Manual for the nexgentec DALI Line driver framework
Version 1.00.006

Table of Content

1 Whats in the box?

Included in one set of the framework are:
- One license key
- Software drivers
- nexgentec DALI interface (If ordered)

2 What is it doing?

- It connects DALI/DSI system to Control4.
- It provides seamless feedback to Control4 from the DALI bus devices

3 What functionality have the "devices" drivers ?

A full description of the functionality is provided in the devices section of this document

4 What DALI actors are supported and which driver in need therefore?

All DALI actors are supported. They all communicate with data packets (0-254) on the single address range of 0-63 and group address 0-15

5 How is it working?

The framework contains 2 parts. The first part is the controller driver. This driver connects all device drivers that are added in the rooms together and communicates with the DALI Processor.

6 How many devices can it handle?

The architecture allows you to connect unlimited devices to each controller driver. Controller drivers can be added as many as needed, the only limitation is the CPU power of the Control4 controller itself. A HC- 800 is always a good choice

7 How is it licensed?

The framework is will license itself automatically when the nexgentec DALI Processor is used, no license key must be applied.
If a original DALI-RESI-ASCII Processor is used a key must be inserted to avoid a nonworking system. It will only work for the Control 4 controller specified
- More info about licensing/ key change is available in the Driver Dashboard at technet.genesis-technologies.ch

8 Who does provide support?

Contact nexgentec.eu:
info@nexgentec.eu

Before you call or email support, make sure your system has a 4sight account that is active and tested. Supply always the credentials for login.

9 Where can I ask for device drivers?

- Driver inquiries can be sent to info@nexgentec.eu
- In order to integrate it into the framework the actor must be sent to nexgentec
- A estimates of costs will be provided before the integration starts

## 10 Configuring the DALI bus using the manufacturers software

Skip this step if the DALI bus addressing is already done.
Download the software from the drivers page on technet.genesis-technologies.ch.
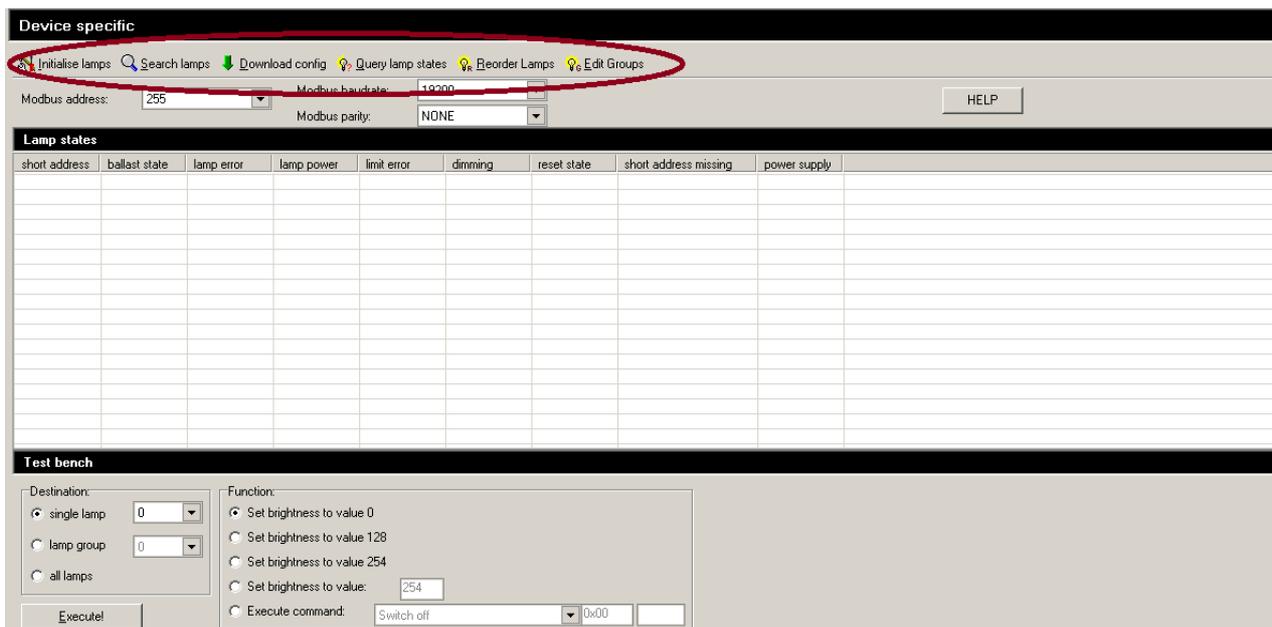You need to connect the Interface to the PC, see the next chapter for the pin out of the serial connection. After installation and start of the software the main window is showing up. Select on the left to side the DALI-RESI-ASCII module
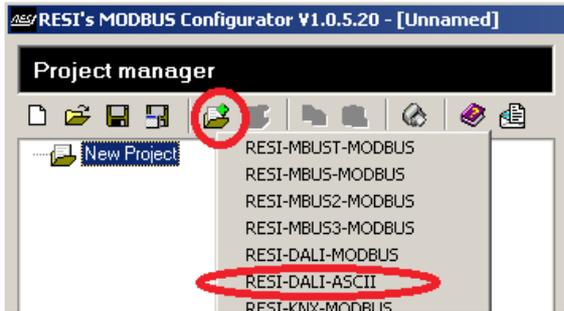
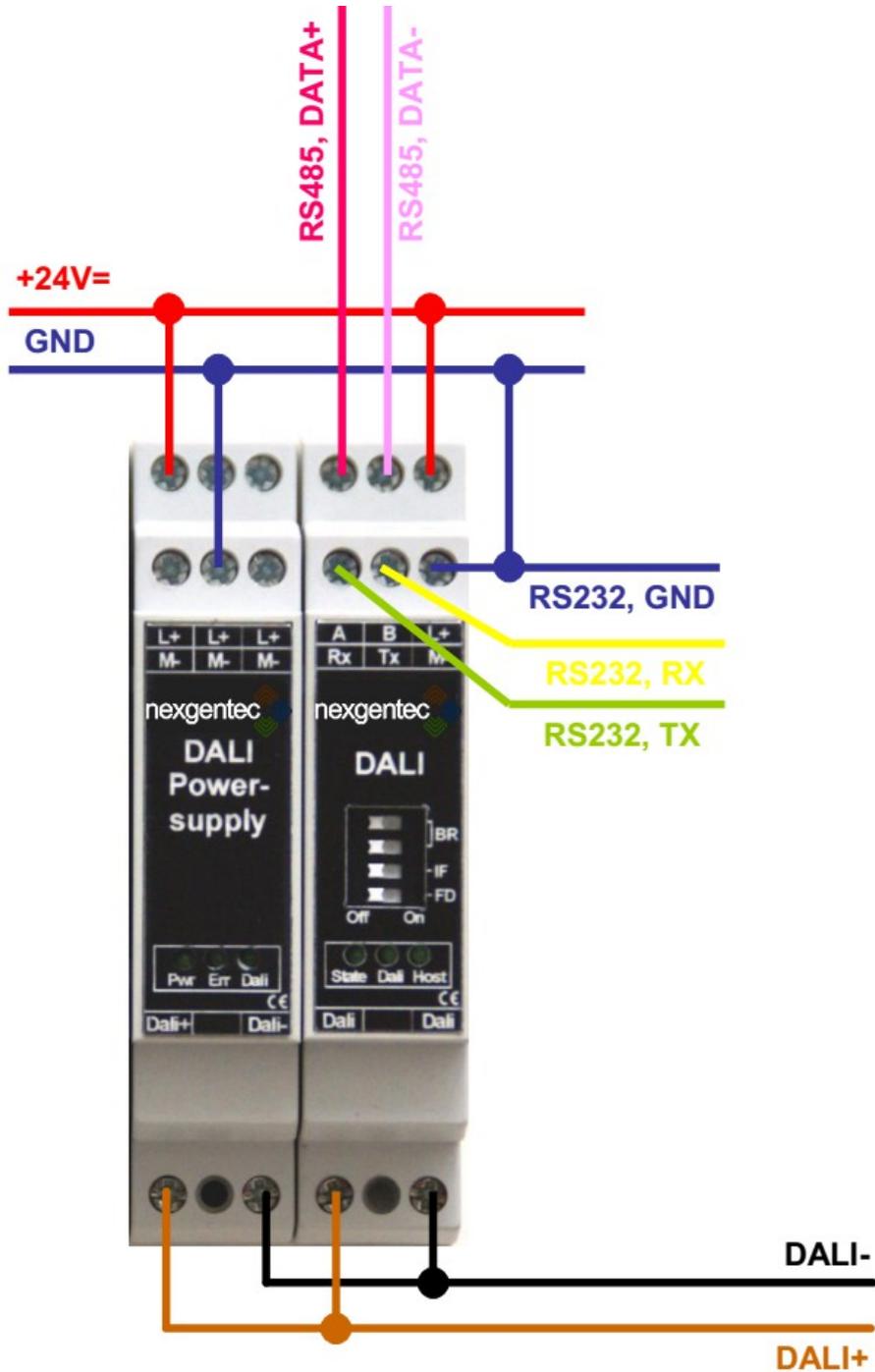Connect via network or Serial, test the connection to verify.
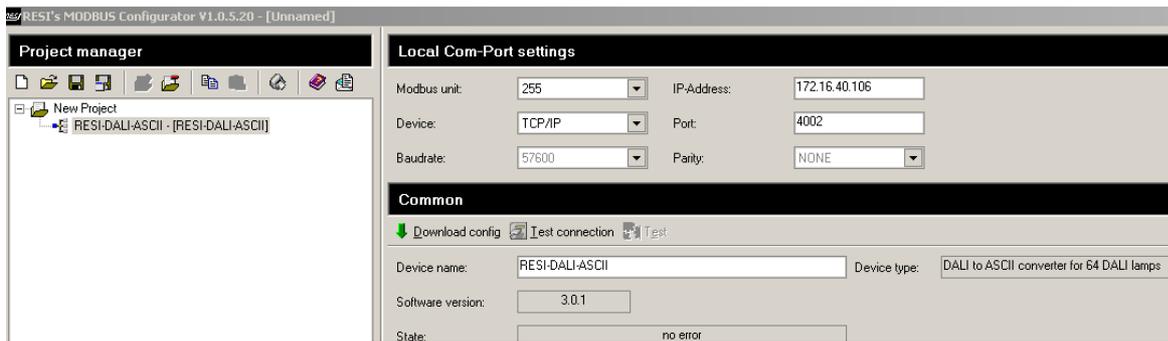
Configure the DALI bus

11 Wiring up the the DALI interface

Per default the DALI Interface connects via RS232 to the Control4 Controller
Wiring setup:

Additionally the driver supports the connection over a Serial<->TCP module like the Moxa Nport 5210 or USR-TCP232-200 module
The setup from this modules is not described in this manual. They must be configured as transparent TCP server.

12 Setup the DALI interface in Composer

In Composer add the controller driver to the project

Items

Locations	Discovered	My Drivers	Search

dali

☑ Local ☑ Online ☐ Certified Only

All Device Types ▼ | Dali ▼

Results   Sort by: Relevance ▼

Dali network
Dali   NGTSLCO4DLI01NW
others   Serial **Local**

Dali Light Switch
Dali   NGTSLCO4DLI01SW
Light (v2)   Other **Local**

Dali Light Dimmer
Dali   NGTSLCO4DLI01LD
Light (v2)   Other **Local**

Connect the RS232 in Connections

Name	Type	Connection	Input/Output	Connected To	
Control Inputs					
Serial RS-232	Control	RS_232	Input	Master HC800->SERIAL 2	
Control Outputs					
Dali Control	Control	DALI_DEVICE	Output	Load 17->Dali Control, Group 0->Dali Control, Load 6...	

Back in System Design click on the controller driver, enter the provided product key and press "Set"
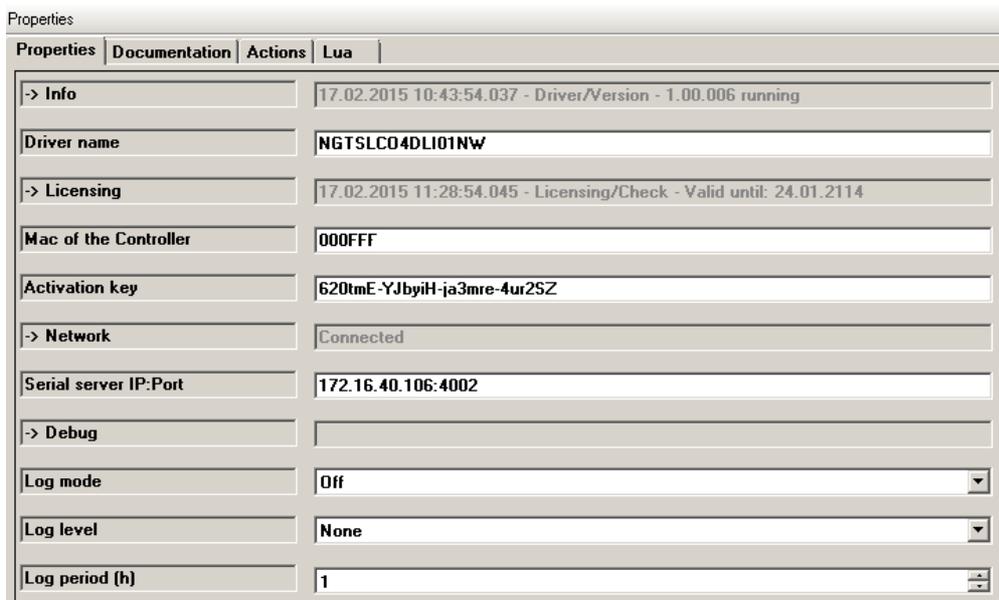
Properties

Properties	Documentation	Actions	Lua

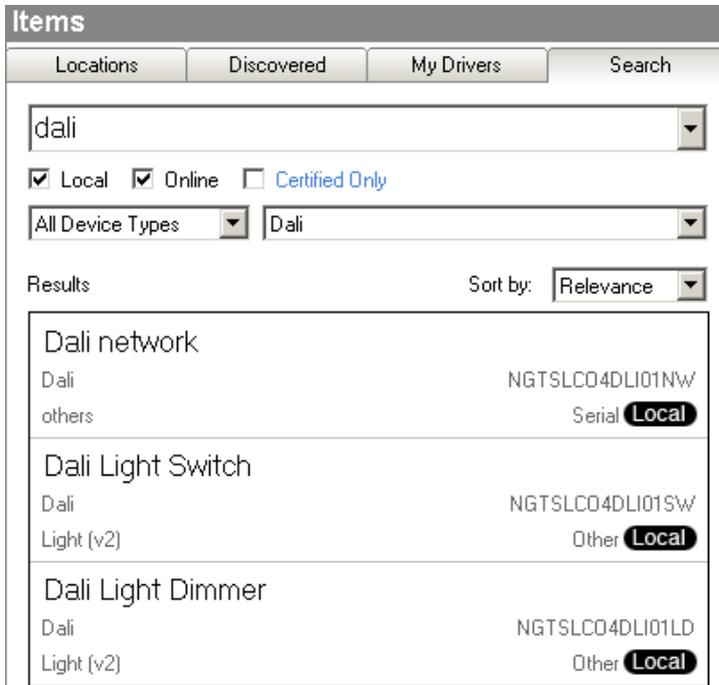| -> Info	17.02.2015 10:43:54.037 - Driver/Version - 1.00.006 running
Driver name	NGTSLCO4DLI01NW
-> Licensing	17.02.2015 11:28:54.045 - Licensing/Check - Valid until: 24.01.2114
Mac of the Controller	000FFF
Activation key	620tmE-YJbyiH-ja3mre-4ur2SZ
-> Network	Connected
Serial server IP:Port	172.16.40.106:4002
-> Debug	
Log mode	Off ▼
Log level	None ▼
Log period (h)	1

The activation is successful when the expiry date is displayed

13 Adding a light

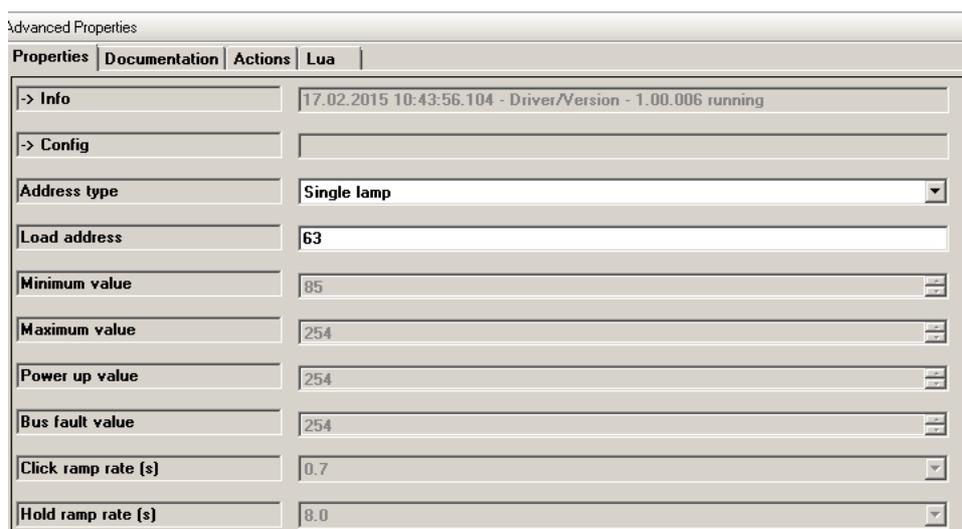In Composer add a switch or dimmer driver to the project.

In functionality there is no difference as the light behavior is anyhow defined in the DALI configuration itself, in Control4 the difference will be that one is showing up as dimmer, the other as switch

13.1 Driver Properties

Address type: Select if the driver does control a single light, a group or all lights. Depending on that setting additional properties will show up.

- Load address: Insert the address from the load to control
- Group address: Insert the address from the DALI group to control
- Level report load: If a group or all lamps are controlled a report load can be configured. It will be the "master" load for all level feedback's during operation. On start up the level of this load will be requested.

14 Finishing your installation

When all devices are added a restart can be issued by pressing "Initialize Framework" in the Actions tab of the "DALI network" driver. When the debug mode is activated the LUA window should print out some information about the restart.
Normally no restart is required the driver refresh by itself when a setting was changed

15 Troubleshooting

Issue: Network does not connect. Solution: Disconnect the Serial connection.
Issue: Serial does not connect. Solution: Remove the IP from Properties