

***DALI – NFC Multi Tag  
User Manual***

***Summary***

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PRELIMINARY

The program has the purpose to program DALI and NFC devices in a simple and intuitive way, using the appropriate hardware, FEIG antenna in case of NFC products or DALIPROGRAMMER in case of DALI products.

NFC programming  
Cod. 127095A or 127101

DALI programming  
Cod. 127099



PRELIMINARY

N.B in most cases TCI control gears can be programmed both by DALI and NFC, in such case the choice of which kind interface has to be used is up to you.

!!!Be careful that DALI features (Power on Level, System failure Level etc...) can be adjusted only via DALI programming!!!

In order to install the program check our website or click directly on the following link:

[http://www.tci.it/TCI\\_tools/TCI\\_NFC\\_READER.zip](http://www.tci.it/TCI_tools/TCI_NFC_READER.zip)

Once the software is installed the properly icon will appear on your desktop:



Click on it and the software will run automatically.

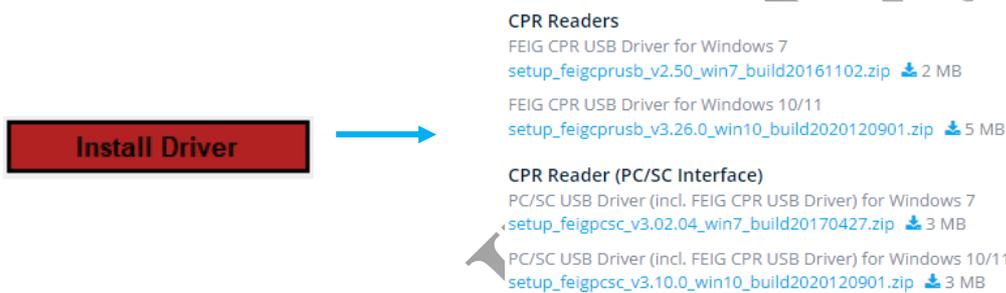
Once the software will run the following popup will appear and based on the hardware used you have to select the programming interface DALI or NFC:



### *NFC programming:*

- 1) Select "NFC" click on "INSTALL DRIVER" and automatically the software will launch to FEIG website in order to install all properly driver useful to allow the communication between FEIG reader and the laptop.

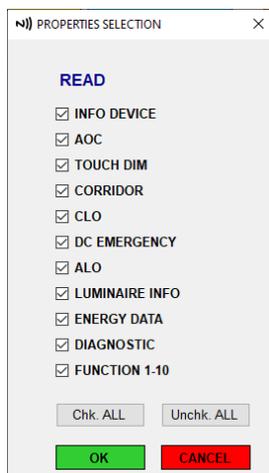
N.B FEIG driver must be installed only the first time for future programming it's not necessary.



- 2) Click "DATA READ" in order to read the ECG under programming:



Once select "DATA READ" a further popup will appear with all available capabilities:



Select the features one by one or use the properly button "CHK. ALL" or "UNCHK. ALL" in order to remove or select the features in a faster way.

Click "OK" in order to go ahead with the reading.

If the reading process is correctly terminated the following message will appear "PROCESS OF READING TAG TERMINATED".

3) When the reading process is terminated all capabilities of the ECG will be displayed as follow:

**INFO DEVICE:**

- **Device name.**  
N.B the value near the description (06) is the address of the ECG.
- **Product code.**
- **Build Num.**
- **GTIN.**
- **FW version.**
- **Serial number.**



INFO DEVICE (read only)

\*    Device Name: PROFESSIONALE DALI NFC BI

Product Code: 142012

Build Num.: 55

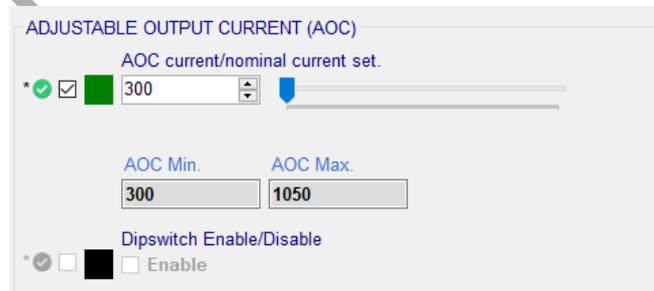
GTIN: 8010703396203

FW ver.: 1.12

Serial Num.: 0

**AOC (Adjustable Output Current):** minimum and maximum adjustable current based on the ECG features.

- The current shown during first reading is the factory default (usually the minimum).
- Write the current value you need and be sure to be always inside the min. and max. allowed. (ex. 300 – 1050mA).
- The current can be selected also through the “slide”.
- **“Dipswitch Enable/Disable”** adjustable only during DALI mode and if the driver have the dip-switch.



ADJUSTABLE OUTPUT CURRENT (AOC)

AOC current/nominal current set.

\*    300

AOC Min. AOC Max.

300 1050

Dipswitch Enable/Disable

\*    Enable

### Touch Dim:

- **Light level after brownout:** if the flag on “No change” field is activated, after missing of the PUSH the brightness value come back at previously dimming value without change. In order to change the value remove the flag on “No change” and adjust the brightness using the slide follow your needed.
- **Toogle limit flag:**  
Enable: set dim direction down above 70%, set dim direction up at 10% + min dim level.  
Disable: switch dim direction every time when long push is performed.
- **DALI PUSH:** possibility to enable or disable the functionality.

TOUCH DIM

Light level after brownout %  
\*   0  No change

Toggle limit flag  
\*    Enable

Dipswitch DALI Push  
\*    Enable

### Corridor function:

- **DALI Dim Level “normal” %:** starting brightness value (es. 100%).
- **DALI Dim Level “background” %:** reached brightness value (es. 10%).
- **Fade time to background level:** time in seconds in order to reach the “background level” (es. 100% to 10% in 72,4sec).
- **Delay to off:** delay in seconds in order to reach OFF mode starting from “background level” (es. 10% to OFF in 1800sec)
- **Delay to starting dimming in 10 seconds:** maintained time of “normal level” (es. Keep 100% for 20sec).
- **Numbers of seconds to enable corridor function:** time in seconds before to start the corridor function.
- **Enable corridor function in the device:** enable/disable the function on the device.

CORRIDOR

DALI Dim Level "normal" %  
\*   100

DALI Dim Level "background" %  
\*   10

Fade time to background level  
\*   12 72,4 sec.

Delay to OFF in 10\*seconds  
\*   180  Infinite 1800 sec.

Delay to starting dimming in 10\*seconds  
\*   2 20 sec.

Num. of seconds to enable corridor func.  
\*   55  Never

Enable corridor in the device  
\*    Enable

**CLO:**

The decrease in the luminous flux of an LED module can be compensated over its entire lifetime via a preprogrammed current curve. The decrease light flux and lifetime value normally are provided directly by the LED chip manufacturer by means of TM21 and related LM report (es. LM80B20).

This not only ensure stable lighting but also saves energy and increase the lifetime of the LEDs.

- **Hour time step x/20:** setting of the hours (minimum adjustable 5khrs).
- **Value % time step x/20:** setting of the brightness increasing.

The screenshot displays the 'CLO SETTINGS' interface. At the top left, there is a 'Status' section with a radio button for 'Enable' and a checkbox for 'Enable'. Below this, there are 20 rows of settings, each representing a time step from 1/20 to 20/20. Each row contains two input fields: 'Hour time step x/20' and 'Value % time step x/20'. The 'Hour time step' fields are currently set to '0', and the 'Value % time step' fields are currently set to '0,0'. A large 'PRELIMINARY' watermark is visible across the bottom half of the image.

Hour time step x/20	Value % time step x/20
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0
0	0,0

**Luminarie info (DT.50):**

- **Luminaire manufacturer GTIN.**
- **Content format ID.**
- **Luminaire week of manufacturer (WW).**
- **Power at minimum dim level (W).**
- **Nominal Maximum AC (V).**
- **CRI (Colour rendering index):** This value is a quality feature if artificial light over the natural light.
- **Light distribution type: Type I -V, the different types are described in the IES 901.11 standard.**
- **Luminaire color: ASCII character string**
- **Luminaire identification: ASCII character string**
- **Luminaire identification number:**
- **Luminaire year manufacture (YY).**
- **Nominal input power (W).**
- **Nominal Minimum AC (V).**
- **Nominal light output (lm).**
- **CCT (K).**

All the above information can be read and write by final users it self in order to take the traceability of the production.

Field Name	Status	Value	Default Value
Luminaire manufacturer GTIN	Green Checkmark		No value (Default value)
Content Format ID	Green Checkmark	0003	No value (Default value)
Luminaire week of manufacture (WW)	Green Checkmark	1	No value (Default value)
Power at minimum dim level (W)	Green Checkmark	0	No value (Default value)
Nominal Maximum AC (V)	Green Checkmark	90	No value (Default value)
CRI	Green Checkmark	0	No value (Default value)
Light Distribution Type	Green Checkmark	0	No value (Default value)
Luminaire color	Green Checkmark		No value (Default value)
Luminaire identification	Green Checkmark		No value (Default value)
Luminaire Identification number	Green Checkmark		No value (Default value)
Luminaire year of manufacture (YY)	Green Checkmark	0	No value (Default value)
Nominal Input Power (W)	Green Checkmark	0	No value (Default value)
Nominal Minimum AC (V)	Green Checkmark	90	No value (Default value)
Nominal light output (Lm)	Green Checkmark	0	No value (Default value)
CCT (K)	Green Checkmark	0	No value (Default value)

**Energy data (DT.51 read only):**

- **Active energy (Wh):** Indicates the integral of the current power over a time interval.
- **Active power (W):** Indicates the mean value of the current power, taken over one period.
- **Apparent energy (Wh):** Indicates the integral of apparent power over a time interval, measured in units of VA hour.
- **Load side active energy (Wh):** Indicates the integral of load side power over a time interval.
- **Load side active power (W):** Indicates the input power minus the power used for the DALI bus power supply if present and the AUX power supply if present.
- **Apparent power (W):** Indicates the power, calculated with the rms voltage and rms electric current.

ENERGY DATA (dev. type 51)

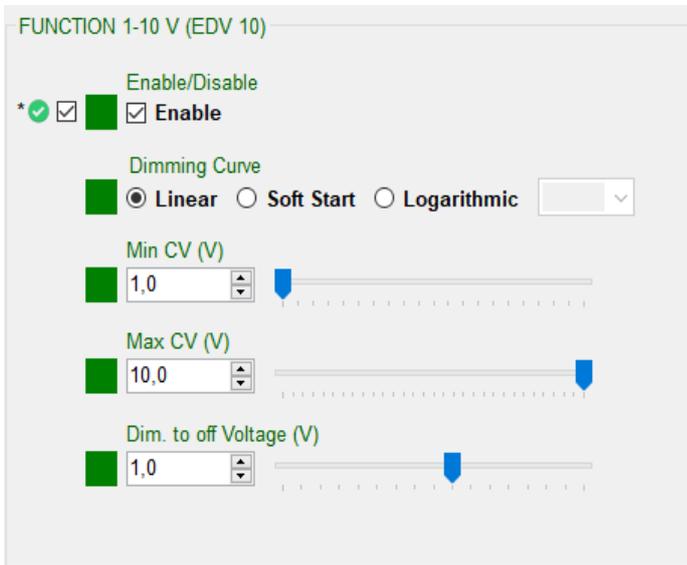
<input checked="" type="checkbox"/>	Active energy (Wh)	Active power (W)	Apparent energy (Wh)
<input checked="" type="checkbox"/>	0	0	0
<input checked="" type="checkbox"/>	Load side active energy (Wh)	Load side active power (W)	Apparent power (W)
<input checked="" type="checkbox"/>	0	0	0

**Diagnostic and Maintenance (DT.52):**

DIAGNOSTIC (dev. type 52)

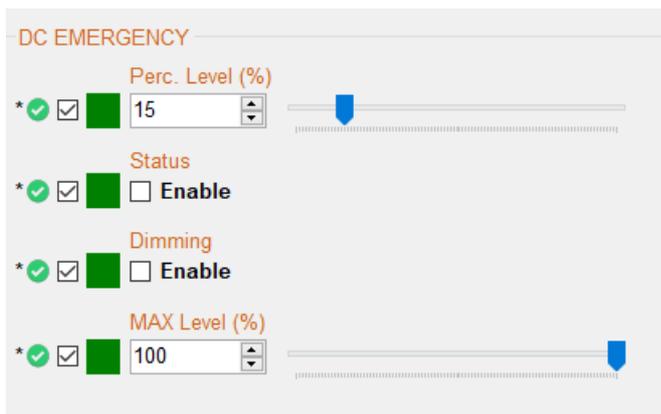
<input checked="" type="checkbox"/>	Light Src. start count. reset.	Light Src. start count.	Rated median useful lightsource
<input checked="" type="checkbox"/>	3	4	NULL
<input checked="" type="checkbox"/>	Light Src. OnTime	Light Src. voltage	Control Gear Operating Time
<input checked="" type="checkbox"/>	35	329	35
<input checked="" type="checkbox"/>	Light Src. Current	Light Src. overall fail. condition	Ctrl G. Exter. Supply Volt. Freq.
<input checked="" type="checkbox"/>	350	0	0
<input checked="" type="checkbox"/>	Light Src. over. fail. cond. count.	Light Src. short circuit	Ctrl G. Overall Failure Condition
<input checked="" type="checkbox"/>	2	0	NULL
<input checked="" type="checkbox"/>	Light Src. short circuit counter	Light Src. open circuit	Ctrl G. Ext. Supply Undervoltage
<input checked="" type="checkbox"/>	1	0	NULL
<input checked="" type="checkbox"/>	Light Src. thermal derating	Light Src. thermal derating count.	Ctrl G. Ext. Supply Overvoltage
<input checked="" type="checkbox"/>	0	0	NULL
<input checked="" type="checkbox"/>	Light Src. thermal shutd.	Light Src. thermal shutd. counter	Ctrl G. Output Power Limitation
<input checked="" type="checkbox"/>	0	0	NULL
<input checked="" type="checkbox"/>	Rated median useful lifetime of luminaire	Light Src. OnTime reset.	
<input checked="" type="checkbox"/>	NULL	32	
<input checked="" type="checkbox"/>	Light Src. temperature	Light Src open circuit count.	
<input checked="" type="checkbox"/>	NULL	2	

<b>Parameter</b>	<b>Description</b>
<b>Ctrl. G. Ext. Supply Undervoltage Counter</b>	Indicates how often undervoltage was measured at the mains input.
<b>Ctrl. G. Ext. Supply Overvoltage Counter</b>	Indicates how often overvoltage was measured at the mains input.
<b>Ctrl. G. Ext. Supply Volt. Freq.</b>	Indicates the supply frequency measured at mains input.
<b>Ctrl. G. Ext. Supply Undervoltage</b>	Indicates if there is currently undervoltage measured at the mains input.
<b>Ctrl. G. Ext. Supply Overvoltage</b>	Indicates if there is currently overvoltage measured at the mains input.
<b>Ctrl. G. Operating time</b>	Indicates the time the LED driver was operated either via mains or from battery.
<b>Ctrl. G. Start Counter</b>	Indicates how often the LED drivers was started.
<b>Ctrl. G. Power factor</b>	Indicates the power factor of the LED driver under reading.
<b>Ctrl. G. Overall Failure condition Counter</b>	Indicates how often a failure was detected.
<b>Ctrl. G. Output Power limitation Counter</b>	Indicates how often the output power has to be limited.
<b>Ctrl. G. External supply voltage</b>	Indicates the mains input.
<b>Ctrl. G. Thermal Derating Counter</b>	Indicates how often the LED driver reached a critical temperature and the intelligent temperature Guard Function (ITG) started reducing the output power.
<b>Ctrl. G. Thermal Shutdown counter</b>	Indicates how often the LED driver reached a critical temperature and the intelligent temperature Guard Function (ITG) shut off the device.
<b>Ctrl. G. Overall Failure Condition</b>	Indicates if a failure is currently detected.
<b>Ctrl. G. Output Power limitation</b>	Indicates if the output power is currently limited by the LED driver.
<b>Int. Control gear reference temp.</b>	Indicates the internal control gear reference temperature in °C.
<b>Ctrl. G. Thermal derating</b>	Indicates if the output power of the LED driver has been reduced due to a critical temperature.
<b>Ctrl. G. Thermal Shutdown</b>	Indicates if the LED driver has been turned off due to a critical temperature.
<b>Ctrl. G. Output Current Percentage</b>	Indicates the active output current percentage.
<b>Ctrl. G. Temperature</b>	Indicates the temperature of the control gear in °C.
<b>Light Src. Start count.</b>	Indicates how often the LED was switched on.
<b>Light Src. Start count. Reset</b>	Indicates the resettable amount of starts of the light source.
<b>Light Src. On time</b>	Indicates for how long the LED has been switched on.
<b>Light Src. Over Fail. cond. Count.</b>	Indicates how often a failure was detected.
<b>Light Src. Short circuit counter</b>	Indicates how often a short circuit was detected.
<b>Light Src. Open circuit counter</b>	Indicates the amount of times the light source open circuit occurred.
<b>Light Src. Thermal derating count.</b>	Indicates how often the LED had reached the overload temperature.
<b>Light Src. Thermal shutd. Counter</b>	Indicates how often the LED had reached the shutdown temperature.
<b>Light Src. Voltage</b>	Indicates the voltage at the LED output.
<b>Light Src. Current</b>	Indicates the current at the LED output.
<b>Light Src. Overall fail. Condition</b>	Indicates if a failure is currently detected.
<b>Light Src. Short circuit</b>	Indicates if a short circuit is currently detected.
<b>Light Src. Open circuit</b>	Indicates if a open circuit is currently detected,
<b>Light Src. Thermal derating</b>	Indicates if a temperature overload is currently detected.
<b>Light Src. Thermal shutd.</b>	Indicates if a shutdown temperature is currently detected.
<b>Rated median useful lifetime of luminaire</b>	Indicates the rated median useful lifetime of the luminarie in hours.
<b>Rated median useful lifetime of light source</b>	Indicates the rated median useful light source starts of the luminaire.
<b>Light Src. Temperature</b>	Indicates the temperature of the light source in °C.
<b>Light Src. On time reset</b>	Indicates the resettable light source operating time in hrs, minutes and seconds.



### 1-10V function:

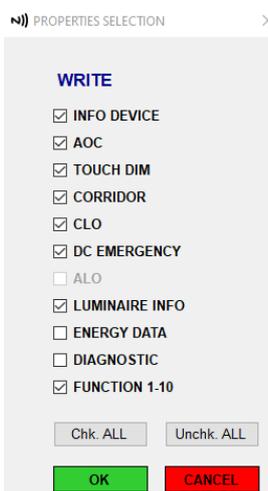
- **Enable/Disable**
- **Dimming curve:** adjustable to Logarithmic, Linear and Soft start.
- **Min. CV (V):** Minimum dimming voltage, 1...3V.
- **Max CV (V):** Maximum dimming voltage, 7...10V.
- **Dim. To off Voltage (V):** reached dimming value able to switch off the ECG.



### DC Emergency:

- **Perc. Level (%):** the displayed data shown the factory default value.
- **Status:** Enable/Disable.
- **Dimming:** Enable/Disable.
- **Max Level (%):** 0...100%.

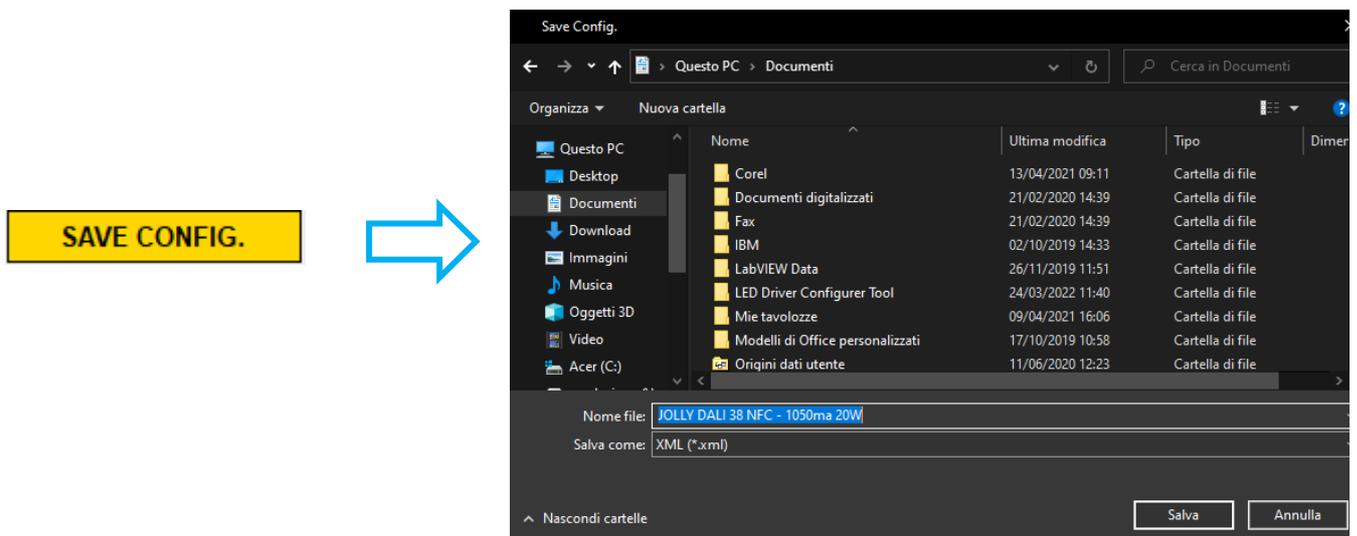
- Once adjust all needed features you can proceed with the writing of the features on the ECG using properly button "DATA WRITE":



Once selected "DATA WRITE" a further popup will appear with all capabilities of the driver, now you can select again (for double confirm) which capabilities you really need to set on the driver. If the writing process is correctly terminated the following message will appear "PROCESS OF WRITING TAG TERMINATED".

After write the ECG is always possible to save a pre-set configuration in order to be used also for a future productions.

Click on “SAVE CONFIG.” and select on the popup which folders do you prefer and save the configuration. If the xml. File is correctly saved the following message will follow “CONFIGURATION DATA SAVED CORRECTLY”



The saved xml. file of course can be load on the next production, click on “LIBRARIES ECG”, based on the window that will appear you can proceed in two way:

- 1) Click on “LOAD FILE” , select the xml. file previously saved (es. JOLLY DALI 38 NFC – 1050mA 20W) and confirm everything. If you follow this procedure the file will be loaded in the software and it can be modified, saved again or load in the driver under programming.
- 2) Select “MULTIPROGRAMMER” click on “LOAD FILE”, select the xml. file previously saved (es. JOLLY DALI 38 NFC – 1050mA 20W) and confirm everything, the following message will displayed ”CONFIGURATION DATA LOADED CORRECTLY, START UPLOAD CONTINUOS”.

Software will start the programming, once finish the first piece software displayed this message: “CONFIGURATION OPERATIONS COMPLETE. REPLACE THE DEVICES FOR THE NEXT CONFIGURATION”, at the right you will have a counter of 5sec at your disposal in order to change the ECG on the reader going ahead with the production.

We suggest to use this procedure only during “production”.

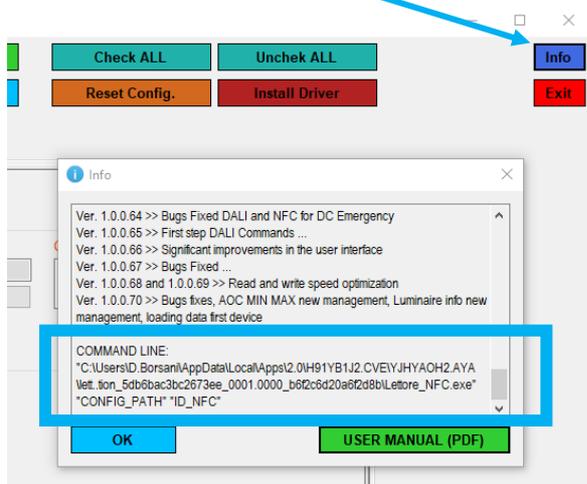
MESSAGE ...

**Configuration operations complete.  
Replace the devices for the next  
configuration [5]**

### Command line:

ECG programming via command line, allow the final user to avoid the graphic interface during production process, create a pre-set configuration and launch them using the appropriate string.

- 1) Click on “INFO” button and a further pop-up will appear, scroll down until following sentence”  
COMMAND LINE”, copy and paste the sentence inside on the command line.



`"C:\Users\D.Borsani\AppData\Local\Apps\2.0\H91YB1J2.CVE\YJHYAOH2.AYA\lett..tion_5db6bac3bc2673ee_0001.0000_b6f2c6d20a6f2d8b\Letlore_NFC.exe"`

- 2) Add a space, copy and paste the configuration file to load instead of (“CONFIG\_PATH”), in our case:

`"C:\Users\D.Borsani\AppData\Local\Apps\2.0\H91YB1J2.CVE\YJHYAOH2.AYA\lett..tion_5db6bac3bc2673ee_0001.0000_b6f2c6d20a6f2d8b\Letlore_NFC.exe" "C:\Users\D.Borsani\Desktop\PROFESSIONALE DALI NFC 38W 1050MA.xml"`

- 3) Add a space copy and paste the ID number of the NFC reader used:

`"C:\Users\D.Borsani\AppData\Local\Apps\2.0\H91YB1J2.CVE\YJHYAOH2.AYA\lett..tion_5db6bac3bc2673ee_0001.0000_b6f2c6d20a6f2d8b\Letlore_NFC.exe" "C:\Users\D.Borsani\Desktop\PROFESSIONALE DALI NFC 38W 1050MA.xml" "687511757"`

In order to check which is the ID number of the connected reader please check “LOG” field, scroll down and copy your ID:

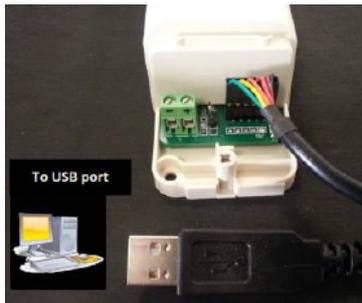


**Error message during command line programming:**

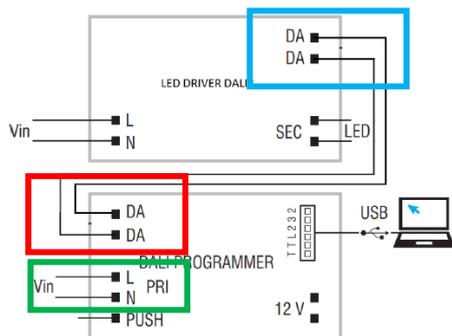
Error message	Description
0 Success	All operations are finished with good results.
1 cannot read/write	Impossible write and read on the products.
2 device not conforming to configuration	The device that you're reading/writing is different from the device previously saved in the xml. File
7 no reader NFC	The software do not recognize the RFID NFC reader
8 Cannot reader NFC tag	The software recognize the NFC reader, but reader it self do not find any NFC chip to read.
9 No devices checked in the signal field	ECG missing on the reader.

**DALI programming:**

Before to start must be necessary wiring all the system in a properly way, because different to NFC system the communication between ECG and laptop is always done through an hardware but in this case it's necessary a physical wiring into DALI input.



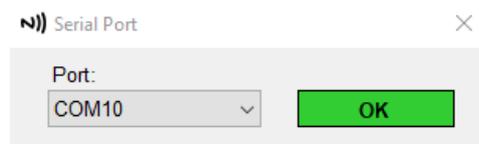
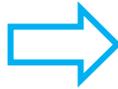
First step connect the FTDI cable order (code 485720519) between laptop (USB) and our DALI PROGRAMMER, if the connection has been done correctly the green led chip on programmer will light up.



Second step connect the **DALI output** of the DALI PROGRAMMER into **DALI input** of the ECG and **power the ECG on the primary side**.

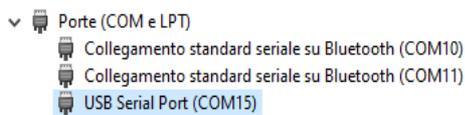
N.B load can be avoided.

Once do all above wiring run the software and select “DALI” as programming interface. A further window will appear “SERIAL PORT” now you have to select the COM port where the FTDI cable is connected.



N.B Check always which is the correct port, sometimes software recognized automatically the correct one sometime not. In order to check follow this procedure on your laptop:

- Control panel
- Device management
- COM port and LPT, click/extend this field and check which COM port has been assigned to the FTDI cable:



After select the correct COM port the follow message will appear “CONNECTION PROCESS TERMINATED”.

**Commissioning:**

Depends on the ECG in your hands, you have to select “COMMISSION” if the ECG under programming do not have any address, if the ECG have an address it’s enough to click on “SCAN LIST” and all ECG connected on the DALI bus will be displayed as their description name.



After reading the ECG all capabilities will be displayed as follow:

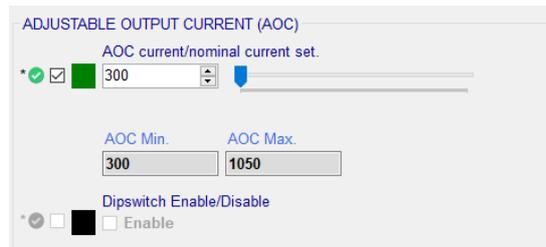


**INFO DEVICE:**

- **Device name.**  
N.B the value near the description (06) is the address of the ECG.
- **Product code.**
- **Build Num.**
- **GTIN.**
- **FW version.**
- **Serial number.**

**AOC (Adjustable Output Current):** minimum and maximum adjustable current based on the ECG features.

- The current shown during first reading is the factory default (usually the minimum).
- Write the current value you need and be sure to be always inside the min. and max. allowed. (ex. 300 – 1050mA).
- The current can be selected also through the “slide”.
- “**Dipswitch Enable/Disable**” adjustable only during DALI mode.



#### **Touch Dim:**

- **Light level after brownout:** if the flag on “No change” field is activated, after missing of the PUSH the brightness value come back at previously dimming value without change. In order to change the value remove the flag on “No change” and adjust the brightness using the slide follow your needed.
- **Toogle limit flag:**  
Enable: set dim direction down above 70%, set dim direction up at 10% + min dim level.  
Disable: switch dim direction every time when long push is performed.
- **DALI PUSH:** possibility to enable or disable the functionality.



**Corridor function:**

- **DALI Dim Level “normal” %:** starting brightness value (es. 100%).
- **DALI Dim Level “background” %:** reached brightness value (es. 10%).
- **Fade time to background level:** time in seconds in order to reach the “background level” (es. 100% to 10% in 72,4sec).
- **Delay to off:** delay in seconds in order to reach OFF mode starting from “background level” (es. 10% to OFF in 1800sec)
- **Delay to starting dimming in 10 seconds:** maintained time of “normal level” (es. Keep 100% for 20sec).
- **Numbers of seconds to enable corridor function:** time in seconds before to start the corridor function.
- **Enable corridor function in the device:** enable/disable the function on the device.

**CORRIDOR**

<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="text" value="100"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="text" value="180"/> <input type="checkbox"/> <b>Infinite</b> 1800 sec.	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="text" value="10"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="text" value="2"/> 20 sec.	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="text" value="12"/> 72,4 sec.	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="text" value="55"/> <input type="checkbox"/> <b>Never</b>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <b>Enable</b>

**CLO:**

The decrease in the luminous flux of an LED module can be compensated over its entire lifetime via a preprogrammed current curve. The decrease light flux and lifetime value normally are provided directly by the LED chip manufacturer by means of TM21 and related LM report (es. LM80B20).

This not only ensure stable lighting but also saves energy and increase the lifetime of the LEDs.

- **Hour time step x/20:** setting of the hours (minimum adjustable 5khrs).
- **Value % time step x/20:** setting of the brightness increasing.

CLO SETTINGS

Status  
 Enable

Hour time step 1/20	Value % time step 1/20	Hour time step 11/20	Value % time step 11/20
0	0,0	0	0,0
Hour time step 2/20	Value % time step 2/20	Hour time step 12/20	Value % time step 12/20
0	0,0	0	0,0
Hour time step 3/20	Value % time step 3/20	Hour time step 13/20	Value % time step 13/20
0	0,0	0	0,0
Hour time step 4/20	Value % time step 4/20	Hour time step 14/20	Value % time step 14/20
0	0,0	0	0,0
Hour time step 5/20	Value % time step 5/20	Hour time step 15/20	Value % time step 15/20
0	0,0	0	0,0
Hour time step 6/20	Value % time step 6/20	Hour time step 16/20	Value % time step 16/20
0	0,0	0	0,0
Hour time step 7/20	Value % time step 7/20	Hour time step 17/20	Value % time step 17/20
0	0,0	0	0,0
Hour time step 8/20	Value % time step 8/20	Hour time step 18/20	Value % time step 18/20
0	0,0	0	0,0
Hour time step 9/20	Value % time step 9/20	Hour time step 19/20	Value % time step 19/20
0	0,0	0	0,0
Hour time step 10/20	Value % time step 10/20	Hour time step 20/20	Value % time step 20/20
0	0,0	0	0,0

PRELIMINARY

**Luminaire info (DT.50):**

- **Luminaire manufacturer GTIN.**
- **Content format ID.**
- **Luminaire week of manufacture (WW).**
- **Power at minimum dim level (W).**
- **Nominal Maximum AC (V).**
- **CRI (Colour rendering index): This value is a quality feature if artificial light over the natural light.**
- **Light distribution type: Type I-V, the different types are described in the IES 901.11 standard.**
- **Luminaire color: ASCII character string**
- **Luminaire identification: ASCII character string**
- **Luminaire identification number:**
- **Luminaire year manufacture (YY).**
- **Nominal input power (W).**
- **Nominal Minimum AC (V).**
- **Nominal light output (lm).**
- **CCT (K).**

All the above information can be read and write by final users it self in order to take the traceability of the production.

LUMINAIRE INFO (dev. type 50)

* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Luminaire manufacturer GTIN	<input type="text"/>	* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Luminaire Identification number	<input type="text"/> <input checked="" type="checkbox"/> No value (Default value)
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Content Format ID	<input type="text" value="0003"/>	* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Luminaire year of manufacture (YY)	<input type="text" value="0"/> <input checked="" type="checkbox"/> No value (Default value)
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Luminaire week of manufacture (WW)	<input type="text" value="1"/> <input checked="" type="checkbox"/> No value (Default value)	* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Nominal Input Power (W)	<input type="text" value="0"/> <input checked="" type="checkbox"/> No value (Default value)
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Power at minimum dim level (W)	<input type="text" value="0"/> <input checked="" type="checkbox"/> No value (Default value)	* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Nominal Minimum AC (V)	<input type="text" value="90"/> <input checked="" type="checkbox"/> No value (Default value)
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Nominal Maximum AC (V)	<input type="text" value="90"/> <input checked="" type="checkbox"/> No value (Default value)	* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Nominal light output (Lm)	<input type="text" value="0"/> <input checked="" type="checkbox"/> No value (Default value)
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	CRI	<input type="text" value="0"/> <input checked="" type="checkbox"/> No value (Default value)	* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	CCT (K)	<input type="text" value="0"/> <input checked="" type="checkbox"/> No value (Default value)
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Light Distribution Type	<input type="text" value="0"/> <input checked="" type="checkbox"/> No value (Default value)			
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Luminaire color	<input type="text"/>			
* <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Luminaire identification	<input type="text"/>			

**Energy data (DT.51 read only):**

- **Active energy (Wh):** Indicates the integral of the current power over a time interval.
- **Active power (W):** Indicates the mean value of the current power, taken over one period.
- **Apparent energy (Wh):** Indicates the integral of apparent power over a time interval, measured in units of VA hour.
- **Load side active energy (Wh):** Indicates the integral of load side power over a time interval.
- **Load side active power (W):** Indicates the input power minus the power used for the DALI bus power supply if present and the AUX power supply if present.
- **Apparent power (W):** Indicates the power, calculated with the rms voltage and rms electric current.

ENERGY DATA (dev. type 51)

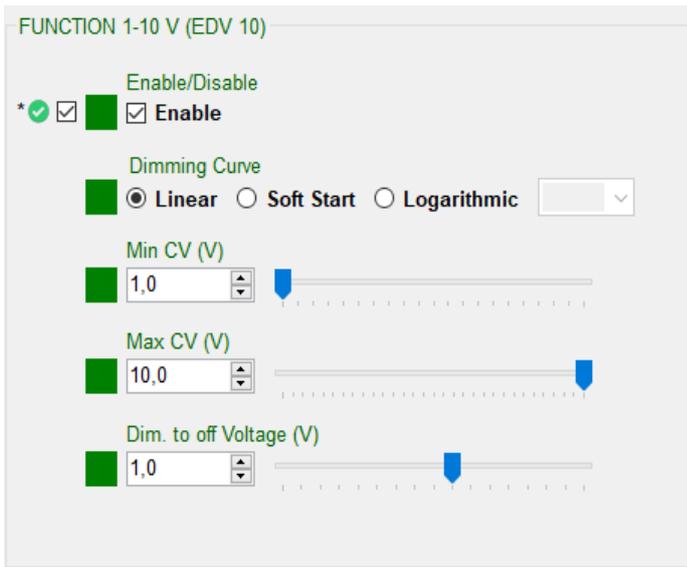
<input checked="" type="checkbox"/>	Active energy (Wh)	0	Active power (W)	0	Apparent energy (Wh)	0
<input checked="" type="checkbox"/>	Load side active energy (Wh)	0	Load side active power (W)	0	Apparent power (W)	0

**Diagnostic and Maintenance (DT.52)**

DIAGNOSTIC (dev. type 52)

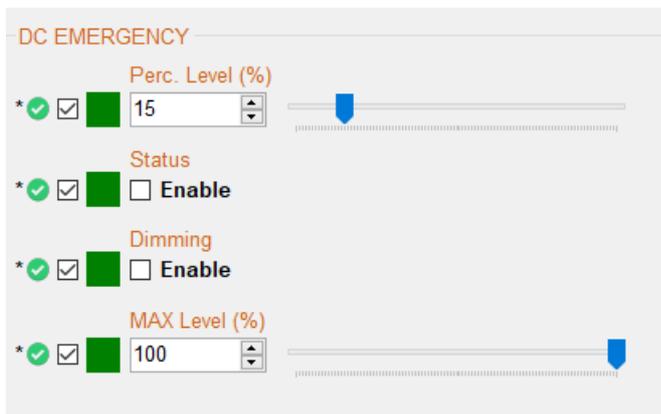
<input checked="" type="checkbox"/>	Light Src. start count. reset.	3	Light Src. start count.	4	Rated median useful lightsource	NULL
<input checked="" type="checkbox"/>	Light Src. OnTime	35	Light Src. voltage	329	Control Gear Operating Time	35
<input checked="" type="checkbox"/>	Light Src. Current	350	Light Src. overall fail. condition	0	Ctrl G. Exter. Supply Volt. Freq.	0
<input checked="" type="checkbox"/>	Light Src. over. fail. cond. count.	2	Light Src. short circuit	0	Ctrl G. Overall Failure Condition	NULL
<input checked="" type="checkbox"/>	Light Src. short circuit counter	1	Light Src. open circuit	0	Ctrl G. Ext. Supply Undervoltage	NULL
<input checked="" type="checkbox"/>	Light Src. thermal derating	0	Light Src. thermal derating count.	0	Ctrl G. Ext. Supply Overvoltage	NULL
<input checked="" type="checkbox"/>	Light Src. thermal shutd.	0	Light Src. thermal shutd. counter	0	Ctrl G. Output Power Limitation	NULL
<input checked="" type="checkbox"/>	Rated median useful lifetime of luminaire	NULL	Light Src. OnTime reset.	32		
<input checked="" type="checkbox"/>	Light Src. temperature	NULL	Light Src open circuit count.	2		

<b>Parameter</b>	<b>Description</b>
<b>Ctrl. G. Ext. Supply Undervoltage Counter</b>	Indicates how often undervoltage was measured at the mains input.
<b>Ctrl. G. Ext. Supply Overvoltage Counter</b>	Indicates how often overvoltage was measured at the mains input.
<b>Ctrl. G. Ext. Supply Volt. Freq.</b>	Indicates the supply frequency measured at mains input.
<b>Ctrl. G. Ext. Supply Undervoltage</b>	Indicates if there is currently undervoltage measured at the mains input.
<b>Ctrl. G. Ext. Supply Overvoltage</b>	Indicates if there is currently overvoltage measured at the mains input.
<b>Ctrl. G. Operating time</b>	Indicates the time the LED driver was operated either via mains or from battery.
<b>Ctrl. G. Start Counter</b>	Indicates how often the LED drivers was started.
<b>Ctrl. G. Power factor</b>	Indicates the power factor of the LED driver under reading.
<b>Ctrl. G. Overall Failure condition Counter</b>	Indicates how often a failure was detected.
<b>Ctrl. G. Output Power limitation Counter</b>	Indicates how often the output power has to be limited.
<b>Ctrl. G. External supply voltage</b>	Indicates the mains input.
<b>Ctrl. Thermal Derating Counter</b>	Indicates how often the LED driver reached a critical temperature and the intelligent temperature Guard Function (ITG) started reducing the output power.
<b>Ctrl. G. Thermal Shutdown counter</b>	Indicates how often the LED driver reached a critical temperature and the intelligent temperature Guard Function (ITG) shut off the device.
<b>Ctrl. G. Overall Failure Condition</b>	Indicates if a failure is currently detected.
<b>Ctrl. G. Output Power limitation</b>	Indicates if the output power is currently limited by the LED driver.
<b>Int. Control gear reference temp.</b>	Indicates the internal control gear reference temperature in °C.
<b>Ctrl. G. Thermal derating</b>	Indicates if the output power of the LED driver has been reduced due to a critical temperature.
<b>Ctrl. G. Thermal Shutdown</b>	Indicates if the LED driver has been turned off due to a critical temperature.
<b>Ctrl. G. Output Current Percentage</b>	Indicates the active output current percentage.
<b>Ctrl. G. temperature</b>	Indicates the temperature of the LED driver.
<b>Light Src. Start count.</b>	Indicates how often the LED was switched on.
<b>Light Src. Start count. Reset</b>	Indicates the resettable amount of starts of the light source.
<b>Light Src. On time</b>	Indicates for how long the LED has been switched on.
<b>Light Src. Over Fail. cond. Count.</b>	Indicates how often a failure was detected.
<b>Light Src. Short circuit counter</b>	Indicates how often a short circuit was detected.
<b>Light Src. Open circuit counter</b>	Indicates the amount of times the light source open circuit occurred.
<b>Light Src. Thermal derating count.</b>	Indicates how often the LED had reached the overload temperature.
<b>Light Src. Thermal shutd. Counter</b>	Indicates how often the LED had reached the shutdown temperature.
<b>Light Src. Voltage</b>	Indicates the voltage at the LED output.
<b>Light Src. Current</b>	Indicates the current at the LED output.
<b>Light Src. Overall fail. Condition</b>	Indicates if a failure is currently detected.
<b>Light Src. Short circuit</b>	Indicates if a short circuit is currently detected.
<b>Light Src. Open circuit</b>	Indicates if a open circuit is currently detected.
<b>Light Src. Thermal derating</b>	Indicates if a temperature overload is currently detected.
<b>Light Src. Thermal shutd.</b>	Indicates if a shutdown temperature is currently detected.
<b>Rated median useful lifetime of luminaire</b>	Indicates the rated median useful lifetime of the luminaries in hours.
<b>Rated median useful lifetime of light source</b>	Indicates the rated median useful light source starts of the luminaire.
<b>Light Src. Temperature</b>	Indicates the temperature of the light source in °C.
<b>Light Src. On time reset</b>	Indicates the resettable light source operating time in hrs,minutes and seconds.



**1-10V function:**

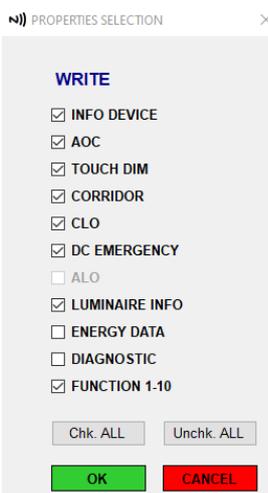
- **Enable/Disable**
- **Dimming curve:** adjustable to Logarithmic, Linear and Soft start.
- **Min. CV (V):** Minimum dimming voltage, 1...3V.
- **Max CV (V):** Maximum dimming voltage, 7...10V.
- **Dim. To off Voltage (V):** reached dimming value able to switch off the ECG.



**DC Emergency:**

- **Perc. Level (%):** the displayed data shown the factory default value.
- **Status:** Enable/Disable.
- **Dimming:** Enable/Disable.
- **Max Level (%):** 0...100%.

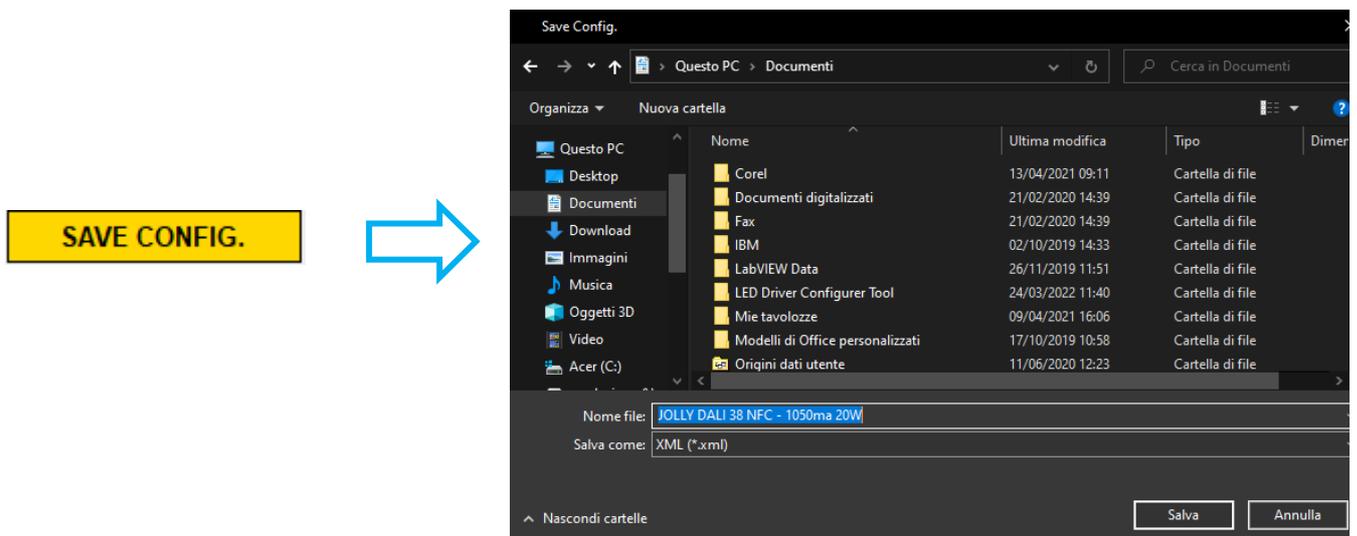
- Once adjust all needed features you can proceed with the writing of the features on the ECG using properly button “DATA WRITE”:



Once selected “DATA WRITE” a further popup will appear with all capabilities of the driver, now you can select again (for double confirm) which capabilities you really need to set on the driver. If the writing process is correctly terminated the following message will appear “PROCESS OF WRITING TAG TERMINATED”.

After write the ECG is always possible to save a pre-set configuration in order to be used also for a future production.

Click on “SAVE CONFIG.” and select on the popup which folders do you prefer and save the configuration. If the xml. File is correctly saved the following message will follow “CONFIGURATION DATA SAVED CORRECTLY”



The saved xml. file of course can be load on the next productions, click on “LIBRARIES ECG”, based on the window that will appear you can proceed in two way:

- 3) Click on “LOAD FILE” , select the xml. file previously saved (es. JOLLY DALI 38 NFC – 1050mA 20W) and confirm everything. If you follow this procedure the file will be loaded in the software and it can be modified, saved again or load in the driver under programming.
- 4) Select “MULTIPROGRAMMER” click on “LOAD FILE”, select the xml. file previously saved (es. JOLLY DALI 38 NFC – 1050mA 20W) and confirm everything, the following message will displayed ”CONFIGURATION DATA LOADED CORRECTLY, START UPLOAD CONTINUOS”.

Software will start with the programming, once finish the first piece software displayed this message: “CONFIGURATION OPERATIONS COMPLETE. REPLACE THE DEVICES FOR THE NEXT CONFIGURATION”, at the right you will have a counter of 5sec at your disposal in order to change the ECG on the reader going ahead with the production.

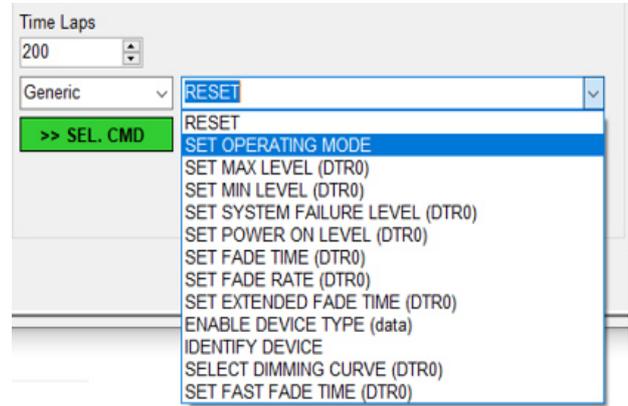
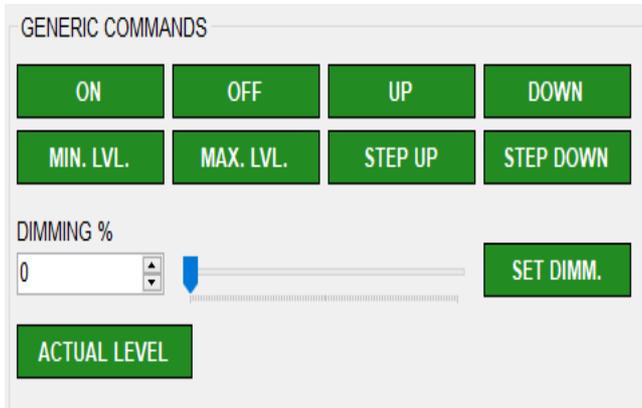
We suggest to use this procedure only during “production”.

MESSAGE ...

**Configuration operations complete.  
Replace the devices for the next  
configuration [5]**

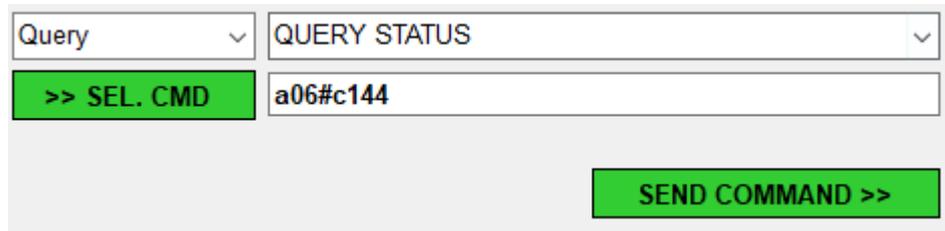
## DALI COMMANDS:

Accordingly with DALI normative we dedicate a complete section related to the DALI commands, under button functionality or using the properly query in order to recall most of them:

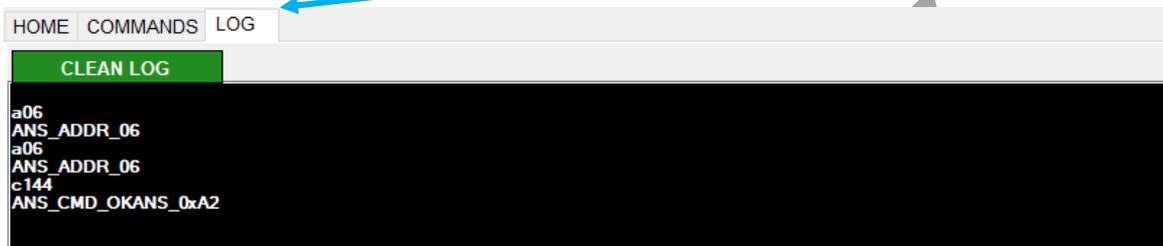


<b>Parameter</b>	<b>Description</b>
<b>Fade time</b>	The selected value is set as the fade time in seconds.
<b>Fade rate</b>	The selected value is set as the dimming speed. It indicates by how many steps per second the intensity is change. The fade rate is used with DALI commands (UP) and (DOWN).
<b>Minimum Level</b>	The selected value is set as the minimum level for the control gear. This value cannot be fallen during dimming/brightening. Value range: Physical lower limit – Max. Level
<b>Maximum Level</b>	The selected value is set as the maximum level for the control gear. This value cannot be exceed during dimming/brightening. Value range: Minimum Level – Maximum Level
<b>Power on Level</b>	The selected value is set as the value after power is restored.
<b>System failure Level</b>	The selected value is set as the value in the event of failure of the DALI power supply.

After select the query (es. **QUERY STATUS**) click on “>> SEL.CMD” the properly command will appear in the row “a06#c144”, now in order to send the QUERY click on “SEND COMMAND”.



Later on in order to check the answer of the ECG check the “LOG” file at the top of the window:



**DALI PROGRAMMER:**

The following buttons can be used in order to check the compatibility between the hardware (DALI PROGRAMMER) and the software or to reset the master in the case will be necessary.



**CONTROL VERSION:** must be used in order to check the compatibility between the hardware (DALI PROGRAMMER) and the software. The hardware version must be from 2.7 or higher, if the hardware is compatible the software will show the following popup-up:

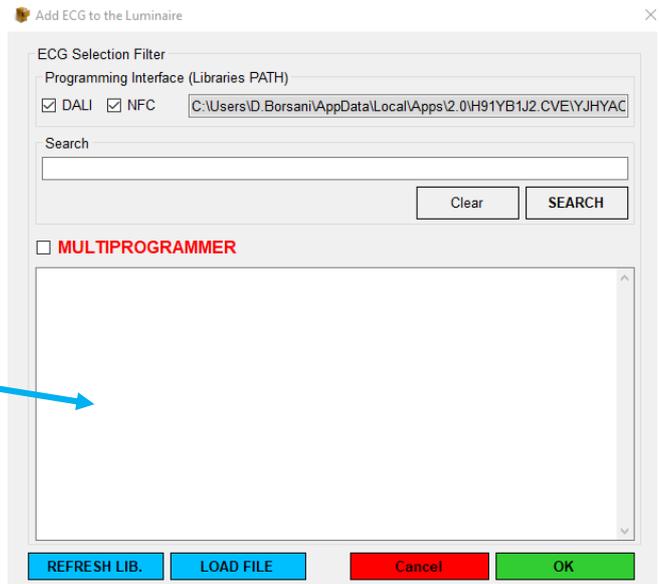
**RESET MASTER:** sometimes it could happen that the software send the “error01” it could be due to an incompatibility with the hardware (an old firmware version) or because the communication laptop-ECG is missing. Check the connection and when you’re sure to have adjust the wires reset the master.



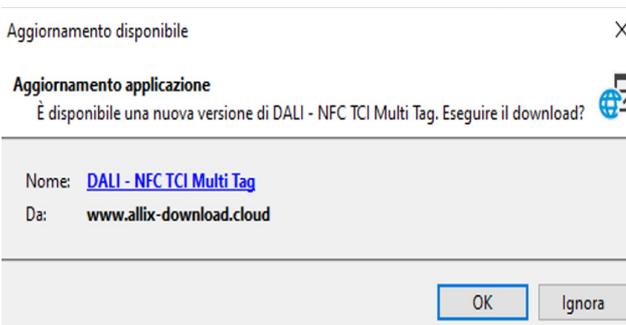
### Library management:

DALI-NFC multi tag it's an on-line version, it means that all modifications done by us so all updating on the library are always implemented on your installed software.

The white window will be filled with all library published from us.



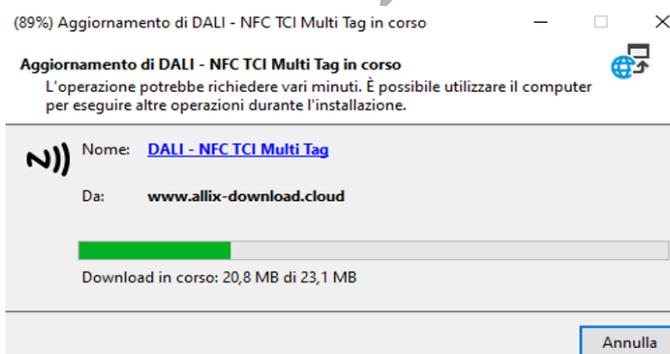
### Software updates:



As above explained DALI-NFC multi tag is on-line so means that all modifications done in terms of graphic point of view and functionality are always and automatically implemented on your software.

If a new updating will be published on the net, when software will run, it will ask to confirm the updating, click "OK" and go ahead.

A second message will appear, with a slide showing the status of the upload.



N.B in order to install the updates, the laptop must be connect via Wi-Fi or LAN.

PRELIMINARY