USER´S MANUAL
BEDIENUNGSANLEITUNG
MANUEL D`UTILISATION
MANUAL DE USUARIO
INSTRUKCJA OBSŁUGI
MANUALE D‘ USO

Featuring

WIRELESS SOLUTION
MADE IN SWEDEN

FIRMWARE VERSION 2.20 AND HIGHER

ZENIT® W600

LED OUTDOOR WASHLIGHT
CLZW600

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ENGLISH

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DMX

DMX CONTROL / DMX STEUERUNG / PILOTAGE DMX / CONTROL DMX / STEROWANIE DMX / CONTROLLO DMX 181

ENGLISH

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 **CAMEOLIGHT**.COM.

INFORMATION ON THIS USER MANUAL

- Carefully read the safety instructions and the entire manual before operating the device.
- Observe the warnings on the device and in the user manual.
- Always keep the user manual within reach.
- If you sell or pass on the device, it is important that you also include this user manual, as it is an integral part of the product.

INTENDED USE

The product is a device for event technology!

This product has been developed for professional use in the field of event technology and is not suitable for use as domestic lighting!

Furthermore, this product is only intended for qualified users with specialist knowledge of event technology!

Use of the product outside the specified technical data and operating conditions is considered inappropriate!

Liability for damage and third-party damage to persons and property due to inappropriate use is excluded!

The product is not suitable for:

- Use by persons (including children) with limited physical, sensory or mental abilities or lack of experience and knowledge.
- children (children must be instructed not to play with the device).

DEFINITIONS AND SYMBOL EXPLANATIONS

1. **HAZARD:** The word HAZARD, possibly in combination with a symbol, indicates situations in which there is an immediate danger or risk of potentially fatal injury.

2. **WARNING:** The word WARNING, possibly in combination with a symbol, indicates situations in which there is an immediate danger or risk of potentially fatal injury.

3. **CAUTION:** The word CAUTION, possibly in combination with a symbol, indicates situations or conditions that could result in injury.

4. **ATTENTION:** The word ATTENTION, possibly in combination with a symbol, indicates situations or conditions that could result in damage to property and/or the environment.

This symbol identifies hazards that can cause electric shock.

This symbol identifies hazardous areas or hazardous situations.

This symbol indicates hazards caused by hot surfaces.

This symbol indicates hazards caused by intense light sources.

This symbol indicates a device in which there are no user-replaceable parts.

This symbol indicates additional information on the operation of the product.

SAFETY INSTRUCTIONS

HAZARD:

1. Do not open the device and do not perform any modifications.
2. If your device no longer functions properly, if liquids or objects get inside it or if it has been damaged in any other way, switch it off immediately and unplug it from the power source. The device may be repaired only by authorised repair technicians.
3. For devices of protection class 1, the protective conductor must be connected correctly. Never disconnect the protective conductor. Devices of protection class 2 do not have a protective conductor.
4. Ensure that live cables are not kinked or otherwise mechanically damaged.
5. Never bypass the device fuse.

WARNING:

1. The device may not be operated if it shows obvious signs of damage.
2. The device may only be installed in a voltage-free state.
3. If the device's power cable is damaged, the device may not be used.
4. Permanently connected power cables may only be replaced by a qualified person.

ATTENTION:

1. Do not switch on the device if it has been exposed to extreme temperature fluctuations (for example, following transport). Moisture and condensation can damage the device. Switch on the device only when it has reached room temperature.
2. Ensure that the voltage and frequency of the mains supply match the values specified on the device. If the device has a voltage selector switch, do not connect the device until it has been set correctly. Use only suitable power cables.
3. To disconnect the device from the mains on all poles, it is not sufficient to press the on/off switch on the device.
4. Make sure that the fuse used corresponds to the type printed on the device.
5. Ensure that suitable measures have been taken against overvoltage (e.g. lightning strikes).
6. Observe the specified maximum output current on devices with a Power Out connection. Ensure that the total current consumption of all connected devices does not exceed the specified value.
7. Replace plug-in power cables with original cables only.

HAZARD:

1. Choking hazard! Plastic bags and small parts must be kept out of reach of persons (including children) with reduced physical, sensory or mental capabilities.
2. Risk of falling! Make sure that the device is securely installed and will not fall down. Only use suitable stands or mounts (particularly for fixed installations). Ensure that accessories are properly installed and secured. Ensure that applicable safety regulations are observed.

WARNING:

1. Use the device in the prescribed manner only.
2. Operate the device using only accessories of the type recommended and supplied by the manufacturer.
3. Observe safety regulations applicable in your country during installation.
4. After connecting the device, ensure that all cables are routed so as to avoid damage or accidents, such as from tripping.
5. Always observe the specified minimum distance to normally flammable materials! Unless explicitly stated, the minimum distance is 0.3 m.
6. Always observe the minimum distance to the illuminated surface, which can be read on the device!

CAUTION:

1. Moving components such as mounting brackets may become jammed.
2. In the case of devices with motor-driven components, there is a risk of injury due to the movement of the device. Sudden movement of the device can cause shock reactions.

3. The housing surface of the device can become very hot during regular operation. Ensure that accidental touching of the housing is not possible. Always allow the device to cool sufficiently before removal, maintenance work and charging etc.

ATTENTION:

1. Do not install or use the device in the vicinity of radiators, accumulators, stoves, or other heat sources. Ensure that the device is always installed in such a way that it is sufficiently cooled and cannot overheat.
2. Do not place any ignition sources, such as burning candles, near the device.
3. Ventilation openings must not be covered and fans must not be blocked.
4. For transport, use the original packaging or packaging provided by the manufacturer.
5. Avoid any impacts to or shaking of the device.
6. Observe the IP rating and the ambient conditions such as temperature and humidity according to the specifications.
7. Devices can be continuously further developed. In the event of deviating information on operating conditions, performance or other device properties between the user manual and the device labelling, the information on the device always has priority.
8. The device is not suitable for tropical climate zones or for operation over 2,000 m above sea level.
9. Unless explicitly stated, the device is not suitable for operation under marine conditions.

NOTE:

In the case of conversion or retrofit sets or accessories provided by the manufacturer, be sure to observe the enclosed instructions.

CAUTION! IMPORTANT INFORMATION REGARDING LIGHTING PRODUCTS!

1. Never look directly into the beam of light, not even for a short period of time.
2. Never look into the beam of light using optical devices such as a magnifying glass.

3. Stroboscopic effects may cause epileptic seizures in susceptible individuals!

4. These luminaires contain permanently installed light sources which cannot be replaced by the user. The light source contained in this luminaire may only be replaced by the manufacturer or its service partner or a similarly qualified person.

SIGNAL TRANSMISSION AND CONTROL BY RADIO (E.g. W-DMX or audio radio systems, Bluetooth):

The quality and performance of wireless signal transmissions generally depends on the ambient conditions.

The following factors can impact range and signal stability, for example:

- Shielding (e.g. masonry, metal structures, water)
- High volume of radio traffic (e.g. powerful wireless LAN networks)
- Interference
- Electromagnetic radiation (e.g. LED video screens, dimmers)

All range specifications refer to free-field application with visual contact and without interference!

The operation of transmission systems is subject to official regulations. These may vary from region to region and must be checked by the operator before use (e.g. radio frequency and transmission power).

WARNING: Devices with wireless signal transmission are not suitable for use in sensitive areas in which radio operation can lead to potential detrimental effects. These include:

- Hospitals, health centres or other healthcare facilities that provide patient treatment with skilled personnel and equipment.
- Hazardous areas Class I, II and III
- Restricted areas
- Military facilities
- Aircraft or vehicles
- Areas where the use of mobile phones is prohibited

TRANSMISSION VIA W-DMX

WARNING: In general, wireless DMX transmission must not be used for applications involving safety-related factors that might result in personal injury or property damage in the event of a failure.

This applies in particular to moving scene or traverse structures, DMX-controlled motors/lifts or lifting devices for operating DMX-operated platform lifts, hydraulic systems or comparable moving components.

Furthermore, wireless DMX transmission must not be used to trigger flame or pyrotechnic devices, explosion-driven effects, or to control gas or liquid effects. These include CO_2 cannons, confetti shooters, water effects or similar.

NOTES ON PORTABLE OUTDOOR DEVICES

1. Temporary operation! Event equipment is generally only designed for temporary operation.
2. Continuous operation or permanent structural installation – particularly outdoors – can impair the function, surfaces and seals and accelerate material fatigue.
3. Damage to the surface coating can impair the device's corrosion protection. Damaged surface coating (e.g. scratches) must be promptly repaired by suitable measures.

SCOPE OF DELIVERY

Remove the product from the packaging and remove all packaging material.

Please check the completeness and integrity of the delivery and notify your distribution partner immediately after purchase if the delivery is not complete or if it is damaged.

Product includes:

- ▶ Headlights
- ▶ 1 Power cable
- ▶ 2x omega bracket
- ▶ Operating instructions

INTRODUCTION

LED WASH LIGHT 600 W RGBW IP65

CLZW600

CONTROL FUNCTIONS:

2-channel CCT, 3-channel color macros, 3-channel RGB 8-bit, 4-channel RGBW 8-bit, 8-channel RGBW 8 bit, 6-channel RGB 16-bit, 8-channel RGBW 16-bit, 10-channel full-access 8-bit, and 15-channel full-access 16-bit DMX controll

Master/slave mode

Standalone functions

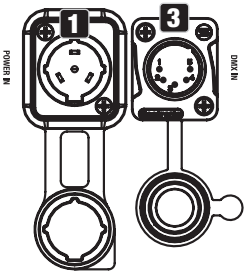
W-DMX™

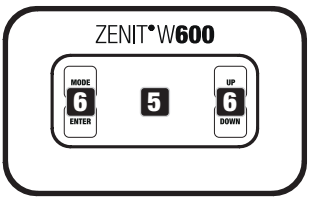
FEATURES:

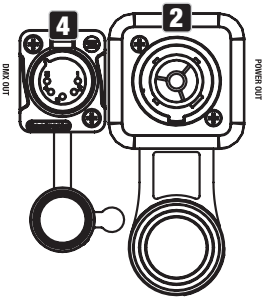
DMX-512. 40 x 15 W high-power RGBW LEDs. W-DMX™. Stroboscope. 16-bit dimmer. 4 dimmer curves. Color temperature correction. Adjustable LED PWM frequency. Fast access feature. IP65-class protection. 5-pin DMX connections. Plastic feet. 2 x Omega mounting brackets included. Operating voltage 100–240 V AC. Power consumption 565 W. 25°, 45°, 60°x10°, 100° diffusers and flap optionally available.

The spotlight features the RDM standard (Remote Device Management). This remote device management system makes it possible to carry out status checks and configure RDM devices with an RDM-enabled controller.

CONNECTIONS, OPERATING AND DISPLAY ELEMENTS







1 POWER IN

IP65 power input socket with rubber sealing cap. Operating voltage 100-240 V AC/50-60 Hz. Connection via included power cable (when not in use, always close with rubber sealing cap).

2 POWER OUT

IP65 power output socket with rubber sealing cap. Facilitates power supply to other CAMEO spotlights. Ensure that the total current consumption of all connected devices does not exceed the value specified on the device in amperes (A) (when not in use, always close with the rubber sealing cap).

3 DMX IN

Male IP65 5-pin XLR socket for connecting a DMX control device (e.g. DMX console; when not in use, always close with the rubber sealing cap).

4 DMX OUT

Female IP65 5-pin XLR socket for sending DMX control signal (when not in use, always close with the rubber sealing cap).

5 OLED-DISPLAY

Displays the current operating mode and other system settings.

6 TOUCH-SENSITIVE CONTROLS

MODE

Press MODE to access the selection menu for system settings. Press repeatedly to go back to the main display.

ENTER

Press ENTER to access the menu levels to make value changes, and to access the sub-menus. Confirm changes by pressing ENTER.

UP and DOWN

Select individual menu items in the selection menu (DMX address, operating mode etc.) and in the sub-menus. Allow changes to the value of a menu item, such as the DMX address as required.

PRESSURE EQUALISATION ELEMENT

The pressure equalisation element to prevent condensation inside the housing is in the device base, behind the cable feed for the LED unit. In order to ensure its proper function, the element must be protected from contamination.

HOUSING FAN

The 3 housing fans and the heat sink are on the back of the LED unit. Ensure air circulation by not covering the device, and cleaning it regularly.

NOTES: In order to provide protection from spraying water, in accordance with protection class IP65, special IP65-rated XLR connectors must be used correctly with the DMX input and output sockets, or they must be closed using the rubber sealing caps. When connected correctly, or when sealed correctly with the rubber sealing caps, the POWER IN and POWER OUT sockets are protected from spraying water, as in accordance with IP65.

PLEASE NOTE

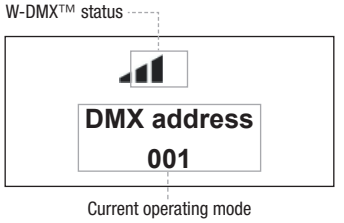
As soon as the spotlight is correctly connected to the power supply, the following will be displayed in succession during the starting process: “Welcome to Cameo”, the model name and the software version. After this process, the spotlight is ready for operation, and starts in the previously enabled mode.

- If one of the DMX operating modes is activated and there is no DMX signal to the DMX input, the currently programmed DMX address is displayed and the characters on the display will begin to flash.
- After approximately 1 minute of inactivity, the display will automatically show the currently active operating mode.
- Fast Access Feature: In order to simplify the menu guide, the device has an intelligent menu structure that allows direct access to previously selected menu items and sub-menu items.
  1. Press MODE and ENTER simultaneously for direct access to the last-edited sub-menu item, where you can make changes instantly as required (DMX starting address and all modes).
  2. Press MODE for direct access to the last-selected and last-edited menu item. Press ENTER repeatedly to access the sub-menu items in order to change individual settings (DMX starting address and all modes).
- Before changing device settings, ensure that the control panel is dry and dust free so that its functionality is not impaired.
- The display can be rotated 180° by pressing UP when the main display is visible.

OPERATION

MAIN DISPLAY

After the power-up process, the spotlight is ready for operation, and starts in the previously activated mode. The main display appears with the following information: current mode (in the example DMX mode) and W-DMX™ status.



W-DMX™

1. To pair with W-DMX™-compatible transmitters, enable W-DMX™ in the device settings (Settings -> Wireless Setting -> W-DMX On Off -> On) and reset the W-DMX™ module (Receive Reset -> Yes). Start the pairing process as described in the operating instructions of the W-DMX™ transmitter. Pairing is then completed automatically.

2. Pair a group of W-DMX™ devices to create a DMX universe with them. First decouple all devices that should form the group (Settings -> Wireless Setting -> Receive Reset). Then select a CLZW600 with a DMX controller via DMX cable and select “Transmit” in the settings (Settings -> Wireless Setting -> Operating Mode -> Transmit). Select “Receive” in the settings of the W-DMX™ device that you want to control via W-DMX™ (Settings -> Wireless Setting -> Operating Mode -> Receive), and pair it by selecting “Link” in the settings of the DMX cable controlled CLZW600, then confirm your selection (Settings -> Wireless Setting -> Link -> Link). Pairing is then completed automatically.

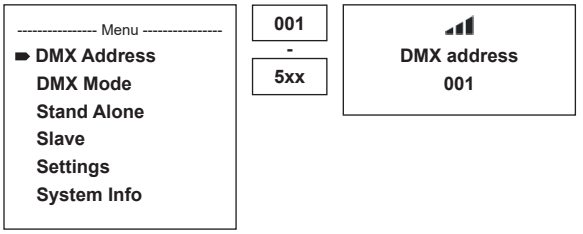
3. It is also possible to create a connected group of W-DMX™ devices via W-DMX™, and operate them in master/slave mode. First decouple all devices that should form the group (Settings -> Wireless Setting -> Receive Reset). In the settings (Settings -> Wireless Setting -> Operating Mode) of the master unit select “Transmit”, and in the settings of the slave units select “Receive”. On the master unit select “Link” (Settings -> Wireless Setting -> Link -> Link) and confirm your selection by pressing ENTER. Pairing of the devices is then completed automatically. On the master unit select one of the standalone modes (Auto, Color Macro, Static, Tunable White, User Color), and use this to control the slave unit.

W-DMX™ STATUS

W-DMX™ deactivated	W-DMX™ as receiver activated, not coupled	W-DMX™ as receiver activated and device coupled, Transmitter off, or out of range	W-DMX activated and coupled device, no DMX signal	W-DMX™ as reveicer activated and coupled device, DMX signal is present	W-DMX™ and transmission mode G3 Arrow up = send operation Down arrow = Receive mode Arrow flashing = Coupling Flashing stops = Coupled	W-DMX™ and transmission mode G4S Arrow up = send operation Down arrow = Receive mode Arrow flashing = Coupling Flashing stops = coupled

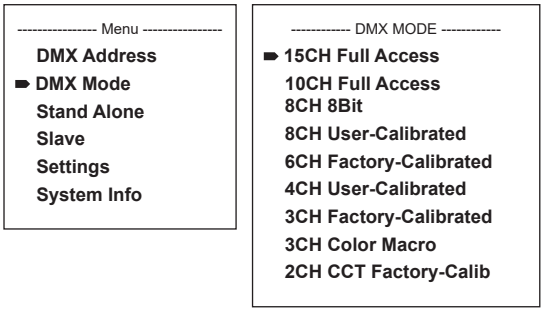
SET DMX START ADDRESS (DMX ADDRESS)

Press MODE to access the device settings selection menu (--- Menu ---). Use UP and DOWN to select the menu item “DMX Address” (observe arrow) and confirm with ENTER. The display will show a three-digit number field and you can use the UP and DOWN controls to configure the desired DMX start address. Confirm with ENTER and press MODE to return to the main display (in the example, “DMX address 001”).



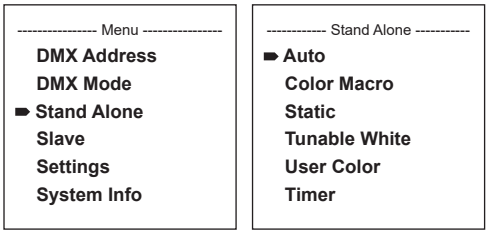
SET DMX MODE (DMX Mode)

Press MODE to access the device settings selection menu (--- Menu ---). Use UP and DOWN to select the menu item “DMX Mode” (observe arrow) and confirm with ENTER. In the sub-menu, you can now select between 9 different DMX operating modes with the UP and DOWN buttons. Confirm your selection with ENTER. DMX tables with the channel assignments can be found in these instructions under DMX CONTROL.



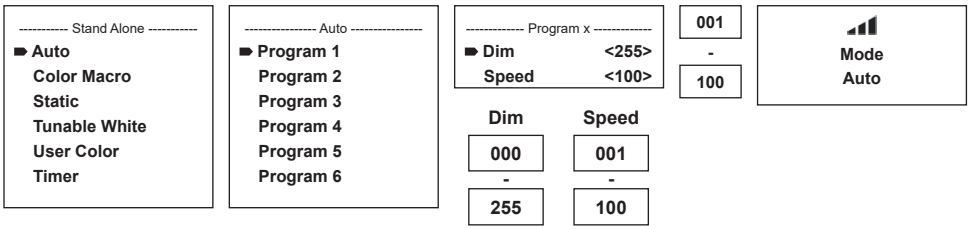
CONFIGURING STANDALONE MODE

Press MODE to access the device settings selection menu (--- Menu ---). Using the UP and DOWN controls, select the menu item “Stand Alone” (observe arrow) and confirm with ENTER. In the sub-menu you can now select from the standalone modes “Auto”, “Colour Macro”, “Static”, “Tunable White”, “User Colour” and the timer function “Timer” using UP and DOWN. Confirm your selection with ENTER.



AUTO MODE (programme 1 to programme 6)

The 6 different auto-programmes each comprise non-editable color-change sequences. Brightness and speed are independently adjustable. Select auto mode as described above under “CONFIGURE STANDALONE MODE” and confirm with ENTER. Now use UP and DOWN to select one of the 6 auto programmes (observe arrow) and confirm with ENTER. To adjust brightness, use UP and DOWN to select the menu item “Dim” and confirm with ENTER, then use UP and DOWN to select the desired value between 000 and 255. Confirm by pressing ENTER. Set the run speed by selecting the menu item “Speed”, confirm with ENTER, and then select the desired value between 001 and 100. Confirm by pressing ENTER. Press MODE four times to return to the main display (Mode Auto).

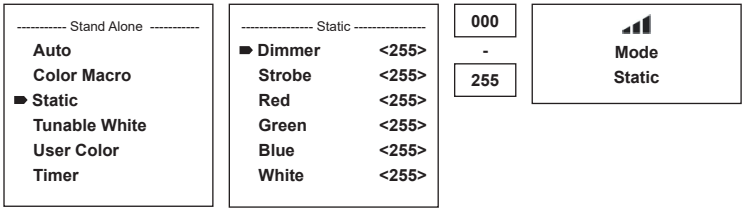


COLOR MACROS (Color Macro)

15 different preset color macros are available. Select color macro mode as per the procedure previously described in SETTING OPERATION MODE and confirm with ENTER. Now use UP and DOWN to select the desired color preset (observe arrow) and confirm with ENTER (Color Off = blackout). A three-digit figure is shown on the display, and you can set the desired brightness on a scale from 000 to 100 using UP and DOWN. Confirm by pressing ENTER. Press MODE three times to return to the main display (Color Macro Mode).

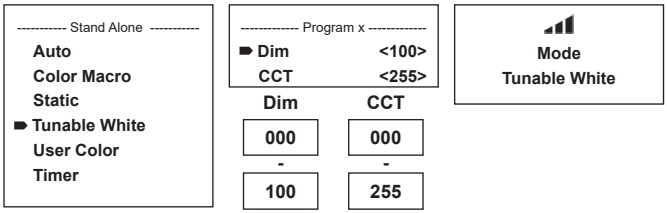
STATIC MODE (STATIC)

The static mode allows the functions Dimmer, Strobe, R, G, B, W and Color Temp to be adjusted directly on the device with values between 000 and 255, in a similar way to a DMX controller. In this way, an individual scene can be created without the need for an additional DMX controller. Select static mode as per the procedure previously described in SETTING OPERATION MODE and confirm with ENTER. Now use UP and DOWN to select the menu item you wish to edit (observe arrow) and confirm with ENTER. The display will now show a three-digit number field, and you can use UP and DOWN to configure the desired value between 000 and 255. Confirm by pressing ENTER. Press MODE three times to return to the main display (Static Mode).



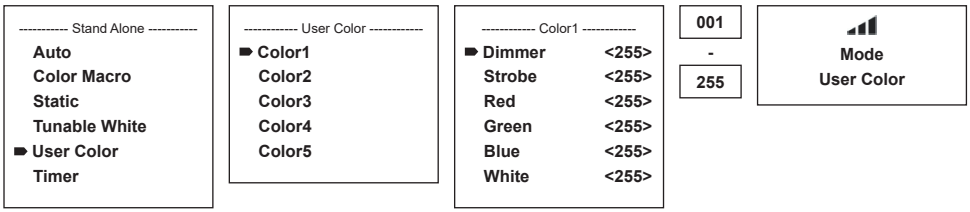
COLOR TEMPERATURE (Tunable White)

The color temperature mode enables the light to be configured with a color temperature of warm white to cold white (CCT), and allows brightness (Dim) to be adjusted directly on the device. Select color temperature mode as described above under “CONFIGURE STANDALONE MODE” and confirm with ENTER. Now use UP and DOWN to select the menu item you wish to edit (observe arrow) and confirm with ENTER. The display will now show a three-digit number field and you can use UP and DOWN to configure the desired value. Confirm by pressing ENTER. Press MODE three times to return to the main display (Tunable White Mode).



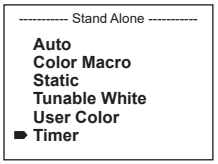
USER PRESETS (User Color)

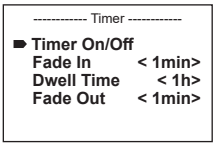
The operating mode “User Presets” allows the overall brightness and a color mixture of R, G, B and W to be saved directly in the device in five individual color presets. Select “User Color” as described above under “CONFIGURE STANDALONE MODE” and confirm with ENTER. Now use UP and DOWN to select presets Color1 to Color5, confirm with ENTER, and select the sub-menu item you would like to edit (observe arrow). Confirm by pressing ENTER.
The display will now show a three-digit number field and you can use UP and DOWN to configure the value between 000 and 255 as required. Confirm again with ENTER. Once all settings have been made according to preference, press MODE four times to return to the main display (User Color Mode).



TIMER FUNCTION (Timer)

The timer function allows the standalone modes “Colour Macro”, “Static”, “Tunable White” and “User Colour” to be timer controlled in such a way that the fade-in time can be set from 0 to 60 minutes, the dwell time from 1 to 24 hours and the fade out time from 0 to 60 minutes. Time control starts immediately after activating the timer function in the previously activated stand-alone mode and remains active even if the spotlight is switched off and restarted. Select “Timer” by means of procedure described above under CONFIGURE STANDALONE MODE and confirm with ENTER. Now select “Fade In”, “Dwell Time” and “Fade Out” for the individual settings (observe arrow) and confirm with ENTER. The display will show a three-digit number field in each case and you can use UP and DOWN to set the value as required from 000 to 060 or 001 to 024. Confirm by pressing ENTER again. Once all settings have been configured as required, activate the timer function by selecting the submenu item “Timer On/Off” using UP and DOWN, confirm with ENTER, select “On” and confirm again with ENTER (to deactivate the timer function, please select “Off” and confirm). Press MODE three times to return to the main display.

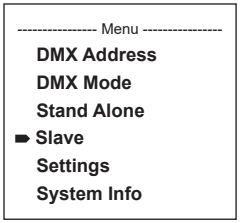




Note: The timer function is suitable for use in master/slave mode via cable and W-DMX™.

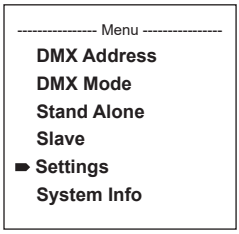
SET SLAVE MODE

Press MODE to access the device settings selection menu (--- Menu ---). Use UP and DOWN to select the menu item “Slave” (observe arrow) and confirm with ENTER. Connect the master and slave units (same model) with a DMX cable, and enable one of the standalone modes on the master unit (Auto, Color Macro, Static, Tunable White, User Color). 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.



DEVICE SETTINGS (Settings)

Press MODE to access the device settings selection menu (--- Menu ---). Using the UP and DOWN controls, select the menu item “Settings” (observe arrow) and confirm with ENTER.



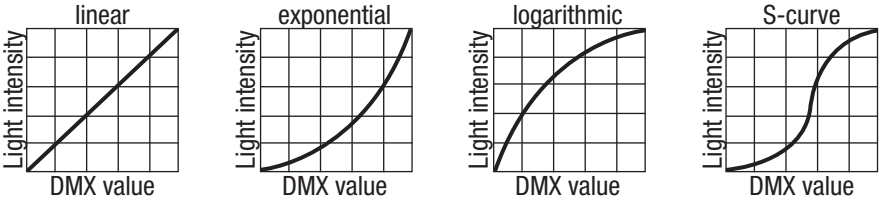
This will take you to the sub-menu for configuring the following sub-menu items (see table, select with UP and DOWN, confirm with ENTER, change value or status with UP and DOWN, confirm with ENTER):

Settings				
Wireless Setting	=	W-DMX settings (wireless DMX)	W-DMX on/off	On = W-DMX enabled
				Off = W-DMX disabled
			Operating Mode	Receive = W-DMX module as receiver
				Transmit = W-DMX module as transmitter
			Transmitting Mode	G3 = G3 transmission standard
				G4S = G4S transmission standard
			Link	Link = pair with W-DMX devices. W-DMX must be activated on all devices and the pairing must be picked up by a transmitter (Receive Reset).
				Unlink = unpair all devices
			Receive Reset	No = do not retain transmitter pairing
				Yes = retain transmitter pairing
Display Reverse	=	Flip display	On	Rotate display by 180° (e.g. for overhead installation)
			Off	No display rotation
Display Backlight	=	Display lighting	On	Permanent on
			Off	Deactivation after approximately 1 minute of inactivity
DMX Fail	=	Operating status with DMX signal fault	Hold	Last command is retained
			Blackout	Activates blackout
			Emergency Light	Spotlight changes to color macro “Cold White”

Dimmer Curve	=	Dimmer curve	Linear	Light intensity increases linearly with DMX value
			Exponential	Light intensity can be finely adjusted at lower DMX values and broadly adjusted at higher DMX values.
			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.
Dimmer Response	=	Dimmer sensitivity	LED	Lamp responds abruptly to changes in DMX value
			Halogen	Lamp behaves like a halogen spotlight with slight brightness changes
Color Calibration	=	Color calibration (If one of the DMX factory calibration modes is activated, no other calibration can be selected and the message “no possible change in this DMX Mode” will be shown on the display. If one of the DMX user calibration modes is activated, RAW can be selected as the alternative calibration.)	RAW	individual color calibration. Brightness adjustment of 4 RGBW LED groups for all modes in the range 000-255
			User calibration	Individual color calibration. Cross-mode brightness setting of the 4 LED groups RGBW with values from 000 - 255
			Factory calibration	Factory-default calibration of R, G, B, and W (across all operating modes). Select this setting to ensure the consistent-looking presentation of color macros in stand-alone mode and to control color macros with DMX.
Autolock	=	Automatic locking of the controls	On	Automatic locking of the controls after approximately 1 minute of inactivity. After attempted input the display shows: "Locked!" Unlock: press and hold UP and DOWN simultaneously for approx. 5 seconds
			Off	Automatic locking of the controls is disabled

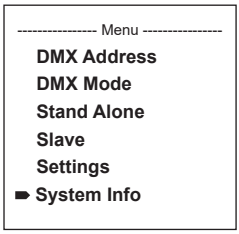
LED frequency	=	LED PWM frequency	800 Hz/ 1200 Hz/ 2000 Hz/ 3600 Hz/ 12 kHz/ 25 kHz	Setting the LED PWM frequency
Fan	=	Adjust fan control	Auto	Automatic adjustment of the fan performance
			Max. Intensity	Maximum fan capacity for maximum brightness
			Low Noise	Extra-quiet fan with reduced brightness
Factory Reset	=	Reset to factory setting		Reset to factory settings: ENTER -> “Reset Now!” -> ENTER

Dimmer curves



SYSTEM INFORMATION (System Info)

Press MODE to access the device settings selection menu (--- Menu ---). Using UP and DOWN, select the menu item “System Info” (observe arrow) and confirm with ENTER.



Use the UP and DOWN controls to select the desired sub-menu item, and press ENTER to display the corresponding information.

System Info				
Firmware	=	Displays device firmware	Main CPU	Vx.xx
			LED Driver	Vx.xx
Temperature	=	Displays temperature of LED unit	LED	xx °C / xx °F
			Unit	°C (= display in degrees Celsius)
				°F (= display in degrees Fahrenheit)
Operation Hours	=	Displays operating time	xx:xx h	Displays total operating time in hours and minutes

MANUAL LOCKING FUNCTION

In addition to the ability to automatically protect the spotlight from accidental and unauthorised operation (see “Settings” – “Auto-lock”), the controls can also be locked manually. Press and hold the UP and DOWN controls simultaneously for approximately 5 seconds. If an attempt is made to change settings, “Locked!” will appear in the display, and changing the spotlight’s settings via the controls is no longer possible. After approx. 1 minute, the current operating mode is displayed again. To unlock, press and hold the UP and DOWN controls simultaneously for approximately 5 seconds.
The display will show the previously displayed information.

SETUP AND INSTALLATION

Thanks to the integrated plastic feet, the spotlight can be placed on a flat surface at a suitable location. Mounting on a truss is done either by means of an omega bracket fixed in the centre of the unit base (A), or by means of two omega brackets mounted at the outer fixing positions (B). Two omega brackets are included in the delivery, suitable crossbar clamps are optionally available. Ensure firm connections and secure the headlamp with a suitable safety rope at the designated point (C).

The beam direction of the LED unit is adjusted independently of the unit base using the wing screws on the side.

HAZARD: Overhead mounting requires extensive experience, including the calculation of the limit values for load, the installation materials and regular safety inspection of all installation materials and spotlights. If you do not have these qualifications, do not attempt to perform an installation yourself. Refer instead to a qualified professional. There is a risk that devices that are incorrectly mounted and secured may come loose and fall down. This can cause serious injury or death.

CARE, MAINTENANCE AND REPAIR

In order to ensure the long-term, proper functioning of the device, it must be regularly cleaned and, if necessary, maintained. The maintenance requirement depends on the intensity of use and the environment in which it is used.

We generally recommend a visual inspection before each operation. Furthermore, we recommend carrying out all the applicable maintenance measures specified below once every 500 operating hours or, in the case of a lower intensity of use, at the latest after one year. Warranty claims may be limited in the event of defects resulting from inadequate maintenance.

CARE (carried out by user)

WARNING! Before carrying out any maintenance work, the power supply and, if possible, all device connections must be unplugged.

PLEASE NOTE! Improper care can lead to impairment of the device or even destruction.

1. Housing surfaces must be cleaned with a clean, damp cloth. Make sure that no moisture can penetrate the device.
2. Air inlets and outlets must be regularly cleaned of dust and dirt. If compressed air is used, make sure that damage to the device is prevented (e.g. fans must be blocked in this case, as they could otherwise over-rev.).
3. Lines and plug contacts must be cleaned regularly and dust and dirt must be removed.
4. In general, no cleaning agents or abrasive agents may be used, otherwise the surface finish may be damaged.
5. Devices must generally be stored dry and protected from dust and dirt.
6. To ensure correct and safe operation, all accessible or removable lenses and light-emitting apertures must be cleaned regularly.

MAINTENANCE AND REPAIR (by qualified personnel only)

HAZARD! There are live components in the device. Even after disconnecting the mains connection, there may still be residual voltage in the device, e.g. due to charged capacitors.

NOTE! There are no assemblies in the unit that require maintenance by the user.

PLEASE NOTE! Maintenance and repair work may only be carried out by sufficiently qualified specialist personnel. If in doubt, consult a specialist workshop.

PLEASE NOTE! Improperly performed maintenance work may affect warranty claims.

OPTIONAL ACCESSORIES

CLZW6004B

Flap – tool-free mounting thanks to threaded locking bolts, safety cable included

CLZW600SMLSD20

25° diffuser
Tool-free mounting thanks to SNAPMAG® technology

CLZW600SMLSD40

45° diffuser
Tool-free mounting thanks to SNAPMAG® technology

CLZW600SMLSD100

100° diffuser
Tool-free mounting thanks to SNAPMAG® technology

CLZW600SMLSD6010

60° x 10° diffuser
Tool-free mounting thanks to SNAPMAG® technology

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.

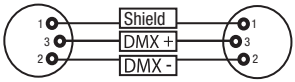
The Adam Hall 3 STAR, 4 STAR, and 5 STAR product ranges include an extensive selection of suitable cables.

DMX CABLES

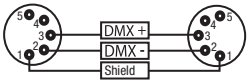
When fabricating your own cables, always observe the illustrations on this page. Never connect the shielding of the cable to the ground contact of the plug, and always make certain that the shielding does not come into contact with the housing of the XLR plug. If the shielding is connected to the ground,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

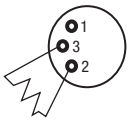
To prevent system errors, the last device in a DMX chain needs to be equipped with a terminating resistor (120 ohm, 1/4 Watt).

3-pin XLR connector with a terminating resistor: K3DMXT3

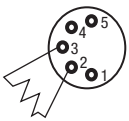
5-pin XLR connector with a terminating resistor: K3DMXT5

Pin Assignment

3-pin XLR connector:



5-pin XLR connector:



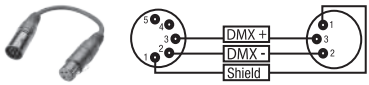
DMX ADAPTER

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

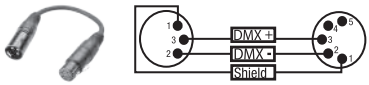
Pins 4 and 5 are not used.



Pin Assignment

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

Pins 4 and 5 are not used.



TECHNICAL DATA

Item number:	CLZW600
Product type:	LED Wash Light
Type:	Outdoor spotlight
Colour spectrum LED:	RGBW
LED quantity:	40
LED type:	15 W
LED PWM frequency:	800 Hz, 1200 Hz, 2000 Hz, 3600 Hz, 12 kHz, 25 kHz (adjustable)
Beam angle:	18° (35° Field)
DMX input:	5-pin XLR male, IP65
DMX output:	5-pin XLR female, IP65
DMX modes:	2-channel CCT, 3-channel colour macros, 3-channel RGB 8 bit, 4-channel RGBW 8 bit, 6-channel RGB 16 bit, 8-channel 8 bit, 8-channel RGBW 16 bit, 10-channel full access 8 bit, 15-channel full access 16 bit
DMX functions:	Dimmer, Dimmer Fine, RGBW, RGBW Fine, Strobe, Dimmer Curves, Colour Temperature Correction, Dimming Behaviour, Colour Macros, Colour Change, Colour Fade, LED PWM Frequency, Colour Calibration
Standalone functions:	Colour mixing, colour macros, master/slave operation, auto programmes, stroboscope, dimming behaviour, dimming curves, display lock function, colour calibration, LED PWM frequency
Control:	DMX512, W-DMX™, RDM enabled
Controls:	Mode, Enter, Up, Down
Display elements:	OLED display
Power supply connection:	Input and output, special sockets IP65
Electrical protection class:	1
Operating voltage:	100 - 240V AC / 50 - 60Hz
Power consumption:	565 W
Illuminance (@ 1m, without diffusing lens):	120000 lx
Luminous flux (RGBW):	20932 lm
Ambient temperature (in operation):	-15°C – +45°C
Housing material:	Metal
Housing colour:	black

Item number:	CLZW600
Enclosure cooling:	3x IP65 fan
Protection class:	IP65
Situation of use:	any
Minimum distance to the illuminated surface:	0,5 m
Minimum distance to normally flammable materials:	0,3 m
Dimensions (W x H x D, without mounting bracket):	463 x 161 x 291 mm
Weight:	13 kg
Other features:	1 m mains cable with special IP65 plug, stand/mounting bracket and 2x omega brackets included, 25°, 45°, 60°x10°, 100° diffusers and barndoor optionally available

EXPLANATION OF IP PROTECTION CLASS

1. An IP rating only reflects protection from solid objects and water. It does not describe general weather resistance, such as protection from UV radiation and temperature, etc.

2. The first identification digit indicates protection from dust, solid objects and contact:

IP2X	Protected against solid foreign bodies ≥ 12.5 mm in diameter
IP3X	Protected against solid foreign bodies ≥ 2.5 mm in diameter
IP4X	Protected against solid foreign bodies ≥ 1.0 mm in diameter
IP5X	Protected against dust in harmful quantities and completely protected against contact
IP6X	Are dust-tight and completely protected against contact

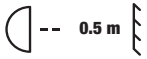
3. The second identification digit indicates protection from water:

IPX0	No protection
IPX1	Protection against dripping water
IPX2	Protection against dripping water when the device is tilted up to 15°
IPX3	Protection against falling spray water up to 60° from the vertical
IPX4	Protection against splashing water on all sides
IPX5	Protection against water jets (nozzle) from any angle
IPX6	Protection against strong water jets
IPX7	Protection against temporary immersion

4. In addition, some device-specific measures, such as covers and sealing caps, are necessary in order to achieve the specified protection class (e.g. protective caps on unused connections).

The IP rating of the product can be found in the technical data and is printed on the device.

MINIMUM DISTANCE TO ILLUMINATED SURFACE



This symbol with distance specification in metres (m) indicates the minimum distance between the light head and the illuminated surface. In this example, the distance is 0.5 m.

MINIMUM DISTANCE TO NORMALLY FLAMMABLE MATERIALS

This symbol with distance specification in metres (m) indicates the minimum distance between the light head and normally flammable materials. In this example, the distance is 0.5 m.

DISPOSAL

Packaging:

1. Packaging can be fed into the reusable material cycle using the usual disposal methods.
2. Please separate the packaging in accordance with the disposal laws and recycling regulations in your country.

Device:

1. This device is subject to the European Directive on Waste Electrical and Electronic Equipment, as amended. WEEE Directive Waste Electrical and Electronic Equipment. Old appliances do not belong in household waste. The old device must be disposed of via an approved disposal company or a municipal disposal facility. Please observe the applicable regulations in your country!
2. Observe all disposal laws applicable in your country.
3. As a private customer, you can obtain information on environmentally-friendly disposal options from the seller of the product or the appropriate regional authorities.

Batteries:

1. Batteries should not be disposed of in household waste. Batteries must be disposed of via an approved disposal company or a municipal disposal facility.
2. Observe all disposal laws and regulations applicable in your country.
3. As a private customer, you can obtain information on environmentally-friendly disposal options from the seller of the product or the appropriate regional authorities.
4. Devices with batteries that cannot be removed by the user must be taken to a collection point for electrical devices.

MANUFACTURER'S DECLARATIONS

MANUFACTURER'S WARRANTY & LIMITATION OF LIABILITY

Adam Hall GmbH, Adam-Hall-Str. 1, 61267 Neu Anspach, Germany / E-mail Info@adamhall.com / +49 (0)6081 / 9419-0.
Our current warranty conditions and limitation of liability can be found at:
https://cdn-shop.adamhall.com/media/pdf/Manufacturers-Declarations-CAMEO_DE_EN_ES_FR.pdf.
Contact your distribution partner for service.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
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.

RF EXPOSURE INFORMATION

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

UKCA- CONFORMITY

Hereby, Adam Hall Ltd. declares that this product meets the following guidelines (where applicable)

Electrical Equipment (Safety) Regulations 2016

Electromagnetic Compatibility Regulations 2016 (SI 2016/1091)

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulation 2012 (SI 2012/3032)

Radio Equipment Regulations 201 7(SI 2016/2015)

UKCA- DECLARATION OF CONFORMITY

Products that are subject to Electrical Equipment(Safety)Regulation 2016, EMC Regulation 2016 or RoHS Regulation can be requested at info@adamhall.com.

Products that are subject to the Radio Equipments Regulations 2017 (SI2017/1206) can be downloaded from www.adamhall.com/compliance/

SUBJECT TO MISPRINTS AND ERRORS, AS WELL AS TECHNICAL OR OTHER MODIFICATIONS!

DMX CONTROL / DMX STEUERUNG / PILOTAGE DMX / CONTROL DMX / STEROWANIE DMX / CONTROLLO DMX

15 CH Full Access 16 Bit						
Ch.	**Function**	**Values**				**Sub-Group**
1	Dimmer	000	-	255	0% to 100%	Dimmer
2	Dimmer fine	000	-	255	0% to 100%	
3	Strobe functions	000	-	005	Strobe open	Multifunctional strobe
		006	-	010	Strobe closed	
		011	-	033	Pulse random slow -> fast	
		034	-	056	Ramp up random slow -> fast	
		057	-	079	Ramp down random slow -> fast	
		080	-	102	Random strobe effect slow -> fast	
		103	-	127	Strobe break effect, 5s…..1s (short burst with break)	
		128	-	250	Strobe slow -> fast <1Hz - 20Hz	
		251	-	255	Strobe open	
4	Red	000	-	255	0% to 100%	Red
5	Red fine	000	-	255	0% to 100%	
6	Green	000	-	255	0% to 100%	Green
7	Green fine	000	-	255	0% to 100%	
8	Blue	000	-	255	0% to 100%	Blue
9	Blue fine	000	-	255	0% to 100%	
10	White	000	-	255	0% to 100%	White
11	White fine	000	-	255	0% to 100%	
12	Color Macros (override RGBW)	000	-	005	Color off	Color Macros
		006	-	013	Red	
		014	-	021	Amber	
		022	-	029	Yellow warm	
		030	-	037	Yellow	
		038	-	045	Green	
		046	-	053	Turquoise	
		054	-	061	Cyan	
		062	-	069	Blue	
		070	-	077	Lavender	
		078	-	085	Mauve	
		086	-	093	Magenta	
		094	-	101	Pink	
		102	-	109	Warm White	

12	Color Macros (override RGBW)	110	-	117	White	Color Macros
		118	-	125	Cold White	
		126	-	127	Color Jumping stop	
		128	-	191	Color Jumping speed slow -> fast / color 1 -> 12	
		192	-	255	Color Fading speed slow -> fast / color 1 -> 12	
13	Color Temperature RGBW must be set to 100%	000	-	005	Off	Color Temperature
		006	-	006	Warm White	
		007	-	046	Warm White -> 2700K	
		047	-	047	Bulb White 2700K	
		048	-	087	2700K -> 3200K	
		088	-	088	Halogen White 3200K	
		089	-	128	3200K -> 4000K	
		129	-	129	Neutral White 4000K	
		130	-	169	4000K -> 5600K	
		170	-	170	Studio White 5600K	
		171	-	210	5600K -> 6500K	
		211	-	211	Daylight White 6500K	
		212	-	251	6500K -> Cold Daylight	
		252	-	255	Cold Daylight	
14	Set dimmer curve	000		005	No function	Set dimmer curve
		006	-	063	Linear dimmer curve	
		064	-	127	Exponential dimmer curve	
		128	-	191	Logarithmic dimmer curve	
		192	-	255	S-Curve dimmer curve	
15	Device settings (please read remark 1*)	000	-	077	No function	Control
		078	-	079	Dimmer response LED (hold 1,5 s)	
		080	-	081	Dimmer response halogen (hold 1,5s)	
		082	-	101	No function	
		102	-	103	Silent fan (hold 3s)	
		104	-	105	Auto fan (hold 3s)	
		106	-	123	No function	
		124	-	125	PWM 1 (800 Hz) (hold 3s)	
		126	-	127	PWM 2 (1200 Hz) (hold 3s)	
		128	-	129	PWM 3 (2000 Hz) (hold 3s)	
		130	-	131	PWM 4 (3600 Hz) (hold 3s)	
		132	-	133	PWM 5 (12 kHz) (hold 3s)	
		134	-	135	PWM 6 (25 kHz) (hold 3s)	
		136	-	143	No function	
		144	-	145	Display on (hold 3s)	

15	Device settings (please read remark 1*)	146	-	147	Display off (hold 3s)	Control
		148	-	205	No function	
		206	-	207	Raw mode (hold 3s)	
		208	-	209	Factory calibrated mode (hold 3s)	
		210	-	211	User calibrated mode (hold 3s)	
		212	-	255	No function	

10 CH Full Access 8 Bit						
Ch.	**Function**	**Values**				**Sub-Group**
1	Dimmer	000	-	255	0% to 100%	Dimmer
2	Strobe functions	000	-	005	Strobe open	Multifunctional strobe
		006	-	010	Strobe closed	
		011	-	033	Pulse random slow -> fast	
		034	-	056	Ramp up random slow -> fast	
		057	-	079	Ramp down random slow -> fast	
		080	-	102	Random strobe effect slow -> fast	
		103	-	127	Strobe break effect, 5s…..1s (short burst with break)	
		128	-	250	Strobe slow -> fast <1Hz - 20Hz	
		251	-	255	Strobe open	
3	Red	000	-	255	0% to 100%	Red
4	Green	000	-	255	0% to 100%	Green
5	Blue	000	-	255	0% to 100%	Blue
6	White	000	-	255	0% to 100%	White
7	Color Macros (override RGBW)	000	-	005	Color off	Color Macros
		006	-	013	Red	
		014	-	021	Amber	
		022	-	029	Yellow warm	
		030	-	037	Yellow	
		038	-	045	Green	
		046	-	053	Turquoise	
		054	-	061	Cyan	
		062	-	069	Blue	
		070	-	077	Lavender	
		078	-	085	Mauve	
		086	-	093	Magenta	
		094	-	101	Pink	
		102	-	109	Warm White	
		110	-	117	White	
		118	-	125	Cold White	
		126	-	127	Color Jumping stop	

7	Color Macros (override RGBW)	128	-	191	Color Jumping speed slow -> fast / color 1 -> 12	Color Macros
		192	-	255	Color Fading speed slow -> fast / color 1 -> 12	
8	Color Temperature RGBW must be set to 100%	000	-	005	Off	Color Temperature
		006	-	006	Warm White	
		007	-	046	Warm White -> 2700K	
		047	-	047	Bulb White 2700K	
		048	-	087	2700K -> 3200K	
		088	-	088	Halogen White 3200K	
		089	-	128	3200K -> 4000K	
		129	-	129	Neutral White 4000K	
		130	-	169	4000K -> 5600K	
		170	-	170	Studio White 5600K	
		171	-	210	5600K -> 6500K	
		211	-	211	Daylight White 6500K	
		212	-	251	6500K -> Cold Daylight	
		252	-	255	Cold Daylight	
9	Set dimmer curve	000		005	No function	Set dimmer curve
		006	-	063	Linear dimmer curve	
		064	-	127	Exponential dimmer curve	
		128	-	191	Logarithmic dimmer curve	
		192	-	255	S-Curve dimmer curve	
10	Device settings (please read remark 1*)	000	-	077	No function	Control
		078	-	079	Dimmer response LED (hold 1,5 s)	
		080	-	081	Dimmer response halogen (hold 1,5s)	
		082	-	101	No function	
		102	-	103	Silent fan (hold 3s)	
		104	-	105	Auto fan (hold 3s)	
		106	-	123	No function	
		124	-	125	PWM 1 (800 Hz) (hold 3s)	
		126	-	127	PWM 2 (1200 Hz) (hold 3s)	
		128	-	129	PWM 3 (2000 Hz) (hold 3s)	
		130	-	131	PWM 4 (3600 Hz) (hold 3s)	
		132	-	133	PWM 5 (12 kHz) (hold 3s)	
		134	-	135	PWM 6 (25 kHz) (hold 3s)	
		136	-	143	No function	
		144	-	145	Display on (hold 3s)	

10	Device settings (please read remark 1*)	146	-	147	Display off (hold 3s)	Control
		148	-	205	No function	
		206	-	207	Raw mode (hold 3s)	
		208	-	209	Factory calibrated mode (hold 3s)	
		210	-	211	User calibrated mode (hold 3s)	
		212	-	255	No function	

8 CH 8 Bit						
Ch.	**Function**	**Values**				**Sub-Group**
1	Dimmer	000	-	255	0% to 100%	Dimmer
2	Strobe functions	000	-	005	Strobe open	Multifunctional Strobe
		006	-	010	Strobe closed	
		011	-	033	Pulse random, slow -> fast	
		034	-	056	Ramp up random, slow -> fast	
		057	-	079	Ramp down random, slow -> fast	
		080	-	102	Random Strobe effect, slow -> fast	
		103	-	127	Strobe Break effect, 5s…..1s (short burst with break)	
		128	-	250	Strobe slow -> fast <1Hz - 20Hz	
		251	-	255	Strobe open	
3	Red	000	-	255	0% to 100%	Red
4	Green	000	-	255	0% to 100%	Green
5	Blue	000	-	255	0% to 100%	Blue
6	White	000	-	255	0% to 100%	White
7	Color Macros (override RGBW)	000	-	005	Color off	Color Macro
		006	-	013	Red	
		014	-	021	Amber	
		022	-	029	Yellow warm	
		030	-	037	Yellow	
		038	-	045	Green	
		046	-	053	Turquoise	
		054	-	061	Cyan	
		062	-	069	Blue	
		070	-	077	Lavender	
		078	-	085	Mauve	
		086	-	093	Magenta	
		094	-	101	Pink	
		102	-	109	Warm White	
		110	-	117	White	
		118	-	125	Cold White	
		126	-	127	Color Jumping stop	

7	Color Macros (override RGBW)	128	-	191	Color Jumping speed slow -> fast / Color 1 -> 12	Color Macro
		192	-	255	Color Fading speed slow -> fast / Color 1 -> 12	
8	Device Settings (please read remark 1*)	000	-	077	no function	Control
		078	-	079	Dimmer response LED (hold 1,5 s)	
		080	-	081	Dimmer response halogen (hold 1,5s)	
		082	-	101	No function	
		102	-	103	Silent fan (hold 3s)	
		104	-	105	Auto fan (hold 3s)	
		106	-	123	No function	
		124	-	125	PWM 1 (800 Hz) (hold 3s)	
		126	-	127	PWM 2 (1200 Hz) (hold 3s)	
		128	-	129	PWM 3 (2000 Hz) (hold 3s)	
		130	-	131	PWM 4 (3600 Hz) (hold 3s)	
		132	-	133	PWM 5 (12 kHz) (hold 3s)	
		134	-	135	PWM 6 (25 kHz) (hold 3s)	
		136	-	143	No function	
		144	-	145	Display on (hold 3s)	
		146	-	147	Display off (hold 3s)	
		148	-	205	No function	
		206	-	207	Raw mode (hold 3s)	
		208	-	209	Factory calibrated mode (hold 3s)	
		210	-	211	User calibrated mode (hold 3s)	
		212	-	255	No function	

8 CH User-Calibrated 16 Bit						
Ch.	**Function**	**Values**				**Sub-Group**
1	Red	000	-	255	0% to 100%	Red
2	Red fine	000	-	255	0% to 100%	
3	Green	000	-	255	0% to 100%	Green
4	Green fine	000	-	255	0% to 100%	
5	Blue	000	-	255	0% to 100%	Blue
6	Blue fine	000	-	255	0% to 100%	
7	White	000	-	255	0% to 100%	White
8	White fine	000	-	255	0% to 100%	

6 CH Factory-Calibrated 16 Bit						
Ch.	**Function**	**Values**				**Sub-Group**
1	Red	000	-	255	0% to 100%	Red
2	Red fine	000	-	255	0% to 100%	
3	Green	000	-	255	0% to 100%	Green
4	Green fine	000	-	255	0% to 100%	
5	Blue	000	-	255	0% to 100%	Blue
6	Blue fine	000	-	255	0% to 100%	

4 CH User-Calibrated						
Ch.	**Function**	**Values**				**Sub-Group**
1	Red	000	-	255	0% to 100%	Red
2	Green	000	-	255	0% to 100%	Green
3	Blue	000	-	255	0% to 100%	Blue
4	White	000	-	255	0% to 100%	White

3 CH Factory-Calibrated 8 Bit						
Ch.	**Function**	**Values**				**Sub-Group**
1	Red	000	-	255	0% to 100%	Red
2	Green	000	-	255	0% to 100%	Green
3	Blue	000	-	255	0% to 100%	Blue

3 CH Color Macros						
Ch.	**Function**	**Values**				**Sub-Group**
1	Dimmer	000	-	255	0% to 100%	Dimmer
2	Strobe functions	000	-	005	Strobe open	Multifunctional strobe
		006	-	010	Strobe closed	
		011	-	033	Pulse random slow -> fast	
		034	-	056	Ramp up random slow -> fast	
		057	-	079	Ramp down random slow -> fast	
		080	-	102	Random strobe effect slow -> fast	
		103	-	127	Strobe break effect, 5s…..1s (short burst with break)	
		128	-	250	Strobe slow -> fast <1Hz - 20Hz	
		251	-	255	Strobe open	
3	Color Macros	000	-	005	Color off	Color Macros
		006	-	013	Red	
		014	-	021	Amber	
		022	-	029	Yellow warm	
		030	-	037	Yellow	
		038	-	045	Green	

3	Color Macros	046	-	053	Turquoise	Color Macros
		054	-	061	Cyan	
		062	-	069	Blue	
		070	-	077	Lavender	
		078	-	085	Mauve	
		086	-	093	Magenta	
		094	-	101	Pink	
		102	-	109	Warm White	
		110	-	117	White	
		118	-	125	Cold White	
		126	-	127	Color Jumping stop	
		128	-	191	Color Jumping speed slow -> fast / color 1 -> 12	
		192	-	255	Color Fading speed slow -> fast / color 1 -> 12	

2 CH CCT Factory-Calibrated						
Ch.	**Function**	**Values**				**Sub-Group**
1	Dimmer	000	-	255	0% to 100%	Dimmer
2	Color Tempera-ture	000	-	006	Warm White	Color Temperature
		007	-	046	Warm White -> 2700K	
		047	-	047	Bulb White 2700K	
		048	-	087	2700K -> 3200K	
		088	-	088	Halogen White 3200K	
		089	-	128	3200K -> 4000K	
		129	-	129	Neutral White 4000K	
		130	-	169	4000K -> 5600K	
		170	-	170	Studio White 5600K	
		171	-	210	5600K -> 6500K	
		211	-	211	Daylight White 6500K	
		212	-	251	6500K -> Cold Daylight	
		252	-	255	Cold Daylight	

EN: (1*)	After the adjustments have been made, set the value to 000 to avoid disturbance by endless function call.
DE: (1*)	Nachdem die Einstellungen vorgenommen wurden, stellen Sie den Wert auf 000 ein, um Störungen durch endlosen Funktionsaufruf zu vermeiden.
FR: (1*)	Une fois les ajustements effectués, réglez la valeur sur 000 pour éviter les perturbations par appel de fonction sans fin.
ES: (1*)	Después de realizar los ajustes, establezca el valor en 000 para evitar perturbaciones mediante una llamada de función sin fin.
PL: (1*)	Po dokonaniu ustawień ustaw wartość na 000, aby uniknąć zakłóceń przez niekończące się wywołanie funkcji.
IT: (1*)	Dopo aver effettuato le regolazioni, impostare il valore su 000 per evitare disturbi causati da una chiamata a funzione infinita.

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CAMEOLIGHT.COM

Adam Hall GmbH
Adam-Hall-Str. 1 | 61267 Neu-Anspach | Germany
Phone: +49 6081 9419-0 | **adamhall**.com
Adam Hall Ltd. | The Seedbed Business Centre | SS3 9QY Essex | United Kingdom

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