

NOWSONIC AUTARK LED MASTER II DMX Controller for LED Lighting System User Manual

Home » NOWSONIC » NOWSONIC AUTARK LED MASTER II DMX Controller for LED Lighting System User

Manual ™

Contents

- 1 NOWSONIC AUTARK LED MASTER II DMX Controller for LED Lighting System
- **2 IMPORTANT SAFETY INSTRUCTIONS**
- **3 WARNING**
- 4 Introduction
- **5 Features**
- **6 Operation**
- 7 Specifications
- 8 Disclaimer
- 9 Documents / Resources
 - 9.1 References
- 10 Related Posts



NOWSONIC AUTARK LED MASTER II DMX Controller for LED Lighting System



IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any of the ventilation openings! Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING

- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

- This apparatus must be earthed.
- Use a three-wire grounding type line cord like the one supplied with the product.
- Be advised that different operating voltages require the use of different types of line cord and attachment plugs.
- Always observe the local safety regulations.
- This equipment should be installed near the socket outlet and disconnection of the device should be easily accessible.
- To completely disconnect this equipment from the AC Mains, disconnect the power supply cord plug from the AC receptacle. dd Please follow all instructions of the manufacturer for installation. dd Do not install in a confined space.
- Do not open the unit risk of electric shock.

CAUTION!

Please note: Changes or modifications to the device not expressly approved in this manual could void your authority to operate the instrument.

Servicing

- There are no user-serviceable parts inside.
- All service must be performed by qualified personnel.

CAUTION: TO REDUCE THE RISK OF ELEC TRIC SHOCK, DO NOT REMOVE THE COVER. NO USER SER VICEABLE PARTS INSIDE. REFER SER VICING TO QUALIFIED PERSONNEL ONLY.

The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

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

Introduction

Thank you very much for purchasing the Nowsonic Autark LED Master II! The Nowsonic Autark LED Master II is an extremely compact and innovative DMX controller for LED floodlights like the Nowsonic Autark ID07 or Autark OD09. However, thanks to the DMX 512 pro-tocol it is directly compatible with any floodlight products or PAR cans from third parties. You can easily configure the device for the six available channel modes (RGB, RGBW, RGBWM, DRGB, DRGBW and DRGB) with just one button press. The controller can address up to 40 channels via the DMX512 protocol. The individual color channels can be controlled via the faders for the R, G, B and W/D color components. You can trigger the internal pre-configured color mixtures via a separate MIX fader. The MAC fader allows to choose one of the 8 internal programs which then can be adapted in speed as needed. The internal programs can be controlled dynamically via the music signal; the sensitivity in Sound mode can be adjusted, if needed. The Strobe mode is activated by a button press, the strobe speed is adjusted via an additional fader.

Features

- Transmission of DMX 512 control messages to external devices dd 40 channels in total addressable
- Six channel modes available—RGB, RGBD, RGBW, RGBWD, DRGB and DRGBW
- Four separate faders for the color channels R, G, B and W/D

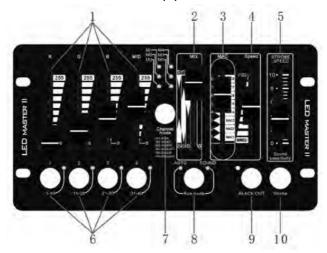
- · Separate faders for controlling the internal color mixtures
- · 8 internal programs with adjustable speed
- · Separate Strobe feature with adjustable speed
- Built-in operation or mobile use thanks to the extremely compact design and an external power supply

Applications

- Lighting controller for small-scale fixed installation in discotheques, clubs or other venues
- DMX controller for mobile applications (especially in combination with a wireless DMX transmitter)

Outlets and controls on the rear panel

The following outlets and controls are available on the top panel of Autark LED Master II:



DMX OUT socket

Connect a standard XLR cable (not supplied) to the DMX OUT socket: The pins of this female XLR socket are wired as follows:

Wiring

- Pin 1: ground (shield)
- Pin 2: signal inverted, DMX -
- Pin 3: signal, DMX+

The signal is output in the DMX 512 format. You must therefore connect the cable to a DMX-capable input of the slave device.

NOTE: The LED Master II works always as the master in any DMX setup. Therefore, all following DMX devices must be configured as slave units.

DC INPUT socket

Connect the included wall power supply with the DC INPUT sock-et (coaxial plug, + = inner contact,- = outer contact). If the supplied power supply is not available, you can use any AC adapter as long as it matches the requirements (9–12V, min. 300mA).

POWER switch

The POWERswitch turns the LED Master II on and off.

Controls and indicators on the top panel

The Autark LED Master II provides the following controls and indica-tors on the top panel:



R, G, B and W/D faders

You can manually set any color mixture for the selected channel mode (7) via the R, G, B and W/D faders: the control range for each color channel is 0 to 255, the channel assignment is set via the button (6) below.

NOTE: In the M1 channel mode (RGB), the W/D fader has no effect.

MIX fader

Via the MIX fader you can choose between the internal color mixtures of the LED Master II: the color mixtures are printed on the top panel next to the fader.

MAC fader

Via the MAC fader, you can choose between the 8 internal programs of the LED Master II: Depending on the selected RUN mode (8), the program is controlled either automatically or dynamically via the music. In AUTO mode (8) you can set the speed for the programs via the corresponding SPEED fader (4).

SPEED fader

If you have selected the AUTO mode via the RUN MODE button (8), you can control the speed of the internal LED Master II programs via the SPEED fader. The range is 0.1 to 30 seconds.

STROBE SPEED / Sound Sensitivity fader

When you engage the STROBE mode by pressing the corresponding button (10), you can set the speed/frequency of the Strobe effect via the STROBE SPEED fader from 1 to 20Hz: As long as the STROBE mode is inactive, the fader controls the music sensitivity (when this feature was activated by pressing the RUN MODE mode).

1-10, 11-20, 21-30 and 31-40 buttons

Using the 1–10, 11–20, 21–30 and 31–40 buttons you can choose the desired channel group which is then controlled via the R, G, B and W/D faders: thus, 40 channels in total can be controlled. The LEDs next to the buttons show the current selection.

CHANNEL MODE button

You can choose the desired channel mode for the faders R, G, B and W/D via the CHANNEL MODE button (1): the active selection is shown via the LEDs above the buttons. You can choose from the following six modes:

| LED | Channel mode | Mode description |
|-----|--------------|--|
| M1 | RGB | Channel 1 = red, channel 2 = green, channel 3 = blue |
| M2 | RGBD | Channel 1 = red, channel 2 = green, channel 3 = blue, channel 4 = dimme r |
| M3 | RGBW | Channel 1 = red, channel 2 = green, channel 3 = blue, channel 4 = white |
| M4 | RGBWD | Channel 1 = red, channel 2 = green, channel 3 = blue, channel 4 = white, channel 5 = dimmer |
| M5 | DRGB | Channel 1 = dimmer, channel 2 = red, channel 3 = green, channel 4 = blu e |
| M6 | DRGBW | Channel 1 = dimmer, channel 2 = red, channel 3 = green, channel 4 = blu e, channel 5 = white |

RUN MODE button

By pressing the RUN MODE button you can choose whether the program which you have selected via the MAC fader (3) is controlled automatically or via the music sensitivity. Depending on the selection, the LED AUTO or SOUND lights.

BLACK OUT button

Press the BLACK OUT button to set all channel values temporarily to 0: this means that all controlled slave units are idle (not lit) as long as you hold this button pressed.

STROBE button

Press this button to activate the Strobe mode: the Strobe effect is active as long as you hold the button pressed. When the Strobe mode is active, you can control the Strobe speed via the STROBE SPEED /Sensitivity fader (5) in the range from 1 to 20Hz.

Cabling

The LED Master II allows to control external slave devices via up to 40 channels. Connect the devices as follows:

- 1. Using the supplied wall power supply, connect the LED Master II to the mains power and switch the unit on.
- 2. Connect a standard high quality XLR audio cable (not supplied) to the DMX out socket (female) of the LED Master II.

NOTE: A suitable XLR audio cable connects the two signal leads to PIN 2 and 3, while ground is soldered to PIN 1. Please make sure that the wiring doesn't change within the cables: a polarity error or short circuit between the Pins will at least impair or com-pletely stop the control functionality.

- 3. Connect the other (female) plug of the cable to the DMX In socket of the first slave unit.
- 4. Connect additional slave units according to this pattern (DMX output to DMX input).

Next, you must enter an individual DMX address for each slave unit. For further information on this topic, read the documentation supplied with the unit.

Operation

When the peripherals are connected to the LED Master II, you can set the control features. Proceed as follows:

1. Choose a channel mode using the CHANNEL MODE button (7). The following modes are available (for a mode

description see page 6):

- RGB
- RGBD
- RGBW
- RGBWD
- DRGB
- DRGBW

The selected mode is shown via the LEDs above the button.

2) Using the address buttons beneath the fader choose the channel group which you want to control: you can choose from a total of 40 channels. The LED of the active group lights to show the current selection. You can choose between the following channel groups:

- For channel 1 to 10, press button 1
- For channel 11 to 20, press button 2
- For channel 21 to 30, press button 3
- For channel 31 to 40, press button 4



Now you can choose between the following control options:

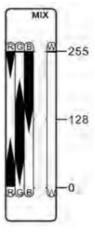
Manual control

In this mode you can manually set the desired color mixtures with the R, G, B and W/D faders.

NOTE: In the M1 channel mode (RGB), the W/D fader has no effect.

Internal color mixtures

As an alternative, you can choose between the internal color mixtures of the LED Master II via the MIX fader. The color mixtures are printed on the top panel next to the fader.



Internal programs

Via the MAC fader you can choose between the 8 internal programs of the LED Master II. Depending on your

selection, the following effects are triggered via the corresponding channel values:

| Program | Channel value | Effect |
|---------|---------------|---------------------------------|
| MAC 1 | 8–38 | Color fading red – green |
| MAC 2 | 39–69 | Color fading red – blue |
| MAC 3 | 70–100 | Color fading green – blue |
| MAC 4 | 101–131 | Color fading red – green – blue |
| MAC 5 | 132–162 | Chasing red – green |
| MAC 6 | 163–193 | Chasing red – blue |
| MAC 7 | 194–224 | Chasing green – blue |
| MAC 8 | 225–25 | Chasing red – green – blue |

By pressing the RUN MODE button you can toggle between the AUTO and the SOUND mode for automatically changing the effect.

- In AUTO mode, the programs are changed automatically with the speed which is set with the SPEED fader in the range from 0.1 to 30 seconds.
- In SOUND mode, the programs are dynamically changed depending on the music sensitivity which is set with the Sound Sensiti-vity fader. If the programs are not changed as expected, increase or decrease the music sensitivity as needed.

STROBE mode

The Strobe mode is activated by pressing and holding the STROBE button. When you hold the STROBE button, the speed of the Strobe effect can be set with the STROBE SPEED fader in the range from 1 to 20Hz. When the STROBE button is released, the LED Master II returns to the previous mode. Regardless of the current mode, you can press the BLACK OUT button at any time to temporarily darken all connected lights for the duration of the button press.



Specifications

- Type DMX controller
- Data format DMX
- DMX protocol DMX 512

- DMX channels 40
- Channel modes RGB, RGBD, RGBW, RGBWD, DRGB, DRGBW
- Operating voltage 9–12VDC 300mA (external power supply included)
- DMX connector 3-pin XLR (output)
- Weight 0.8 kg
- Dimensions $200 \times 56 \times 110 \text{ mm } (H \times W \times D)$

Scope of supply

• Autark LED Master II: 1 pc

Wall power supply: 1 pc

• User manual: 1 pc

Disclaimer

Nowsonic has taken all possible steps to ensure that the information given here is both correct and complete. In no event can Nowsonic accept any liability or responsibility for any loss or damage to the owner of the equipment, any third party, or any equipment which may result from use of this manual or the equip-ment which it describes.

Servicing

If you have any question or encounter technical issues, please first contact your local dealer from whom you have purchased the device. In case servicing is required, please contact your local dealer. Other-wise you may contact us directly. Please find our contact data on our website under www.nowsonic.com.

NOTE: We take great care in packing the device in a well protected box at the factory, so any shipping damage is very unlikely. However, should this happen please contact your supplier imme-diately to report the damage. We recommend to keep the original packing materials in case you need to ship or transport the device at a later date.

Legal information

Copyright for this user manual © 2014: Nowsonic Product features, specifications and availability are subject to change without prior notice. Edition v1.0, 07/2014 Part no. 311617

www.nowsonic.com

Documents / Resources



NOWSONIC AUTARK LED MASTER II DMX Controller for LED Lighting System [pdf] User Manual

AUTARK LED MASTER II DMX Controller for LED Lighting System, AUTARK LED MASTER II, DMX Controller for LED Lighting System, LED Lighting System DMX Controller, DMX Controller, Controller

References

- Onowsonic.com
- Onowsonic.com

