

/SNOWCASE®



DISCLAIMER

⚠ WARNING

Read this manual carefully before installing and/or using this product. Failure to read the manual and to follow the printed instructions may lead to personal injury and/or damage to the product.

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MAGIC FX reserves the right to modify specifications stated in this manual.

TRADEMARKS

Any brand names mentioned in this manual are registered trademarks of their respective owners.

LIABILITY

MAGIC FX accepts no liability for claims from third parties arising from unauthorised use, use other than that stated in this manual, and use other than in accordance with the General Conditions registered at the Chamber of Commerce.

We further refer to the General Conditions. These are available on request, free of charge.

Although considerable care has been taken to ensure a correct and comprehensive description of all relevant components, the manual may nonetheless contain errors and inaccuracies.

Should you detect any errors or inaccuracies in the manual, we would be grateful if you would inform us. This helps us to further improve our documentation.

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FOREWORD

Congratulations! You have bought a great new product from MAGIC FX.

This manual contains all information required for the intended use of the equipment. Deviation from the described intended use can result in a hazardous situation and/or property damage.

This manual includes notes and warnings on safe operation of the equipment. These notes and warnings are accompanied by the following icons. Read them attentively!

⚠ DANGER

Indicates a hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

⚠ WARNING

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates information considered important, but not hazard-related (e.g. messages relating to property damage).

LANGUAGE

This document contains the original instructions in English. In case you require other languages please contact MAGIC FX.

REVISION TABLE

Doc nr	Revision	Date	Description	Author	Approved
PART01729	01-00	10-10-2019	Initial release	CSK	SVG
PART01729	01-01	30-09-2020	Accessories	NvE	LL

1 MEET THE MAGICFX® SNOWCASE!

The MAGICFX® SNOWCASE is a special effects machine that creates a simulated snow effect. The machine launches snow into the air at a set distance and density.

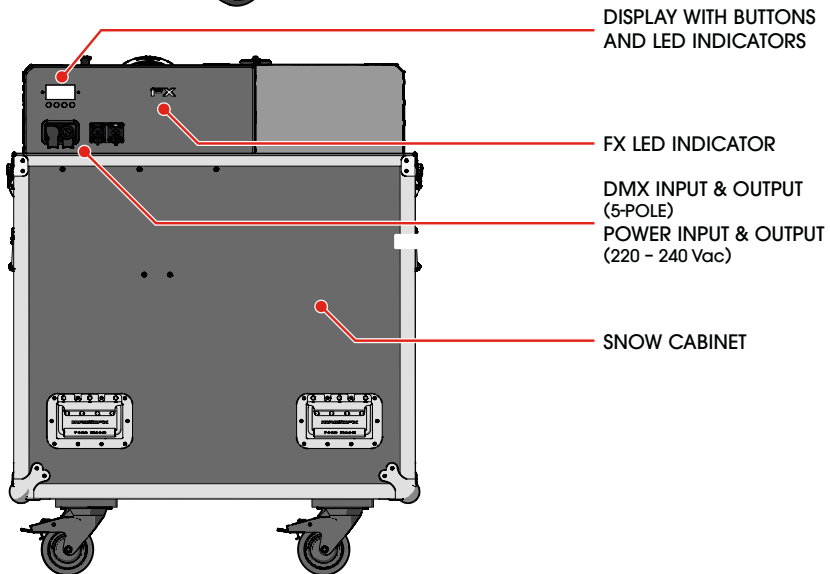
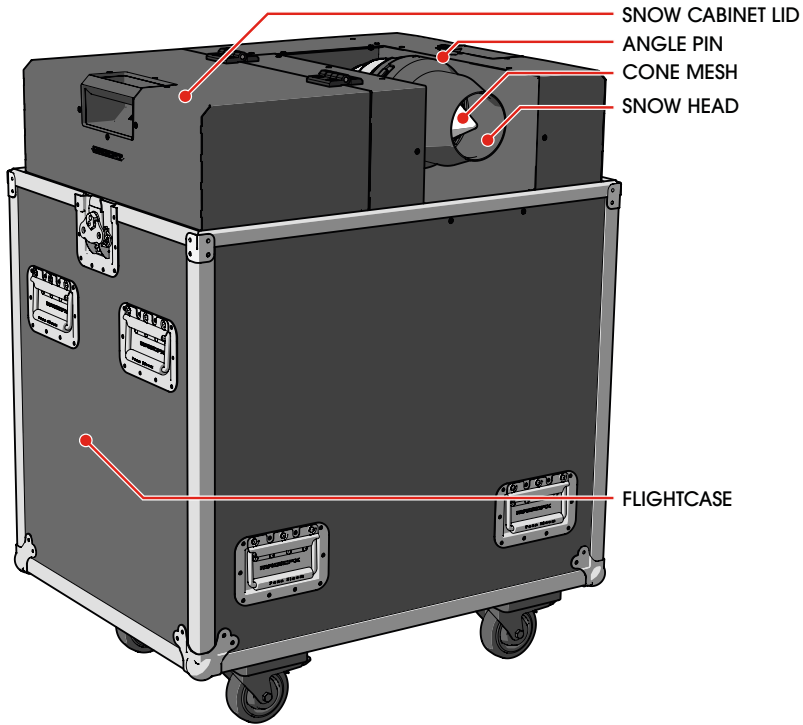
The machine pumps snow fluid from a jerrycan to the snow head. The snow fluid leaves the snow head through a cone formed mesh. This creates the snow effect.

The MAGICFX® SNOWCASE is a very flexible machine. It can be operated with the effect coming straight from the machine itself, or an extension hose can be connected. This gives the user the possibility to create the effect in difficult to reach places such as high up in the truss. In both use cases the user has a wide variety to set the effect angle.

The MAGICFX® SNOWCASE is outfitted for operation:

- in Manual mode with multiple options (e.g setting a timer and the output distance);
- with DMX and optionally RDM;
- in sequence with multiple machines.

1.1 MAIN PARTS

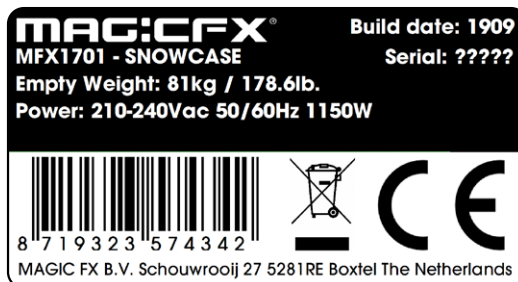


1.2 TECHNICAL DATA

Product	Product Name	MAGICFX® SNOWCASE	
	Product Code	MFX1701	
	Product Type	SNOW FX	
Main Dimensions	Length	800 mm	31.5 in
	Width	600 mm	23.6 in
	Height	1000 mm	39.4 in
Weight	Weight	81 kg	178.6 lb
Environment	Minimum Temperature	0 °C	32 °F
	Maximum Temperature	50 °C	122 °F
	Humidity (Relative)	20 % to 90 % (non condensing)	
Electrical	Voltage Input	210 - 240 Vac	
	Voltage Frequency	50 - 60 Hz	
	Power Consumption	1150 W	
	Power Connector	Neutrik® powerCON TRUE1 (in & out)	
Controlling	Control Options	DMX / Manual / Timer	
	Control Protocols	DMX512-A (ANSI E1.11) RDM (ANSI E1.20)	
	Control Connectors	Neutrik® 5 pole male / female XLR	
Configuring	Configure Options	On Device & RDM	
Usage	Consumable(s)	MAGICFX® SNOWCASE - SNOW FLUID	
	Consumable Consumption	MAGICFX® SNOWCASE - SNOW FLUID: 1 L/min	

Technical data

1.3 PRODUCT IDENTIFICATION



Type plate

1.4 FX FLUIDS

The MAGICFX® SNOWCASE uses MAGICFX® SNOWCASE - SNOW FLUID to create the snow effect. The fluid is delivered in a jerrycan. Do not use other fluids than those that are approved and supplied by MAGIC FX, see following table.

Code	Type of fluid	Volume
MF3032	MAGICFX® SNOWCASE - SNOW FLUID	20 litre

Approved FX Fluids

1.5 ACCESSORIES

Code	Product	Included
MF1702	MAGICFX® SNOWCASE HOSE 5 m	
MF1703	MAGICFX® SNOWCASE HOSE 10 m	
MF1704	MAGICFX® SNOWCASE TRUSS BRACKET	

Accessories

Please contact MAGIC FX for additional possibilities.

1.6 MANUAL MODE

Manual mode gives the user the possibility to control the machine without the need for DMX and an external lighting console. A simple sequence of effect on and off times, and desired distance and density can be set via the manual mode menu on the display panel.

Manual operation menu items	Values
Manual mode	ON / OFF
Run timer	0 - 600 (s)
Pause timer	0 - 600 (s)
Output density	0 - 255
Output distance	0 - 255

Manual mode

1.7 DMX CONTROL

When connected to DMX and with Manual mode OFF the MAGICFX® SNOWCASE is controlled with 1 safety address and 2 operational addresses:

DMX Address	Address range
Safety address	1 - 512
Start address (Effect distance)	1 - 511
Start address + 1 (Effect density)	2 - 512

DMX addresses

The safety address cannot be the same as (one of) the operational address(es). Operating of these addresses results in the following:

DMX Address	DMX Value (decimal)		Result
Safety address	0	99	Device disabled
	100	154	Device enabled
	155	255	Device disabled
	201	255	Extract snow fluid
Start address (Effect distance)	0	255	Effect distance
Start address + 1 (Effect density)	0	9	No output
	10	255	Variable snow output

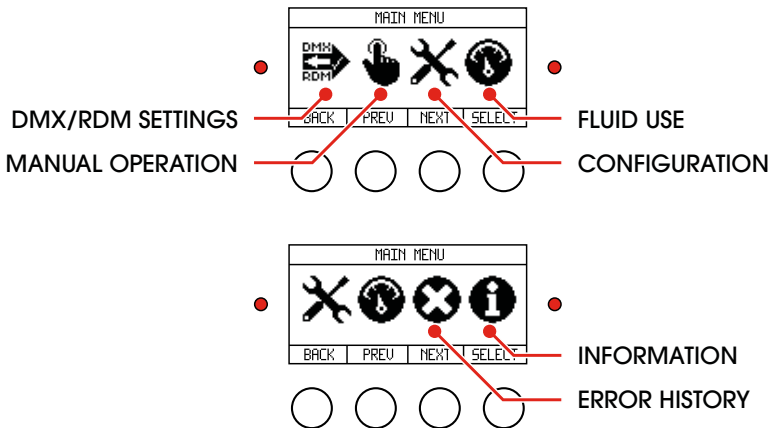
Operation of the DMX addresses

When you link multiple machines with DMX, we advise you to use the same Safety address for all machines.

⚠ CAUTION

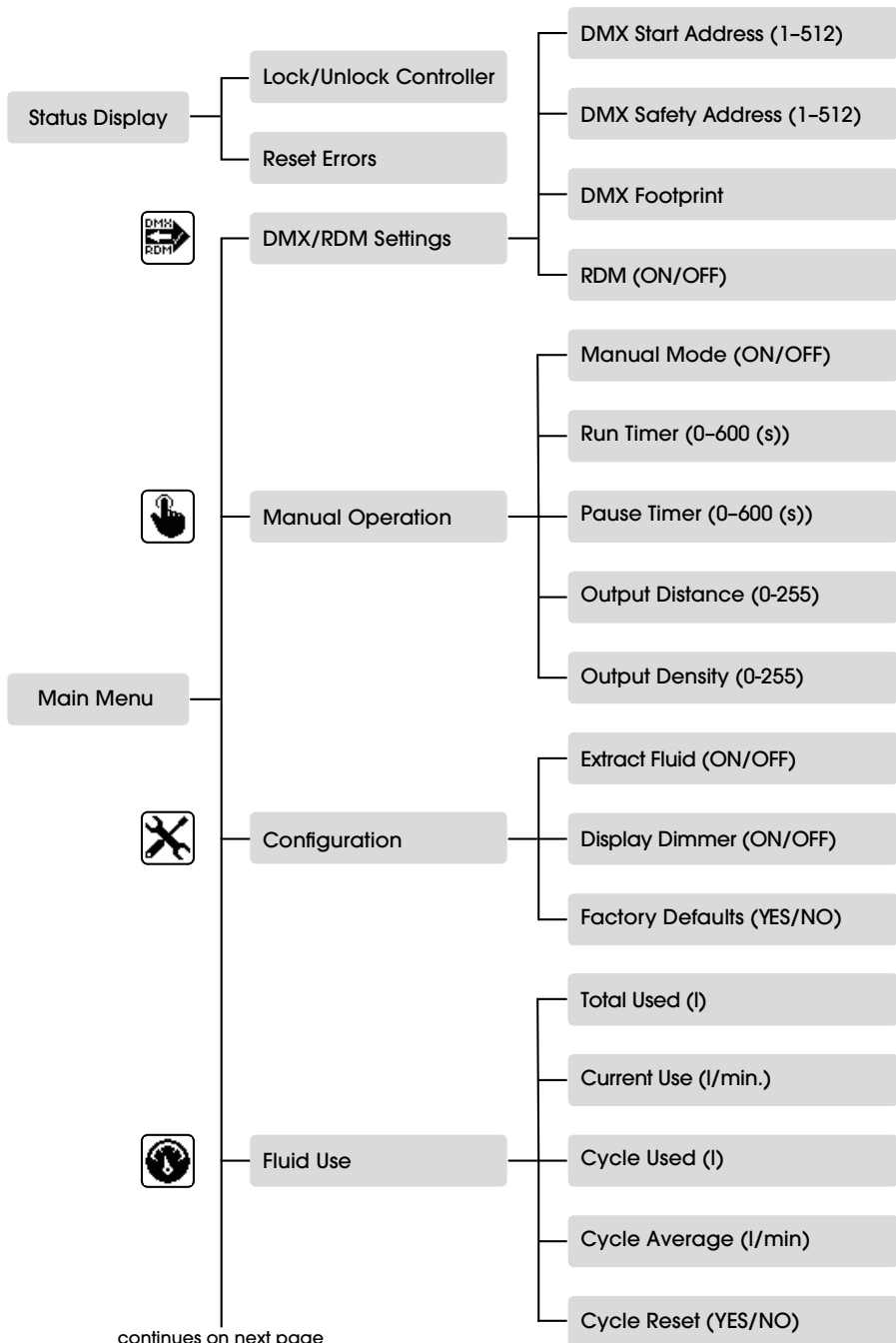
Always plug in a DMX Terminator into the DMX output of the final unit in the control sequence. Using a DMX Terminator improves signal reliability.

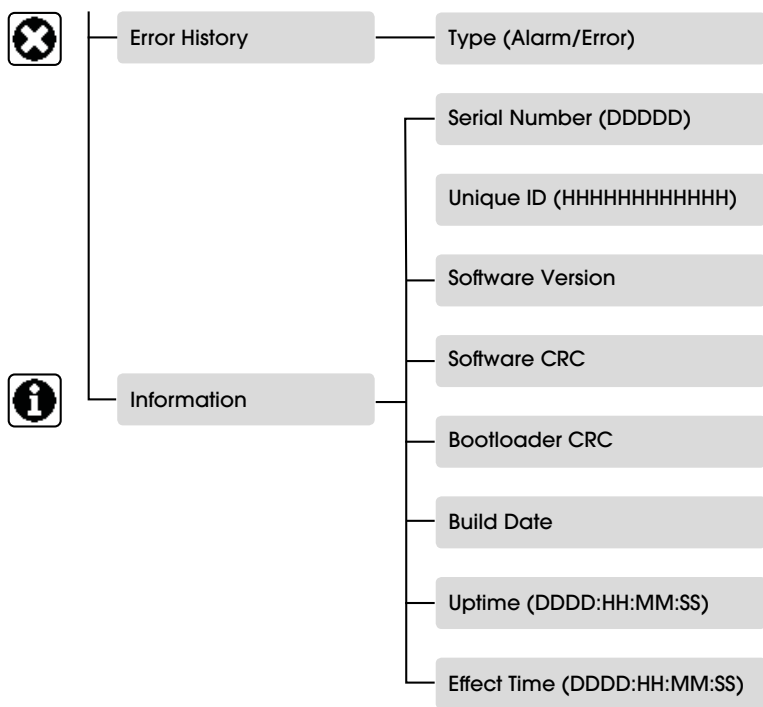
1.8 DISPLAY PANEL



Display panel

The display panel is located on the backside of the MAGICFX® SNOWCASE. Check the following menu structure for all options in the menu. Use the buttons for navigation and selection. The left-hand LED blinks red when DMX is active. The right-hand LED continuously lights red when an error is present.





Menu function	Explanation
Lock/Unlock Controller	Holding the Lock button for more than 5 seconds will “lock” the display functions. Meaning buttons will not respond. This to avoid accidental change of parameters via display. To unlock, hold the Unlock button for more than 5 seconds.
Reset Errors	In case there is a locking error present, this button will reset the appliance. If the fault does not persist, the locking error will not reappear.
DMX Start Address (1-512)	Setting the DMX start address.
DMX Safety Address (1-512)	Setting the DMX safety address.
DMX Footprint	This parameter indicates the DMX footprint, in other words the amount of sequential channels used by the appliance. This does not include the safety channel.
RDM (On/Off)	This function turns on/off the RDM functionality.
Manual Mode (On/Off)	This turns manual mode on or off. Via manual mode the user is able to control the SNOWCASE without the need for a DMX lighting console.
Run Timer (sec) (0-600)	This parameter represents the on time duration of the on/off cycle of the effect.

Pause Timer (sec) (0-600)	This parameter represents the off time duration of the on/off cycle of the effect.
Output Distance (0-255)	Setting of the distance the snow is blown away. The 0-255 range is comparable to the lighting console fader running from 0 upto 255.
Output Density (0-255)	Setting of the snow density. The 0-255 range is comparable to the lighting console fader running from 0 upto 255.
Extract Fluid (On/Off)	This function empties the fluid hoses of the snowCase by running the pump in reverse for a certain time.
Display Dimmer (On/Off)	Turn display dimmer on or off. If turned on, the display is dimmed automatically 30 seconds after the last button push.
Factory Defaults (Yes/No)	Restores the appliance factory default settings.
Total Used (l)	Indicates the total amount of snow fluid used since first use of the machine.
Curr Use (l/min)	Indicates the current snow fluid consumption.
Cycle Used (l)	Indicates the total amount of snow fluid used since the cycle was reset.
Cycle Avg (l/min)	Indicates the average snow fluid consumption since the cycle was reset.
Cycle Reset (Yes/No)	When set to Yes, this resets the cycle numbers above.
Type (Alarm/Error)	Toggle between the occurred locking error (Alarm) list, and blocking error (Error) list. Locking errors need intervention by user, although they are "auto-reset" 3 times before the appliance remains in error until reset by user. Blocking errors clear when the triggering fault disappears. 16 locked, and 16 blocked errors are logged. Top of the list shows the last occurring error.
Serial Number (DDDDD)	Appliance serial number as also printed on the appliance label.
Unique ID (HHHHHHHHHH)	UID number as the appliance appears in the RDM device list after running discovery.
Software Version	Installed software version.
Software CRC	CRC of the functional software.
Bootloader CRC	CRC of the bootloader software.
Build Date	Release date of functional software.
Up-Time (DDDD:HH:MM:SS)	Time counter which indicates how long the appliance has been powered in total.
Effect-Time (DDDD:HH:MM:SS)	Time counter which indicates how long the effect has been activated in total.

1.9 RDM CAPABILITY

Remote Device Management Protocol (RDM) is an enhancement of the DMX512 communication protocol. RDM can be used for configuration and status monitoring while DMX512 takes care of the default controlling.

For RDM you will need a RDM compatible controller. The following RDM parameters are supported by the MAGICFX® SNOWCASE.

Parameter ID	Discovery	GET	SET
DISC_UNIQUE_BRANCH	X		
DISC_MUTE	X		
DISC_UN_MUTE	X		
DEVICE_INFO		X	
SUPPORTED_PARAMETERS		X	
SOFTWARE_VERSION_LABEL		X	
DEVICE_MODEL_DESCRIPTION		X	
MANUFACTURER_LABEL		X	
SLOT_DESCRIPTION		X	
SENSOR_DEFINITION		X	
SENSOR_VALUE		X	
DMX_START_ADDRESS		X	X
IDENTIFY_DEVICE		X	X
DEVICE_LABEL		X	X
FACTORY_DEFAULTS		X	X
RESET_DEVICE			X

RDM parameters

RDM parameters are subject of change due to software updates. Contact MAGIC FX for the latest information and updates.

2 SNOW SAFELY!

The MAGICFX® SNOWCASE has been designed and constructed in such a manner that it can be used safely. This applies to the use, the circumstances and the regulations as described in this documentation. Reading this documentation and following the instructions are therefore necessary for everyone who is authorised to work with the MAGICFX® SNOWCASE.

The MAGICFX® SNOWCASE must be used in surroundings that:

- Have a stable temperature of between 0 and 50 °C.
- Have a relative humidity degree between 20 % and 90 % (non condensing).
- Are free of dust, corrosive gases and high concentrations of organic vapours.
- Are not situated in the vicinity of a source of vibration.

2.1 GENERAL SAFETY RULES

- Only authorised persons may carry out work with the MAGICFX® SNOWCASE.
- Do not use the MAGICFX® SNOWCASE if there are people or animals in the direct output.
- Make sure there are no objects in the direct output that can be damaged by the MAGICFX® SNOWCASE (e.g. by getting wet).
- Make sure that children, unauthorised people and animals do not obtain access to the MAGICFX® SNOWCASE.
- Do not connect more units to a single electrical circuit than the installed fuse is able to handle. (Calculate the summed load with the electrical data from Chapter 1)
- Do not remove any safeguards, safety caps and safety symbols.
- All required safety devices must be in good condition and function properly.
- Ensure sufficient lighting of the surroundings.
- Keep the workplace clean.

2.2 INDOOR USE

The MAGICFX® SNOWCASE is designed for outdoor use and use in well-ventilated indoor spaces.

⚠ WARNING

Do not use the MAGICFX® SNOWCASE in poorly ventilated confined spaces. Exposure to high levels of MAGICFX® SNOWCASE - SNOW FLUID can cause skin and airway irritation.

2.3 RIGGING

Please follow the European and national guidelines for safe rigging and trussing.


2.4 NOISE LEVEL

The environmental noise level measured at 1 m from the nozzle of the product is 100 dB(A). The noise level measured surrounding the product is between 75 and 82 dB(A) with a hose. Without a hose, the noise level measured surrounding the product is between 72 and 78 dB(A). This level of noise is only reached during the short instances that the snow effect is active. Therefore hearing protection is not necessary.

⚠ WARNING

Do not operate the MAGICFX® SNOWCASE close to yourself or to others for a long period of time. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit.

2.5 SAFETY SYMBOLS

Symbol	Meaning	Position
	Read the manual carefully before use!	Front panel near the display

Safety symbols

2.6 PRECAUTIONS FOR OPERATION

⚠ WARNING

Using a damaged or an improper installed machine can lead to death, serious injury or property damage. Always inspect the machine thoroughly before operation.

⚠ WARNING

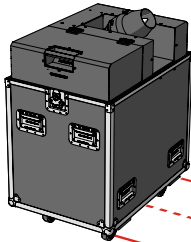
Missing or obscured safety symbols on the machine can lead to death, serious injury or property damage. Make sure all safety symbols are correctly in place and visible, see Section 2.4.

⚠ WARNING

Always follow the instructions as noted on the jerrycans.

⚠ WARNING

Always create a safety zone of 5 m in front of the MAGICFX® SNOWCASE when the snow comes directly from the snow output.



The floor can get slippery due to spilled snow fluid. A safety zone clear of objects is also necessary for an effective output.

⚠ CAUTION

Do not tip over the machine. This can damage the machine.

⚠ CAUTION

Remove the (snow fluid) jerrycan when transporting the MAGICFX® SNOWCASE. The jerrycan can tip over and spill fluid in the snow cabinet.

⚠ CAUTION

Walk carefully when approaching the machine. The floor can be slippery due to spilled snow fluids.

NOTICE

Transport the MAGICFX® SNOWCASE only on flat surfaces.

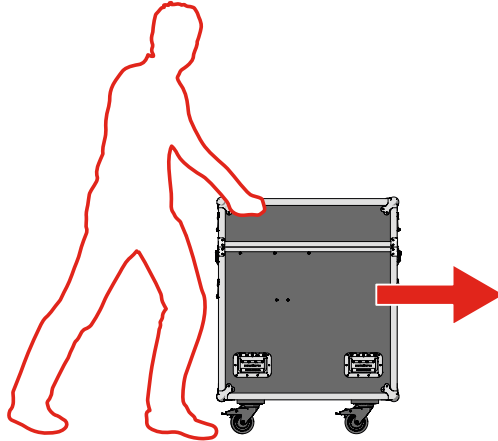
NOTICE

Do not use other fluids than those that are approved and supplied by MAGIC FX, see Section 1.4.

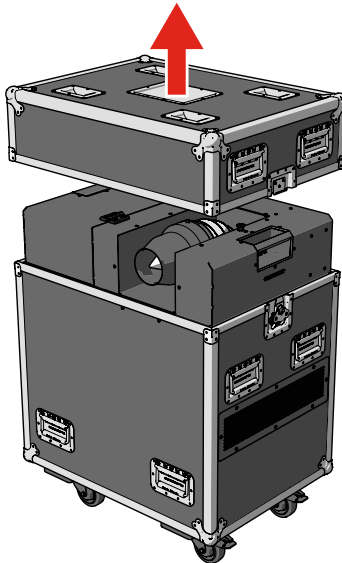
3 LET'S SNOW!

3.1 INSTALL THE MACHINE

- 1 Bring the MAGICFX® SNOWCASE to the desired location.

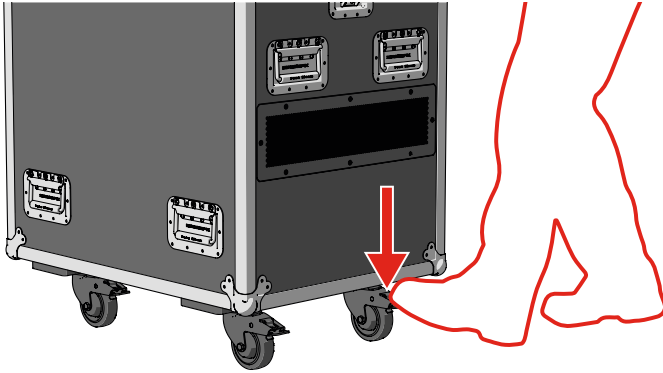


- 2 Unlock and remove the top cover.



3 Take the necessary safety precautions, see Section 2.5.

4 Place the MAGICFX® SNOWCASE in its final position and set the brakes.



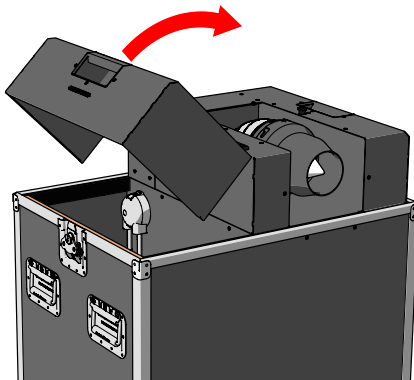
3.2 (RE)PLACE THE JERRYCAN WITH SNOW FLUID

⚠ WARNING

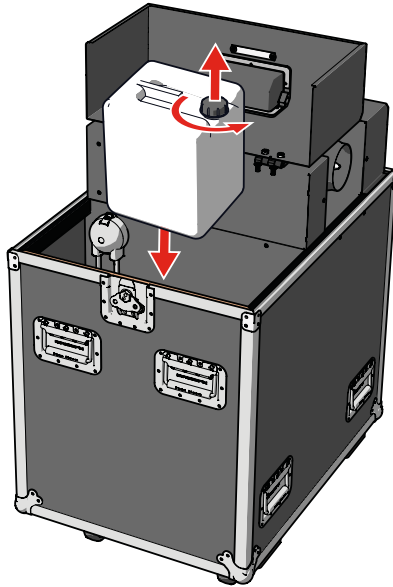
Always follow the instructions as noted on the jerrycans.

1 Make sure that the machine is not in operation (FX LED indicator is dimmed).

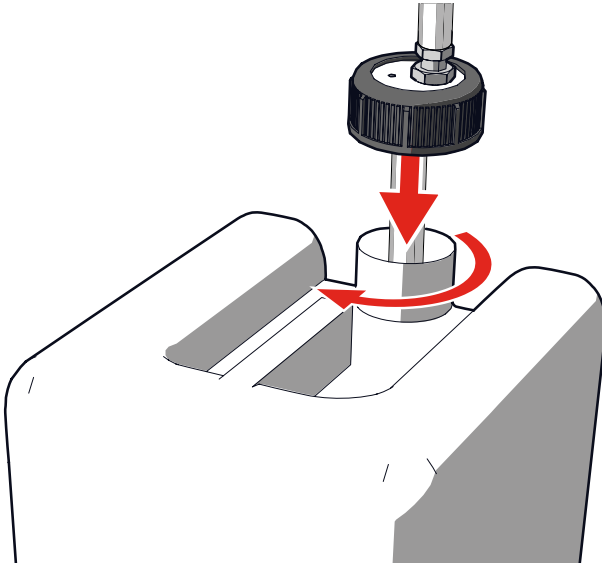
2 Open the snow cabinet lid. Disconnect and remove an empty jerrycan if present.



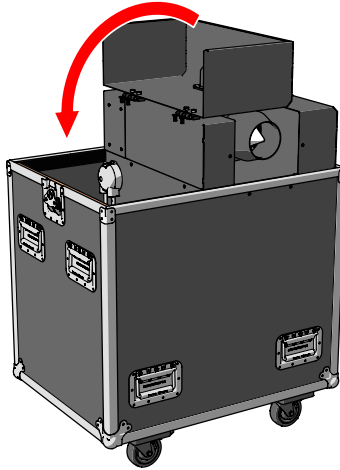
-
- 3** Place a jerrycan with snow fluid in the snow cabinet and remove and save the lid.



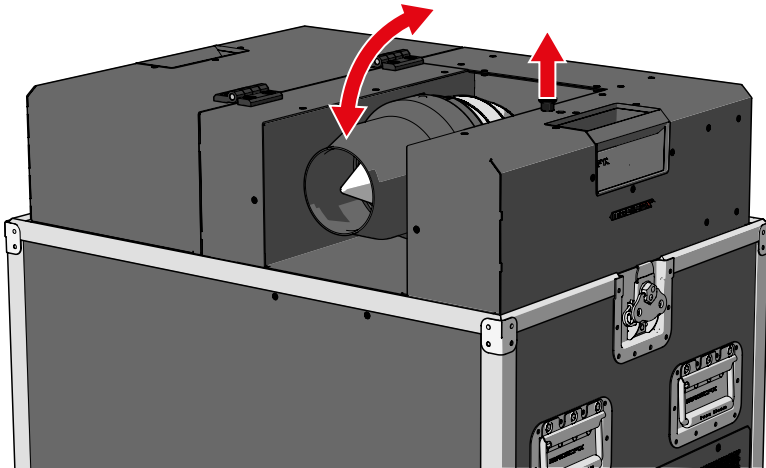
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- 4** Connect the snow lid inside the cabinet.



-
- 5 Close the snow cabinet lid.



-
- 6 Pull the angle pin to adjust the angle of the snow head.



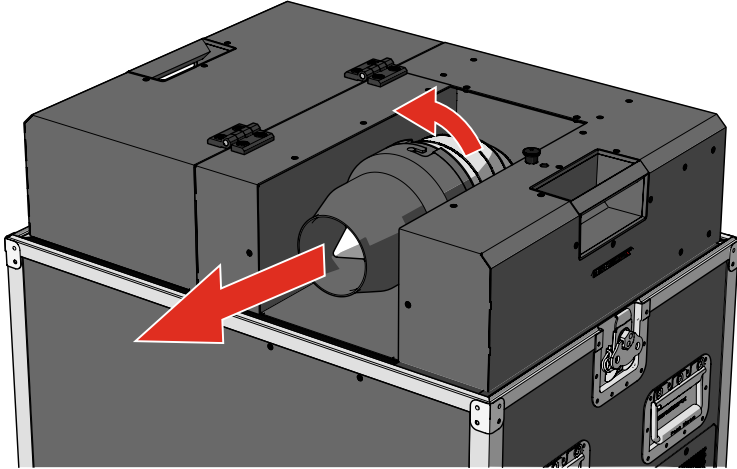
-
- 7 Let go of the angle pin when satisfied with the angle.

-
- 8 In case of multiple machines: Repeat steps 1 – 7 for each machine.

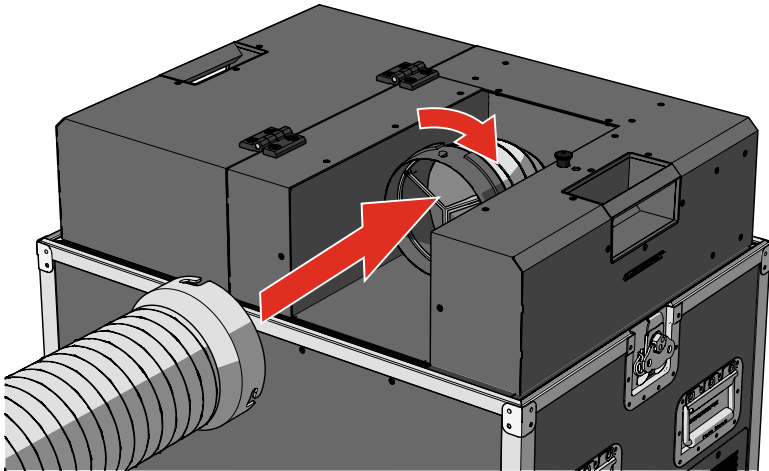
3.3 MOUNT THE TRUSS BRACKET AND HOSE

1 Make sure that the machine is not in operation (FX LED indicator is dimmed).

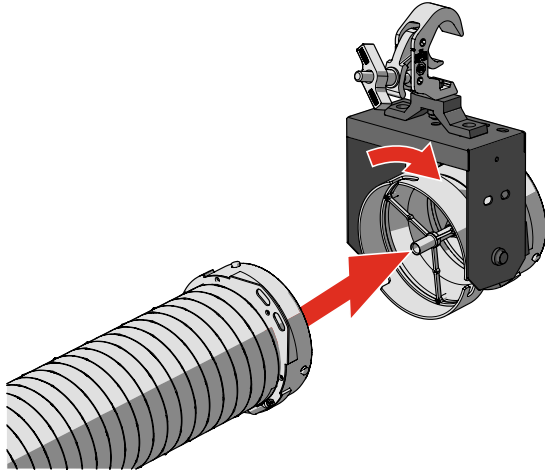
2 Disconnect the snow head.



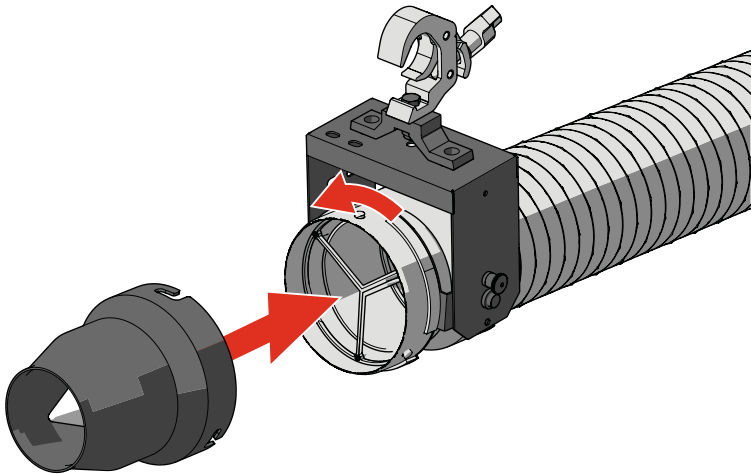
3 Connect the hose to the MAGICFX® SNOWCASE.



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- 4 Connect the other end of the hose to the truss bracket.

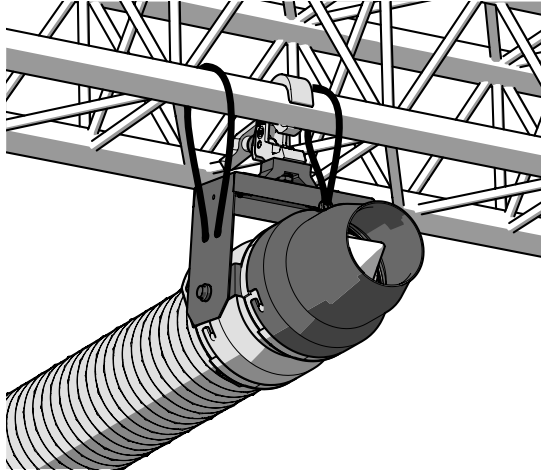


- 5 Attach the snow head to the other end of the truss bracket.



-
- 6** Hang the truss bracket and secure it properly.

Make sure to use the safety steel to secure the truss bracket and snow head to the truss. The safety steel can be attached to the two oval holes located on the side of the truss bracket. The safety steel of the snow head can be attached to the eye located on the top of the snow head.



-
- 7** Inspect the machine and remove any foreign objects and material that will block or obscure the output nozzle or the air inlets of the machine during operation.

-
- 8** Take the necessary safety precautions, including:
- a) Making sure that the direct output will be free from persons and animals.
 - b) Making sure there are no objects near the machine and within the output distance that can be damaged by the emitted snow of the MAGICFX® SNOWCASE.

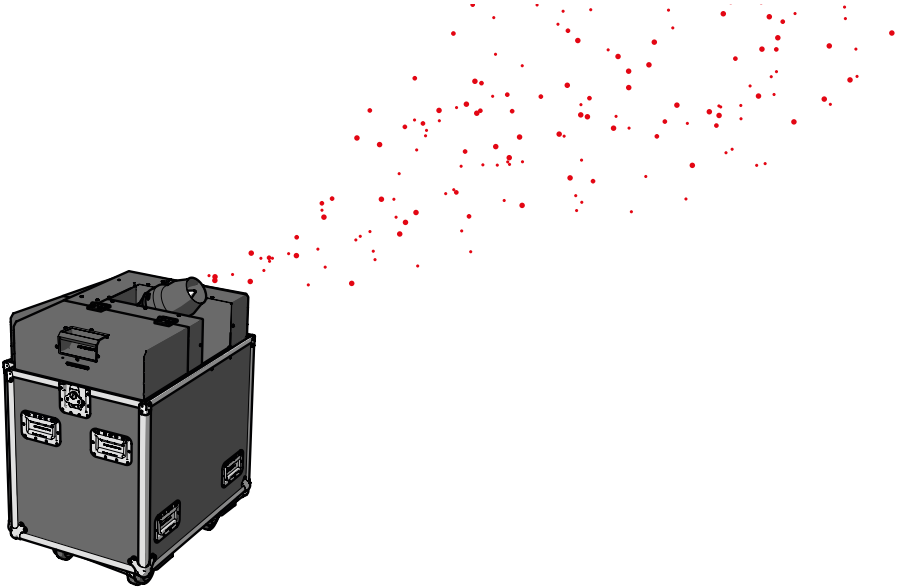
-
- 9** In case of multiple machines: Repeat steps 1 – 5 for each machine.
-

3.4 CONFIGURE MANUAL MODE

1. Switch the machine ON (If Manual mode is ON, the machine starts blowing instantly).
2. Use the display and buttons to create the desired output in Manual mode, see Chapter 1.
3. Make sure that Manual mode is ON.
4. Please note that the manual mode settings will be retained even after turning off and on again. This includes Manual mode OFF/ON.

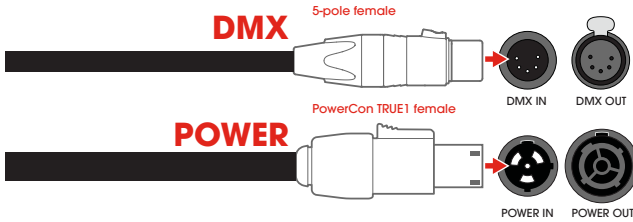
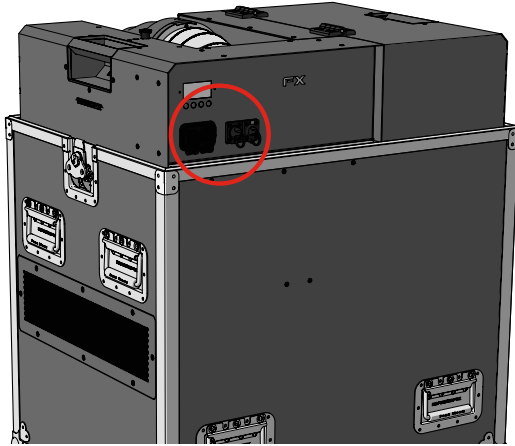
3.5 SNOW IN MANUAL MODE

1. Make sure that the prescribed safety zone is clear.
 2. When it's time to snow, switch the machine ON.
 3. Enjoy the view!
-



-
4. To stop blowing snow:
 - Set Manual mode to OFF, or;
 - Switch the machine OFF.

3.6 CONNECT POWER AND SETUP DMX

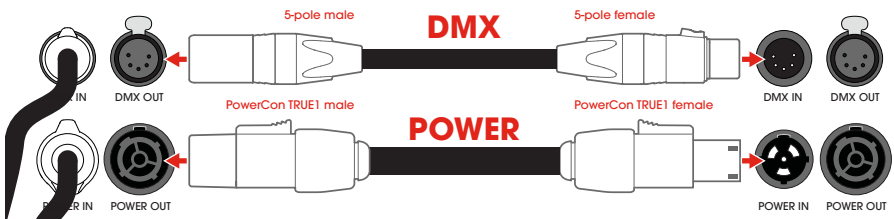
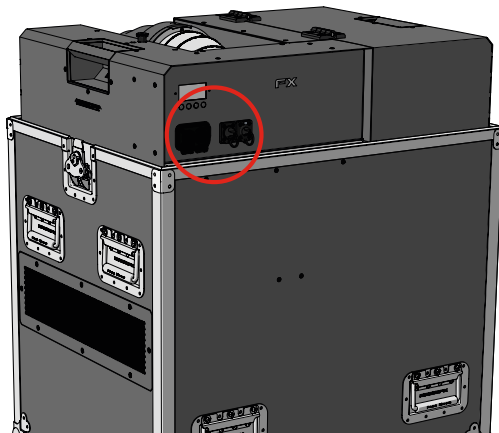


1. Connect a power cable with a Powercon TRUE1 Female connector to the power input.
2. Connect the other end of the power cable to a 210 - 240 Vac (50 - 60 Hz) power source.
3. Connect the female connector of a 5-pole DMX cable in the DMX input.
4. Connect the other end of the DMX cable to your DMX controller.
5. Power up the machine (If Manual mode is ON, the machine starts snowing instantly).
6. Make sure that in the menu Manual mode is OFF, see Section 1.7.
7. Use the display and buttons or a RDM controller to assign DMX addresses, see Chapter 1.
8. Optionally see Section 3.7 for adding more machines to the same sequence.

⚠ CAUTION

Always plug in a DMX Terminator into the DMX output. Using a DMX Terminator improves signal reliability.

3.7 SETUP MULTIPLE MACHINES IN A SEQUENCE WITH DMX



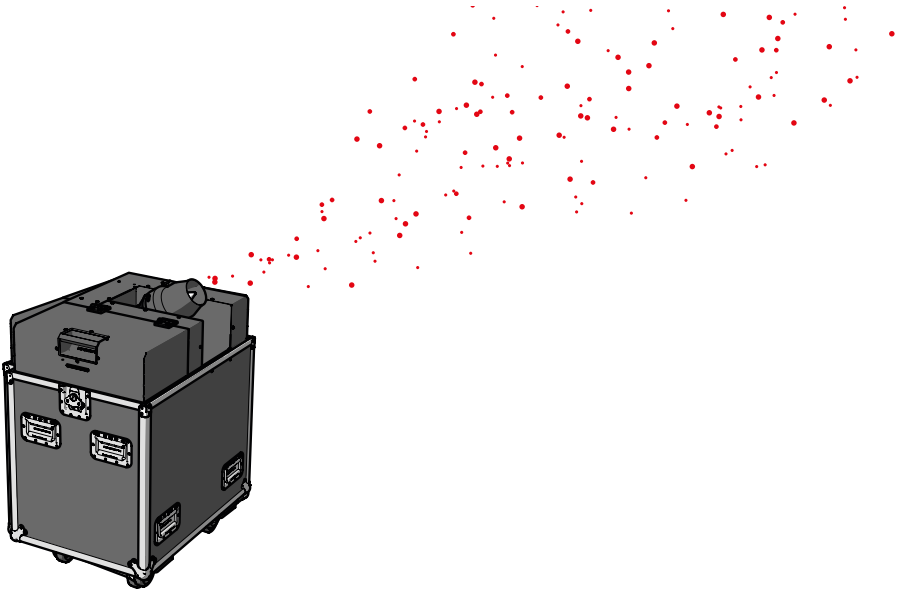
1. Connect a power link cable to the power output.
2. Connect the other end to the power input of the next machine.
3. Connect a DMX cable to the DMX output.
4. Connect the other end to the DMX input of the next machine.
5. Power up the machine (If Manual mode is ON, the machine starts snowing instantly).
6. Make sure that in the menu Manual mode is OFF, see Section 1.7.
7. Use the buttons or a RDM controller to assign DMX addresses, see Chapter 1.
8. Repeat step 1 - 5 for each subsequent machine.

⚠ CAUTION

Always plug in a DMX Terminator into the DMX output of the final unit in the control sequence. Using a DMX Terminator improves signal reliability.

3.8 SNOW WITH DMX

1. Make sure that the prescribed safety zone is clear.
 2. Activate the DMX safety address. The FX LED indicator on the machine lights up.
 3. Choose the desired reach by setting the effect distance anywhere from 0 to 255.
 4. Activate the effect by setting the DMX value for the effect density anywhere between 10 and 255.
 5. Vary the effect reach and density during the effect duration, if desired.
 6. Enjoy the view!
-



7. To deactivate, change the DMX value of the effect density to a value below 10, then deactivate the safety address. The FX LED indicator on each machine dims.

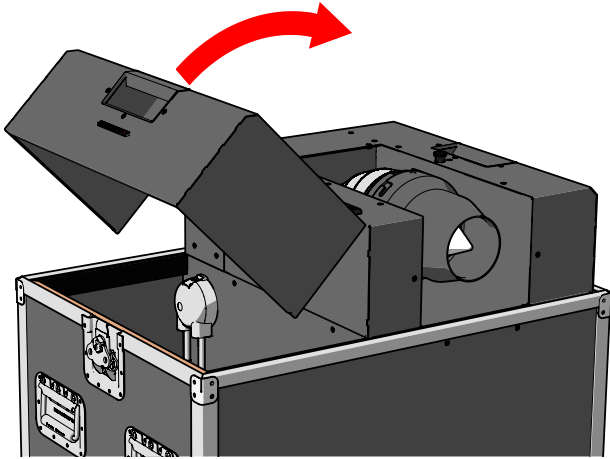
3.9 CLEAN UP

⚠ CAUTION

Walk carefully when approaching the machine. The floor can be slippery due to spilled snow fluids.

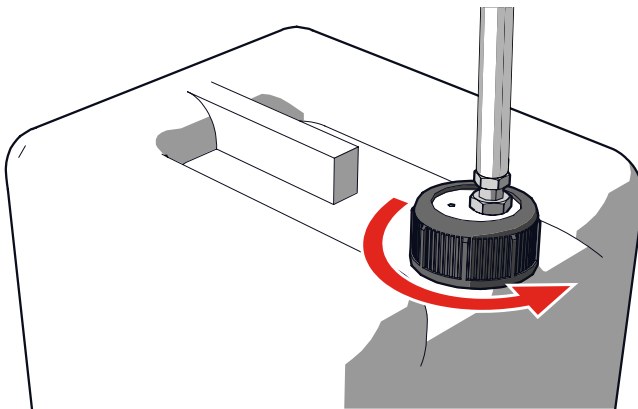
- 1 When finished, extract the snow fluid from the hose. To do so, set the value for safety address between 201 and 255, or start the Extract Fluid programme via the display. This function will stop automatically after a certain time.
-

-
- 2** Open the snow cabinet lid.



-
- 3** Disconnect the snow lid from the jerrycan.

First place lid, then remove the jerrycan with snow fluid and close off with the original lid.



-
- 4** Disconnect all DMX and power cable(s).

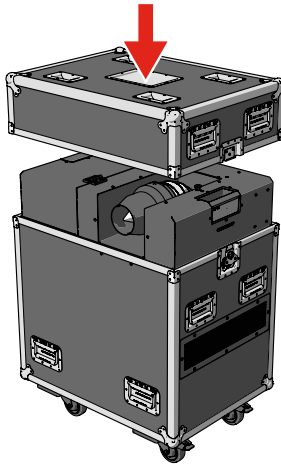
-
- 5** Disconnect and remove the hose if used.
-

6 Wipe down the machine with hand warm water and a cloth.

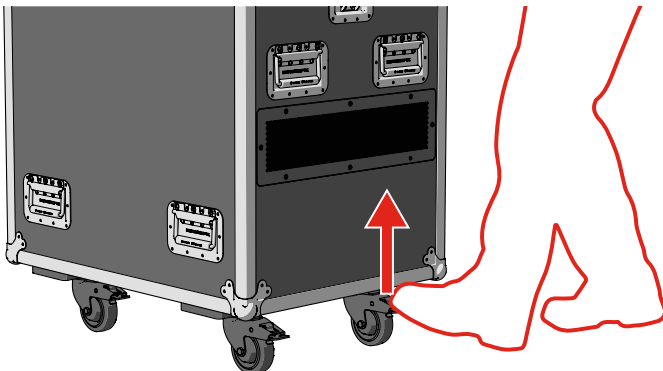
7 Clean the floor in front of the machine.

8 Place and lock the top cover.

Make sure the nozzle is in the most horizontal position before placing and locking the top cover.



9 Release the brakes.



4 MAINTENANCE

To achieve the maximum service life of the MAGICFX® SNOWCASE you must regularly clean the MAGICFX® SNOWCASE and test if it is functioning correctly.

Contact MAGIC FX if the MAGICFX® SNOWCASE is not functioning correctly.

⚠ DANGER

Do not replace parts yourself; always consult MAGIC FX.

5 TROUBLESHOOTING

Always contact MAGIC FX if any malfunctions or errors occur that cannot be solved with the instructions as described in this manual.

6 CORRECT DISPOSAL



This symbol on the product and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product to designated collection points where it will be accepted free of charge.

Alternatively, in some countries you may be able to return your products to your local retailer upon purchase of an equivalent new product.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

7 EC DECLARATION OF CONFORMITY

According to Annex III A Low Voltage Directive 2014/35/EU

MAGIC FX B.V. declares as manufacturer and composer of the technical construction file that the product with the following specifications:

Name machine : SNOWCASE
Type : MFX1701
Voltage : 210-240 Vac 50-60 Hz
Serial number : on product
Year of construction : on product

Is in conformity with the minimal safety regulations as stated in the following directive(s):

- LVD (2014/35/EU) Low Voltage Directive
- EMC (2014/30/EC) ElectroMagnetic Compatibility
- RoHS (2011/65/EU) Restriction of the use of certain Hazardous Substances
- WEEE (2012/19/EU) Waste Electrical & Electronic Equipment
- REACH (1907/2006) Registration, Evaluation, Authorisation and Restriction of Chemicals

The following harmonized standards were applied:

- NEN-EN-ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction.
- NEN-EN-IEC 60204-1:2018, Safety of machinery - Electrical equipment of machines - Part 1: General requirements
- NEN-EN-IEC 61000-6-3:2007/A1:2011/C11:2012, Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.

- Original declaration of conformity
 Translation of the original declaration of conformity

Name manufacturer : MAGIC FX BV
Address : Schouwrooij 27, 5281 RE BOXTEL
Country : The Netherlands

CEO : B. Veroude
Date : 10-10-2019

Signature :



MAG:CFX[®]

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