DINTDALI01

About

DALI is an industrial standard to control lights meaning Digital Addressable Lighting Interface.
A DALI system consists of a master and slaves linked together with 5 wires : Earth, 230VAC supply and 2 wires for datas.
Maximum 64 DALI slave devices can be connected to a DALI master.
Domintell DINTDALI01 module is a DALI Master interface that manages an entire DALI system..


Specifications

- Minimal version of Domintell2 software : 1.27.05.
- Minimal version of module's firmware : v15.
- Up to 16 DINTDALI01 modules can be connected on Domintell2 bus.
- Up to 64 DALI salves/drivers can be connected on one DINTDALI01 module.
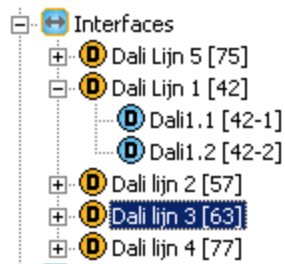- Module's consumption : 45mA.

Limitations

- Only the following DALI DeviceType are handled :
  - "Device type 0" (IEC62386-201) : fluorescent lamps.
  - "Device type 3" (IEC62386-204) : low voltage halogen lamps.
  - "Device type 4" (IEC62386-205) : 220V halogen lamps.
  - "Device type 6" (IEC62386-207) : monochrome LED modules.
- Unlike DDIM01, "dimmer function" only runs one side by push. If minimun or maximum level is reached, push must be released and pressed again to run to dim to the other side.
- DINTDALI01 does not provide DALI bus power. An extra DALI power supply must be used. Here is some references:
  - "TRIDONIC DALI PS1 #24034323" :
    http://www.tridonic.com/com/en/products/2626.asp
  - "Helvar digidim 402":
    https://www.helvar.com/en/products/402/
- If the factory settings model reference (EAN/GTIN code) & serial number are not correctly set in your DALI slaves/drivers by the manufacturer, successive commissioning process will probably twist the short address of the slaves/drivers. You will have to modify all links related to these slaves/drivers and rename the output.

Wiring

230Vac

DALI
slaves /
drivers

DALI
power
supply

Max 64 DALI
channels for
each
DINTDALI01

da

da
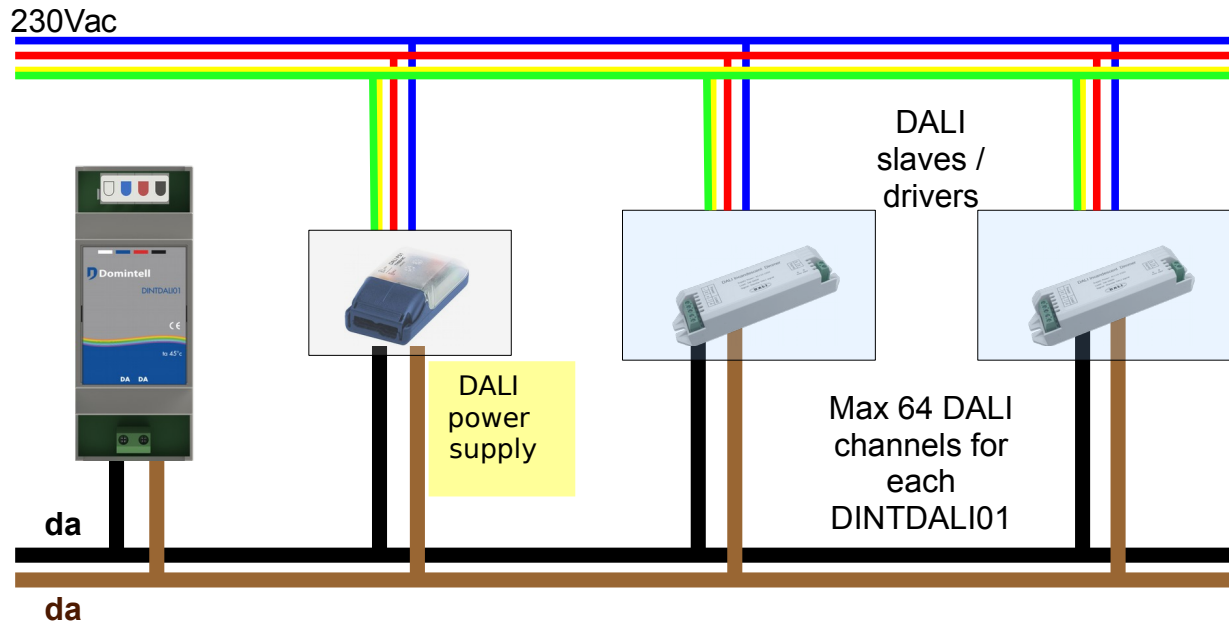
Quick start guide (Configuration in software)

- The configuration software detects a DINTDALI01 module (network scan).
- The module appears then in section "Interfaces"on the right column.

```
Interfaces
  Dali Lijn 5 [75]
  Dali Lijn 1 [42]
       Dali1.1 [42-1]
       Dali1.2 [42-2]
  Dali lijn 2 [57]
  Dali lijn 3 [63]
  Dali lijn 4 [77]
```

- Edit parameters of the interface by right-clicking the yellow icon.

- Start a commissioning of the DALI system bound to the module. There are two options that afftect commissioning :
  - "Erase short addresses" :
    - When a new installation is started, it must be checked to erase all short addresses and reassign a new one to each DALI slave/driver.
    - When the installation is extended (a new slave/driver is added to an already working installation), this option must be unchecked. All existing short addresses will be kept and only the newly added devices will receive a new short address. **When this mode is used, newly added DALI slaves/drivers must be in unassigned mode (short address set to 0xFF). If slave was already used before, please reset its short address using an independent DALI line and master**.
  - "Visual Response" : if checked when a new commissioning is started, all slaves go to their minimum level. When a slave receives a new short address, it goes to its maximum level.
- After a commissioning, names and links will be kept event if short addresses have changes (see Limitations for problematic cases).
- After a commissioning with "Erase short addresses" option set, DINTDALI01 can not control slaves anymore until the new application is sent to the Master (DGQG01).
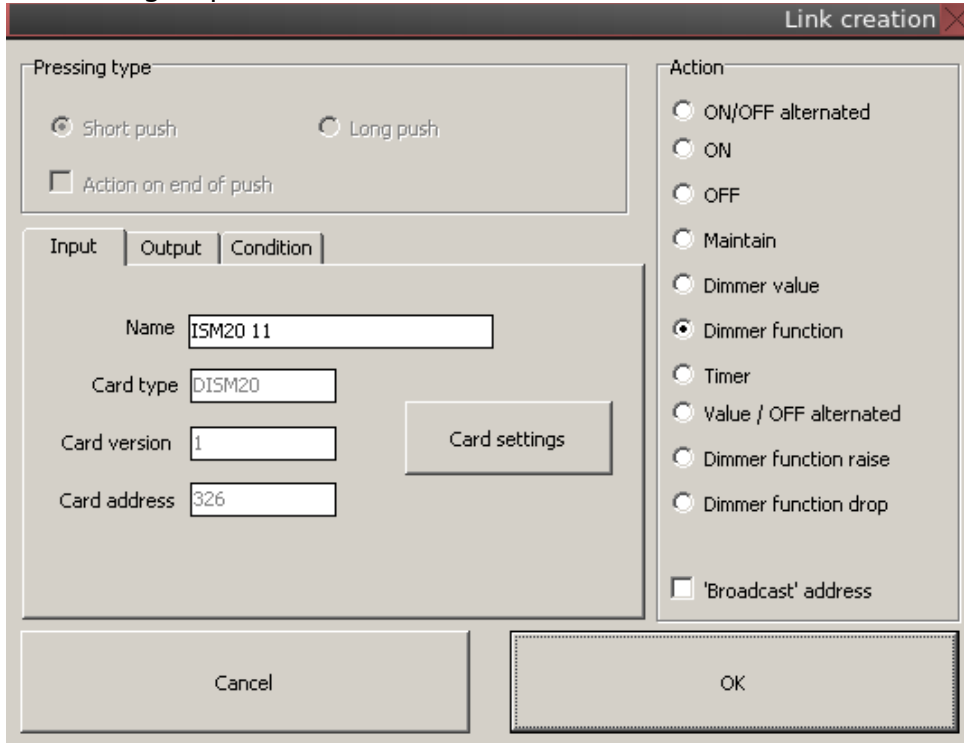
- DALI slaves can be removed replaced via the menu "DALI device management". When done, click on OK button.
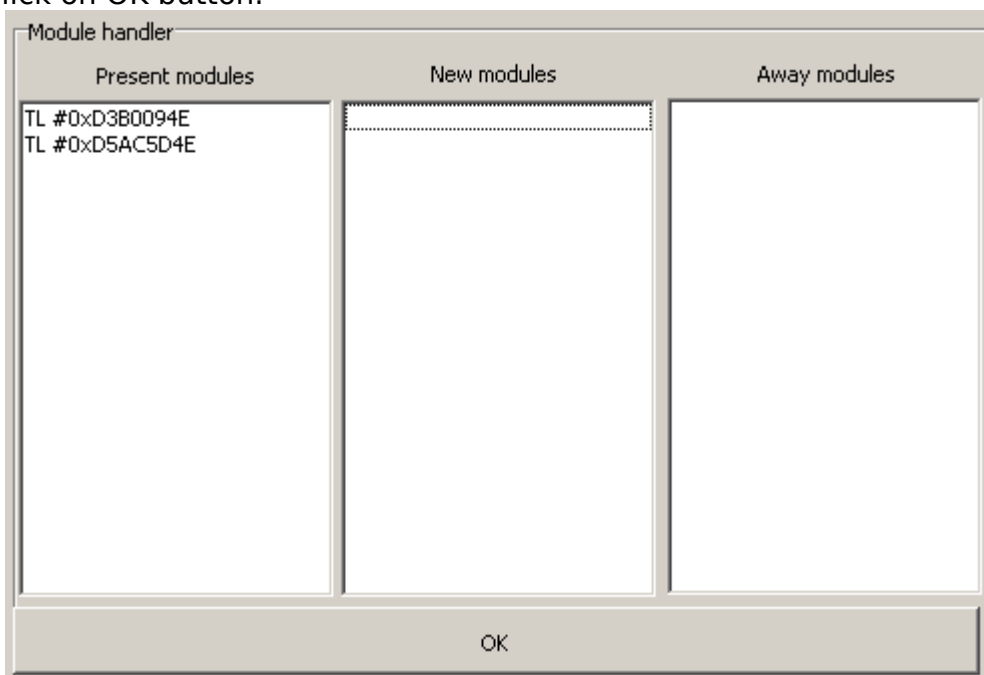
- To edit parameters of a DALI slave, right-click on it (blue icon).
  - The Dimming range gives the physical range in which the slave can dim.
  - The "Max level" and the "Min level" fields can be used to reduce the original dimming range. "Min level" can be increased if a Fluorescent lamp flickers at low level. These levels are then converted into percent by Domintell2 software.
  - The "Reset value" is the level that a slave takes when the power supply is applied.
  - "Remember the last value" allows to memorize the last dimmed value and use it as the default ON value when a "ON/OFF alterneted" function is performed.
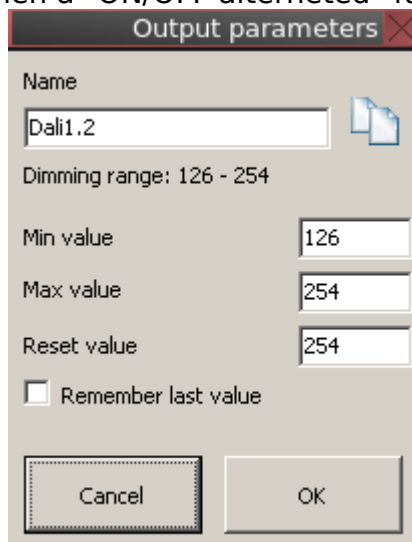
- Link options for DINTDALI01 output are the same than output of a DDIM01. An extra "Broadcast address" checkbox is available to control all slaves connected to a DINTDALI01 module at once. This can be used to perform a "All OFF" or "All ON" without creating a memo/group.

- Groups, sfeers, clocks, followers, conditions, durizing, OnChange, etc are available as usual with DINTDALI01 module. **If a DALI memo only contains slaves from the same DINTDALI01 interface, a DALI group will be assigned/created in the DINTDALI01 module.** If more than 16 DALI groups are needed, they will be handled as classic domintell memo (each slave will be controlled individually).

Warnings

- Available : since version 1.24.00 but Domintell2 **version 1.27.05 and DINTDALI01 firmware v14 or later must be used.**
- DINTDALI01 does not provide power supply to DALI bus. An external DALI power supply is required. Here is some references:
  ○ "TRIDONIC DALI PS1 #24034323" :
    http://www.tridonic.com/com/en/products/2626.asp
  ○ "Helvar digidim 402":
    https://www.helvar.com/en/products/402/
- Only one DALI master (DINTDALI01) can be connected to a DALI bus at the same time.
- A DALI device is always added using a commissioning. There is no manual add.
- DALI Bus cable and Domintell Bus cable must absolutely be separated and should not be wired in the same sheath. Minimun insulation distance = 5cm.

Tested module

- Type 0 (TL) : OSRAM Quicktronic Intelligent QTi DALI 2x14/24 DIM
- Type 6 (LED) : PHILIPS LED driver Xitanium 75W (92 90 008 521)
  www.mylite.be IP65 27W 240V/50Hz

- Type 6 (LED) : TRIDONIC LED LCAI 65 W 900–1 750 mA ECO lp
  http://www.tridonic.fr/fr/products/led-talexxconverter-lcai-65w-400-1750ma.asp
- Type 6 (LED) : DELTALIGHT LED POWER SUPPLY MULTI-POWER DIM9 (300 90 63)
  http://www.deltalight.com/en/products/detail/led-power-supply-multi-power-dim9-300-90-63
- Type 6 (LED) : HELVAR Led driver LL1x20-D-E-DA.
  https://www.helvar.com/en/products/LL1x20-E-DA/
- Type 6 (LED) : TCI DC Mini Jolly DALI 20
  http://www.tci.it/mini-jolly-dali/
- Type 6 (LED) : Lumotech L05025/L05040 (*no serial number*). **Slaves with firmware version below V25/40_8 should not be used !**
  https://www.fulham.com/product-systems/led-systems/lumoseries/
- Type 6 (LED) : OSRAM OTi DALI 75/220-240/24 1-4CH
- Type 6 (LED) : Philips BVP525 1860/757 230V BV DX50 D9 T25 100 (*no serial number*)
  http://www.lighting.philips.nl/professional-product-catalog/outdoor-luminaires/sports-and-area-floodlighting/area-and-recreational-floodlighting/bvp525/912300023822_EU
- Type 4 (Phase dimmer) : Helvar 452
  https://www.helvar.com/en/products/452/
- Type 4 (Phase dimmer) : Helvar 454
  https://www.helvar.com/en/products/454/
- Type 4 (Phase dimmer) : Helvar 455 (*no serial number*)
  https://www.helvar.com/en/products/455/
- Type 4 (Phase dimmer) : OSRAM OTi DALI 25/220-240/700 LT2
- Type 4 (Phase dimmer) : OSRAM HALOTRONIC HTI DALI 315/220-240 DIM
- Most of Helvar products will work (somes do not implement the serial number).
- **Lunatone drivers/slaves are not compatible with DINTDALI01. They do not follow DALI specification.**

If you have any question, you can contact your Domintell2 commercial contact or Domintell2 technical support at support@domintell.com**.**