



WRKT22245NC  
WRKT22255NC

KNX DALI GATEWAY DL101 (1 Channel)  
KNX DALI GATEWAY DL102 (2 Channels)

WRKT22245NC  
WRKT22255NC



Installation should only be carried out by a technical personnel having certificate of competency

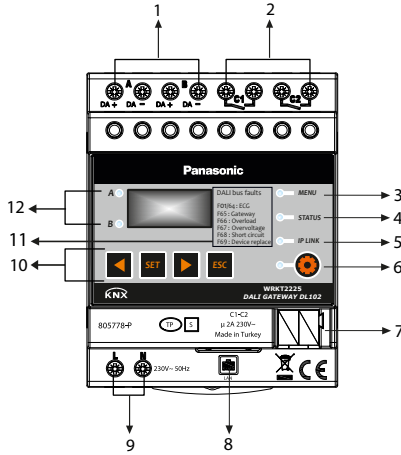
## Panasonic®

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611055-KNX-EN

### Product Components



- 1- DALI Channels (There is no B channel in the single channel option.)
- 2- Relay Outputs\*
- 3- Menu Active LED
- 4- Status LED
- 5- IP Connection Status LED
- 6- KNX programming button and LED
- 7- KNX bus terminal
- 8- Ethernet connector
- 9- Power Supply 230V AC, 50Hz
- 10- Manual operation buttons
- 11- DALI Bus faults description
- 12- 7 segment display and channels LED (Channel's LED turn on, when channel is selected)

\* Relay outputs are for signaling purposes. To use with the load, a contactor must be used.

### Product Versions

Product Features	WRKT22245NC	WRKT22255NC
Number of DALI Channel	1	2
Relay Outputs	2	2

### Technical Information

SUPPLY VOLTAGE	
Voltage range	230 V AC, 50/60 Hz
Power consumption total via mains	Max. 8W (at 230 V AC and max. load) (for 1 ch.) Max. 12W (at 230 V AC and max. load) (for 2 ch.)
DALI	
Number of outputs	1 channel      2 channel
Number of DALI devices	Maximum 64 ballast per output
Protection	Short circuit, Overload, Over-voltage (230VAC)
DALI voltage	18 V DC
No-load voltage	250 mA
Maximum supply current	230 mA
Guaranteed supply current	18 V DC 2x250 mA 2x190 mA
DALI cable lengths (for copper wire)	The DALI control voltage is a functional extra-low voltage (FELV). - 2.5 mm <sup>2</sup> max. 300 m - 1.5 mm <sup>2</sup> max. 300 m - 1.0 mm <sup>2</sup> max. 224 m - 0.75 mm <sup>2</sup> max. 168 m - 0.5 mm <sup>2</sup> max. 112 m
DALI transmission rate	1200 bit / s
KNX	
KNX voltage	DC 21 ... 32 V SELV
KNX current consumption	<5 mA
KNX interface	TP1
Configuration mode	S-Mode
IP	
Connections Speed	10/100 Mbits
RELAY OUTPUT	
Output Contact 1	1 N/O, 2A-230V AC Resistive, 2A 30V DC
Output Contact 2	1 N/O, 2A-230V AC Resistive, 2A 30V DC
BUTTONS AND DISPLAY	
Control buttons	<, SET, >, ESC (Total 4 button)
Display and LED elements	MENU, STATUS 1/2, IP LINK/TRAFFIC, KNX PROG., A, B (only 2 channels) - Total 6 LED indicators 3 Digit 7-Segment LED Display
ENVIRONMENTAL CONDITIONS	
Protection degree (IEC60529)	IP20
Protection class (IEC61140)	II
Isolation category	Overvoltage category III (IEC60664) Pollution degree 2 (IEC60664)
Temperature range	Operation -5...+45 °C Storage -10...+55 °C Transport -25...+70 °C
Humidity	5...93% (non-condensing)
MECHANICAL DESIGN	
Dimensions (HxWxD)	90mmx71,8mmx65,8mm
Mounting (IEC60715)	35 mm top-hat rail (TH35)
Mounting width	DIN rail 72mm (4 modules)
KNX bus connection	KNX connector (243-211 Wago)
IP Connector	Ethernet (RJ45, female)
Connection type (Power/Relay/DALI)	Screw terminal Single wire: 1,5mm <sup>2</sup> ...4mm <sup>2</sup> or 2x1,5mm <sup>2</sup> ...2x2,5mm <sup>2</sup> Stranded wire without ferrule: 0,75mm <sup>2</sup> ...4mm <sup>2</sup> Stranded wire without ferrule: 0,5mm <sup>2</sup> ...2,5mm <sup>2</sup>
Weight	0.22 kg
STANDARDS	
Product	EN 62386 (DALI), EN 50090 (KNX)
EMC	EN 50428 / EN 60669-2-5
LVD	EN 60669-1, EN 60669-2-1, EN 50428 / EN 60669-2-5

## IP Settings

KNX DALI Gateway is designed for use in IEEE802.3 compatible 10/100 BaseT networks. Device receives IP address from DHCP server if "IP address assignment" is selected as "DHCP" in ETS database. If DHCP is not activated, the device starts with the fix IP address entered on the ETS project. Default IP settings are shown in the following table.

DHCP	Off	
Fix IP Address	192.168.1.154	
Net Mask	255.255.255.0	
Gateway Address	192.168.1.1	
Default Usernames	user	admin
Default Passwords	1234	9876

## Firmware Update

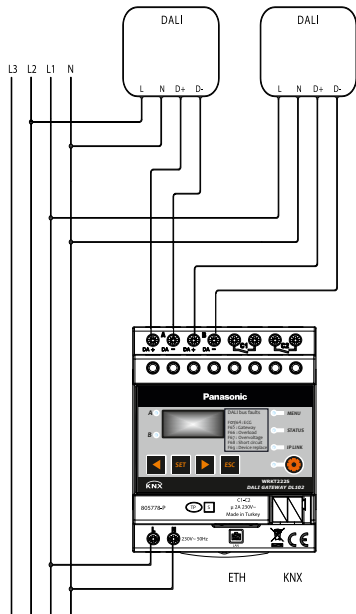
The firmware of the KNX DALI Gateway device can be updated through a web browser without any extra device required. The firmware update doesn't affect KNX (ETS) and DALI saved data. But if you desire to reset the saved data, you can do that in the firmware updated process.

To update the firmware;

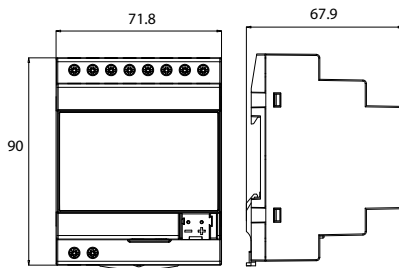
1. Type IP address of DALI Gateway into the search bar of any web browser (recommend Google Chrome). (Please see table 2 for default value)
2. Login page will be loaded.
3. Enter your username and password. (Please see table 2 for default value)
4. Locate the Firmware Update page.
5. Click on the "Choose File" button in the window that opens, and the firmware file with the "\*.bin" extension provided by Panasonic Life Solutions is selected from the location where it is saved.
6. Press "UPLOAD" button.
7. When the uploading is started, "UPLOAD STARTED" will be appeared on the web page and "FUP" animation is shown on the display of the device.
8. Please wait until the uploading is completed.
9. When the uploading is completed successfully, "UPLOAD SUCCEED. NEW FW VER: XX.XX.XX PLEASE REBOOT!" is appeared on the web page and "FUP" animation is stopped. If not success, "UPLOAD FAILED!! TRY AGAIN" is shown. Please try to perform the above steps again.
10. At this stage, if you desire to reset KNX or DALI saved data (factory defaults), you should press "RESET KNX" or "RESET DALI" button and wait until "Reset SUCCESS. PLEASE REBOOT!" is appeared on the web page.
11. Press "REBOOT" button.
12. When the reboot is started, a web page will be loaded to wait boot process.
13. Please wait until boot process is done and the login web page is loaded.
14. At the boot process, "KNX PROGRAM" LED is blink fast (about 200 milliseconds).
15. When the boot process is complete successfully, "STATUS" LED is blink normal (about 1 second) and the device starts up.
16. For more information, please see the technical document.

## Example Connection

DALI control can be provided at the same time with two independent channels. DALI ballasts or an external source can be switched with the help of relays on the device. Connection between the computer and the device can be made directly as a pair-to-pair via Ethernet and configuration can be made without the need for router.



## Dimensions



## Device Behavior

### Factory Default

In the delivered state, the ETS application is unloaded, the manual control is enabled and only DALI broadcast control is available until DALI commission. DALI commission can be done limited way in manual control for first test of DALI bus.

The device can be delivered with old firmware version. Please check our website for latest firmware and updating steps.

### ETS Programming

User can define the device behavior and connect it to another KNX devices after programming it by ETS. The behavior of the device after programming with the ETS depends on the configuration. The description of the features, parameters and objects is in the device reference manual.

### Manual Control

Manual control is available at the factory default. It can be disabled via ETS parameters, if desired. Via manual control, ECG's where at DALI bus can be checked for electrical connection, gear functionality, status of lamp and etc. To enter the manual control mode, press [SET] button for 5 seconds. MENU LED will be turned on and SEGMENTS will indicate user menu information. For user menu states, please check related documents.

## WARNING

- Ensure that the power is cut off before the assembly of the products.
- Connection and assembly of the electrical devices should be carried out only by the technical personnel having certificate of competency.
- No responsibility is assumed for the entire of the malfunction, accident and loss arising from the assembly or interference of the persons not having the competency certificate.
- Use dry or slightly damp cloth to clean the buttons, cover and frame of the product. Never use alcohol, cologne, detergent or other similar chemicals for cleaning. Do not perform wet cleaning do not contact the product with water when the product is energized.
- In case the surface to which the product is connected is dyed, store the product by removing its cover and the frames.
- Keep the product away from the damp or wet environment during the transportation and shipping.
- It is intended for indoor use only.

## Service and Guarantee

- Warranty period starts as of the delivery date of the product and it is 2 years.
- Warranty covers the malfunctions likely to occur due to the manufacturing defects of the product and within the warranty period.
- The product including all of its parts is under warranty as a whole. If the product turns out to be defective, the consumer can use one of the following rights stipulated in Article 11 of Consumer Protection Law no. 6502;
  - a- Withdrawal from the contract
  - b- Demanding discount from sales fee
  - c- Demanding free repair,
  - d- Demanding the replacement of the sold one with a fungible one free from defects. In case the consumer chooses the right of free repair among those rights; the dealer is obliged to repair the product or have the product repaired without claiming any fee under the name of replaced part fee, labor cost or for any other reasons. The consumer can also use the right of free repair against the manufacturer or exporter. The dealer, manufacturer and exporter are jointly and severally liable for the usage of this right by the consumer.
- In case the consumer uses the right of free repair and if the product
  - Fails within the warranty period again and
  - The maximum period required for the repair is exceeded and
  - Authorized service station, dealer, manufacturer or exporter state that it's not possible to repair the product in a report, the consumer can demand the return of the product fee, fee discount at the ratio of the defect or the replacement with the one free of defects, if possible, from the dealer. The dealer can not reject the demand of the consumer. In case this demand is not met, the dealer, manufacturer and exporter shall jointly and severally be held responsible.
- The repair period of the product can not exceed 20 business days. This period starts on the notification of the failure on the product to the authorized service station or the dealer within the warranty period and from the date of delivery of the product to the authorized service station out of warranty period. In case of not eliminating the product malfunction within 10 business days, manufacturer or importer is obliged to dedicate another product with similar characteristics to the use of the consumer until the completion of the product repair. In case the product fails within the warranty period, elapsed time is added to the warranty period.
- Usage of the product contrary to the rules stipulated in user's manual, operating out of determined voltage, current and environmental conditions, damage on the cable connection due to the user's fault and failure of the product due to the facts arising from the fire, flood, earthquake, lightning and similar disasters are not under warranty.
- The consumer can apply to the arbitration committee for consumers or the consumer court where the consumer operations are made or in the residential area for the disputes to be occurred regarding the usage of the rights arising from the warranty.
- In case the dealer doesn't provide this certificate of warranty, the consumer can apply to the General Directorate of Consumer Protection and Market Surveillance of Ministry of Customs and Trade".