
USER MANUAL

DMX LED Moving Spot 12W



CAUTION!

Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!

For your own safety, please read this user manual carefully before you initial start-up.

Every person involved with the installation, operation and maintenance of this device has to

- be qualified
- follow the instructions of this manual
- keep this manual for the entire service life of the product
- pass this manual on to every further owner or user of the product

INTRODUCTION

Thank you for having chosen the latest DMX LED MOVING SPOT 60W. You will see you have acquired powerful and versatile device.

Unpack your unit.

SAFETY INSTRUCTIONS



CAUTION!

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

☞ Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Please make sure that there are no obvious transport damages. Should you notice any damages

on the A/C connection cable or on the casing, do not take the device into operation and immediately consult your local dealer.

This device falls under protection-class I. The power plug must only be plugged into a protection class I outlet. The voltage and frequency must exactly be the same as stated on the device. Wrong voltages or power outlets can lead to the destruction of the device and to mortal electrical shock.

Always plug in the power plug last. The power plug must always be inserted without force. Make sure that the plug is tightly connected with the outlet.

Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution! Never touch them with wet hands, as this could lead to mortal electrical shock.

Never modify, bend, strain mechanically, put pressure on, pull or heat up the power cord. Never operate next to sources of heat or cold. Disregard can lead to power cord damages, fire or mortal electrical shock.

The cable insert or the female part in the device must never be strained. There must always be sufficient cable to the device. Otherwise, the cable may be damaged which may lead to mortal damage.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

If extension cords are used, make sure that the core diameter is sufficient for the required power consumption of the device. All warnings concerning the power cords are also valid for possible extension cords.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord. Otherwise, the cable or plug can be damaged leading to mortal electrical shock. If the power plug or the power switch is not accessible, the device must be disconnected via the mains.

If the power plug or the device is dusty, the device must be taken out of operation, disconnected and then be cleaned with a dry cloth. Dust can reduce the insulation which may lead to mortal electrical shock. More severe dirt in and at the device should only be removed by a specialist.

There must never enter any liquid into power outlets, extension cords or any holes in the housing of the device. If you suppose that also a minimal amount of liquid may have entered the device, it must immediately be disconnected. This is also valid, if the device was exposed to high humidity. Also if the device is still running, the device must be checked by a specialist if the liquid has reduced any insulation. Reduced insulation can cause mortal electrical shock.

There must never be any objects entering into the device. This is especially valid for metal parts. If any metal parts like staples or coarse metal chips enter into the device, the device must be taken out of operation and disconnected immediately. Malfunction or short-circuits caused by metal parts may cause mortal injuries.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

Caution: During the operation, the housing becomes very hot.
Do not switch the device on and off in short intervals as this would reduce the lamp's life.



HEALTH HAZARD!

Never look directly into the light source, as sensitive persons may suffer an epileptic shock (especially meant for epileptics)!

Keep away children and amateurs! Never leave this device running unattended.

OPERATING DETERMINATIONS

This device is a lighting effect for creating decorative effects. This product is only allowed to be operated with an alternating voltage of 230 V, 50 Hz and was designed for indoor use only.

This device is designed for professional use, e.g. on stages, in discotheques, theatres etc.

Lighting effects are not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.

Do not shake the device. Avoid brute force when installing or operating the device.

When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

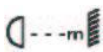
This device must never be operated or stockpiled in surroundings where splash water, rain, moisture or fog may harm the device. Moisture or very high humidity can reduce the insulation and lead to mortal electrical shocks. When using smoke machines, make sure that the device is never exposed to the direct smoke jet and is installed in a distance of 0.5 meters between smoke machine and device. The room must only be saturated with an amount of smoke that the visibility will always be more than 10 meters.

The ambient temperature must always be between -15° C and +45° C. Keep away from direct insulation (particularly in cars) and heaters.

The relative humidity must not exceed 50 % with an ambient temperature of 45° C.

This device must only be operated in an altitude between -20 and 2000 m over NN.

Never use the device during thunderstorms. Over voltage could destroy the device. Always disconnect the device during thunderstorms.

The symbol  determines the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than 0.5 meters.

This device is only allowed for an installation via the mounting bracket. In order to safeguard sufficient ventilation, leave 50 cm of free space around the device.

The housing must never touch surrounding surfaces or objects.

Make sure that the area below the installation place is blocked when rigging, de-rigging or servicing the fixture.

Always fix the fixture with an appropriate safety-rope.

The maximum ambient temperature $t_a = 45^\circ \text{C}$ must never be exceeded.

Operate the device only after having familiarized with its functions. Do not permit operation by

persons not qualified for operating the device. Most damages are the result of unprofessional operation!

Never use solvents or aggressive detergents in order to clean the device! Rather use a soft and damp cloth.

Please use the original packaging if the device is to be transported.

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc.

Occupation of the XLR-connection:

**DMX-output
XLR mounting-socket:**



**1: Ground
2: Signal -
3: Signal +**

**DMX-input
XLR mounting-plug:**



**1: Ground
2: Signal -
3: Signal +**

If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

Building a serial DMX-chain:

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 Ohm resistor between Signal (-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

Addressing

Each projector occupies 7 channels. To ensure that the control signals are properly directed to each projector, the projector requires addressing. This is to be done for every single projector by changing the LED display as set out in this table.

The starting address is defined as the first channel from which the DMX LED MOVING SPOT 60W will respond to the controller.

Please make sure that you don't have any overlapping channels in order to control each DMX LED MOVING SPOT correctly and independently from any other fixture on the DMX data link. If two, three or more DMX LED MOVING SPOTS are addressed similarly, they will work similarly.

Connection with the mains

Connect the device to the mains with the enclosed power supply cable.

The occupation of the connection-cables is as follows:

Cable	Pin	International
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	

The earth has to be connected!

TECHNICAL SPECIFICATIONS

Power supply: 110-230 V/50 Hz/50Hz
Power consumption: 20W
Led: 12W white LED
Beam angle: 14 degree
DMX-control-channels: 7/9CH
DMX-512-connection: 3-pin XLR
Sound-control: via built-in microphone
Number of colours: 7 dichroic + white
Number of gobos: 7 gobos + open
PAN-movement: within 540°
TILT-movement: within 230°
Fuse: F2A, 250V.
Packing Size (LxWxH): 265 x 172 x 132mm
Net Weight: 2.6 kg

OPERATION

After you connected the effect to the mains, the DMX LED MOVING SPOT starts running. During the Reset, the motors are trimmed and the device is ready for use within approximately 20 seconds.

Turn the objective-lens for adjusting the focus in order to obtain a sharp projection.

LED display instructions:

ADDR	A001~AXXX (AXXX)		DMX address
SOUN	MAST (SO-M)		Master setting in Sound mode
	ALON (SO-A)		Alone setting in Sound mode
AUTO	MAST (SO-M)		Master setting in Auto mode
	ALON (SO-A)		Alone setting in Auto mode
TEST	CH XX	0-255	Each channel testing
MODE	MO01-MO02		Channel mode selection (MO01=Ch9, MO02=Ch7)
DMX	CLOS/HOLD/SOUN/AUTO		Selection when no DMX signal
DIMM	STND/STAG/TV/ARCH/THEA		5 dimmer curves
FLSH	ON/OFF		When no DMX signal, select ON=display flash, OFF=display no flash
DISP	01-59-OFF (02)		Setting the display off time from 01-59seconds), select OFF=display never turn off
RDIS	ON/OFF		ON=display will turn up side down OFF= display never turn up side down.
LOCK	ON/OFF		ON=lock the display OFF=never lock the display
MIC	M-XX (70)		Setting the sound sensitivity from 0-99
InvP	ON/OFF		ON=Pan movement inverse OFF=Pan movement never inverse
InvT	ON/OFF		ON=Tilt movement inverse OFF=Tilt movement inverse
DEG	540		Pan movement degree default setting is 540 degree
SPED	SPD1-SPD4		Pan/Tilt moving speed selection from D1-D4
REST	ALL	ON/OFF	All motors reset
	PATI	ON/OFF	Pan/Tilt motors reset
	COLO	ON/OFF	Color wheel reset
	GOBO	ON/OFF	Gobo wheel reset
LOAD	ON/OFF		Loading the default setting of the factory.
CALI	PASS	xxx=050	Password must insert 050 and then go to below menu
	PAN	0-255	Pan calibration
	TILT	0-255	Tilt calibration
	COLO	0-255	Color wheel calibration
	GOBO	0-255	Gobo wheel calibration
RDM	PASS	xxx=050	Password must insert 050 and then go to below menu
	RDML	0-9999	RDM code setting for low 4digits
	RDMH	0-9999	RDM code setting for high 4digits
UNIT	CELS/FAHT		Temperature setting
TEMP	xxx		Current temperature of the unit
TIME	0000-9999Hour		Total working hours of the unit
CLEA	xxx = 050	ON/OFF	Clear the working hours of the unit *insert 050 password, select ON and then clear to 0 hour.
VER	V1.01		Firmware version number

DMX function instructions:

Mode/Channel			Value	Function	
MO01	MO02				
1	1		0-255	<u>PAN Movement 8bit</u> Pan Movement By 630/540	
2			0-255	<u>PAN Fine 16bit</u> Fine control of Pan movement	
3	2		0-255	<u>TILT Movement 8bit</u> Tilt Movement	
4			0-255	<u>Tilt Fine 16bit</u> Fine control of Tilt movement	
5	3		0-34 35-69 70-104 105-139 140-174 175-209 210-244 245-255	<u>Color wheel</u> Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7	
6	4		0-34 35-69 70-104 105-139 140-174 175-209 210-244 245-255	<u>Gobo wheel</u> Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7	
7	5		0-31 32-63 64-95 96-127 128-159 160-191 192-223 224-255	<u>Led strobe</u> Led Off Led On Linear Strobe effect slow to fast Led On Pulse Strobe effect slow to fast Led On Random Strobe effect slow to fast Led On	
8	6		0-255	<u>Intensity (Speed)</u> Intensity 0 to 100% or Speed Slow to fast	
9	7		0-19 20-79 80-89 90-99 100-109 110-119 120-179 180-189 190-199 200-209 210-219 220-229 230-239 240-249 250-255	<u>reset, internal programs</u> Normal Reserve All Motor Reset Pan&tilt Color Gobo Reserve Internal program 1 Internal program 2 Internal program 3 Internal program 4 Internal program 5 Internal program 6 Internal program 7 Sound Control	8

IR remote instructions:

BLACKOUT	PAN	TILT	RESET
	P	T	RT
WHITE	SELECT PROG	FLASH	SPEED
W	SPR	FL	SP
COLOR	SOUND ACTIVE	GOBO	SET ADDR
C	SA	G	S
1	2	3	+
4	5	6	0
7	8	9	-

- < BLACKOUT >: unit reset and all function back to 0
- < WHITE >: Full on, via +, - to adjust the brightness from 0-255;
- < PAN >: Via +, - to adjust the PAN from 0-255;
- < TILT >: Via +, - to adjust the TILT from 0-255;
- < RESET >: Unit reset
- < SELECT PROG >: Via +, - to select the built-in programs from 1-7
- < SPEED >: Via +, - to select the built-in programs running speed from 0-255
- < FLASH > Via +, - to set the flash from 0-255;
- < COLOR >: Via +, - to select colors 1-7
- < GOBO >: Via +, - to select gobos 1-7
- < SOUND ACTIVE >: Sound mode
- < SET ADDR >: setting the DMX address via 0-9

CLEANING AND MAINTENANCE

The operator has to make sure that safety-relating and machine-technical installations are inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 1) All screws used for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on housings, fixations and installation spots (ceiling, suspension, trussing).
- 3) The electric power supply cables must not show any damages, material fatigue (e.g. porous cables) or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



DANGER TO LIFE!

Disconnect from mains before starting maintenance operation!

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents!

The interior of the device should be cleaned at least annually using a vacuum-cleaner or an air-jet.

There are no serviceable parts inside the device except for the lamp and the fuse. Maintenance and service operations are only to be carried out by authorized dealers.