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























# LED THEATER SPOT 40 WW / 60 RGBW CLTS40WW(WH) / CLTS60RGBW(WH)

## CONTENTS / INHALTSVERZEICHNIS / CONTENU / CONTENUDO / TREŚĆ / CONTENUTO

ENGLISH		ESPAÑOL	
PREVENTIVE MEASURES INTRODUCTION CONNECTIONS, CONTROLS AND INDICATORS OPERATION CLTS40WW OPERATION CLTS60RGBW SETTING UP AND MOUNTING WINGED BARNDOOR AND FILTER FRAME MOUNTING / REMOVAL DMX TECHNOLOGY TECHNICAL SPECIFICATIONS MANUFACTURER INFORMATION DMX CONTROL CLTS40WW DMX CONTROL CLTS60RGBW	3-4 4 5-6 6-8 9-13 13 14 15 15 86 86-88	MEDIDAS DE SEGURIDAD INTRODUCCIÓN CONEXIONES, CONTROLES E INDICADORES INSTRUCCIONES DE USO DEL CLTS40WW INSTRUCCIONES DE USO DEL CLTS60RGBW INSTRUCCIONES DE USO DEL CLTS60RGBW INSTALACIÓN Y MONTAJE MONTAJE Y DESMONTAJE DE LA VISERA Y EL PORTAFILTROS TECNOLOGÍA DMX CARACTERÍSTICAS TÉCNICAS DECLARACIÓN DEL FABRICANTE CONTROL DMX DEL CLTS40WW CONTROL DMX DEL CLTS60RGBW	44-45 45 46-47 47-49 50-54 54 55 56 57 86 86-88
DEUTCOU		POLSKI	
DEUTSCH SICHERHEITSHINWEISE EINFÜHRUNG ANSCHLÜSSE, BEDIEN- UND ANZEIGEELEMENTE BEDIENUNG CLTS40WW BEDIENUNG CLTS6ORGBW AUFSTELLUNG UND MONTAGE FLÜGELBEGRENZER UND FILTERRAHMEN MONTIEREN / DEMONTIEREN DMX TECHNIK TECHNISCHE DATEN HERSTELLERERLÄRUNGEN DMX STEUERUNG CLTS40WW	16-17 17 18-19 19-21 22-26 26 26 27 28 29 86 86-88	ŚRODKI OSTROŻNOŚCI WPROWADZENIE ZŁĄCZA, ELEMENTY OBSŁUGI I WSKAŹNIKI OBSŁUGA CLTS4OWW OBSŁUGA CLTS6ORGBW USTAWIENIE I MONTAŻ MONTAŻ/DEMONTAŻ SKRZYDEŁEK I RAMY FILTRA TECHNOLOGIA DMX DANE TECHNICZNE DEKLARACJE PRODUCENTA STEROWANIE DMX CLTS4OWW STEROWANIE DMX CLTS6ORGBW	58-59 59 60-61 61-63 64-68 68 68 69 70 71 86 86-88
DMX STEUERUNG CLTSGORGBW  FRANCAIS  MESURES PRÉVENTIVES INTRODUCTION CONNECTEURS, CONTRÔLES ET INDICATEURS UTILISATION CLTSGORGBW UTILISATION CLTSGORGBW MISE EN PLACE ET MONTAGE MONTAGE/DÉMONTAGE DU VOLET ET DU CADRE DE FILTRE TECHNIQUE DMX CARACTÉRISTIQUES TECHNIQUES DÉCLARATIONS FABRICANT PILOTAGE DMX CLTS40WW PILOTAGE DMX CLTS40WW PILOTAGE DMX CLTS40RBW	30-31 31 32-33 33-35 36-40 40	MISURE PRECAUZIONALI INTRODUZIONE CONNESSIONI, ELEMENTI DI COMANDO E VISUALIZZAZIONE UTILIZZO CLTS40WW UTILIZZO CLTS40WW UTILIZZO CLTS60RGBW INSTALLAZIONE E MONTAGGIO MONTAGGIO E SMONTAGGIO DEL DEFLETTORE AD ALETTE E TELAIO PORTAFILTRO TECNOLOGIA DMX DATI TECNICI DICHIARAZIONI DEL FABBRICANTE CONTROLLO DMX CLTS40WW CONTROLLO DMX CLTS60RGBW	75-76 76-81 82

## 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 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, observ e 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 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 anot her 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 mm<sup>2</sup>. 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.



Warning! This symbol indicates a hot surface. Certain parts of the housing can become hot during operation. After use, wait for a cool-down period of at least 10 minutes before handling or transporting the device.

#### **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

#### CONTROL FUNCTIONS:

- 1-channel, 3-channel, 5-channel DMX control (CLTS40WW)
- 3-channel, 4-channel, 5-channel, 7-channel and 13-channel DMX control (CLTS60RGBW)

Master / Slave mode Standalone Functions

## FEATURES CLTS40WW:

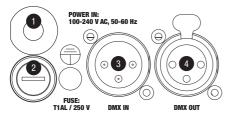
1 x high-power 40 W warm white COB LED, 15° - 38° beam angle, 1,200 Hz refresh rate, DMX-512 control, RDM enabled, manual control, manual zoom, 16 bit dimming, master / slave operation, operating voltage 100 V - 240 V AC / 50 - 60 Hz, power consumption 40 W, mounting bracket and winged barndoor included.

#### **FEATURES CLTS60RGBW:**

1 x high-power 60 W RGBW COB LED, RGBW colour mixing, 10° - 41° beam angle, 3,600 Hz refresh rate, DMX-512 control, RDM enabled, manual control, manual zoom, 16 bit dimming, master / slave operation, operating voltage 100 V - 240 V AC / 50 - 60 Hz, power consumption 65 W, mounting bracket and winged barndoor included.

The spotlight is compliant with the RDM standard (Remote Device Management). This remote management system allows the status query and configuration of RDM devices via an RDM enabled controller.

## **CONNECTIONS, CONTROLS AND INDICATORS**





## 1 POWER IN

Firmly connected 1 meter power cable with plug (CEE 7/7). Operating voltage 100 - 240 V AC / 50 - 60 Hz.

## 2 FUSE

Fuse holder for 5 x 20 mm fine-wire fuses IMPORTANT INFORMATION: Replace the fuse only with a fuse of the same type and rating. If the fuse blows repeatedly, please contact an authorised service centre.

## 3 DMX IN

3-pin male XLR socket for connection of a DMX controller (e.g. DMX console).

## 4 DMX OUT

3-pin female XLR socket for looping through the DMX control signal.

## **5** BACKLIT LC DISPLAY

Displays the operating mode and other system settings.

## **6** CONTROL BUTTONS

#### MENU

Pressing MENU will take you to the selection menu for system settings. Repeatedly pressing MODE takes you back to the main display.

#### **ENTER**

Makes it possible to change a value and confirm changes.

## **UP** and **DOWN** buttons

Press the UP and DOWN buttons for example, to adjust the DMX address or the system settings.



## **7** ZOOM

Knurled knob for adjusting the beam size (right stop = maximum beam size, left stop = minimum beam size).

## **8** SAFETY EYELET

Overhead installation should only be carried out by trained personnel. The spotlight must be secured with appropriate safety ropes to prevent falling.

## **OPERATION CLTS40WW**

#### NOTE:

When the spotlight is properly connected to the mains, the following information appears successively on the display during the startup process: "Update Wait ..." (only for service purposes), "Welcome to Cameo", "Fresnel" and the software version. After this step, the spot is ready for operation and the operating mode that was previously selected is activated.

#### MAIN DISPLAY DMX MODE

In the upper line of the display, "DMX Addr" is displayed and in the lower line the currently set DMX start address. As soon as the DMX signal is interrupted, the display starts flashing; if the DMX signal is present again, the display stops flashing. The main display is automatically activated if no input is made within about 30 seconds.

DMX Addr 001

#### **MAIN DISPLAY STANDALONE MODE**

In the lower line of the display, the currently set operating Standalone mode is displayed (e.g. Slave, Static). The main display is automatically activated if no input is made within about 30 seconds.

Slave

Static

#### **SETTING THE DMX MODE**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "DMX" sub-menu item and confirm by pressing ENTER. Using UP and DOWN, select the desired DMX mode (1CH, 3CH, 5CH) and confirm with ENTER. Press MENU twice to return to the main display. The main display is automatically activated if no input is made within about 30 seconds. You will find tables with the channels of the different DMX modes in this manual under DMX CONTROL.

Menu Mode Mode DMX DMX Mode 5CH

#### **SELECTING THE DMX START ADDRESS**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "DMX Addr" and confirm with ENTER. Now you can select the DMX start address as desired by using the UP and DOWN buttons. Confirm with ENTER and press MENU once to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu DMX Addr DMX Addr 001

#### STATIC MODE

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Static" and confirm by pressing ENTER twice. Now you can select the brightness of the spotlight as desired with values ranging from 000 (Blackout) to 255 (maximum brightness) by using the UP and DOWN buttons. Confirm with ENTER and press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Mode Static

Static Dimmer Dimmer 255

#### **SLAVE MODE**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "Slave" sub-menu item and confirm by pressing ENTER. Connect the slave and the master unit (same model) with a DMX cable and activate the Static standalone mode on the master unit. Now the slave unit follows the master unit. Press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu Mode Mode Slave

#### **DEVICE SETTINGS**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Settings" and confirm with ENTER. You will then be taken to the sub-menu to set the sub-menu items (see table). Press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu Stettings Settinas Display Settings DMX Fail Settinas DimCurve

Settings DimResp.

Settings					
Display = Display lighting		Display lighting	Backlight ON	permanently on	
			Backlight Off	deactivation after approx. 30 seconds of inactivity	
DMX Fail	IX Fail = Operation status with DMX signal interruption		Hold	last DMX command is held	
			Blackout	activates Blackout	
DimCurve	=	Dimmer Curve	Linear	The light intensity increases linearly with the DMX value.	
			Ехр	Adjustment of the light intensity is finer in the lower DMX value range and coarser in the upper DMX value range.	
			Log	The light intensity can be adjusted coarsely in the lower DMX value range, and finely in the upper DMX value range.	
			S Curve	The adjustment of the light intensity is finer in the lower and upper DMX value ranges and coarser in the middle DMX value range.	
DimResp. = C		Dimmer response	LED	The spotlight responds abruptly to changes in the DMX value.	
			Halogen	The spotlight behaves in a manner similar to that of a halogen lamp with gentle changes in brightness.	

#### **DEVICE INFORMATION**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Sys Info" and confirm with ENTER. You will then be taken to the sub-menu to display the device information. Use the UP and DOWN panels again to select the desired sub-menu item and then press ENTER to retrieve the information (see table). Press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu Sys Info Sys Info Temp Sys Info Op. Hours

Sys Info Firmware

Sys Info				
Temp	=	Temperature display of the LED unit	Temp LED	xxC / xxF
			Temp C°/F°	°C (= display in degrees Celsius)
				°F (= display in degrees Fahrenheit)
Op.Hours	=	Operating time display	Hour Total	Displays the total operating time in hours
Firmware	=	Displays the device software version		Vx. xx

## **OPERATION CLTS60RGBW**

#### NOTE:

When the spotlight is properly connected to the mains, the following information appears successively on the display during the startup process: "Update Wait ..." (only for service purposes), "Welcome to Cameo", "Fresnel" and the software version. After this step, the spot is ready for operation and the operating mode that was previously selected is activated.

#### MAIN DISPLAY DMX MODE

In the upper line of the display, "DMX Addr" is displayed and in the lower line the currently set DMX start address. As soon as the DMX signal is interrupted, the display starts flashing; if the DMX signal is present again, the display stops flashing. The main display is automatically activated if no input is made within about 30 seconds.

DMX Addr 001

#### MAIN DISPLAY STANDALONE MODE

In the lower line of the display, the currently set operating Standalone mode is displayed (Sound, Slave, Auto, Static, Macro). The main display is automatically activated if no input is made within about 30 seconds.

Sound

Slave

Auto

Static

Macro

#### SETTING THE DMX MODE

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "DMX" sub-menu item and confirm by pressing ENTER. Using UP and DOWN, select the desired DMX mode (3CH, 4CH, 5CH, 7CH, 13CH) and confirm with ENTER. Press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds. You will find tables with the channels of the different DMX modes in this manual under DMX CONTROL.

Menu Mode Mode DMX DMX Mode 13CH

#### **SELECTING THE DMX START ADDRESS**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "DMX Addr" and confirm with ENTER. Now you can select the DMX start address as desired by using the UP and DOWN buttons. Confirm with ENTER and press MENU once to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu DMX Addr DMX Addr 001

#### **MUSIC CONTROL MODE**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "Sound" sub-menu item and confirm by pressing ENTER. The Music Control mode is now activated and you can set the sensitivity to which the spotlight reacts to noise (bass pulses) as desired using the UP and DOWN buttons (Mic Sens 00 - 99). Confirm with ENTER and press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu Mode Mode Sound Mic Sens 99

## **SLAVE MODE**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "Slave" sub-menu item and confirm by pressing ENTER.

≦

Connect the slave and the master unit (same model) with a DMX cable and activate one of the standalone modes (Sound, Auto, Static, Macro) on the master unit. Now the slave unit follows the master unit. Press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu Mode Mode Slave

#### **AUTO MODE**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "Auto" sub-menu item, confirm by pressing ENTER twice to adjust the program speed using UP and DOWN (Program Speed: 00 - 99). Confirm with ENTER and press MENU three times to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu Mode

Mode Auto Auto Program Program Speed: 99

#### STATIC MODE

In the same way as with a DMX control unit, the static mode allows you to adjust all functions such as Dimmer, Strobe and Colour Macros directly on the device with values from 000 to 255. Thus, an individual scene can be created without an additional DMX controller. Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "Static" menu item and confirm by pressing ENTER. Using the UP and DOWN buttons, select the desired function and confirm with ENTER. The value (Dimmer, Strobe etc., see table) of the corresponding function can now be set from 000 to 255 and press ENTER to confirm the input. Once all of the parameters have been set as desired, press MODE three times to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Mode Static

Static							
Function	Values	Values					
Dimmer	000	-	255	0% to 100%			
Dim fine 000		-	255	0% to 100%			
Strobe	000	-	005	Strobe open			
Strone	006	-	255	Strobe slow -> fast <1 Hz - 20 Hz			
Red	000	-	255	0% to 100%			
Green	000	-	255	0% to 100%			
Blue 000 -		255	0% to 100%				
White	000	-	255	0% to 100%			

	000	-	005	Colour off		
	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		
Macro	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	Colour Jumping Stop		
	128	-	191	Colour Jumping Speed slow -> fast / Colour 1 -> 12		
	192	-	255	Colour Fading Speed slow -> fast / Colour 1 -> 12		
CTC	000	-	005	Off		
(affects RGB and Colour Macros)	006	-	255	7200 K - 3200 K @ Full on affects colours too		
0 1	000			Off		
Speed	001	-	255	Auto Program Speed slow -> fast		
Sound	000	-	005	Sound Control OFF (Mic Sensitivity)		
(if on, override everything)	006	-	255	Sound Control ON Low -> High (Mic Sensitivity)		
	000	-	005	No function		
	006	-	063	Linear Dimmer Curve		
DimCurve	064	-	127	Exponential Dimmer Curve		
	128	-	191	Logarithmic Dimmer Curve		
	192	-	255	S-Curve Dimmer Curve		
	000	-	005	No function		
	006	-	063	Dimmer Response LED (Hold 3s)		
Settings	064	-	127	Dimmer Response Halogen (Hold 3s)		
-	128	-	191	Silent Fan on (Hold 3s)		
	192	-	255	Silent Fan off (Hold 5s)		
			1	· · · · · · · · · · · · · · · · · · ·		

## **COLOUR MACROS**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Mode" (lower line) and confirm with ENTER. Now use the UP and DOWN buttons once more to select the "Macro" menu item and confirm by pressing ENTER. Using the UP and DOWN buttons, one of the 15 different Colour Macros can now be selected (see table). Confirm the input with ENTER.

Mode Macro
------------

1	Red	6	Turquoise	11	Magenta
2	Amber	7	Cyan	12	Pink
3	Yellow warm	8	Blue	13	Warm White
4	Yellow	9	Lavender	14	White
5	Green	10	Mauve	15	Cold White

#### **DEVICE SETTINGS**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Settings" and confirm with ENTER. You will then be taken to the sub-menu to set the sub-menu items (Select and adjust by pressing ENTER and UP and DOWN, for submenu items, see table). Press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu Settinas	Settings	Settinas	Settinas	Settinas
Settinas Display	DMX Fail	DimCurve	DimResp	Calibrat

Settings				
Display	=	Display lighting	Backlight ON	permanently on
			Backlight Off	deactivation after approx. 30 seconds of inactivity
DMX Fail = Operation status with DMX signal interruption		Hold	last DMX command is held	
			Blackout	activates Blackout
DimCurve = Dimmer Curve		Dimmer Curve	Linear	The light intensity increases linearly with the DMX value.
			Ехр	Adjustment of the light intensity is finer in the lower DMX value range and coarser in the upper DMX value range.
			Log	The light intensity can be adjusted coarsely in the lower DMX value range, and finely in the upper DMX value range.
			S Curve	The adjustment of the light intensity is finer in the lower and upper DMX value ranges and coarser in the middle DMX value range.
DimResp	=	Dimmer response	LED	The spotlight responds abruptly to changes in the DMX value.
			Halogen	The spotlight behaves in a manner similar to that of a halogen lamp with gentle changes in brightness.
Calibrat	=	Cross-mode calibration of the colour reproduction in mixed colours.	Red	Adjusting the intensity with values ranging from 000 to 255
			Green	Adjusting the intensity with values ranging from 000 to 255
			Blue	Adjusting the intensity with values ranging from 000 to 255
			White	Adjusting the intensity with values ranging from 000 to 255

#### **DEVICE INFORMATION**

Pressing MENU will take you to the selection menu for system settings. Using UP and DOWN, select the menu item "Sys Info" and confirm with ENTER. You will then be taken to the sub-menu to display the device information. Use the UP and DOWN panels again to select the desired sub-menu item and then press ENTER to retrieve the information (see table). Press MENU once more to return to the main display. The main display is automatically activated if no input is made within about 30 seconds.

Menu	Sys In
Sys Info	Temp

Sys Info Op. Hours

Info

Sys Info Firmware

Sys Info				
Temp	=	Temperature display of the LED unit	Temp LED	xxC / xxF
			Temp C°/F°	°C (= display in degrees Celsius)
				°F (= display in degrees Fahrenheit)
Op.Hours	=	Operating time display	Hour Total	Displays the total operating time in hours
Firmware	=	Displays the device software version		Vx. xx

## **SETTING UP AND MOUNTING**



Thanks to the integrated rubber feet, the spotlight can be placed in a suitable location on a flat surface.

Mounting on a truss is performed with the help of a suitable truss clamp (not included). Make sure that the connection to the mounting bracket is solid, and secure the device with a suitable safety rope to the safety eyelet provided. Important Notice: Overhead installation should only be carried out by trained personnel.

## WINGED BARNDOOR AND FILTER FRAME MOUNTING / REMOVAL

To install or remove the winged barndoor and the filter frame, please press on the spring-loaded button of the locking mechanism and fold it upwards. Place the locking mechanism in the same way in the original position.

#### 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 Ada  $\overline{}$  ter 5-pin XLR male to 3-pin XLR female: K3DGF0020 Pins 4 and 5 are not used.



DMX Adapter 3-pin XLR male to 5-pin XLR female: K3DHM0020 Pins 4 and 5 are not used.









## **TECHNICAL SPECIFICATIONS**

Model Name:	CLTS40WW	CLTS60RGBW
Product Type:	LED spot	LED spot
Type:	Theatre Spot with Zoom Function	Theatre Spot with Zoom Function
Colour Spectrum:	warm white	RGBW
Number of LEDs:	1	1
LED Type:	40 W COB	60 W COB
Refresh Rate:	1200 Hz	3600 Hz
Beam Angle:	15° - 38°	10° - 41°
DMX Input:	3-pin XLR male	3-pin XLR male
DMX Output:	3-pin XLR female	3-pin XLR female
DMX Mode:	1-channel, 3-channel, 5-channel	3-channel, 4-channel, 5-channel, 7-channel, 13-channel
DMX Functions:	Dimmer, Dimmer Fine, Stroboscope, Dimmer Curve, Dimmer Response	Dimmer, Dimmer fine, Stroboscope, Dimmer Curve, RGBW, Colour Macros, Colour Jump, Colour Fade, Colour Temperature, Music Control, Dimmer Response, Fan Control
Control:	DMX512, RDM enabled	DMX512, RDM enabled
Standalone Functions:	Dimmer, Master/Slave	Dimmer, Dimmer fine, Stroboscope, RGBW, Colour Macros, Colour Jump, Colour Fade, Music Control, Auto Program
Controls:	Mode, Enter, Up, Down, Zoom	Mode, Enter, Up, Down, Zoom
Display Elements:	backlit 2-line LC display	backlit 2-line LC display
Operating Voltage:	100 - 240 V AC / 50 - 60 Hz	100 - 240 V AC / 50 - 60 Hz
Power Consumption:	40 W	65 W
Illuminance (@ 1 m):	18,000 lx	19,800 lx
Light Output:	1567 lm	907 lm
Power Connector:	permanently attached 1m power cord with CEE7/7 plug	permanently attached 1m power cord with CEE7/7 plug
Fuse:	T1AL / 250 V (5 x 20 mm)	T1AL / 250 V (5 x 20 mm)
Temperature (during operation):	5°C to 40°C	5°C to 40°C
Relative Humidity:	< 80% non-condensing	< 80% non-condensing
Housing Material:	metal	metal
Housing Colour:	black (CLTS40WW) / white (CLTS40WWWH)	black (CLTS60RGBW) / white (CLTS60RGBWWH)
Housing Cooling:	convection	fan
Dimensions (W x H x D, excluding bracket):	145 x 205 x 240 mm	145 x 205 x 240 mm
Weight:	3.8 kg	3.8 kg
Other Features:	filter frame, winged barndoor and mounting bracket included, manual zoom	filter frame, winged barndoor and mounting bracket included, manual zoom

## **MANUFACTURER'S DECLARATIONS**

#### **MANUFACTURER'S WARRANTY & LIMITATIONS OF LIABILITY**

You can find our current warranty conditions and limitations of liability at: http://www.adamhall.com/media/shop/downloads/documents/ manufacturersdeclarations.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.

## DMX CONTROL CLTS40WW / DMX STEUERUNG CLTS40WW / PILOTAGE DMX CLTS40WW CONTROL DMX DEL CLTS40WW / STEROWANIE DMX CLTS40WW / CONTROLLO DMX CLTS40WW

CLTS40V	3CH Mode						
Ch.	Function	Values			Sub-Group		
1	Dimmer	000	-	255	0% to 100%	Dimmor	
2	Dimmer fine	000	-	255	0% to 100%	- Dimmer	
3	Ctrobo		-	005	Strobe open	Strobe	
3	Strobe	006	-	255	Strobe slow -> fast <1Hz - 20Hz		

CLTS40W	1CH Mode					
Ch.	Function	Values			Sub-Group	
1	Dimmer	000	-	255	0% to 100%	Dimmer

CLTS40	WW	5CH Mod	5CH Mode						
Ch.	Function	Values				Sub-Group			
1	Dimmer	000	-	255	0% to 100%	Dimmer			
2	Dimmer fine	000	-	255	0% to 100%	Dilliller			
3	Strobe	000	-	005	Strobe open	Ctrobo			
	Strobe	006	-	255	Strobe slow -> fast <1Hz - 20Hz	Strobe			
4		000		005	no function				
		006	-	063	Linear Dimmer Curve				
	Set dimmer curve	064	-	127	Exponential Dimmer Curve	Set dimmer curve			
		128	-	191	Logarithmic Dimmer Curve				
		192	-	255	S-Curve Dimmer Curve				
5		000	-	005	no function				
	D	006	-	063	Dimmer Response LED (Hold 3s)	Douise settings			
	Device settings	064	-	127	Dimmer Response Halogen (Hold 3s)	Device settings			
		128	-	255	no function				

## DMX CONTROL CLTS60RGBW / DMX STEUERUNG CLTS60RGBW / PILOTAGE DM CLTS60RGBW / CONTROL DMX DEL CLTS60RGBW / STEROWANIE DMX CLTS60RGBW CONTROLLO DMX CLTS60RGBW

CLTS60R	3CH Mode						
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	

CLTS60R	4CH Mode							
Ch.	Function	Values	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		

CLTS60R	GBW	5CH Mode					
Ch.	Function	Values			Sub-Group		
1	Dimmer	000	-	255	0% to 100%	Dimmer	
2	Red	000	-	255	0% to 100%	Red	
3	Green	000	-	255	0% to 100%	Green	
4	Blue	000	-	255	0% to 100%	Blue	
5	White	000	-	255	0% to 100%	White	

CLTS60RGBW		7CH Mode						
Ch.	Function	Values			Sub-Group			
1	Dimmer	000	-	255	0% to 100%	Dimmer		
2	Dimmer fine	000	-	255	0% to 100%	Dilliller		
3	3 Strobe	000	-	005	Strobe open	Strobe		
3	Strone	006	-	255	Strobe slow -> fast <1Hz - 20Hz	Strone		
4	Red	000	-	255	0% to 100%	Red		
5	Green	000	-	255	0% to 100%	Green		
6	Blue	000	-	255	0% to 100%	Blue		
7	White	000	-	255	0% to 100%	White		

CLTS60RGBW		13CH Mode						
Ch. Function		Values			Sub-Group			
1	1 Dimmer		-	255	0% to 100%	Discourse		
2	Dimmer fine	000	-	255	0% to 100%	- Dimmer		
3	Strobe	000	-	005	Strobe open	Strobe		
3	Strope	006	-	255	Strobe slow -> fast <1Hz - 20Hz	Strobe		
4	Red	000	-	255	0% to 100%	Red		
5	Green	000	-	255	0% to 100%	Green		
6	Blue	000	-	255	0% to 100%	Blue		
7	White	000	-	255	0% to 100%	White		
		000	-	005	Colour off			
		006	-	013	Red			
		014	-	021	Amber			
		022	-	029	Yellow warm			
		030	-	037	Yellow			
		038	-	045	Green			
		046	-	053	Turquoise			
		054	-	061	Cyan			
	Oala AMara	062	-	069	Blue			
	Colour Macro (override RGB)	070	-	077	Lavender			
8	& Colour Jumping	078	-	085	Mauve	Colour Macro		
	& Colour Fading	086	-	093	Magenta			
		094	-	101	Pink			
		102	-	109	Warm White			
		110	-	117	White			
		118	-	125	Cold White			
		126	-	127	Colour Jumping Stop			
		128	-	191	Colour Jumping Speed slow -> fast / Colour 1 -> 12			
		192	-	255	Colour Fading Speed slow -> fast / Colour 1 -> 12			

	Colour Temperature 9 (affects RGB and Colour Macros)		-	005	Off	Colour Temperature
9			-	255	7200K - 3200K @ Full on affects colours too	Correction
10	Auto Program Speed	000	-	255	Auto Program Speed	Auto Program
	Cound	000	-	005	Sound Control OFF (Mic Sensitivity)	
11	Sound (if on, override everything)	006	-	255	Sound Control ON Low -> High (Mic Sensitivity)	Sound
		000	-	005	No function	Set dimmer curve
	Set dimmer curve	006	-	063	Linear Dimmer Curve	
12		064	-	127	Exponential Dimmer Curve	
		128	-	191	Logarithmic Dimmer Curve	
		192	-	255	S-Curve Dimmer Curve	
		000	-	005	No function	
		006	-	063	Dimmer Response LED (Hold 3s)	
13	Device settings	064	-	127	Dimmer Response Halogen (Hold 3s)	Device settings
		128	-	191	Silent Fan on (Hold 3s)	
		192	-	255	Silent Fan off (Hold 5s)	