

ready2mains™ Programmer ready2mains™

Product description

- Interface for programming of Tridonic products via ready2mains, DALI and U6Me2
- Support of configuration scripts
- Display and keypad for manual operation
- Removable protective cover
- USB interface for easy integration in automated test systems
- Parallel programming up to 5 LED Drivers (max. 400 VA)
- Current setting in 1-mA-steps
- Integrated DALI USB interface incl. intelligent 40 mA bus supply
- USB Mini-B cable 1 m included
- 5 years guarantee



Standards, page 3

Wiring diagrams and installation examples, page 4



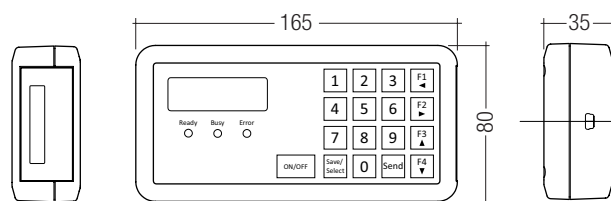


ready2mains™ Programmer

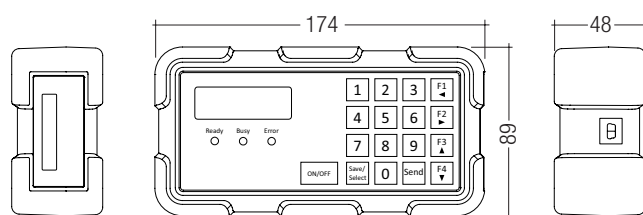
ready2mains™

Technical data

| | |
|------------------------|----------------------------|
| AC voltage range | 110 – 277 V |
| Mains frequency | 50 / 60 Hz |
| Max. load | 400 VA |
| Max. mains current | 3 A |
| Terminals | 0.25 – 1.5 mm ² |
| Cable length secondary | ≤ 5 m |
| Ambient temperature ta | -25 ... +40 °C |
| Type of protection | IP20 |
| Protective cover | blue, removable |
| Housing | grey, ABS UL94V-0 |



ready2mains Programmer without protective cover



ready2mains Programmer with protective cover

Ordering data

| Type | Article number | Packaging, carton | Weight per pc. |
|------------------------|----------------|-------------------|----------------|
| ready2mains Programmer | 28001206 | 1 pc(s). | 0.423 kg |

1. Standards

EN 61347-2
 EN 61347-2-11
 EN 55015
 EN 61000-3-2
 EN 61000-3-3
 EN 61547

According to DALI Standard V2

EN 62386-101
 EN 62386-102
 EN 60950-1 (USB)

1.1 Glow wire test

according to EN 60598-1 with increased temperature of 650 °C passed.

2. Common

2.1 Overview ready2mains Programmer

The ready2mains Programmer is a versatile tool to program various Tridonic products via ready2mains, DALI and U6Me2. It is used in luminaire productions to cover a wide range of manufacturing processes, from manual programming to fully automated production lines. In addition, the Programmer can be used in outdoor applications to configure LED Driver via U6Me2.

2.2 Notes

- The programmer turns off the internal DALI power supply when a second supply is detected on the bus.
- To use the Programmer as a DALI interface, mains supply is not required. For ready2mains operation, mains supply is required.
- To use the Programmer as a DALI interface it is necessary that the firmware on the Programmer is higher than 1.01.45.
- For firmware upgrade see manual.

3. Installation



General:

- Connect max. 5 LED Driver to the Programmer.
- Momentary-action switch has to be rated for mains voltage.
- At low mains voltages the max. mains current of 3 A has to be considered (max. 330 VA at 110 V).
- To guarantee a selective shut down in case of a hardware defect, we recommend to use an extra circuit breaker for the Programmer.
- To prevent destruction of the programmer at incorrect wiring of the luminaire (ground fault), it is recommended to use an isolating transformer plus an adequate fuse.
- Equipment for use in locations where children not likely to be present.

ready2mains:

- The ready2mains Programmer may only be used in conjunction with ready2mains compatible LED Drivers.
- Any other LED Driver or loads shall not be connected when programming via ready2mains.
- LED Driver requires a load to be connected during programming.
- A load in the upper part of the load window is recommended (the highest possible load would be best).
- With small mains power at the LED Driver there might be a systemic problem evaluating the optical feedback.

DALI:

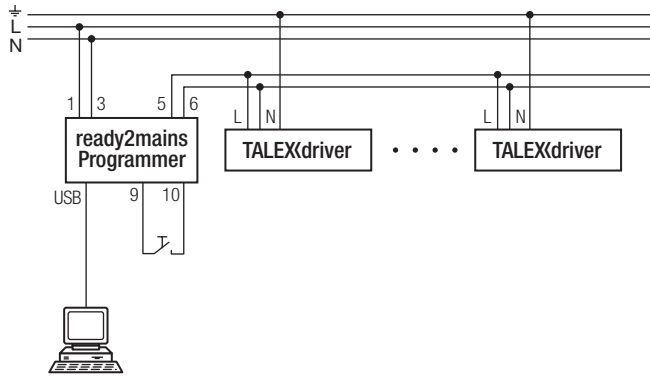
- DALI / DSI is not SELV. Apply the installation instructions for mains voltage.

U6Me2:

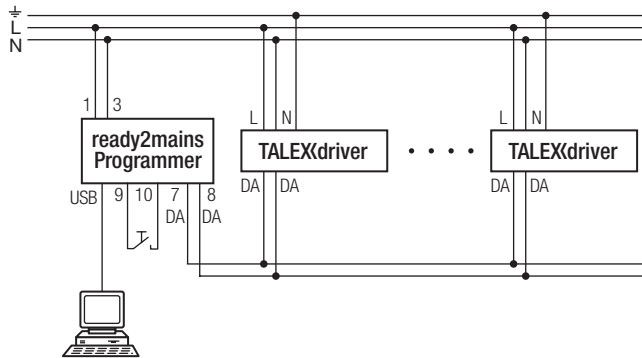
- If load exceeds the stated maximum load, a contactor must be used in between the Programmer and the connected LED Driver.

3.1 Wiring

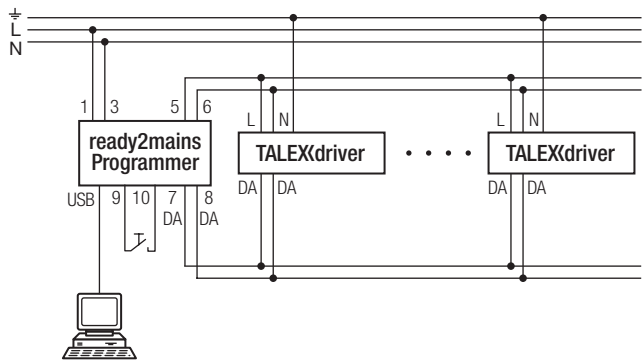
3.1.1 ready2mains



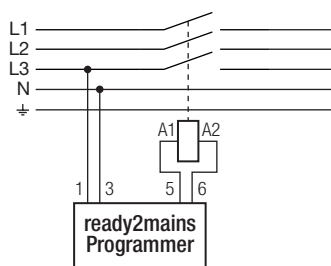
3.1.2 DALI



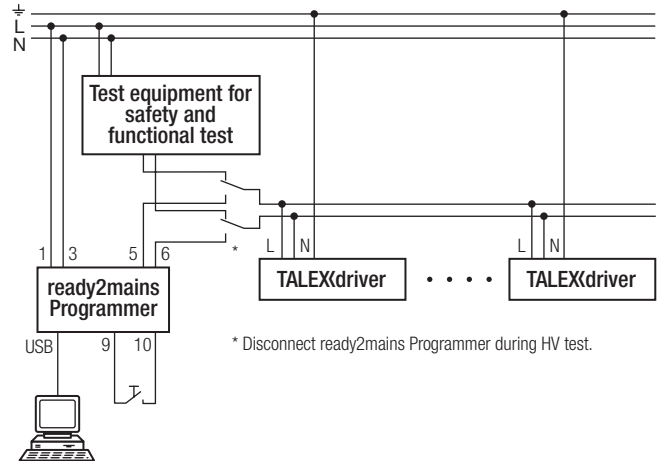
3.1.3 DALI and ready2mains



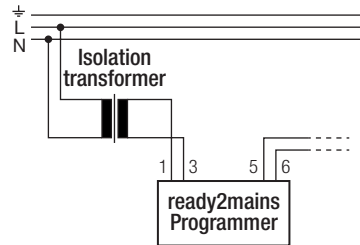
3.1.4 U6Me2 with contactor



3.1.5 Production



3.1.6 Security circuit against ground fault (incorrect wiring of the luminaire)



Tested transformer:

RS Pro 500VA Isolating Transformer

Reference number at RS components: 504-228

Insulation transformer should be protected against secondary short-circuit (B10 circuit breaker primary or a fuse secondary).

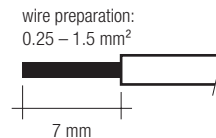
3.2 Installation instructions

Wiring type and cross section

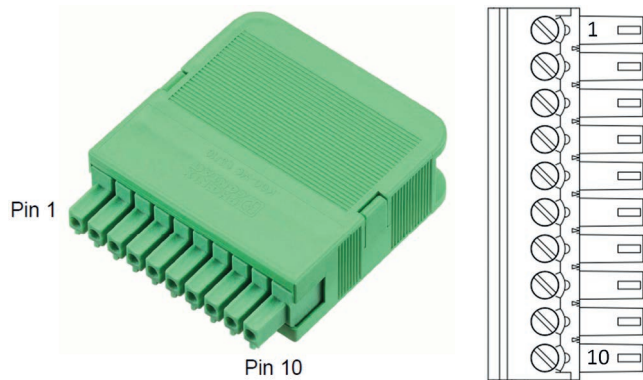
The wiring can be in stranded wires with ferrules or solid with a cross section of 0.25-1.5 mm².

Strip 7 mm of insulation from the cables to ensure perfect operation of the screw terminals.

Use one wire for each terminal connector only.



3.3 Connector pinning



| Pin no. | Input / output | Description |
|---------|----------------|--------------------------------------|
| 1 | Input | Mains input L |
| 2 | - | n.c. |
| 3 | Input | Mains input N |
| 4 | - | n.c. |
| 5 | Output | Mains output L |
| 6 | Output | Mains output N |
| 7 | Output | DALI |
| 8 | Output | DALI |
| 9 | Input | Momentary-action switch [®] |
| 10 | Input | Momentary-action switch [®] |

[®] Momentary-action switch has to be rated for mains voltage. Switch impulse > 200 ms. Potential-free contact.

3.4 Connector notes

One connector with housing is included.
If additional connectors are needed, they may be ordered from a specialized trader or the connector manufacturer itself.

Connector data:
 Manufacturer: Phoenix Contact
 Type: Printed-circuit board connector MC 1,5/10-ST-3,81
 Article number: 1803659

Housing data:
 Manufacturer: Phoenix Contact
 Type: Cable housing KGG-MC 1,5/10
 Article number: 1834424

4. Functions

4.1 Short-circuit behaviour

If there is a short-circuit between L and N at the output, the Programmer will switch off and restart after 10 s. If another short-circuit is detected, the Programmer will switch off and will be reactivated only after a mains reset. If a ground fault without isolating transformer happens the programmer can be destroyed.

4.2 Overload protection

If the maximum permissible connected load is exceeded, the Programmer will switch off the output and restart after 10 s. If the overload persists, the Programmer will switch off and will be reactivated only after a mains reset.

4.3 Overtemperature protection

If a temperature of 65 °C in the Programmer is exceeded, the data rate will be gradually linearly reduced. Commands will therefore be implemented by the LED Driver with a slight delay. If the temperature continues to rise and reaches a value of 120 °C, the Programmer will switch off and will be reactivated only after a mains reset.

5. Miscellaneous

5.1 Disposal of equipment



Return old devices in accordance with the WEEE directive to suitable recycling facilities.

5.2 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim.
No warranty if device was opened.