

2bright Blind 3K

blinder

Musikhaus Thomann

Thomann GmbH

Hans-Thomann-Straße 1

96138 Burgebrach

Germany

Telephone: +49 (0) 9546 9223-0

E-mail: info@thomann.de

Internet: www.thomann.de

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## 1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under <u>www.thomann.de</u>.

## 1.1 Further information

On our website (<u>www.thomann.de</u>) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.	
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.	
Online guides	Our online guides provide detailed information on technical basics and terms.	
Personal consultation	For personal consultation please contact our technical hotline.	
Service	If you have any problems with the device the customer service will gladly assist you.	

### 1.2 Notational conventions

This manual uses the following notational conventions:

**Letterings** The letterings for connectors and controls are marked by square brackets and italics.

**Examples:** [VOLUME] control, [Mono] button.

**Displays**Texts and values displayed on the device are marked by quotation marks and italics.

Examples: '24ch', 'OFF'.

## 1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning	
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.	
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.	
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.	
Warning signs	Type of danger	
A	Warning – high-voltage.	
*	Warning – dangerous optical radiation.	

Cianal ward

Warning signs	Type of danger
	Warning – suspended load.
<u>^</u>	Warning – danger zone.

## 2 Safety instructions

#### Intended use

This device is intended for use as an electronic lighting effect by means of LED technology. The device is designed for professional use and is not suitable for use in households. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Extend the life of the device by regular breaks in operation and avoid switching it on and off frequently. This device is not suitable for continuous use.

## Safety



#### **DANGER!**

### **Danger for children**

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.



#### DANGER!

## Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.



#### **DANGER!**

## Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



#### **WARNING!**

Eye damage caused by high light intensity

Never look directly into the light source.



#### WARNING!

## Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.



#### NOTICE!

#### Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.



#### NOTICE!

## **Power supply**

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.



#### NOTICE!

#### Fire hazard due to exceedance of the maximum current

The device can power other devices via a lockable Power Twist output socket. The current consumption of all serially connected other devices must not exceed 16 A, otherwise you risk injuries and irreparable damages of the device.

Connect just so many devices to the output socket that the maximum current consumption is not exceeded.

Ensure the correct dimensioning (wire cross section) of the used power cords of all serially connected devices.

## 3 Features

The LED-Blinder imitates the dimming and response behaviour and the typical afterglow of a conventional blinder.

Special features of the device:

- 2 × COB LED, each 100 W
- Colour temperature: 3000 K
- Large beam angle with even light spread
- Luminaire can be horizontally angled
- LEDs individually controllable
- Control via DMX or via buttons and display on the unit
- Strobe effect
- Removable frost filter for soft blind effects
- Four dimmer curves
- Silent operation
- Protection class IP65
- Quick-Lock bracket for vertical and horizontal positioning

# Information about protection class IP65

Equipment with protection class IP65 are dust-tight and completely protected against contact (first code number). They are also protected against splash water from any angle (second code digit). That is why this equipment can also be used outdoors. Event technology equipment is generally only designed for temporary use however (event lighting) and not for permanent use outdoors.

The specified protection class does not make a statement about the weather resistance of the equipment (resistance to changing ambient conditions as well as against the effects of sunlight and UV rays).

The seals and screw connections of the equipment must be checked regularly to ensure a fault-free operation. In cases of doubt, consult a specialist workshop in due time.

For technological reasons, the light output of LEDs decreases over their lifetime. This effect increases with higher operating temperature. You can extend the service life of the illuminants by providing adequate ventilation and operating the LEDs with the lowest possible brightness.

## 4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.



#### WARNING!

## Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



#### NOTICE!

## **Risk of overheating**

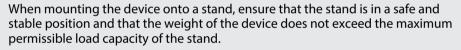
Always ensure sufficient ventilation.

The ambient temperature must not exceed the limits stated in the chapter Technical Specifications of the User Manual.



#### **NOTICE!**

#### **Use of stands**





#### NOTICE!

#### Possible data transmission errors

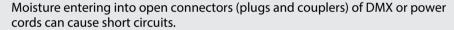
For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.



#### NOTICE!

#### Possible damage due to moisture



Close unused connectors with end caps intended for this purpose (www.thomann.de).

#### **Mounting options**

You can install the unit in hanging or standing position. When in use, the device must always be attached to a solid surface or an approved truss. Use the openings provided on the two-piece bracket for attaching.

Always work from a stable platform whenever installing, moving or servicing the unit. In doing so, the area underneath the unit must be cordoned off.

The safety cable must be attached to the bracket.



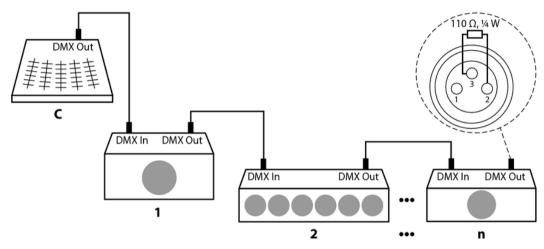
Please note that this device must not be connected to a dimmer.

## 5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

#### Connections in DMX mode

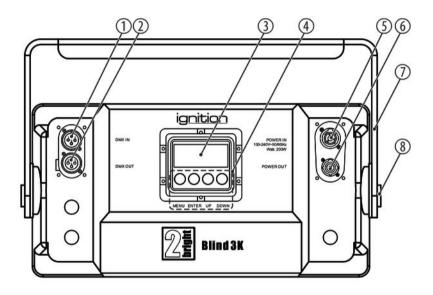
Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110  $\Omega$ ,  $\frac{1}{4}$  W).



# Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

#### **Connections and controls** 6



#### Connections and controls

1 [DMX IN] DMX input, designed as 3-pin XLR panel plug (IP65) 2 [DMX OUT] DMX output, designed as 3-pin XLR panel socket (IP65) 3 Display 4 Function buttons [MENU] Selects an option of the respective operating mode, confirms the set value. [UP] Increases the displayed value by one. [DOWN] Decreases the displayed value by one. [ENTER] Activates the main menu and toggles between menu items. Closes an opened submenu.

5	[POWER IN]	
	Lockable input socket (Power Twist TR1 IP65) for the power supply of the device	
6	[POWER OUT]	
	Lockable output socket (Power Twist TR1 IP65) for powering further devices (output current max. 16 A)	
7	Mounting bracket	
8	Locking screws for the mounting bracket	

## 7 Operating

## 7.1 Starting the device

Connect the device to the power supply to start operation.

## 7.2 Operating on the unit

Press repeatedly [MENU] to call up the desired menu. Confirm the selection with [ENTER]. With [UP] and [DOWN] you can change the respectively displayed value.

Confirm each change with [ENTER]. With [MENU] you exit the opened menu without changes.

If you don't press any button for about eight seconds, the open menu will be closed without applying any changes.

#### **DMX address**

Press [MENU] repeatedly until the display shows 'DMX'. Confirm the selection with [ENTER]. Press again [ENTER] to make changes. Now you can set the number of the first DMX channel to be used by the device (DMX address). Use [UP] or [DOWN] to select a value between 1 and 512 (display shows 'A001'...'A512').

Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the various DMX modes.

Mode	Display	Highest possible DMX address
1-channel	'1CH'	512
2-channel	'2CH 1'	511
2-channel	'2CH 2'	511
3-channel	'3CH'	510
6-channel	'6CH'	507

#### DMX mode

Press [MENU] repeatedly until the display shows 'CHMD'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to specify the desired DMX mode. The following table shows the available DMX channels:

Mode	Display
1-channel mode	'1CH'
2-channel mode, variant 1	′2CH 1′
2-channel mode, variant 2	'2CH 2'
3-channel mode	'3CH'
6-channel mode	'6CH'

#### **Brightness of LEDs**

In this menu you can set the brightness of LED 1 and LED 2.

Press [MENU] repeatedly until the display shows 'STAT'. Use [UP] or [DOWN] LED 1 or LED 2 off (display shows 'LED1' or 'LED2'). Confirm the selection with [ENTER]. Press again [ENTER] to make changes. Use [UP] or [DOWN] to select a value between 0 and 255 to adjust the brightness of the selected LED (display shows '000'...'255').

Confirm the selection with [ENTER].

#### Master / slave mode

In this menu, you can specify whether the device is operating slave mode.

Press [MENU] repeatedly until the display shows 'SLAV'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the option 'Yes' to use the device as slave.

Confirm the selection with [ENTER].

The device is now working in slave mode, i.e. it will exactly copy the movement of the controlling master device, correct wiring provided.

## **Display reversion**

In this menu, you can specify whether the display should be shown normally or rotated by 180°.

Press [MENU] repeatedly until the display shows 'SET'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'DREV' option. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'ON' option if you want the display to be rotated by 180°.

or

Use [UP] or [DOWN] to select the 'OFF' option if you want the display to be shown normally.

Confirm the selection with [ENTER].

## **Display illumination**

In this menu, you can set whether the display is automatically switched off or remains permanently on during operation.

Press [MENU] repeatedly until the display shows 'SET'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'DbKL' option. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'ON' option if you want the display to remain on permanently.

or

Use [UP] or [DOWN] to select the 'OFF' option if you want the display to be automatically switched off after 30 seconds without keypress.

# Behaviour on DMX control failure

In this menu, you can specify the behaviour of the device when the DMX signal is interrupted.

Press [MENU] repeatedly until the display shows 'SET'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'DFAL' option. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the device behaviour on DMX signal failure. The following table shows the available options:

Menu level 2	Menu level 3	Function
'DFAL'	'Hold'	If the DMX control fails, the last setting is retained.
	'bLAK'	If the DMX control fails, the device is blacked out.

#### **Dimmer curve**

In this menu, you can set the dimmer curve.

Press [MENU] repeatedly until the display shows 'SET'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'DCUR' option. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the desired dimmer curve. The following table shows the available options:

Menu level 2	Menu level 3	Function
'DCUR'	'LINR'	Linear course
	'EXPO'	Exponential course
	'LOGA'	Logarithmic course
	'S'	S-curve shaped course

### **Dimmer response**

Press [MENU] repeatedly until the display shows 'SET'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'DRES' option to open the submenu for the response behaviour of the dimmer. Confirm the selection with [ENTER]. The following table shows the setting options.

Menu level 2	Menu level 3	Function
'DRES'	'LED'	The dimmer setting for LED is activated.
	'LAMP'	The imitation of the dimming behaviour for incandescent light is activated.

## **Key lock**

In this menu, you can enable the key lock.

Press [MENU] repeatedly until the display shows 'SET'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'LOCK' option. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'On' option to enable the key lock.

or

Use [UP] or [DOWN] to select the 'Off' option to disable the key lock.

Confirm the selection with [ENTER].



If the key lock is activated, all keys have no function after 60 seconds. To cancel the key lock, press simultaneously [UP] and [DOWN] for 5 seconds.

# Resetting the device to factory settings

In this menu, you can reset the device to factory default settings.

Press [MENU] repeatedly until the display shows 'SET'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'REST' option. Confirm the selection with [ENTER].

'R.E.S.T.' appears in the display. Press and hold [ENTER] for about 5 seconds to reset.

**Firmware** In this menu, you can access the current firmware version.

Press [MENU] repeatedly until the display shows 'INFO'. Confirm the selection with [ENTER]. Use [UP] or [DOWN] to select the 'VERS' option. Confirm the selection with [ENTER].

The current firmware version is displayed.

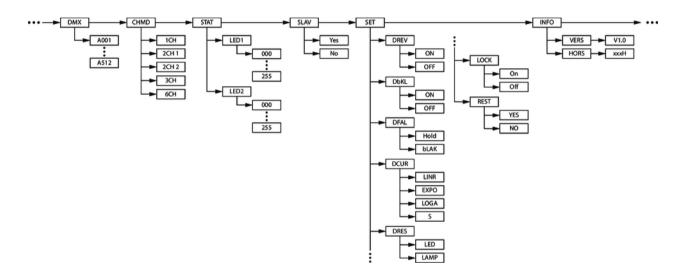
**Operating hours** In this menu, you can call up the number of operating hours.

Press [MENU] repeatedly until the display shows 'INFO'. Confirm the selection with [ENTER].

Use [UP] or [DOWN] to select the 'HORS' option. Confirm the selection with [ENTER].

The number of operating hours is displayed.

### 7.3 Menu overview



### 7.4 Functions in 1-channel mode

Channel	Value	Function
1	0255	Dimmer (0 % to 100 %), LED 1 and 2

## 7.5 Functions in 2-channel mode 1

Channel	Value	Function
1	000255	Dimmer (0 % to 100 %) LED 1
2	000255	Dimmer (0 % to 100 %) LED 2

### 7.6 Functions in 2-channel mode 2

Channel	Value	Function	
1	000255	255 Dimmer (0 % to 100 %), LED 1 and 2	
2	Strobe effect		
	000005	open	
	006255	Strobe effect, increasing frequency	

### 7.7 Functions in 3-channel mode

Channel	Value	Function
1	000255	Master dimmer (0 % to 100 %), LED 1 and LED 2
2	000255	Dimmer (0 % to 100 %) LED 1
3	000255	Dimmer (0 % to 100 %) LED 2

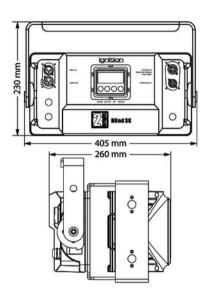
## 7.8 Functions in 6-channel mode

Channel	Value	Function
1	000255	Dimmer (0 % to 100 %), LED 1 and LED 2
2	Strobe	
	000 005	LEDs on
	006 010	LEDs off (blackout)
	011 033	Random impulses, increasing speed
	034 056	Random impulses, increasing speed
	057 079	Random impulses, increasing speed
	080 102	Random Strobe effect, increasing speed
	103 127	Burst effect, 5 s to 1 s
	128 250	Strobe effect, speed increasing from 1 Hz to 20 Hz
	251 255	LEDs on

## Operating

Channel	Value	Function			
3	000255	Dimmer (0 % to 100 %) LED 1			
4	000255	Dimmer (0 % to 100 %) LED 2			
5	Dimmer response				
	000 005	Without function			
	006 127	Dimmer behaviour LED			
	128 255	Dimming behaviour incandescent light			
6	Dimmer curves				
	000 005	Without function			
	006 063	Linear course			
	064 127	Exponential course			
	128 191	Logarithmic course			
	192 255	S-curve shaped course			

# 8 Technical specifications



Light source	2 × COB LED, each 100 W		
Light source properties	Colour temperature	3000 K	
	Colour rendering index	CRI >90	
Optical properties	Beam angle	90°	
Control	DMX		
	Buttons and display on the unit		
Number of DMX channels	1, 2-1, 2-2, 3, 6		
Input connections	Voltage supply	Lockable input socket Power Twist TR1 IP65	
	DMX control	XLR panel plug (IP65), 3-pin	
Output connections	Voltage supply	Lockable output socket Power Twist TR1 IP65	
	DMX control	XLR panel socket (IP65), 3-pin	

Power consumption	200 W		
Operating supply voltage	100 − 240 V ~ 50/60 Hz		
Protection class	IP65		
Mounting options	Quick-Lock bracket for vertical and horizontal positioning		
Dimensions (W $\times$ H $\times$ D)	405 mm × 230 mm × 260 mm		
Weight	9 kg		
Ambient conditions	Temperature range	0 °C40 °C	
	Relative humidity	50 %, non-condensing	

### **Further information**

Construction	2-fold
Illuminant included	Yes
DMX controllable	Yes

## 9 Plug and connection assignment

#### Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

#### **DMX** connections



A three-pole coupling in IP65 design is used as DMX output, a three-pole plug in IP65 design is used as DMX input. The drawing below and the table show the pin assignment of a matching coupling.

Pin	Assignment
1	Ground (shielding)
2	Signal inverted (DMX–, 'cold')
3	Signal (DMX+, 'hot')

## 10 Cleaning

### **Optical lenses**

Clean the optical lenses, that are accessible from the outside, regularly in order to optimize the light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using our lamp and lens cleaner (item no. 280122).
- Always dry the parts carefully.

#### Fan grids

The fan grids of the device must be cleaned of any contamination, such as dust, etc. on a regular basis. Before cleaning, switch off the device and disconnect mains-operated devices from the mains. Only use pH-neutral, solvent-free and non-abrasive cleaning agents. Clean the unit with a slightly damp lint-free cloth.

## 11 Protecting the environment

# Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

### Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.