



BA- Lighting AS FDV BA502-EU-400UD

# Introduction





Digital universal dimmer 3-400VA with Multi-way control Reference number: EU-400UD

#### Intended use

- Dimmable LED
- Swithching and dimming incandescent lamps, HV halogen lamps and Electronics transformers with halogen lamps
- Installation in appliance box according to EU Standard panel

#### **Product characteristics**

- Dimming method: Trailing / Leading edge phase control (Auto-detection)
- Electronic short-circuit protection
- Overload protection
- Over current protection
- Over temperature protection

#### Technical data

Rated voltage: AC230 V~, 50Hz Connected load: 3VA - 400VA

Dimming method: Trailing / Leading edge phase control

(Auto-Detect)

Type of loads: Dimmable LED

> 230V AC Incandescent lamps High voltage halogen lamps

Dimmable electrical transformer and iron transformer Mixed load of the specified

types

Connection: Screw terminals

Approvals: CE









## Features

- Suitable for 1 -way or Multi-way full Dimming and switching.
- Minimum load down to 3W of capacitive or resistive load, Such as Dimmable LED Lighting, Incandescent Lighting, MV Halogen/ LV Halogen Lighting with electronic transformers.
- Lamps soft-start operation ,to extend longer lifetime for the
- LED back light for indicate the dimming mode.
- User setting for the minimum dim level.
- Build-in short circuit protection, designed to ensure the dimmer can be survived in case of wiring fault or catastrophic failure of the load.
- Build-in re-settable thermal cut-off to protect the dimmer over normal operation temperature caused by overloads.
- Complies with IEC EN60669 and International safety standards.

## Normal operation

Operation of Dimmer Knob and Push Switch:







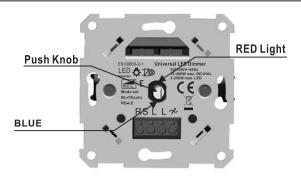
Push knob ON or Push knob OFF the lamp or hold the knob to dim. Turn the knob clockwise to increase brightness. Turn the knob anticlockwise to reduce brightness.

## Note:

When connect with IRON-CORE transformers, Only leading Edge mode(LE)could be applied, the TE mode can not be used in this

Multiple compatible loads can be used as the total lamp wattage does not exceed the maximum load rating of the dimmer. Some lamps may exhibit unexpected performance characteristics when cold. Dimming performance should improve after the lamp warms up. Or in case of lamp appears unstable status, it could be changed to TE or LE mode.

## Minimum bright level setting



#### How to set the Minimum bright level:

Adjust to required minimum brightness then short press 5x within 3 seconds to save minimum level and LED indicator will flash 3 times.

#### How to reset the Minimum bright level:

Short press 9x within 3 seconds to reset the minimum level and LED indicator will flash 3 times then just to required minimum brightness then short press 5x within 2 seconds to save minimum level and LED indicator will flash 3 times.

Each stip must be performed within 15 seconds, if no, it will time out and auto exit program without save.

#### Mode setting

ON lamp and LED indicator show as below: BLUE light-TEauto mode RED light-LE mode

## How to set TEauto, TE or LE Moe (Factory default TEauto mode):

How to set TE or LE Mode (Factory default TEauto mode): Short press 4x within 2 seconds to change to TE or LE mode. Each step must be performed within 15 seconds, if no, it will time out and auto exit program without save.

#### Installation

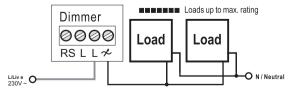
#### Wiring Datails:

- 1. Disconnect power. Lock out and tag the relevant circuit at the mains switchboard.
- 2. Remove existing switch from wall.
- 3. Connect the dimmer in accordance with the wiring diagrams.

  \*the copper conductors for the terminals is 1,0 to 1,5mm rigid wire.
- Refit switch plate to wall and fit the dimmer knob to the shaft.
- 5. Reconnect power. Push ON and dim with turning knob.

#### **Wiring Diagrams**

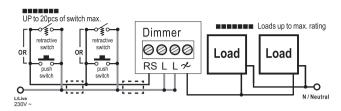
One Way Operation



#### Note:

The Dimmer must always be connected to the LINE side of the load. Two or more dimmers MUST NOT be connected in parallel or series to control the same load from two different locations.

## Multi-way Operation

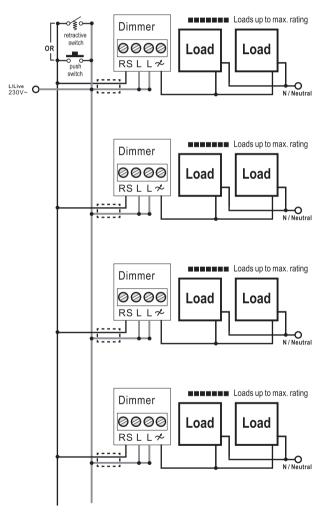


#### Note:

The Dimmer must always be connected to the LIVE side of the load. Multi-way retractive switch or push switch can be control up to 20 units for UP/DOWN dim and ON/OFF function.

Two or more dimmers MUST NOT be connected in parallel or series to control the same load from two different locations.

#### Wiring diagrams for one retractive switch control multidimmer:



#### Note:

One retractive switch or push switch can be control up to 20 units of dimmer for UP/DOWN dim and ON/OFF at the same time.