → **KNX-DALI Interface** → **DCA**.



Figure 4. Project >> Device >> KNX-DALI Interface >> DCA Access

When clicking on DCA tab, the **Zennio DALI Tool** application opens:



Figure 5. Zennio DALI Tool

Since the DCA offers a great deal of functionality, for ease of understanding, the explanation is divided into four sections, that correspond to the tabs of the CDA.

Note: if in any of the process, the communication of the DCA with the KNX-DALI Interface device cannot take place (device non-connected, there is a bus failure, ...), a pop-up will be displayed which indicates that the selected device could not be detected.

3.1 COMMISSIONING

This tab enables the complete configuration of the DALI line of the device, including the detection of the ballasts included in line, as well as the assignment of individual and group addresses for each detected ballast.

When this tab is open, the ballasts and the groups of each one will be displayed.

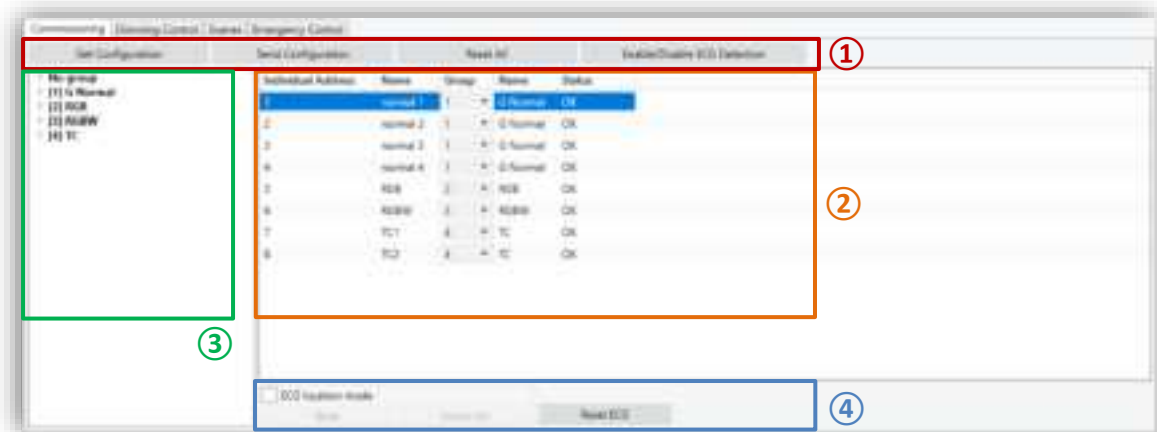


Figure 6. Commissioning

The area marked with number ① displayed four buttons:

- Get Configuration:** once the button is pressed, a communication with the device is established to get the list of the detected ballasts, their individual addresses and the assigned groups. It is also possible to know if these ballasts are connected to the bus or, on the contrary, they have a presence error. To get the information of an installation, before getting configuration, it is necessary to wait for the recognition and configuration of the ballasts after downloading.

Note: It must be noted that the parameters of ETS will be adjusted during this process in order to correspond with the received configuration. For example, ballasts will be enabled if new ballasts have been detected by the interface or the parameter "Overwrite Groups Assignment when Downloading" will be disabled.

- Commit:** once the after completing the desired group assignment (see explanation of zone ②), the commit establishes the sending of the group assignment to the ballasts by means of the DALI bus.

- **Reset All:** carries out a reset and individual address erase of all the ballasts in the line. This action also removes all the ballasts displayed in the table.

After the reset, and once the new commissioning and individual address assignment time has elapsed, the new configuration must be received via the **Get Configuration** button.

Note: *after a reset, the KNX-DALI Interface will not send frames over the DALI bus for a while, allowing the integrator to interact with the ballasts if desired. Because of this, detection and configuration of ballasts may be delayed by several minutes.*

- **Enable/Disable ECG Detection:** enables or disables the ECG automatic detection.

Note: *as Reset is an action manage for the user, ECG Detection will be enabled the first detection cycle in order to monitor the reset ballasts. After the first loop, ECG Detection status will return to the previous.*

The area marked with the number ② is the main area, when the needed information for commit is laid. The information is organized in the following columns:

- **Individual Address [1...64]:** shows the individual address assigned to the ballast after being detected by the KNX-DALI Interface. From the DCA, these addresses can be changed by entering a numerical value between 1 and 64. If the new address is occupied, a pop-up is displayed to confirm or reject the address exchange. After confirmation, the addresses will be automatically exchanged in the ballasts. In case of KNX-DALI interface allowing up to 64 ballasts per channel, if all 64 addresses are occupied, the **exchange will not be possible**.
- **Name:** it shows the name assigned by parameter for each ballast, which can be renamed from the DCA. This change updates the parameterised text in the application program, but in order for it to be shown in the *Installation* sub-menu of the display (only for KNX-DALI interfaces with display), a new download will be necessary.
- **Group [- / 1...64]:** it allows to assign a group with the individual address by using a drop-down menu showing the parameterised groups. The option "-"

indicates that there is no group associated. In this case, the group name will show "No Group".

- **Name:** it shows the name of the group associated with the ballast. As with the ballast name (for KNX-DALI interfaces with display), this field can be modified, but requires a new download of the application program to be displayed on the device. Leaving the text empty will give the default name "Group x" with "x" being the group number.

- **Status [Ok / Presence Error / Not Detected]:** shows the current status of the ballast. This is an information field with which you cannot interact:
 - "OK" → The ballast works properly.
 - "Presence Error" → The ballast has stopped responding.
 - "Not Detected" → The ballast is parameterised in ETS but has not been detected on the line.

The zone marked with the number ③ shows the groups enabled by parameter with their corresponding name. Below each group, the list of associated ballasts can be displayed by clicking on the arrow next to the group. The group associated with a ballast can be changed by dragging the ballast in the drop-down list to the new associated group.

In the area ④, the "location mode" can be enabled by using a checkbox. When the checkbox is activated, the device enters the "location mode" (some KNX-DALI interfaces switch all the ballasts in this mode), and the following buttons are enabled:

- **Blink / Stop Blink:** makes the selected ballast flash. If the ballast is blinking, the button name changes to Stop Blinking and pressing it will stop it.

You can only flash one ballast at a time. If there is one ballast flashing and another one is ordered to flash, the first one will stop its flashing and start the second one.

- **Switch On / Switch Off:** same operation as blinking but executing a permanent on/off.

Depending on the state of the ballast is selected in the ② zone, a button is shown at the right part of the area ④.

■ “OK” status:

- **Rest ECG:** same behaviour as the **Reset All** button but applied only to the selected ballast.

■ “Presence Error” or “Not Detected” status:

- **Delete ECG:** removes the ballast from the DCA ballast table, from the ETS parameterisation and the KNX-DALI interface.

For KNX-DALI interfaces supporting less the 64 ballasts per DALI channel, if the quantity of detected ballasts overpasses the number of supported, it is indicated by the area ④ with a warning message: “Number of allowed ECGs exceeded (Maximum: 16)”.

3.2 REGULATION CONTROL

This tab displays all the groups set in the device *Parameters* tab in ETS.

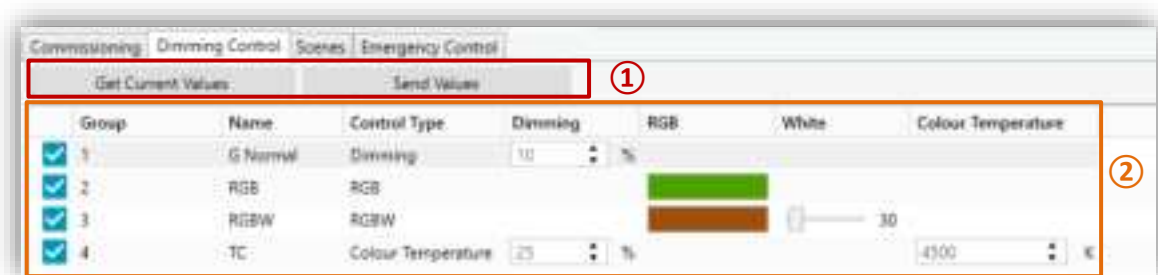


Figure 7. Regulation Control

In the area marked with the number ① there are 2 buttons:

- **Get Current Values:** gets the current dimming values in the DALI line and updates the entire table.
- **Download Values:** sends to the device the configured dimming values of all those groups that have the checkbox enabled.

In the area marked with number ② the following columns are distinguished:

- **Checkbox** [*enabled* / *disabled*]: indicates whether the set value is to be downloaded.
- **Group**: indicates the group number. This field is for information only and cannot be changed. The table will be ordered by the group number.
- **Name**: shows the parameterised name of the corresponding group number. As in the “Commissioning” tab (see section 3.1), the name associated to the group by parameter can be modified from here, although a download will be necessary for the device to receive this name correctly (only in case of KNX-DALI interface with display).
- **Control Type** [*Regulation* / *RGB* / *RGBW* / *Color Temperature*]: shows the type of colour control selected for each group. Changing the colour control type from this field will not be allowed to avoid configuration and parameterisation problems.
- **Dimming Values**: different columns to configure the regulation according to the parameterised control type.
 - **Regulation** [*0...100*][%]: selects a dimming value for parameterized groups without colour control and/or with colour temperature control.
 - **RGB**: shows a preview of the selected colour, enabling its modification by clicking on that preview. At this point a tab will be displayed to select the new colour.

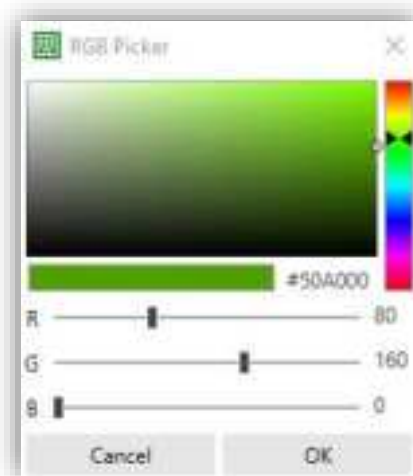


Figure 8. Selector RGB

This column will only appear in groups with RGB and RGBW control.

- **White** [0..255]: allows the control value for the additional white channel to be selected. Column available for groups with RGBW control.
- **Color Temperature** [1000...3000...20000][K]: sets the colour temperature. If a value outside the range is entered, the value will be corrected to the nearest permitted value. Column available for groups with colour temperature control.

3.3 SCENES

This tab, only available when enabling the **Scenes** parameter in ETS, will enable the management of all the scenes set in the device. To avoid configuration problems, only scenes already configured, and with the groups already enabled for each scene in the parameterisation, can be modified.

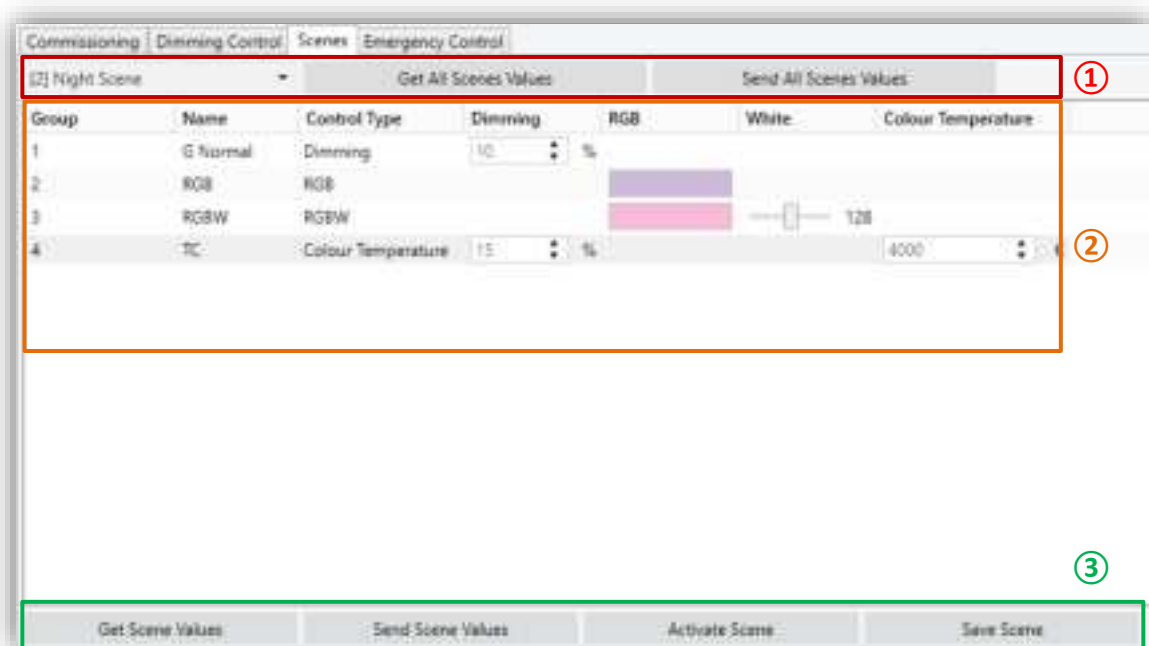


Figure 9. Scenes

In the area ①, a scene selector and 2 general purpose buttons can be found:

- **Scene selector:** enables the scene from which to display information to be chosen. The selection is made from a drop-down menu in which only the parameterised scenes will be shown. The name shown for each scene includes the scene number in brackets and the parameterised name.

- **Import All:** communication is established with the device and the current information of the values of all the scenes is received. The values received will be applied directly in the ETS parameterization.
- **Export All:** communication is established, and all newly configured scene values are sent to the device.

In area marked with number ② the current configuration of the choose scene is displayed. If the currently downloaded scene information has not been received, the values already set by parameter will be displayed. The included columns are the same as those shown from the “Regulation Control” tab (see section 0).

At the bottom area (area ③) the following buttons enable each scene to work individually.

- **Import Scene:** the functionality is the same as the **Import All** button but applying it only to the selected scene.
- **Export Scene:** the functionality is the same as the **Export All** button but applying it only to the selected scene.
- **Activate Scene:** runs the selected scene in the same way as the corresponding object on the device.
- **Save Scene:** saves the current status of the groups included as it should be done with the scene object. In this case, the DCA will automatically import the new saved scene, avoiding any differences between the scene in the device and the DCA. This button is only displayed if Scene Learning is enabled.

3.4 EMERGENCY CONTROL

This tab is used to manage the emergency ballast functions of the device.

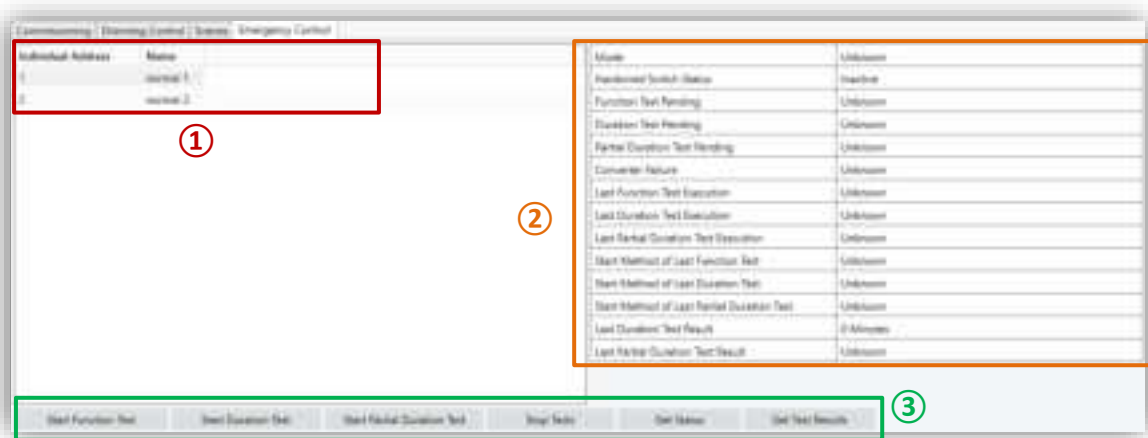


Figure 10. Emergency Control

The area ① displays all the ballasts that have been parameterized as emergency ballasts from the ETS Parameters tab, including their individual address number and parameterized name. From this tab, name can be changed, but not individual addresses.

The table on the right (area ②) shows the information on the status objects and tests run for the selected ballast:

■ Converter Status Information:

- **Mode:** [Unknown / Normal / Emergency / Extended emergency / Function Test in Progress / Duration Test in Progress / Partial Duration Test in Progress]: current operating mode.
- **Hardwired Switch Status** [Inactive / Active]: indicates the status of the external switch to turn the lamp on and off in case the lamp has that this functionality.
- **Function Test Pending** [Unknown / No / Test Pending]: displays if there is any functionality test in the queue pending the ballast to perform the test.
- **Duration Test Pending** [Unknown / No / Test Pending]: same meaning for the duration tests.

- **Partial Duration Test Pending** [[Unknown](#) / *No* / *Test Pending*]: same meaning for the partial duration tests.
- **Converter failure** [[Unknown](#) / *No* / *Failure Detected*]: displays if there are specific failures for the emergency ballast.

Information of test results:

- **Last Function Test Execution** [[Unknown](#) / *Passed in Time* / *Passed with delay exceeded* / *Failed in Time* / *Failed with delay exceeded* / *Stopped by Object*].
- **Last Duration Test Execution** [[Unknown](#) / *Passed in Time* / *Passed with delay exceeded* / *Failed in Time* / *Failed with delay exceeded* / *Stopped by Object*].
- **Last Partial Duration Test Execution** [[Unknown](#) / *Passed in Time* / *Passed with delay exceeded* / *Failed in Time* / *Failed with delay exceeded* / *Stopped by Object*].
- **Start Method of Last Function Test** [[Unknown](#) / *Automatic* / *By Object*]: shows the method by which the last function test was executed.
- **Start Method of Last Duration Test** [[Unknown](#) / *Automatic* / *By Object*]: shows the method by which the last duration test was executed.
- **Start Method of Last Partial Duration Test** [[Unknown](#) / *Automatic* / *By Object*]: shows the method by which the last partial duration test was executed.
- **Last Duration Test Result** [*0...510 Minutes*]: displays the time resultant in the last duration test.
- **Last Partial Duration Test Result** [[Unknown](#) / *0...100%*]: displays the percentage of battery life remaining after the last partial duration test. If no such test has been successfully completed, the text "[Unknown](#)" will be displayed.

In the bottom area (zone ③), the following buttons are displayed in addition to the selection of a ballast:

- **Start Function Test:** starts (or queues if the ballast prevents it) a functionality test.
- **Start Duration Test:** same operation as above, but for a Duration Test.
- **Start Partial Duration Test:** starts or queues a partial duration test. Due to the fact that this type of test is parameterizable, if it is executed, but the ETS parameter **Partial Duration Test Duration** has been configured with value "0", a pop-up will appear indicating that the test is disabled by parameter, and it will not be executed.
- **Stop Tests:** stops all the ballast tests in progress.
- **Get Converter Status:** receives the status of the converter per object and then displays it in the corresponding section of the zone ②.
- **Get Test Result:** receives by object the latest test results and displays them in the corresponding section of the area ②.



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Zennio Avance y Tecnología S.L.

C/ Río Jarama, 132. Nave P-8.11
45007 Toledo, Spain.

Tel. +34 925 232 002

www.zennio.com

info@zennio.com