

USER'S MANUAL
BEDIENUNGSANLEITUNG
MANUEL D'UTILISATION
MANUAL DE USUARIO
INSTRUKCJA OBSŁUGI
MANUALE D'USO

 **cameo**[®]
colours of light



MATRIX 300 RGB

LED MATRIX PANEL 5X5 10W RGB

CLMP10WRGB

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YOU'VE MADE THE RIGHT CHOICE!

We have designed this product to operate reliably over many years. Please read this User's Manual carefully, so that you can begin making optimum use of your Cameo Light product quickly. Learn more about Cameo Light on our website WWW.CAMEOLIGHT.COM.

PREVENTIVE MEASURES

1. Please read these instructions carefully.
2. Keep all information and instructions in a safe place.
3. Follow the instructions.
4. Observe all safety warnings. Never remove safety warnings or other information from the equipment.
5. Use the equipment only in the intended manner and for the intended purpose.
6. Use only sufficiently stable and compatible stands and/or mounts (for fixed installations). Make certain that wall mounts are properly installed and secured. Make certain that the equipment is installed securely and cannot fall down.
7. During installation, observe the applicable safety regulations for your country.
8. Never install and operate the equipment near radiators, heat registers, ovens or other sources of heat. Make certain that the equipment is always installed so that it is cooled sufficiently and cannot overheat.
9. Never place sources of ignition, e.g., burning candles, on the equipment.
10. Ventilation slits must not be blocked.
11. This appliance is designed exclusively for indoor use, do not use this equipment in the immediate vicinity of water (does not apply to special outdoor equipment - in this case, observe the special instructions noted below). Do not expose this equipment to flammable materials, fluids or gases.
12. Make certain that dripping or splashed water cannot enter the equipment. Do not place containers filled with liquids, such as vases or drinking vessels, on the equipment.
13. Make certain that objects cannot fall into the device.
14. Use this equipment only with the accessories recommended and intended by the manufacturer.
15. Do not open or modify this equipment.
16. After connecting the equipment, check all cables in order to prevent damage or accidents, e.g., due to tripping hazards.
17. During transport, make certain that the equipment cannot fall down and possibly cause property damage and personal injuries.
18. If your equipment is no longer functioning properly, if fluids or objects have gotten inside the equipment or if it has been damaged in any other way, switch it off immediately and unplug it from the mains outlet (if it is a powered device). This equipment may only be repaired by authorized, qualified personnel.
19. Clean the equipment using a dry cloth.
20. Comply with all applicable disposal laws in your country. During disposal of packaging, please separate plastic and paper/cardboard.
21. Plastic bags must be kept out of reach of children.

FOR EQUIPMENT THAT CONNECTS TO THE POWER MAINS:

22. **CAUTION:** If the power cord of the device is equipped with an earthing contact, then it must be connected to an outlet with a protective ground. Never deactivate the protective ground of a power cord.
23. If the equipment has been exposed to strong fluctuations in temperature (for example, after transport), do not switch it on immediately. Moisture and condensation could damage the equipment. Do not switch on the equipment until it has reached room temperature.
24. Before connecting the equipment to the power outlet, first verify that the mains voltage and frequency match the values specified on the equipment. If the equipment has a voltage selection switch, connect the equipment to the power outlet only if the equipment values and the mains power values match. If the included power cord or power adapter does not fit in your wall outlet, contact your electrician.
25. Do not step on the power cord. Make certain that the power cable does not become kinked, especially at the mains outlet and/or power adapter and the equipment connector.
26. When connecting the equipment, make certain that the power cord or power adapter is always freely accessible. Always disconnect the equipment from the power supply if the equipment is not in use or if you want to clean the equipment. Always unplug the power cord and power adapter from the power outlet at the plug or adapter and not by pulling on the cord. Never touch the power cord and power adapter with wet hands.
27. Whenever possible, avoid switching the equipment on and off in quick succession because otherwise this can shorten the useful life of the equipment.
28. **IMPORTANT INFORMATION:** Replace fuses only with fuses of the same type and rating. If a fuse blows repeatedly, please contact an authorised service centre.
29. To disconnect the equipment from the power mains completely, unplug the power cord or power adapter from the power outlet.
30. If your device is equipped with a Volex power connector, the mating Volex equipment connector must be unlocked before it can be removed. However, this also means that the equipment can slide and fall down if the power cable is pulled, which can lead to personal injuries and/or other damage. For this reason, always be careful when laying cables.
31. Unplug the power cord and power adapter from the power outlet if there is a risk of a lightning strike or before extended periods of disuse.
32. The device must only be installed in a voltage-free condition (disconnect the mains plug from the mains).
33. Dust and other debris inside the unit may cause damage. The unit should be regularly serviced or cleaned (no guarantee) depending on ambient conditions (dust etc., nicotine, fog) by qualified personnel to prevent overheating and malfunction.
34. Please keep a distance of at least 0.5 m to any combustible materials.
35. Power cables to power multiple devices must have a cross-section of at least 1.5 mm². Within the EU, the cables must correspond to H05VV-F, or similar. Suitable cables are offered by Adam Hall. With these cables, you can connect multiple devices via the power OUT connection to the power IN connection of an additional device. Make sure that the total current consumption of all connected devices does not exceed the specified value on all connected devices (label on the device). Make sure to keep power cable connections as short as possible.

**CAUTION:**

To reduce the risk of electric shock, do not remove cover (or back). There are no user serviceable parts inside. Maintenance and repairs should be exclusively carried out by qualified service personnel.



The warning triangle with lightning symbol indicates dangerous uninsulated voltage inside the unit, which may cause an electrical shock.



The warning triangle with exclamation mark indicates important operating and maintenance instructions.



The housing surface of the spotlight can heat up to temperatures as high as 70 °C in regular use. Ensure that it is not possible to come into contact with the housing unintentionally. Always allow sufficient time for the lamp to cool down before dismantling, carrying out maintenance work or charging etc.



Warning! This device is designed for use below 2000 metres in altitude.



Warning! This product is not intended for use in tropical climates.



Caution! Intense LED light source! Risk of eye damage. Do not look into the light source.

CAUTION! IMPORTANT INFORMATION ABOUT LIGHTING PRODUCTS!

1. The product has been developed for professional use in the field of event technology and is not suitable as household lighting.
2. Do not stare, even temporarily, directly into the light beam.
3. Do not look at the beam directly with optical instruments such as magnifiers.
4. Stroboscope effects may cause epileptic seizures in sensitive people! People with epilepsy should definitely avoid places where strobes are used.

INTRODUCTION

LED MATRIX PANEL 5X5 10 W RGB

CLMP10WRGB

CONTROL FUNCTIONS

3-channel, 5-channel, 19-channel, 28-channel, 78-channel DMX control

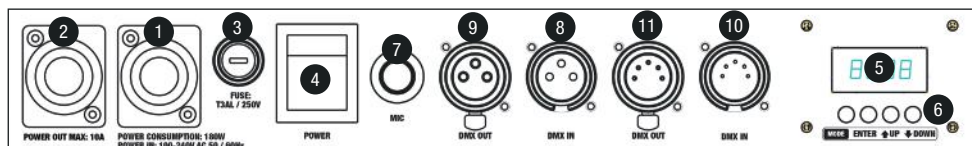
Master/slave mode

Standalone function

FEATURES

Matrix panel with 25 x 10 W RGB LEDs. Single pixel control. 5 DMX modes. DMX-512 control. Master/slave mode. Standalone programmes. Sound control via built-in microphone. Safety eyelet and swivel bracket included. 2 Omega mounting brackets included. Integrated connection system for mounting an unlimited number of elements horizontally and up to five elements vertically. Operating voltage 100-240 V AC/50-60 Hz. Power consumption 180 W.

CONNECTIONS, OPERATING AND DISPLAY ELEMENTS



1 POWER IN

Blue power input socket for power supply to the device. A suitable power cable is included.

2 POWER OUT

White power output socket for the power supply of additional CAMEO spotlights. Ensure that the total current consumption of all connected devices does not exceed the value specified on the device in amperes (A).

3 FUSE HOLDER

IMPORTANT: Replace the fuse only with a fuse of the same type and of the same value according to the stamp on the device! In the event of repeated fuse failure, please contact an authorised service centre.

4 POWER

On/off switch.

5 LED DISPLAY

The four-digit LED display shows the operating mode and other system information.

6 OPERATING KEYS

MODE: Selection of the main menu items. Move up one level in the menu structure.

ENTER: Confirms programme selection and value changes.

UP and **DOWN:** Selection of operation mode and system settings, e.g. changing of microphone sensitivity and DMX address.

7 MIC

Microphone for music control mode

8 DMX IN

Male 3-pin XLR socket for connection to a DMX control device (e.g. DMX console).

9 DMX OUT

Female 3-pin XLR socket for sending the DMX control signal.

10 DMX IN

Male 5-pin XLR socket for connection to a DMX control device (e.g. DMX console).

11 DMX OUT

Female 5-pin XLR socket for sending the DMX control signal.

12 FAN

There are three case fans on the back of the device. Ensure that the fans are not covered and that air can circulate freely.

13 VENTILATION SLITS

Ensure that the ventilation slits are not covered and that air can circulate freely.

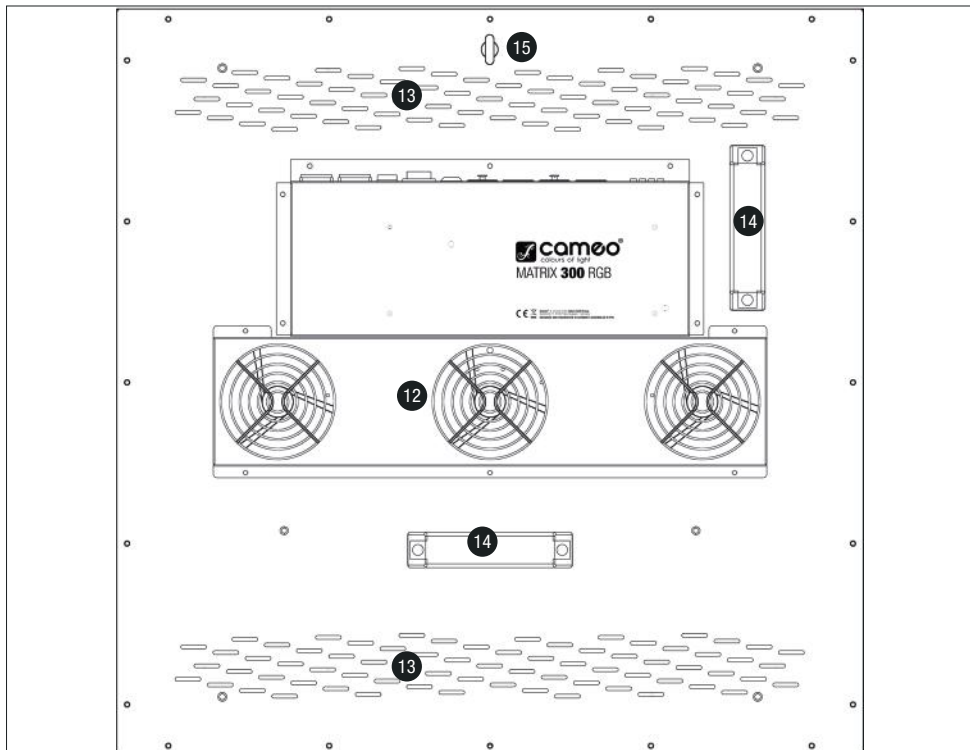
14 CARRY HANDLE

Two carry handles are provided at the back of the device so as to facilitate transport and mounting.

15 SAFETY EYELET

An eyelet for a safety cable is to be found at the upper edge of the device at the back.

Overhead installation may only be carried out by qualified personnel. A suitable safety cable must be fitted to the eyelet to ensure that the spotlight does not fall down.



OPERATION

A few seconds after being switched on, the spotlight is ready for operation and the previously selected operating mode is activated.

CONFIGURE DMX START ADDRESS

Press MODE repeatedly until "Addr" appears in the display. Now press ENTER and configure the DMX start address using UP and DOWN as required (A001–A512). Confirm your entry by pressing ENTER. For synchronous control of several spotlights of the same model using a DMX device (e.g. DMX console), configure the lights with identical DMX start addresses and the same DMX mode setting and connect them using DMX cables. If there is no DMX signal, the display characters will flash. Flashing stops as soon as a DMX signal is present.



CONFIGURE DMX MODE

Press MODE repeatedly until “ChAn” appears in the display. Now press ENTER and select the desired DMX mode using UP and DOWN as required (DMX 03Ch, 05Ch, 19Ch, 28Ch, 78Ch). Confirm your entry by pressing ENTER.

Tables with the channel assignment of the different DMX modes can be found in these instructions under DMX CONTROL.



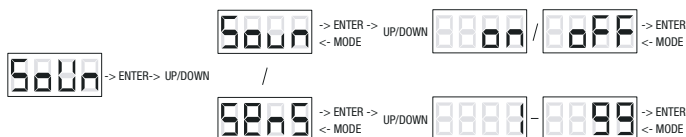
SLAVE MODE

Press MODE repeatedly until “SLAV” appears in the display and confirm by pressing ENTER. Connect the slave and master units (same model) using a DMX cable and enable the standalone mode SOUND CONTROL on the master unit. The slave unit will now follow the master unit. If there is no control signal, the display characters will flash. Flashing stops as soon as a control signal is present.



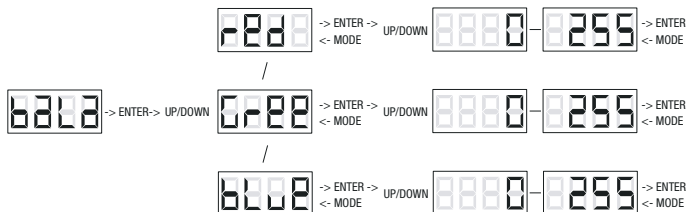
SOUND CONTROL MODE

Activate sound control mode to control the spotlight via the built-in microphone (bass impulses) and set the microphone sensitivity as required. Press MODE repeatedly until “SoUn” appears in the display and confirm by pressing enter. Now use UP and DOWN to select “Soun”, press ENTER and then use UP and DOWN again to select “on” or “oFF” to activate or deactivate sound control. Confirm by pressing ENTER. Now use UP and DOWN to select “SenS”, the menu item for microphone sensitivity, confirm by pressing ENTER and use UP and DOWN to set the desired level (1 = minimum sensitivity, 99 = maximum sensitivity). Confirm by pressing ENTER.



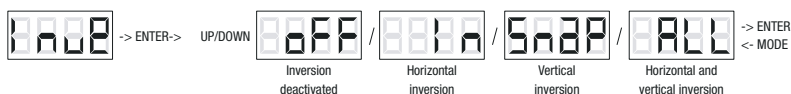
COLOUR BALANCE

Cross-mode calibration of colour reproduction with mixed colours. Press MODE repeatedly until “baLa” appears in the display and confirm by pressing ENTER. Now select the colour whose intensity you wish to change using UP and DOWN (red = red, Gree = green, bLue = blue) and confirm by pressing ENTER. Use UP and DOWN once again to set the colour intensity from 0 to 255 and confirm by pressing ENTER.



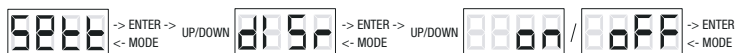
INVERTED DISPLAY

This function can be used to display letters, numbers and symbols horizontally, vertically or horizontally and vertically inverted on the LED matrix panel. Press MODE repeatedly until “Inve” appears in the display and confirm by pressing enter. Now use UP and DOWN to select the desired option and press ENTER to confirm.



SYSTEM SETTINGS AND SYSTEM INFORMATION

To adjust system settings and access system information, press MODE repeatedly until "Sett" appears in the display. Confirm by pressing ENTER. You can now use UP and DOWN to select and edit one of the following menu items:



Display is rotated
by 180°
(overhead installation)



on – display permanently on
off – display goes off after ap-
prox. 60 seconds of inactivity



This menu option allows you to define
which operating mode is to be enabled if
the DMX signal is interrupted in DMX mode.

The last DMX command
is retained

Blackout

Auto programme



Set
dimmer curve

dimmer curve
linear
Light intensity
increases linearly
with DMX value.

dimmer curve
exponential
Light intensity can
be finely adjusted
at lower DMX
values and broadly
adjusted at higher
DMX values.

dimmer curve
logarithmic
Light intensity can
be broadly adjusted
at lower DMX values
and finely adjusted
at higher DMX
values.

S-curve
Light intensity can
be finely adjusted
at lower and higher
DMX values and
broadly adjusted
at medium DMX
values.



Displays
firmware version



Displays device
temperature in °C

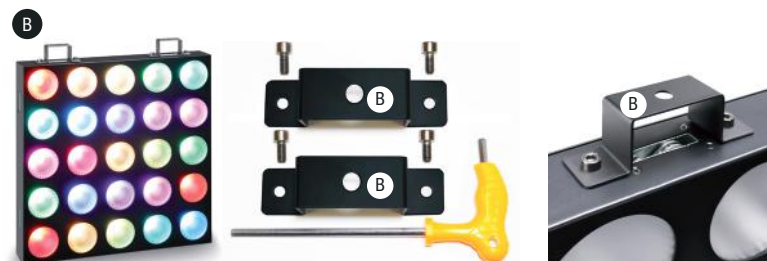


Displays total
operating time in
hours



LED test
Functional test of all
LEDs from 1 to 25.
Display flashes
during test. Press
MODE or ENTER
to stop.

MOUNTING



Single mounting in a traverse system is carried out using either a swivel bracket (Fig. A) or two Omega mounting brackets (Fig. B). A swivel bracket and two Omega mounting brackets are included, along with a set of screws and U-discs and the tools required (1x5 mm and 1x6 mm hexagonal tool). In both cases, ensure the brackets are firmly connected to the device, use appropriate traverse mounting bolts (not included) and fit a suitable safety cable to the eyelet to ensure the spotlight does not fall down (safety cable not included, eyelet at rear of device). Important: Overhead installation may only be carried out by qualified personnel.



The spotlight has an integrated connection system for mounting an unlimited number of elements horizontally and up to five elements vertically. In order to mount a group of spotlights created in this way in a system of traverses, it is absolutely necessary to use two Omega mounting brackets for each top element. For mechanical reasons, a group of spotlights may not be mounted on a vertical traverse.

Each element is fitted with two connecting hooks on two sides and two connecting bolts on two sides. In order to securely attach two elements, use the 5 mm hexagonal tool to move the connecting hooks (Fig. C) into starting position (turn as far as possible to the right). Join the elements in such a way that the two recesses in the connecting hooks (Fig. C) of one element are positioned precisely opposite the two recesses of the connecting bolts of the other element (Fig. D). Now turn the connecting hooks anticlockwise using the hexagonal tool as far as they will go (approx. 3/4 rotation) so that the connecting hook firmly encloses the connecting bolt. Secure each element at its eyelet by means of a suitable safety cable (safety cable not included). For dismantling purposes, return the connecting hooks to starting position (turn right as far as they will go). Important: Overhead installation may only be carried out by qualified personnel.

DMX TECHNOLOGY

DMX-512

DMX (Digital Multiplex) is the designation for a universal transmission protocol for communications between corresponding devices and controllers. A DMX controller sends DMX data to the connected DMX device(s). The DMX data is always transmitted as a serial data stream that is forwarded from one connected device to the next via the "DMX IN" and "DMX OUT" connectors (XLR plug-type connectors) that are found on every DMX-capable device, provided the maximum number of devices does not exceed 32 units. The last device in the chain needs to be equipped with a terminator (terminating resistor).



DMX CONNECTION

DMX is the common "language" via which a very wide range of types and models of equipment from various manufacturers can be connected with one another and controlled via a central controller, provided that all of the devices and the controller are DMX compatible. For optimum data transmission, it is necessary to keep the connecting cables between the individual devices as short as possible. The order in which the devices are integrated in the DMX network has no influence on the addresses. Thus the device with the DMX address 1 can be located at any position in the (serial) DMX chain: at the beginning, at the end or somewhere in the middle. If the DMX address 1 is assigned to a device, the controller "knows" that it should send all data allocated to address 1 to this device regardless of its position in the DMX network.

SERIAL CONNECTION OF MULTIPLE LIGHTS

1. Connect the male XLR connector (3-pin or 5-pin) of the DMX cable to the DMX output (female XLR socket) of the first DMX device (e.g. DMX-Controller).
2. Connect the female 3-pin XLR connector of the DMX cable connected to the first projector to the DMX input (male 3-pin socket) of the next DMX device. In the same way, connect the DMX output of this device to the DMX input of the next device and repeat until all devices have been connected. Please note that as a rule, DMX devices are connected in series and connections cannot be shared without active splitters. The maximum number of DMX devices in a DMX chain should not exceed 32 units.

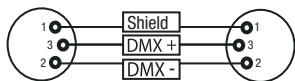
The Adam Hall 3 STAR, 4 STAR, and 5 STAR product ranges include an extensive selection of suitable cables.

DMX CABLES

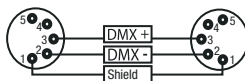
When fabricating your own cables, always observe the illustrations on this page. Never connect the shielding of the cable to the ground contact of the plug, and always make certain that the shielding does not come into contact with the housing of the XLR plug. If the shielding is connected to the ground, this can lead to short-circuiting and system malfunctions.

Pin Assignment

DMX cable with 3-pin XLR connectors:



DMX cable with 5-pin XLR connectors (pin 4 and 5 are not used):



DMX TERMINATORS (TERMINATING RESISTORS)

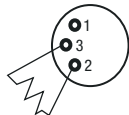
To prevent system errors, the last device in a DMX chain needs to be equipped with a terminating resistor (120 ohm, 1/4 Watt).

3-pin XLR connector with a terminating resistor: K3DMXT3

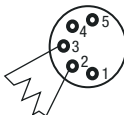
5-pin XLR connector with a terminating resistor: K3DMXT5

Pin Assignment

3-pin XLR connector:



5-pin XLR connector:



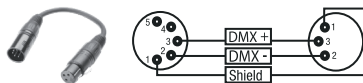
DMX ADAPTER

The combination of DMX devices with 3-pin connectors and DMX devices with 5-pin connectors in a DMX chain is possible with suitable adapters.

Pin Assignment

DMX Adapter 5-pin XLR male to 3-pin XLR female: K3DGF0020

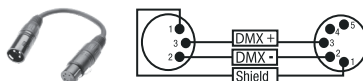
Pins 4 and 5 are not used.



Pin Assignment

DMX Adapter 3-pin XLR male to 5-pin XLR female: K3DHM0020

Pins 4 and 5 are not used.



TECHNICAL DATA

Model:	CLMP10WRGB
Product type:	LED MATRIX PANEL
Type:	5X5 matrix
Colour spectrum:	RGB
Number of LEDs:	25
LED type:	10 W Tri LED
Refresh rate:	8000 Hz
Beam angle:	40°
DMX input:	3-pin and 5-pin male XLR
DMX output:	3-pin and 5-pin female XLR
DMX mode:	3-channel, 5-channel, 19-channel, 28-channel, 78-channel
DMX functions:	master dimmer, dimmer fine, auto programmes, sound programmes, stroboscope
Standalone functions:	sound control, master/slave
Control system	DMX512
Operating controls:	mode, enter, up, down
Display elements:	4-digit LED display
Power connection:	blue mains input socket white power output socket
Operating voltage:	100-240 V AC/50-60 Hz
Power consumption:	180 W
Light intensity (@ 1 m):	6950 lx (full on)
Fuse:	T3AL/250 V (5 x 20mm)
Ambient temperature (in operation):	10°C-40°C
Relative air humidity:	<85%, non-condensing
Housing material:	metal
Housing colour:	black
Housing cooling:	convection
Dimensions (W x H x D, without bracket):	580 x 580 x 125 mm
Weight (not incl. brackets):	13.7 kg
Additional features:	adjustable swivel bracket including two Omega mounting brackets, safety eyelet, integrated connection system for mounting an unlimited number of elements horizontally and up to five elements vertically

MANUFACTURER'S DECLARATIONS

MANUFACTURER'S WARRANTY & LIMITATIONS OF LIABILITY

You can find our current warranty conditions and limitations of liability at: https://cdn-shop.adamhall.com/media/pdf/Manufacturers-Declarations-CAMEO_DE_EN_ES_FR.pdf. To request warranty service for a product, please contact Adam Hall GmbH, Daimler Straße 9, 61267 Neu Anspach / Email: Info@adamhall.com / +49 (0)6081 / 9419-0.



CORRECT DISPOSAL OF THIS PRODUCT

(valid in the European Union and other European countries with a differentiated waste collection system)

This symbol on the product, or on its documents indicates that the device may not be treated as household waste. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. Please dispose of this product separately from other waste and have it recycled to promote sustainable economic activity. Household users should contact either the retailer where they purchased this product, or their local government office, for details on where and how they can recycle this item in an environmentally friendly manner. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial waste for disposal.

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation

CE Compliance

Adam Hall GmbH states that this product meets the following guidelines (where applicable):

R&TTE (1999/5/EC) or RED (2014/53/EU) from June 2017

Low voltage directive (2014/35/EU)

EMV directive (2014/30/EU)

RoHS (2011/65/EU)

The complete declaration of conformity can be found at www.adamhall.com.

Furthermore, you may also direct your enquiry to info@adamhall.com.