HAZE I
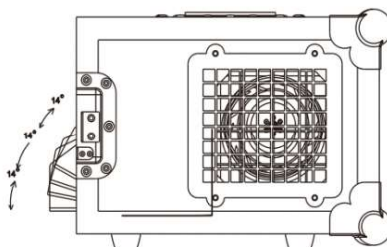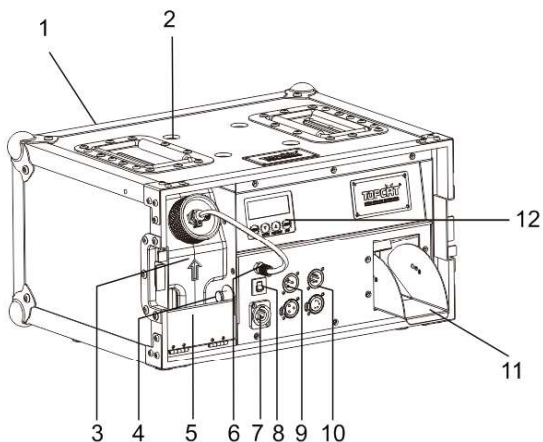
MANUAL

TABLE OF CONTENTS

DIMENSIONS
ALL DIMENSIONS ARE IN MILLIMETERS

395

283

405
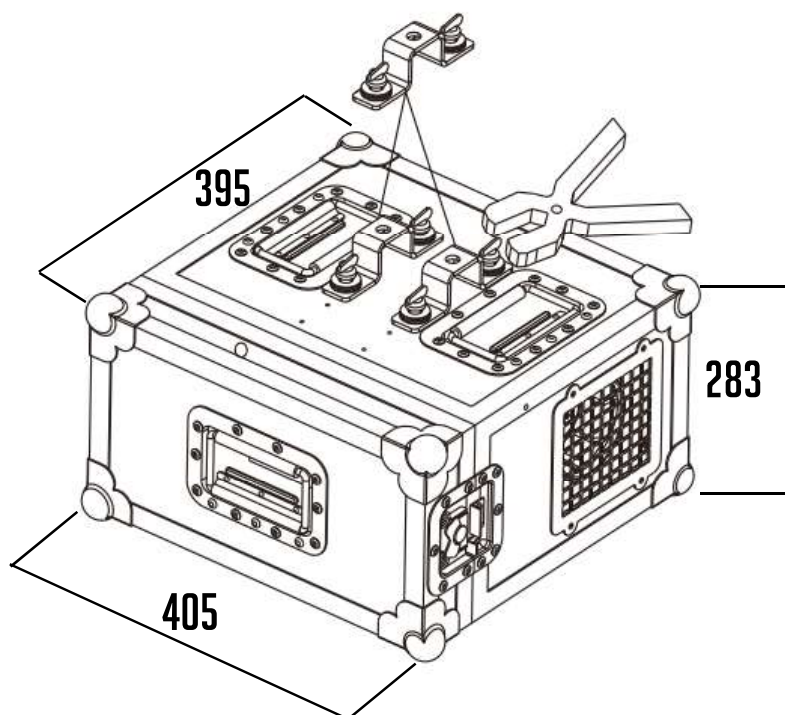
MACHINE OVERVIEW

1. Flightcase
2. Hanging option
3. Fluid container handle
4. Fluid container fixation knob
5. Fluid container fixation
6. Fluid inlet
7. Powercon input
8. Breaker
9. 3 Pin DMX in/out
10. 5 Pin DMX in/out
11. Smoke output
12. LCD display

SAFETY INSTRUCTION

WARNING!
Read the safety precautions in this section before installing, powering, operating or servicing this product

The following symbols are used to identify important safety information on the product and in this manual:

DANGER! Safety hazard. Risk of severe injury or death.

DANGER! Hazardous voltage. Risk of lethal or severe electric shock.

WARNING! Fire hazard.

WARNING! LED light emission. Risk of eye injury.

WARNING! Burn hazard. Hot surface. Do not touch.

WARNING! Wear protective eyewear.

WARNING! Refer to user manual.

USING FOR THE FIRST TIME

This product is for professional use only. It is not for household use.

This product presents risks of severe injury or death due to fire and burn hazards, electric shock and falls.

Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture. If you have questions about how to operate the fixture safely, please contact your supplier.

PROTECTION FROM ELECTRIC SHOCK

•	Disconnect the machine from AC power before removing or installing any cover or part and when not in use
•	Always ground (earth) the fixture electrically.
•	Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.
•	Before using the machine check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
•	Power input and throughput cables must be rated 20 A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm . Cables must be hard usage type (SJT or equivalent) and heat-resistant to 90° C minimum.
•	Use only PowerCON® cable connectors to connect to power input sockets. Use only PowerCON® cable connectors to connect to power through put sockets.
•	Isolate the machine from power immediately if the power plug or any seal, cover, cable, or other component is damaged, defective, deformed, wet or showing signs of overheating. Do not reapply power until repairs have been completed.

DO NOT EXPOSE THE FIXTURE TO RAIN OR MOISTURE

CLF Haze II has an IP20 rating, indoor use only.

SAFETY INSTRUCTION

PROTECTION FROM BURNS AND FIRE

- Do not operate the machine if the ambient temperature (Ta) exceeds 45°C.
- The exterior of the machine becomes hot during use. Avoid contact by persons and materials. Allow the machine to cool for at least 10 minutes before handling.
- Keep all combustible materials (e.g. fabric, wood, paper) at least 100 mm away from the nozzle
- Keep flammable materials well away from the machine
- Ensure that there is free and unobstructed airflow around the machine
- Do not place objects within 200 mm of the machine
- Do not attempt to bypass thermostatic switches or fuses.
- If you relay power from one machine to another using power throughput sockets, do not connect more than 1 machines in total to each other in an interconnected chain.
- Connect only other machines to fixture power throughput sockets. Do not connect any other type of device to these sockets.
- Do not connect any other type of device to these sockets.
- Do not stick filters, masks or other materials onto any optical component.
- Do not modify the machine in any way not described in this manual
- Do not connect machine to a dimmer

PROTECTION FROM INJURY

- Fasten the fixture securely to a fixed surface or structure when in use. The fixture is not portable when installed.
- Ensure that any supporting structure and/or hardware used can hold at least 10 times the weight of all the devices they support.
- Allow enough clearance around the head to ensure that it cannot collide with an object or another fixture when it moves.
- Check that all external covers and rigging hardware are securely fastened.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the machine
- Do not operate the machine with missing or damaged covers, shields or any optical component.

AC POWER

POWER VOLTAGE

Check that the voltage range specified on the machine serial number label matches the local AC mains power voltage before applying power to the fixture. The machine accepts AC mains power at 100-240 V nominal, 50/60 Hz. Do not apply AC mains power to the machine at any other voltage than specified.

POWER CABLES

Power input and throughput cables must be rated 20 A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm. Cables must be hard usage type (SJT or equivalent) and heat- resistant to 90°C minimum. In the EU the cable must be HAR approved or equivalent. If you install a power plug on the power cable, install a grounding-type (earthed) plug that is rated 20 A minimum. Follow the plug manufacturer's instructions. Table 1 shows standard wire color-coding schemes and some possible pin identification schemes; if pins are not clearly identified, or if you have any doubts

Wire color (EU models)	Wire color (US models)	Conductor	Symbol	Screw (US)
Brown	Black	Live	L	Yellow or Brass
Blue	White	Neutral	N	Silver
Yellow / green	Green	Ground (earth)	⏚ or ⏚	Green

Table 1: Wire color-coding and power connections

DATA LINK

A DMX 512 data link is required in order to control a machine via DMX. The machine has 3 & 5-pin XLR connectors for DMX data input and output. The pin-out on all connectors is pin 1 = shield, pin 2 = cold (-), and pin 3 = hot (+) Pins 4 and 5 in the 5-pin XLR connectors are not used.

TIPS FOR RELIABLE DATA TRANSMISSION

To connect the machine to data:
1. Connect the DMX data output from the controller to the closest machines male 3 & 5-pin XLR DMX input connector.
2. Connect the DMX output of the machine closest to the controller to the DMX input of the next machine and continue connecting machines output to input.

PHYSICAL INSTALLATION

Warning! The machine must be either fastened to a flat surface such as a stage or wall, or clamped to a truss or similar structure in any orientation using a rigging clamp.

Warning! At all times machine can cause injury or damage it if falls, attach an approved safety cable to one of the safety cable attachment points on the base (see "machine overview" on page 4).

Check that all surfaces more far aways then a minimum of 200 mm. from the machine, that combustible materials (wood, fabric, paper, etc.) are minimum 100 mm. from the nozzle, that there is free airflow around the machine and that there are no flammable materials nearby.

FASTENING THE MACHINE TO A FLAT SURFACE

The machine can be fastened to a fixed flat surface that is oriented at any angle. Check that the surface can support at least 10 times the weight of all machines and equipment to be installed on it. Warning! The supporting surface must be flat otherwise the air vents in the base may be blocked, which will cause overheating. Fasten the machine securely. Do not place it on a surface or leave it where it can be moved or can fall over. Attach a securely anchored safety cable to the safety cable attachment point (see "machine overview" on page.

If the machine is installed in any location where it may fall and cause injury or damage if the primary attachment fails:
1. Block access under the work area. Working from a stable platform.
2. Secure the machine with a secondary attachment such as an approved safety cable that is rated for the weight of the machine using one of the attachment points at the edges of the base (see "machine overview" on page 4). Do not use any other part of the machine as a safety cable attachment point.

OPERATING INSTRUCTIONS

1. After checking that all the parts are intact and complete, position the machine on a flat surface.
2. Only use designated CLF Lighting haze liquid. Machine can be harmed when using other fluids and warranty is expired
3. Connecting the power cord. Before power on, make sure it is connected with the rated voltage.
4. Turn on the machine, it will immediately start heating up, the digital display will show "WARMING UP".

MENU INSTRUCTION

1. MENU button: When it shows "HEAT", press "menu" button to enter the page "ADDR"
2. UP button: Increase the relevant value of each page
3. DOWN button: Decrease the relevant value of each pag
4. ENTER button: Enter or exit each page

MENU NAVIGATION

MENU: Scroll through setting menu;
UP: Increase, multiplex "TIMER" button;
DOWN: Decrease, multiplex "VOLUME" button;
ENTER: In/Out, multiplex "stop" button;

Press " MENU " button to switch different menu optionsl:

1.   Ready To Fog: The machine is ready to work
2.   Interval Set: To set the interval of timer mode , adjustable from 5~200s
3.   Duration Set: To set the duration of timer mode , adjustable from 5~200s
4.   Timer out: Set the haze fog output from 1 - 100% under Timer mode
5.   Volume out: Set the haze fog output from 1 - 100% under Volume mode
6.   Fan speed: Set the fan speed from 1 - 100%
7.   DMX512 Address: The DMX address can be set up from 1 to 512
8.   Direct timer: Direct timer on / off after power on
9.   Language: Select the language saved by "Enter"

Under any setting pages, press STOP to exit or return to the page one.

When the unit is working, press STOP to stop running and return to the page one. After enter into different setting pages, press UP and DOWN to change the value. When it is in the page one, press TIMER button to enter into timer mode.

DMX CHANNELS

Channel	Function	Value	Percentage	Remark
CH 1	FAN output	006 - 255	0 - 100%	000 - 005 = OFF
CH 2	HAZE output	006 - 255	0 - 100%	000 - 005 = OFF

MAINTENANCE

Fluid injection trouble:
Refers to the fog fluid atomizing in the heater pipe of the machine is not good, heater temperature cannot be timely and effective transmit to the fog fluid, fog fluid cannot all atomization and lead to fluid injection.
1. Using the low quality or counterfeit fog fluid, low quality fog fluid have more impurities, easy to adhere to the pipe wall and hindered temperature transmission result in incomplete atomization caused fluid injection.
2. Using an incorrect fog fluid. Different fog fluid have different required atomization temperature. If you use the wrong fog fluid result in oil cannot fully atomization caused fluid injection.(fig 1)

Heater blocking trouble:
Poor atomization fluid injection is the early signs of heater block. Using no CLF quality fog fluid or not timely maintenance cleaning the fog machine for a long time. Inevitable will appear the terminal symptom of heater blocking.
1. heater blocked is because used inferior fog fluid or not maintenance for a long time. Have nothing to do with the quality of machine. Like a car with poor quality gasoline produce poor fluid circuit failure or long-time no maintenance the car will inevitably appear bigger problems. (fig 2)
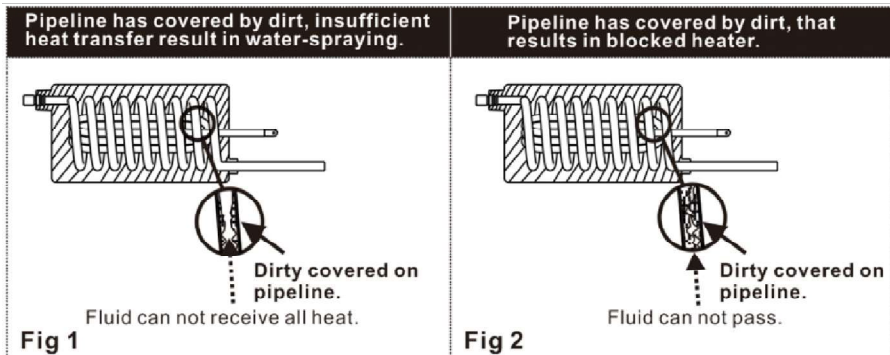
Solutions to these problems:
Fog machine heating pipes used for a long time and then the pipe wall will easily produce sediments (The more inferior fog fluid the more impurities thus lead to fluid injection or blocked). All fog machines need regular maintenance (fog machine maintenance cycle for 1 to 2 months/time).

Specific maintenance method: after heating the 35% white vinegar plus 65% distilled water and then spray 10 to 15 times

Conclusion:
As long as the fog machine with fluid injection or heater blocking after using a period of time. It was caused by fog fluid quality or lack of maintenance, has nothing to do with the quality of the machine. Please use the CLF original high quality fog fluid and timely maintain it, then it can be used for a long time

Fig 1: Pipeline has covered by dirt, insufficient heat transfer result in water-spraying. Dirty covered on pipeline. Fluid can not receive all heat.

Fig 2: Pipeline has covered by dirt, that results in blocked heater. Dirty covered on pipeline. Fluid can not pass.

Fluid restrictions!:
Only use CLF or JEM hazer fluid. Any other fluid will dammage the machine and warranty is not valid anymore. Always check if the fluid is still clear looking. Never use parfume or any other chemical aditions to the hazer.

EXPLODED VIEW
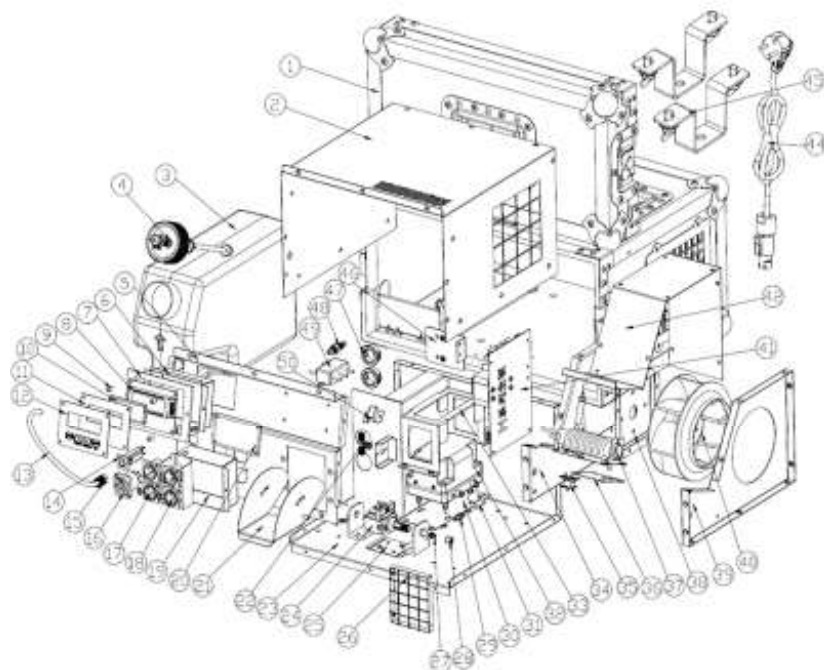
1	Empty flight case	CLF-70-075	26	Filter air direction	CLF-70-100
2	Top cover	CLF-70-076	27	Copper connector fluid pump	CLF-70-065
3	Fluid container	CLF-70-077	28	Copper cap fluid pump	CLF-70-066
4	Fluid cap	CLF-70-078	29	Straight connector fluid line	CLF-70-103
5	Front plate	CLF-70-079	30	Air pump support plate	CLF-70-061
6	LCD cover	CLF-70-042	31	Air line	CLF-70-105
7	Display seal	CLF-70-081	32	Air pump	CLF-70-063
8	Display PCB	CLF-70-082	33	Air pump clip	CLF-70-037
9	Plastic display support	CLF-70-017	34	Left cover plate turbo fan	CLF-70-108
10	Display glass	CLF-70-084	35	Thermostat	CLF-70-058
11	Display support plate	CLF-70-016	36	Heat filter	CLF-70-059
12	Display sticker	CLF-70-015	37	Fast heater	CLF-70-060
13	Spring fluid line	CLF-70-087	38	Turbo fan mounting plate	CLF-70-112
14	Fuse	CLF-70-051	39	Right cover plate turbo fan	CLF-70-113
15	Copper cap fluid line	CLF-70-089	40	Turbo fan	CLF-70-114
16	Powercon input socket blue	CLF-70-010	41	Main PCB	CLF-70-115
17	3-pin DMX PCB (male/female)	CLF-70-019	42	Top cover plate turbo fan	CLF-70-116
18	5-pin DMX PCB (male/female)	CLF-70-009	44	Schuko-Powercon aansluitkabel 3x1,5mm², 1.8 meter	
19	Cover DMX PCB's	CLF-70-093	45	Hanging bracket	CLF-70-117
20	Name plate	CLF-70-094	46	Alu. Heat sink main PCB	CLF-70-118
21	Air director	CLF-70-095	47	Plastic clip	CLF-70-119
22	Tee connector fluid line	CLF-70-096	48	Copper joint fluid line	CLF-70-050
23	Bottom cover	CLF-70-097	49	Mains filter	CLF-70-121
24	Fluid pump	CLF-70-064	50	Tee connector clip	CLF-70-122

SPECIFICATIONS

Power hazer	850W
Power heater	800W
Voltage / frequency	AC100V - 240V - 50/60Hz
Fuse	8A/250V
AC power input	PowerCON
DMX data in/out	5 pin & 3 pin locking XLR
Netto weight	15,3kg
Size	425x390x242mm
Control	DMX
Channel	2 channels
Output	6000CUFT/MIN
Settings and addressing	control panel with backlit LED graphic display
Protocol	USITT DMX512-A
Housing color	Black flightcase
Housing	High strenght die-casting aluminium and metal
Protection rating	IP20
Orientation	Floor & hanging
Min. distance to combustable materials	50mm from machine
Min. distance to iluminated surfaces	100mm from machine
Wireless remote	No
Fluid consumption	10ml/min.
Fluid capacity	3,5L
Fluid brand	CLF Haze fluid
Heat up time	50-100 sec
Max. ambient temperature (Ta max)	45°C

HAZE I