DSP2-LED
DMX TRIAC DIMMER
FOR LED LAMPS

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INPUT – DMX – OUTPUT		AC100-240V OUTPUT2	L2
D+			N2
D-	Uin=100-240VAC		
GND	Iin=2A	AC100-240V OUTPUT1	L1
D+	Uout=2×(100-240)VAC		N1
D-	Iout=2×1A		
GND	Pout=2×(100-240)W	AC100-240V INPUT	L
	Temp Range: -30℃~+55℃		N

888

0.5-2.0mm²
4-5mm

M ◄ ►

DMX⇄RDM✓

MADE IN P.R.C.

RoHS ✓   CE   🗑

JBSYSTEMS
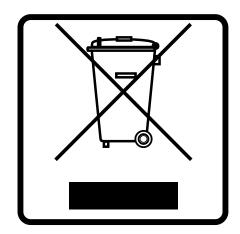
ENGLISH
Operation Manual

Other languages can be downloaded from:
WWW.JB-SYSTEMS.EU

CE

Version: 1.0

JBSYSTEMS

EN - DISPOSAL OF THE DEVICE

Dispose of the unit and used batteries in an environment friendly manner according to your country regulations.

FR - DÉCLASSER L'APPAREIL

Débarrassez-vous de l'appareil et des piles usagées de manière écologique Conformément aux dispositions légales de votre pays.

NL - VERWIJDEREN VAN HET APPARAAT

Verwijder het toestel en de gebruikte batterijen op een milieuvriendelijke manier conform de in uw land geldende voorschriften.

DU - ENTSORGUNG DES GERÄTS

Entsorgen Sie das Gerät und die Batterien auf umweltfreundliche Art und Weise gemäß den Vorschriften Ihres Landes.

ES - DESHACERSE DEL APARATO

Reciclar el aparato y pilas usadas de forma ecologica conforme a las disposiciones legales de su pais.

PT - COMO DESFAZER-SE DA UNIDADE

Tente reciclar a unidade e as pilhas usadas respeitando o ambiente e em conformidade com as normas vigentes no seu país.

OPERATION MANUAL

Thank you for buying this JB Systems® product. To take full advantage of all possibilities, please read these operating instructions very carefully.

FEATURES

- This 2 channel mosfet dimmer works perfectly with small loads like LED-lamps & small halogen lamps.
- Excellent dimming of 100-240Vac dimmable LED lamps and LED-drivers with loads down to only 2watt!
- Forward- / Reverse-phase control dimmer for a wide lamp compatibility!
- The minimum dimmer brightness from 1% to 40% can be programmed to avoid flicker.
- Different operating modes:
    - **DMX-control:** 1 or 2 DMX-channels with possibility for remote RDM-addressing
    - **Stand-alone dimmer:** with up to 8 dimmer presets, no DMX needed.
    - **Stand-alone dynamic:** 4 different modes with brightness and speed setting
- Small dimensions for easy "blind" installation in cabinets or in false ceilings!
- Maximum output: 2x 1A (2x 240W / 240Vac or 2x 120W / 120Vac)

BEFORE USE

Check the contents:
Check that the carton contains the following items:
- DSP2-LED
- User manual

Some important instructions:
- Before you start using this unit, please check if there's no transportation damage. Should there be any, do not use the device and consult your dealer first.
- **Important:** This device left our factory in perfect condition and well packaged. It is absolutely necessary for the user to strictly follow the safety instructions and warnings in this user manual. Any damage caused by mishandling is not subject to warranty. The dealer will not accept responsibility for any resulting defects or problems caused by disregarding this user manual.
- Keep this booklet in a safe place for future consultation. If you sell the fixture, be sure to add this user manual.
- To protect the environment, please try to recycle the packing material as much as possible.

SAFETY INSTRUCTIONS:

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: To reduce the risk of electric shock, do not remove the top cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.

The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the use or the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.

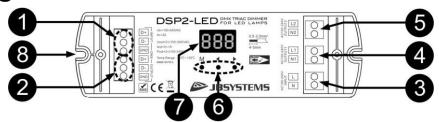This symbol means: indoor use only

This symbol means: Read instructions

- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- To avoid condensation to be formed inside, allow the unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condense sometimes prevents the unit from working at full performance or may even cause damages.
- This unit is for indoor use only.

- Don't place metal objects or spill liquid inside the unit. No objects filled with liquids, such as vases, shall be placed on this appliance. Electric shock or malfunction may result. If a foreign object enters the unit, immediately disconnect the mains power.
- No naked flame sources, such as lighted candles, should be placed on the appliance.
- Don't cover any ventilation openings as this may result in overheating.
- Prevent use in dusty environments and clean the unit regularly.
- Keep the unit away from children.
- Inexperienced persons should not operate this device.
- Maximum save ambient temperature is 40°C. Don't use this unit at higher ambient temperatures.
- Always unplug the unit when it is not used for a longer time or before you start servicing.
- The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.
- Check that the available voltage is not higher than the one stated on the rear panel of the unit.
- The socket inlet shall remain operable for disconnection from the mains.
- The power cord should always be in perfect condition: switch the unit immediately off when the power cord is squashed or damaged. It must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard
- Never let the power-cord come into contact with other cables!
- In order to prevent electric shock, do not open the cover. There are no user serviceable parts inside.
- In the event of serious operating problems, stop using the appliance and contact your dealer immediately.
- Please use the original packing when the device is to be transported.
- Due to safety reasons it is prohibited to make unauthorized modifications to the unit.

MAINTENANCE

Clean by wiping with a polished cloth slightly dipped with water. Avoid getting water inside the unit. Do not use volatile liquids such as benzene or thinner which will damage the unit.

FUNCTIONS

1. **DMX Input:** receives incoming DMX signal
2. **DMX Output:** links the incoming DMX signal to another DMX fixture.
3. **MAINS INPUT:** Terminal block used to connect the dimmer to the mains (100Vac → 240Vac).
4. **CHANNEL OUTPUT 1:** Terminal block used to connect small loads between 2W and max 240W (1A).
5. **CHANNEL OUTPUT 2:** Terminal block used to connect small loads between 2W and max 240W (1A).
6. **MENU buttons:** mainly used to browse the setup menu and adapt the different settings.
   - **M-button:** used to select the different menu options
   - **◄/►-buttons:** used to change the functions / adjust parameters.
7. **DISPLAY:** helps setting up the different options.
8. **INSTALLATION OPENING:** used to fix the dimmer on a flat surface. Note that the screws (Dmax=4mm) are not included!

INSTALLATION

MENU STRUCTURE AND SETUP

IMPORTANT: The DSP2-LED can work fully stand-alone or controlled by a DMX-signal.

⇨ As soon as a DMX-signal is connected the DMX-mode will always get priority!

DMX CONTROLLED

STANDARD DISPLAY
The selected DMX-address is shown, if the DMX-signal disappears, the display starts blinking.

SET DMX ADDRESS
● Press the ◄/► buttons until the DMX-address is shown.

SET DMX CHANNEL MODE
Sets the unit to 1 or 2 channel mode
● Press the **M**-button for 2 seconds to enter the setup menu
● The display shows **d-1** or **d-2**:
  ● **d-1**: 1 DMX-channel used: both outputs work together.
  ● **d-2**: 2 DMX-channels used: both outputs can be controlled separately.
● Press the **M**-button for 2 seconds to leave the setup menu

SET PHASE CONTROL METHOD
Determines the dimmer method, important to choose the right one!
● Press the M-button for 2 seconds to enter the setup menu
● Press the M-button until **C-F** or **C-A** is shown:
  ● **C-F**: the dimmer is working in **FORWARD-phase mode**:
    ● Better energy efficiency with incandescent / halogen lamps.
    ● Better performance with magnetic transformers (P36 pin-spot)
    ● Works well with certain LED lamps / drivers, not all!
  ● **C-A**: the dimmer is working in REVERSE-phase mode:
    ● In general better dimmer performance with most dimmable LED lamps / drivers.
    ● Better performance with electronic transformers
    ● Extremely silent operation and smoother dimming down to 5%
● Press the **M**-button for 2 seconds to leave the setup menu
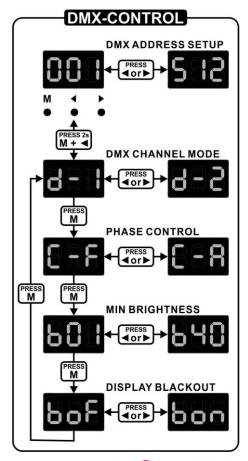
SET MINIMUM BRIGHTNESS
Sets the minimum dimmer level, helps avoiding flicker on certain dimmable LED-lamps
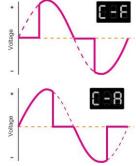● Press the **M**-button for 2 seconds to enter the setup menu
● Press the **M**-button until **b01** → **b40** is shown:
● Press the ◄/► buttons to set the minimum dimmer level.
● Press the **M**-button for 2 seconds to leave the setup menu

SET DISPLAY BLACKOUT
Choose if the display should go dark or not.
● Press the **M**-button for 2 seconds to enter the setup menu
● Press the **M**-button until **boF** or **bon** is shown:
  ● **boF**: display is always lit
  ● **bon**: display turns dark while not used
● Press the **M**-button for 2 seconds to leave the setup menu

STAND-ALONE MODE

IMPORTANT: Make sure that no DMX-signal is connected.

Select which stand-alone mode you want to use:

- **DIMMER MODE:** the output is set to a predefined dimmer level, in most cases this is the one you need!
- **DYNAMIC MODE:** automatic dim or switch sequence.

After switching the unit off, it will always startup in the last selected working mode.

SETUP DIMMER MODE:

- Press the M-button until ▊-▊▊ is shown.
- Press the ◄/►-buttons to choose one of the 8 dimmer modes.

SET DIMMER LEVEL

- Press the **M**-button for 2 seconds:
- The display shows ▊▊▊ → ▊▊▊ for output1 (00= 0%, FF= 100%)
- Press the ◄/►-buttons to set the desired level for output 1.
- Press the **M**-button until ▊▊▊ → ▊▊▊ is shown for output 2
- Press the ◄/►-buttons to set the desired level for output 2.
- Press the **M**-button for 2 seconds to leave the setup menu.

SETUP DYNAMIC MODE:

- Press the M-button until ▊-▊▊ is shown.
- Press the ◄/►-buttons to choose one of the 4 dynamic modes:
  - ▊-▊ : the 2 outputs switch together on/off
  - ▊-▊ : the 2 outputs switch alternately on/off
  - ▊-▊ : the 2 outputs dim together
  - ▊-▊ : the 2 outputs dim alternately

SET SPEED & BRIGHTNESS

- Press the **M**-button for 2 seconds:
- The display shows ▊-▊ → ▊-▊
- Press the ◄/►-buttons to set the desired speed (▊-▊ = slow, ▊-▊ = fast).
- Press the **M**-button until ▊-▊ → ▊-▊ is shown.
- Press the ◄/►-buttons to set the desired brightness.
- Press the **M**-button for 2 seconds to leave the setup menu.

RESET TO FACTORY DEFAULTS

- Press the ◄/►-buttons for 2 seconds until the display shows RES

Factory defaults: 2channel DMX-mode, start address: 001, REVERSE phase control, 10% min. output.

SPECIFICATIONS

This unit is radio-interference suppressed. This product meets the requirements of the current European and national guidelines. Conformity has been established and the relevant statements and documents have been deposited by the manufacturer.
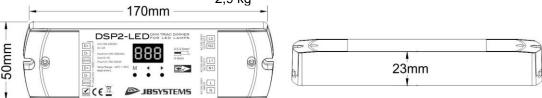
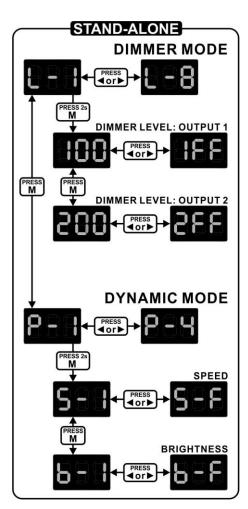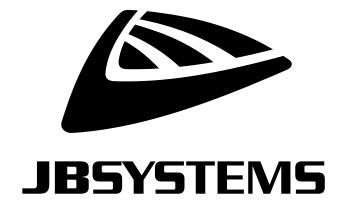|	
Power Input:	AC 100-240V 50/60Hz.
Max load Per Channel:	1 A (240W / 240Vac)
Weight:	2,9 kg

All this information is subject to change without prior notice
You can download the latest version of this user manual on our website: WWW.JB-SYSTEMS.EU

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MAILING LIST

EN: Subscribe today to our mailing list for the latest product news!
FR: Inscrivez-vous à notre liste de distribution si vous souhaitez suivre l'actualité de nos produits!
NL: Abonneer je vandaag nog op onze mailinglijst en ontvang ons laatste product nieuws!
DE: Abonnieren Sie unseren Newsletter und erhalten Sie aktuelle Produktinformationen!
ES: Suscríbete hoy a nuestra lista de correo para recibir las últimas noticias!
PT: Inscreva-se hoje na nossa mailing list para estar a par das últimas notícias!

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