## LITECRAFT <br> OutLED AT60.zoom



User Manual

## Inhalt

Vielen Dank für den Kauf dieses LITECRAFT Produktes. Zu Ihrer eigenen Sicherheit lesen Sie bitte vor der ersten Inbetriebnahme diese Bedienungsanleitung sorgfältig

Sicherheitshinweise
Bestimmungsgemäße Verwendung
Montage
Elektrischer Anschluss
Reinigung und Wartung
Bedienung
Display-Modus
DMX-Modus
Photometrische Daten
Technische Spezifikation

## Content

Thank you for purchasing this LITECRAFT product. For your own safety, please read the instruction manual carefully before turn on the product for the first time.

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- Each person which is responsible for the installation, the use or service of this unit must be:
- qualified
- has to follow the instructions in this manual


## WARNING!

Be careful when using the device. You risk an electrical shock from high voltage, if you touch the wires!

- The device has left our company in manufacturer proofed state. To maintain this status and to ensure a permanent safe operation, it is absolutely necessary to follow the safety instructions and warnings in this manual.


## IMPORTANT!

Errors, caused by not following these instructions are not covered by the warranty. The manufacturer will not accept liability for any resulting defects or problems.

- Keep the unit away from radiators or other heat sources!
- If the unit has been exposed to tremendous temperature changes (e.g. after transportation), do not turn it on immediately. The resulting condensation could damage the unit. Don't switch unit on until the device reaches room temperature.
- This device belongs to protection class I. Therefore, it is imperative that the green/yellow wire is connected to the earth contact of the plug. The electrical connection must be made by a qualified person.
- Make sure that the cable has never been squeezed or damaged by sharp objects. Check the device and the cables regularly.
- If the cable is damaged, it must be replaced immediately by the manufacturer, its service agent or a qualified person in order to avoid danger.
- Lenses, glasses or UV filters must be replaced if they are visually damaged, or their effectiveness is impaired, e.g. by broken glass or by deep scratches.
- Ensure that wires never come in contact with other wires! Handle the power cord and all connections with caution!
- Make sure that the line voltage is not higher than the voltage specified in this manual.
- Disconnect the unit from the AC mains when it is not in use or when cleaning it. Disconnect the connection only by pulling the cable plug.
- Using the fixture for the first time, can result in light smoke and odors. This is a normal process and does not constitute a defect.


## RISK OF BURNS!

Do not touch the unit during operation! The housing may reach high temperatures.

## RISK TO HEALTH!

Never look directly into the light source. Especially epileptics risk an epileptic shock! Disconnect the unit from the AC mains when not in use or when cleaning it.

- Defects caused by modifications of the device by unqualified handling or an unqualified person are not covered by the warranty.
- Keep the product away from children and unskilled people.
- There are no wear parts in the device. Maintenance and service must be performed only by an authorized service partner.


## Designated Use

This product is a spotlight, which is designed only for professional use on stages, discotheques, theatres, etc. This product is approved for mains connection up to $\mathbf{2 3 0}$ volts and designed for indoor use.

- Please avoid any kind of shocks and outer actions during its installation or transportation.
- Take care of too high ambient temperature, humidity and dust when choosing the installation location. Assure that all cables are fixed. Incorrect operation may lead to danger.
- Image $\$. m 言 shows the minimum distance to illuminated objects. Minimum distance between fixture and illuminated surface is 0,5 meters
- Assure that the area below the mounting position of the fixture is roped in while mounting, dismantling and service.
- The spotlight itself and its accessories like color frame and barndoors have to be safed with a suitable safety chain.
- Assure that the maximum ambient temperature is never exceeded.
- Do not put the fixture in operation before you are familiar with its functions. Keep the product away from children and unskilled people.


## Installation

- There are specific regulations like BGV C1 (old VBG 70) or country related regulations which need to attend during the installation. The installation has to be handled by skilled persons only!
- Suspension device hast to be built and calculated in order to handle up to 10 times its specific load limit over a time of one hour without permanent or harmful deformation.
- Installation has to be done with a separate, independent suspension device like a safety chain. A second suspension device has to be built in order to assure that in case of error no part of an installation can fall off.
- Trepassing the danger zone below the installation during the assembling is prohibited.
- Installer has to take care of all safety and machinery installations are approved by authorized persons before first operation or after changes before restarting.
- Installer has to take care of all safety and machinery installations are approved by skilled persons at least once a year.
- Installer has to take care of all safety and machinery installations are approved by authorized persons at least every four years during the acceptance inspection.
- Spotlight should ideally installed outside peoples lounge area.


## ATTENTION!

Installation overhead needs a high level of experience. This includes (but is not just limited to) calculation and definition of load capacity, used installation material and regular safety inspections of used material and the fixture itself. Never try to do the installation by yourself if you are not qualified, instead you have to instruct a skilled installer. Inappropriate installations can cause injuries and/or damage of property.

- Spotlight has to be installed outside areas where people can touch it.
- Professional truss system or similar licensed suspension systems have to be used if the spotlight is used in suspension from ceiling or other constructions. Spotlights can never be installed freely suspended!


## ATTENTION!

Spotlights can cause injuries when fall off. If you are not trained in questions of safety for the different kinds of installation do NOT install the spotlight!

## ATTENTION!

Assure the specified safety distances to flammable material. on do NOT install the spotlight!

- Attach the spotlight with its yoke and the use of a suitable hook/clamp to your truss system. According to your installation also similar but approved suspension devices are possible. The therefor used thread is M10.
- When installing the spotlight overhead make sure to safe the fixture by a safety chain which is specified at least with a load limit of 12 times of the spotlights weight. Only safety chain with approved connective can be used. Attach the safety chain to its designated opening and attach it to the truss system or a similar and safe attachment point. Assure to close the fasteners as specified.
- To adjust the angle of the fixture open the locking screw, set the fixure in its position and close it by hand.


## Electrical Connection

- Connection to the mains is only allowed by skilled persons.
- Before connecting the fixture to the mains, assure that the specifications are corresponding.
- Electrical grounding has to be used in the whole installation!


## ATTENTION!

Installation has to be approved by an authorized person before first operation!

## Cleaning and Maintenance

- Installer has to take care of all safety and machinery installations are approved by skilled persons at least once a year.
- Installer has to take care of all safety and machinery installations are approved by authorized persons at least every four years during the acceptance inspection. Following points need to receive special attention:
- All screws used for mounting the fixture or parts of it need to be proof and must not show corrosion.
- Housing, Suspension device and installation site (ceiling, suspension, truss) must not show deformation.
- All power cords must not show any damage, aging (for example porous wires) or sediments. Other, to the location related and usage aligned regulations will be observed by the skilled person and safety defects will be fixed.


## ATTENTION!

AMake sure that the fixture is disconnected from mains during all maintenance! Is it important to unplug mains connector

- The fixture must be regularly cleaned from dirt and dust. Only use a wetted, lint-free cloth for cleaning the fixture. Never use alcohol or any kind of solvent for cleaning.
- Inside the fixture there are no parts which need maintenance. Maintenance \& service must be done by authorized dealers only. Only use original spare parts!


## Advice!

If you have further questions, your local dealer will be happy to help you.

## Operation

- This device has several DMX- and Stand-Alone-Modes. In DMXmode, multiple devices can be connected and controlled by a controller. The device accepts the settings of the DMX-controller, as soon as the corresponding start address is set.
- Slave mode:

Connect the DMX-output of the master device (XLR female) to the DMX-input of the slave device (XLR male). Set the slave device to Master/Slave mode Slave (display shows: Master/ Slave/<Slave>). The slave device accepts all settings of the master device (such as programm, programm speed, color/color combination).

- Display description:

The display shows the different DMX-modes \& the DMX-start address or programm, programm speed, etc.; the first line shows the mode, the second line the corresponding value.

- Button description: Press the MENU button to get access to the menu. Press the MENU button or UP/DOWN button repeatedly to select the mode. Press ENTER button to change the relevant topic; change the relevant topic by pressing UP/DOWN button to set the DMX-start address or any of the pre-programmed modes or the speed values. Use the UP button to increase the value. Use the DOWN button to decrease it. Press ENTER button again to save your settings and get access to next menu.


## NOTE!

If you hold the UP or DOWN button for longer, the value changes faster. The device has an automatic storage for all settings. When you turn the device off and on again, it works with the previously set values

## Operation



MENU-Button

OLED-Display

UP-Button

DOWN-Button

DMX-Output 5 pin

Mains-Input

Mains-Output

(10) Yoke
(11) Locking Screw

## Display-Mode

|  | display | function |  |
| :---: | :---: | :---: | :---: |
|  | LITECRAFT V*.* | ```LITECRAFT V *.** *.** = Software-Version``` | shows the software version direct after switching on the unit <br> (this messages appears after 3 seconds automaticly) |
|  | <** ${ }^{\circ} \mathrm{C}$ > <br> <Slave Mode> <br> <No Signal> | ```<***}\textrm{C} <*** = Fixture-Temperature <Slave Mode> <No Signal>``` | unit is in slave mode and is not receiving dmx-values by $d m x$-input <br> (this menu is only for information - no settings available) |
|  | ```<*** <Master Mode> <No Signal>``` | ```<***}\textrm{C} <*** = Fixture-Temperature <Master Mode> <******> <******> = Auto Programm 1-5``` | unit is in master mode and is playing back one of five Auto programms <br> (this menu is only for information - no settings available) |
|  | DMX Address <***> | $\begin{aligned} & \text { DMX Address } \\ & <* * *> \\ & * * *=\text { DMX-Adresse } \end{aligned}$ | display the DMX-adress <br> ( $5 \mathrm{Ch}=<001-508>$ ) <br> ( $7 \mathrm{Ch}=<001-506>$ ) <br> ( $10 \mathrm{Ch}=<001-503>$ ) <br> ( $11 \mathrm{Ch}=<001-502>$ ) <br> ( $13 \mathrm{Ch}=<001-500>$ ) <br> ( $17 \mathrm{Ch}=<001-496>$ ) <br> (default setting = 1) |
|  | DMX Channel <****> | Channel **** = $<5 \mathrm{Ch}>$ $<7 \mathrm{Ch}>$ <10 Ch> $<11 \mathrm{Ch}>$ $<13 \mathrm{Ch}>$ <17 Ch> | setting DMX-channel mode (description of modes in next chart) $\text { (default setting = } 11 \mathrm{Ch} \text { ) }$ |


|  | Static | Fixture Color <R> <br> <G> <br> <B> <br> <W> <br> <GB> <br> <RB> <br> <RG> <br> <RGB> <br> <RW> <br> <GW> <br> <BW> <br> <RGW> <br> <RBW> <br> <GBW> <br> <RGBW> | setting color/color combination @ full brightness for selected color |
| :---: | :---: | :---: | :---: |
|  |  | White Presets <br> <~ $2.000 \mathrm{~K}>$ <br> <~ $3.000 \mathrm{~K}>$ <br> <~ $4.000 \mathrm{~K}>$ <br> <~ $4.200 \mathrm{~K}>$ <br> <~ $5.000 \mathrm{~K}>$ <br> <~ $5.600 \mathrm{~K}>$ <br> <~ $6.000 \mathrm{~K}>$ <br> <~ $7.000 \mathrm{~K}>$ <br> <~ 8.000 K> | setting white presets @ different color temperatures |
| 0 <br> 0 <br> 0 <br> 2 <br> 1 <br> 10 <br> 0 <br> 0 <br> 0 |  | Manual Color <Red> <***> *** $=0-255$ <Green> <***> $* * *=0-255$ <Blue> <***> *** $=0-255$ <White> <***> *** $=0-255$ | setting brightness for each color in steps of 256 |
|  | Auto Show <******> | Auto $\begin{aligned} & \text { <********> } \\ & * * * * * * * *= \\ & \text { <Auto 1> } \\ & \text { <Auto 2> } \\ & \text { <Auto 3> } \\ & \text { <Auto 4> } \\ & \text { <Auto 5> } \end{aligned}$ | Einstellung der Dimmerkurve <br> Off = Dimmer linear <br> Dimmer 1 = Dimmer S-Kurve 1 (schnell) <br> Dimmer 2 = Dimmer S-Kurve 2 (medium) <br> Dimmer 3 = Dimmer S-Kurve 3 (langsam) <br> (Standard Einstellung = off) |
|  |  | $\begin{aligned} & <* * *> \\ & * * *=<1-100> \end{aligned}$ | setting speed in 100 steps for the pre-programmed chaser available <br> (default setting = Show Speed 100) |
|  | $\begin{aligned} & <\text { Zoom> } \\ & <* * *> \end{aligned}$ | $\begin{aligned} & <\text { Zoom> } \\ & <* * *> \\ & * * *=0-255 \end{aligned}$ | setting zoom in 256 steps |
|  | <Zoom Offset> <***> | $\begin{aligned} & <\text { ZZoom Offset> } \\ & <* * *> \\ & * * *=0-255 \end{aligned}$ | fine adjustment of zoom-setting in steps of 256 |
|  | Master/Slave <******> | Master/Slave <******> <br> ****** = <br> <Master> <br> <Slave > | setting working mode <br> (Master = control without external controller) <br> (Slave = control with external controller) <br> (default setting = Slave) |


|  | Dimmer Mode <********> | Dimmer Mode <br> <********> <br> ******** $=$ <br> <Off> <br> <Dimmer 1> <br> <Dimmer 2> <br> <Dimmer 3> | setting dimmer curve Off = dimmer linear <br> Dimmer 1 = dimmer s-curve 1 (fast) <br> Dimmer 2 = dimmer s-curve 2 (medium) <br> Dimmer 3 = dimmer s-curve 3 (slow) <br> (default setting = off) |
| :---: | :---: | :---: | :---: |
|  | White <br> <Balance> | Balance Value <br> <Off> <br> <Red> <br> <***> $* * *=125-255$ <br> <Green> $\begin{aligned} & <^{* * *>} \\ & * * *=125-255 \end{aligned}$ <br> <Blue> <br> <*** $* * *=125-255$ <br> <White> <br> <*** $* * *=125-255$ | setting white balance <br> (default setting $=\mathrm{R}=255, \mathrm{G}=255, \mathrm{~B}=255, \mathrm{~W}=255$ ) |
| 00021$\frac{1}{2}$0000 | LED Frequency <**** | $\begin{aligned} & \text { LED Frequency } \\ & <* * *> \\ & * * * *= \\ & <600 \mathrm{Hz>} \\ & <1.200 \mathrm{Hz>} \\ & <2.000 \mathrm{Hz>} \\ & <4.000 \mathrm{Hz>} \\ & <25 \mathrm{kHz} \end{aligned}$ | setting PWM-frequency <br> (default setting $=1.200 \mathrm{~Hz}$ ) |
|  | Fan Speed <**** | Fan Speed <br> <****> <br> **** = <br> <Auto> <br> <High> | setting fan control <br> Auto = automatic temperature control <br> High = max. power <br> (default setting = Auto) |
|  | Back Lite <*** | BackLite <*** <br> $* * *=$ <br> <On> <br> <10S> <br> <20S> <br> <30S> | setting automatic switch off for Icd backlite <br> (permanent on, switch off after $\mathbf{1 0 , 2 0 , 3 0 ~ s e c o n d s ) ~}$ <br> (default setting = On) |
|  | Key Lock | Key Lock <br> <*** <br> *** $=$ <br> <On> <br> <Off> | setting automatic lock of display <br> (default setting = On) <br> (Password: Up, Down, Up, Down, Enter) |
|  | Information | FixHours <br> <****H> <br> **** = Betriebsstunden | display the fixture hours |
|  |  | Version <br> $\mathrm{V}^{*}$.** <br> *.** = Softwareversion | display the software version |
|  | Reset Factory | ```Reset Factory <***> *** = <NO> <YES>``` | reset all parameter to factory defaults |

DMX-Mode

|  | mode | display | function |
| :---: | :---: | :---: | :---: |
|  | 5 channel mode | Channel < 5 Ch> | $\begin{aligned} \text { ch1 }= & \text { dimmer red } \\ & 000-255 \text { stepless brightness red } \\ \text { ch2 }= & \text { dimmer green } \\ & 000-255 \text { stepless brightness green } \\ \text { ch3 }= & \text { dimmer blue } \\ & 000-255 \text { stepless brightness blue } \\ \text { ch4 }= & \text { dimmer white } \\ & 000-255 \text { stepless brightness white } \\ \text { ch5 }= & \text { zoom } \\ & 000-255 \text { stepless zoom } \end{aligned}$ |
|  | 7 channel mode | Channel < 7 Ch> | ch1 $=$ master dimmer <br> ch2 $=$ dimmer red <br>  dimess brightness <br> ch3 $=$ dimmer green <br>  $000-255$ stepless brightness red <br> ch4 $=$ dimmer blue <br>  $000-255$ stepless brightness blue <br> ch5 $=$ dimmer white <br> ch $=$ $000-255$ stepless brightness white <br>  flash rate <br>  $000-030$ no function <br>  $031-100$ flash rate from s $->\mathrm{f}$ <br>  $101-130$ no function <br>  $131-200$ random strobe from s $->\mathrm{f}$ <br>  $201-255$ no function <br> ch7 $=$ zoom <br>  $000-255$ stepless zoom |
|  | 10 channel mode | Channel <10 Ch> |  |


| DMX-Mode | 11 channel mode | Channel <br> <11 Ch> | ```ch1 \(=\) master dimmer 000-255 stepless brightness ch2 \(=\) dimmer red 000-255 stepless brightness red ch3 \(=\) dimmer green 000-255 stepless brightness green ch4 = dimmer blue 000-255 stepless brightness blue ch5 \(=\) dimmer white 000-255 stepless brightness white ch6 \(=\) flash rate 000-030 no function 031-100 flash rate from s -> f 101-130 no function 131-200 random strobe from s-> f 201-255 no function ch7 \(=\) zoom 000-255 stepless zoom ch8 \(=\) color function 000-010 no color function 011-085 color macro 086-170 white macro 171-255 programms auto ch9 \(=\) color macro \(000-028 \mathrm{r}=100 \%, \mathrm{~g}=0-100 \%, \mathrm{~b}=0 \%\) \(029-056 r=100-0 \%, g=100 \%, b=0 \%\) \(057-084 \mathrm{r}=0 \%, \mathrm{~g}=100 \%, \mathrm{~b}=0-100 \%\) \(085-112 r=0 \%, g=100-0 \%, b=100 \%\) \(113-140 r=0-100 \%, g=0 \%, b=100 \%\) \(141-168 \mathrm{r}=100 \%, \mathrm{~g}=0 \%, \mathrm{~b}=100-0 \%\) \(169-196 r=100 \%, g=0-100 \%, b=0-100 \%\) 197-224 \(r=100-0 \%, g=100-0 \%, b=100 \%\) \(225-255 \mathrm{r}=100 \%, \mathrm{~g}=100 \%, \mathrm{~b}=100 \%, \mathrm{w}=100 \%\) white macro \(000-195\) white \(\sim 2.000 \mathrm{~K}-3.000 \mathrm{~K}\) \(196-210\) white \(\sim 3.000 \mathrm{~K}-4.000 \mathrm{~K}\) \(211-225\) white \(\sim 4.000 \mathrm{~K}-6.000 \mathrm{~K}\) \(226-240\) white \(\sim 6.000 \mathrm{~K}-8.000 \mathrm{~K}\) \(241-255\) white \(\sim 8.000 \mathrm{~K}\) programms auto 000-060 programm auto 1 061-110 programm auto 2 111-160 programm auto 3 161-210 programm auto 4 211-255 programm auto 5 (1-4) ch \(10=\) speed 000-255 stepless speed ch11 \(=\) dimmer mode 000-000 mode set on display 001-255 dimmer s-curve from s-> f``` |
| :---: | :---: | :---: | :---: |


|  | 13 channel mode | Channel <13 Ch> |  |
| :---: | :---: | :---: | :---: |


|  | 17 channel mode | Channel <br> <17 Ch> | ```ch1 \(=\) master dimmer 8 -bit 000-255 stepless brightness 8 -bit ch2 \(=\) master dimmer 16-bit 000-255 stepless brightness 16-bit ch3 \(=\) dimmer red 8 -bit 000-255 stepless brightness red 8-bit ch4 \(=\) dimmer red 16-bit 000-255 stepless brightness red 16-bit ch5 \(=\) dimmer green 8 -bit 000-255 stepless brightness green 8-bit ch6 \(=\) dimmer green 16 -bit 000-255 stepless brightness green 16-bit ch7 \(=\) dimmer blue 8 -bit 000-255 stepless brightness blue 8-bit ch8 \(=\) dimmer blue 16-bit 000-255 stepless brightness blue 16 -bit ch9 \(=\) dimmer white 8 -bit 000-255 stepless brightness white 8-bit ch10 \(=\) dimmer white 16 -bit 000-255 stepless brightness white 16-bit ch11 \(=\) flash rate 000-030 no function 031-100 flash rate from s -> f 101-130 no function 131-200 random strobe from s -> f 201-255 no function ch12 \(=\) zoom 8 -bit 000-255 stepless zoom 8-bit ch13 = zoom 16-bit 000-255 stepless zoom 16-bit ch14 \(=\) color function 000-010 no color function 011-085 color macro 086-170 white macro 171-255 programms auto ch15 = color macro \(000-028 r=100 \%, g=0-100 \%, b=0 \%\) \(029-056 r=100-0 \%, g=100 \%, b=0 \%\) 057-084 r = 0\%, g= 100\%, b=0-100\% \(085-112 r=0 \%, g=100-0 \%, b=100 \%\) \(113-140 r=0-100 \%, g=0 \%, b=100 \%\) \(141-168 r=100 \%, g=0 \%, b=100-0 \%\) \(169-196 r=100 \%, g=0-100 \%, b=0-100 \%\) \(197-224 r=100-0 \%, g=100-0 \%, b=100 \%\) \(225-255 r=100 \%, g=100 \%, b=100 \%, w=100 \%\) white macro 000-195 white \(\sim 2.000\) K -3.000 K 196-210 white \(\sim 3.000\) K -4.000 K 211-225 white \(\sim 4.000 \mathrm{~K}-6.000 \mathrm{~K}\) \(226-240\) white \(\sim 6.000 \mathrm{~K}-8.000 \mathrm{~K}\) 241-255 white \(\sim 8.000 \mathrm{~K}\) programms auto 000-060 programm auto 1 061-110 programm auto 2 111-160 programm auto 3 161-210 programm auto 4 211-255 programm auto 5 (1-4) ch16 \(=\) speed 000-255 stepless speed ch17 \(=\) dimmer mode 000-000 mode set on display 001-255 dimmer s-curve from s -> f``` |
| :---: | :---: | :---: | :---: |

Beam Specs

| ininE0ON |  | 1 m | 3 m | 5 m | 7 m | 10 m |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | red | 14.692 Ix | 1.632 lx | 588 1x | 3001 x | 147 lx |
|  | green | 31.154 lx | 3.462 lx | 1.246 lx | 6361 x | 312 1x |
|  | blue | 4.876 lx | 542 1x | 195 lx | 100 lx | 49 lx |
|  | white | 44.180 lx | 4.909 lx | 1.767 lx | 902 lx | 442 lx |
|  | rgbw | 75.850 lx | 8.428 lx | 3.034 lx | 1.548 lx | 759 lx |


|  |  | 1 m | 3 m | 5 m | 7 m | 10 m |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | red | 868 lx | 97 lx | 351 x | 18 lx | 91 x |
|  | green | 2.077 lx | 2311 x | 831 x | 42 lx | 21 Ix |
|  | blue | 311 Ix | 351 x | 12 lx | 61 x | 31 x |
|  | white | 2.942 lx | 327 Ix | 118 lx | 60 lx | 301 x |
|  | rgbw | 5.355 lx | 595 lx | 214 lx | 109 Ix | 54 lx |

## Technical Specification


voltage: $100-240$ V $50 / 60 \mathrm{~Hz}$

measurements: $26 \times 18,6 \times 37 \mathrm{~cm}$


DMX-channels: 5 / 7 / 10 / 11 / 13 / 17


