LED Aqua Painter

ORDERCODE 41220

Congratulations!
You have bought a great, innovative product from Showtec.
The Showtec LED Aqua Painter brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.
We design and manufacture professional light equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.
For more information: iwant@showtec.info

You can get some of the best quality, best priced products on the market from Showtec.
So next time, turn to Showtec for more great lighting equipment.
Always get the best -- with Showtec !

Thank you!

Showtec

Showtec LED Aqua Painter™ Product Guide

WARNING

SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this device has to:
- be qualified
- follow the instructions of this manual

Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect 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 manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- 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 remove warning or informative labels from the unit.
- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmerpack.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Do not switch the device on and off in short intervals, as this would reduce the system's life.
- Do not submerse the LED Aqua Painter below 2 meters. Remember the IP68 classification.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep case closed while operating.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the power-cord from time to time.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- 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.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. The device must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement use fuses of same type and rating only.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

OPERATING DETERMINATIONS

If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious damage to people and property !

Description of the device

Features

The LED Aqua Painter is a water submersible LED system from Showtec.
• 360 High power LEDs (120 Red, 120 Green, 120 Blue)
• DMX-controlled
• 3 Channels (R, G, B)

NOTE: Knowledge of DMX is required to fully utilize this unit.

Overview

Fig. 1

NOTE: Please make sure to also obtain the 41221 Distibutor and 41222 External PSU.
    Both devices are essential for using the LED Aqua Painter.
    The 41221 Distributor has to be made waterproof, before submerging the device !

Installation
Remove all packing materials from the LED Aqua Painter. Check that all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly.
Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.

Set Up and Operation
Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

DMX Operation

Press the Up/Down button to change the DMX address setting rnenu:

The DMX Channel functions when using the entire device as one:

Channel 1:   Red (0-255)
Channel 2:   Green (0-255)
Channel 3:   Blue (0-255)

DMX Addressing

Unit address   DMX address
1   1
2   4
3   7
4   10
5   13
6   16
7   19
8   22
9   25
10   28

Etc.

Light Output

Light Output Measurement (for 28º beam angle)

illuminance:

Color \ Bulb spacing	1	2	3	4	5
White	1724.3	456.1	208.4	118.1	74.6
Red	213.1	57.0	27.1	15.2	9.3
Green	700.9	185.9	85.9	47.9	30.4
Blue	937.4	242.9	110.3	62.4	40.4

units: lux
direction: on axis

Source specifications:

Optics: clear polycarbonte
Source: 360 LEDs
(120 Red, 120 Green, 120 Blue)

LIGHT OUTPUT:

									0.5m
60.1	70.4	83.4	104.0	117.7	124.3	108.6	90.3	74.9	63.7
76.2	97.5	155.1	248.6	314.0	308.4	240.2	153.3	129.1	77.6
101.9	163.6	320.6	593.5	751.4	684.1	473.8	265.4	149.5	94.4
136.4	269.2	629.9	1047.7	1242.0	1157.9	829.9	475.7	220.6	118.7
156.1	370.1	801.9	1255.1	1619.6	1535.5	1114.0	630.8	281.3	141.1
147.7	329.9	746.7	1205.6	1296.0	1528.9	1129.9	680.4	298.1	142.1
128.9	237.4	529.9	923.4	1203.7	1213.1	943.9	542.9	246.7	120.6
103.7	154.2	291.6	550.5	752.3	761.7	567.3	306.5	144.9	92.5
89.7	112.1	152.3	240.2	317.8	315.9	214.9	135.5	93.5	71.0
72.9	86.9	100.9	116.8	129.9	121.5	101.9	81.3	67.3	57.0

0.5m   0m   0.5m

units: lux
measured on: white
direction: on axis
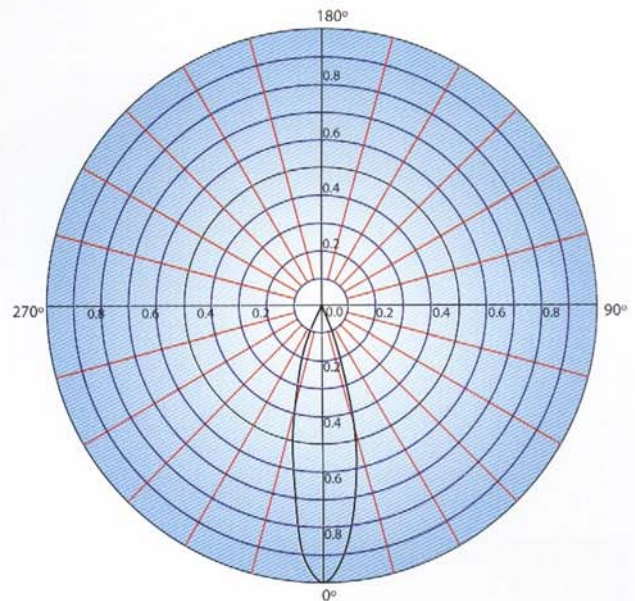multipliers: 0.115 Red,   0.378 Green,   0.506 Blue

Candle Power Distribution:

testing circumstance
installation position: horizontal
testing surface: A-A surface

electrical parameters
current: 0.253 A
voltage: 220V
power consumption: 35W

testing result
Max. luminous intensity: 1022.806cd
Luminous flux: 370.7lm
Luminous efficiency: 11.029lm/w
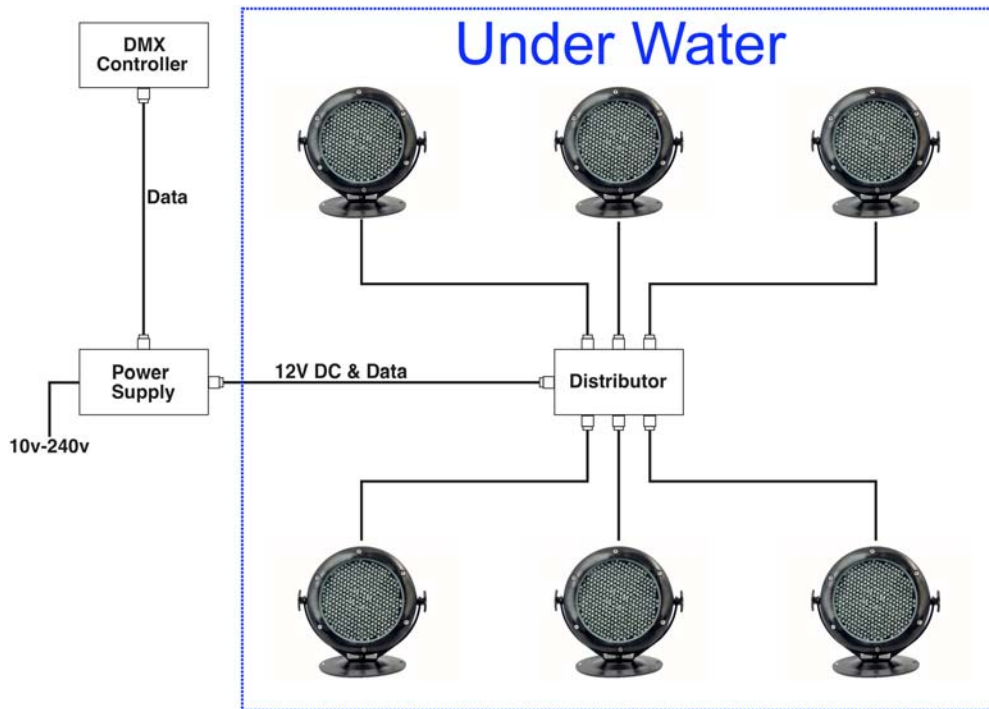Beam angle: 28º

Set Up example

Fig. 2

Note : Link all cables before connecting electric power.
Ensure that the power supply is off before unplugging the Controller, the PSU or before connecting / disconnecting fixtures.
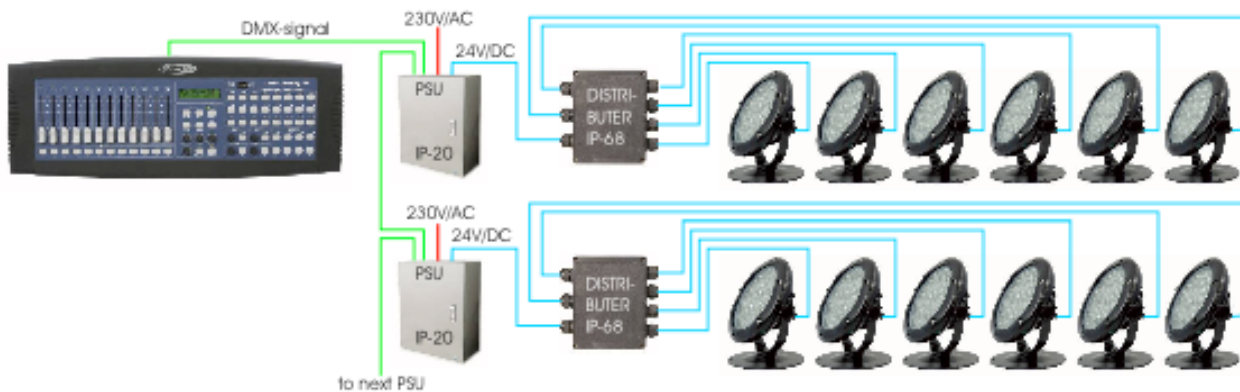

Fig. 3

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Maintenance

The LED Aqua Painter requires almost no maintenance. However, you should keep the unit clean.
Disconnect the mains power supply, and then wipe the cover with a damp cloth.
Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth.
Make sure connections are thoroughly dry before linking equipment or supplying electric power.
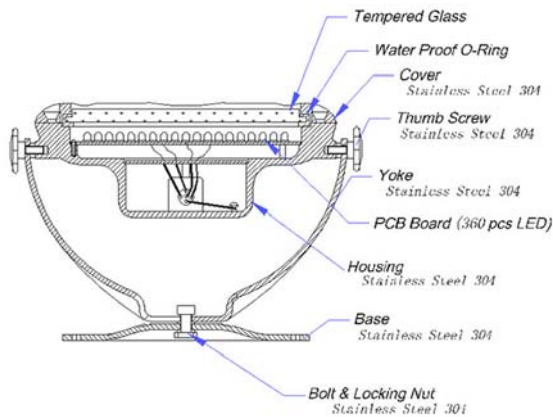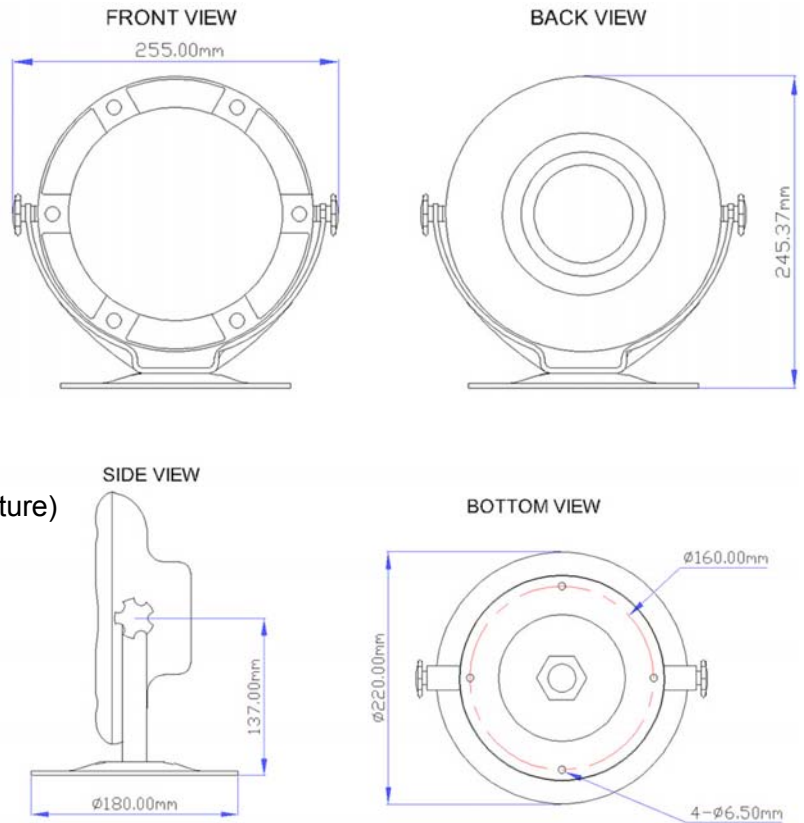

Troubleshooting

Showtec LED Aqua Painter
This troubleshooting guide is meant to help solve simple problems.
If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.
1. If the device does not operate properly, unplug the device.
2. Check the power from the wall, all cables etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If you are unable to determine the cause of the problem, do not open the Quadra, as this may damage the unit and the warranty will become void.
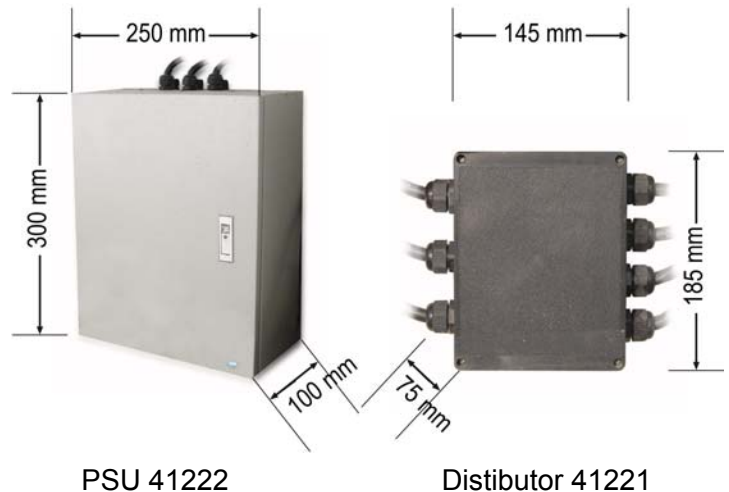**5.** Return the device to your Showtec dealer.

Product Specification

Model: Showtec LED Aqua Painter
Voltage : 12V DC
Power: 27W
Submersion Depth Up to 5 meters (15 feet)
DMX Input : 3-pin XLR Male connector
DMX Output : 3-pin XLR Female connector
Color Combination: 16.7 million colors
Light Source: 360 High power LEDs
            (120 Red, 120 Green, 120 Blue)
Housing: Stainless Steel 304
Protective Lens: Tempered glass
Protection Rating: IP68
Control Protocol: DMX 512 (3 channels per fixture)
Cabling: Multi-core control/data cable
Temperature Environment: -22º C to 51º C
Dimensions : 255 x 180 x 245 mm (LxWxH)
Weight : 9,14 kg

Model: Showtec External PSU (ordercode 41222)
Dimensions : 300 x 250 x 100 mm (LxWxH)
Weight : 7,96 kg

Model: Showtec Distributor (ordercode 41221)
Dimensions : 185 x 145 x 75 mm (LxWxH)
Weight : 0,6 kg

PSU 41222   Distibutor 41221

Design and product specifications are subject to change without prior notice.

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