MAGICFX® STAGE FLAME

1.1 CHOICE OF FLAME

The following types of flames are possible (at a normal ambient temperature of 20°):

- AEROSOL CAN: Flame height approximately three meters high
- GAS BOTTLE: Flame height approximately three to four meters high
- BIG-FLAME (AEROSOL CAN + GAS BOTTLE): Flame height approximately six meters high

MODE	FLAME HEIGHT	MINIMUM CLEARANCE HEIGHT
AEROSOL CAN	 **3M**	**6M**
GAS BOTTLE	 **4M**	**7M**
BIG-FLAME (AEROSOL CAN + GAS BOTTLE)	 **6M**	**10M**

Table 1.2

	**DANGER WARNING:** **As the ambient temperature increases so does the gas pressure and that leads to a higher flame.**
	**DANGER WARNING:** **An invisible hot vapor is created above the flame. At all times, ensure that the minimum clearance height is kept clear when the Stage Flame can be activated.**

2. SAFETY

2.1 INTRODUCTION

The Stage Flame is designed and constructed so that it can be used in a safe manner. Specifically, this refers to the usage, situations, and prescriptions for the device as described in this documentation. It is the responsibility of all persons authorized to use the Stage Flame to read and follow the instructions in this manual.

The Stage Flame should be located and used in an environment that preferably:

- Has a fairly constant temperature between 0 and 30ºC.
- Has a relative humidity not exceeding a maximum of 75%.
- Is reasonably free of dust, corrosive gases, and high concentrations of organic vapors.
- Does not contain any source of vibrations in the environment.

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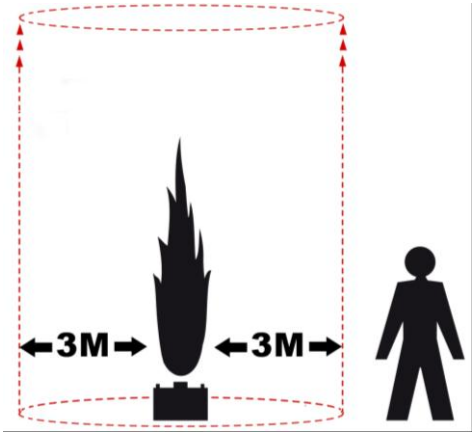
2.2 GENERAL SAFETY RULES



- The Stage Flame should only be used when there are no people, animals, or inflammable objects within the danger zone. The danger zone is the cylindrical space around the device with a radius of three meters. See also the red shading in Figure 3 (not drawn to scale).
- Ensure that the Stage Flame is not accessible to children, unauthorized persons, or animals!
- Do not touch the Stage Flame when it is operational or turned on. Even if the device is not in operation it might be ready to activate.
- Safety devices must not be removed or rendered inoperative.
- All required safety devices should be in good working order and functioning properly.
- Ensure that there is adequate lighting in the environment.
- Keep the workplace clean.
- Only authorized persons may work with the Stage Flame.
- It not permitted to use the Stage Flame in an environment containing flammable gases or fluids.
- Always ask the fire brigade for permission to use the Stage Flame at the desired location.

2.3 EMERGENCY STOP BUTTON

The Stage Flame is equipped with an emergency stop button (MFX1201) in case of emergencies. The Emergency Stop Button has the following characteristics:

- The emergency button is easy to recognize because of its red/yellow colors and should be positioned so that it can be reached easily and quickly.
- Pressing the emergency stop button immediately stops the Stage Flame. The emergency stop button remains mechanically blocked and the device cannot be restarted.

In the event of personal injury, immediate assistance can be given straight away. Any other emergency procedures should also be carried out as soon as possible.
The Stage Flame can be reset after the danger is entirely eliminated.

The emergency stop button also can be used if there is a sudden danger such as a malfunction. Such a situation does not require urgent action. The device can be simply turned off.
Further safety measures may be required depending on the nature of how the device will be used. See the relevant prescriptions.

Recommendations:

- Have new operators practice several times with the emergency stop button.
- Do not use the emergency stop button to stop the device in normal circumstances.
- Regularly test that it is working properly.
- An emergency stop button should not be reset when it is not known who or why it was used.

2.4 WARNINGS

There are several warnings displayed on the Stage Flame to which the following restrictions apply:

- The text must not be removed or otherwise spoilt. The operator should regularly check that the warnings are in good condition.
- The operator must ensure that the text is always visible and legible and that it remains so.

	**DANGER WARNING:** **Any missing, spoilt, or illegible text or icons must be replaced.**

The icons used are shown below:

Icons	Explanation
 PIC 616 Observe directions for use	Make the operator aware that they may only use the device after they have read the user manual. This warning is indicated with this instruction icon.

Icons	Explanation
 PIC 307 Hazardous voltage	This warning icon indicates the presence of dangerous live voltage.

Icons	Explanation

 PIC 315 Hot surface	A warning for danger from a hot surface must be indicated using the PIC 315 icon. This is located on the top of the Stage Flame.

Icons	Explanation
 PIC 300 Combustible substances	A warning for danger for fire must be indicated using the PIC 300 icon. This is located on the top of the Stage Flame.

2.5 FEATURES

The Stage Flame has many safety features. One of these features checks whether the Stage Flame is moved, tilted, or was given a massive jolt.
In these cases, the Stage Flame automatically stops and it will not be possible to create flames.

If the Stage Flame experiences a failure or is moved then the message “error press reset” will appear on the display window.

The Stage Flame can be made ready for use again by pressing and holding the reset button for three seconds.

3. READYING FOR USE

	CAUTION: **This indicates that the equipment may be damaged if procedures are not carried out in the proper manner.**
	DANGER WARNING: **The MAGICFX® Stage Flame may only be worked on by authorised adults.**

Prepare the Stage Flame for use as follows:

1.

Place the Stage Flame on a flat, solid, and stable surface.

For indoor use with aerosol cans, the minimum clearance height above the Stage Flame is six meters. For indoor use with gas bottles, the minimum clearance height is seven meters.
For Big Flame mode, the minimum clearance height is at least ten meters.

2.

Ensure the Power button is set to “off”. Connect the power cable. The Stage Flame runs on 230V~ 50/60Hz. You will need a powerCON plug to be able to connect the Stage Flame to the power supply. The Stage Flame is delivered with a powerCON looping cable. it You can use the powerCON looping cable to connect multiple Stage Flame devices up to the same power source.

3.

Connect a 3-pole DMX cable to the Stage Flame.

Optionally, you can link multiple Stage Flames together using 3-pole DMX cables.

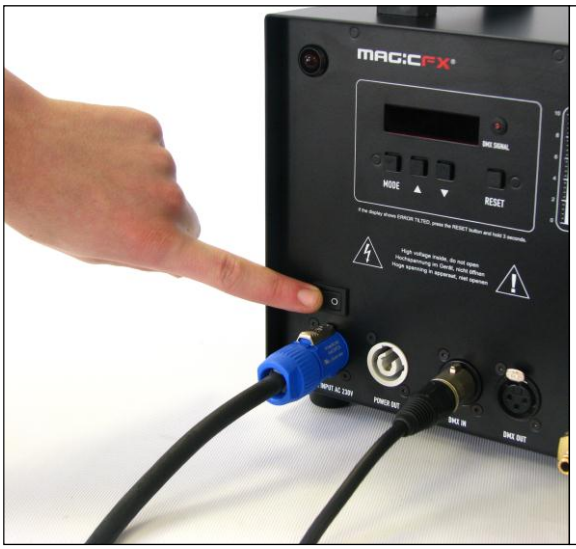
4.

Connect the other end of the DMX cable (male plug) to a Professional DMX Controller.

Ensure that the controller is placed so that the operator always has a complete view of all the connected Stage Flames.

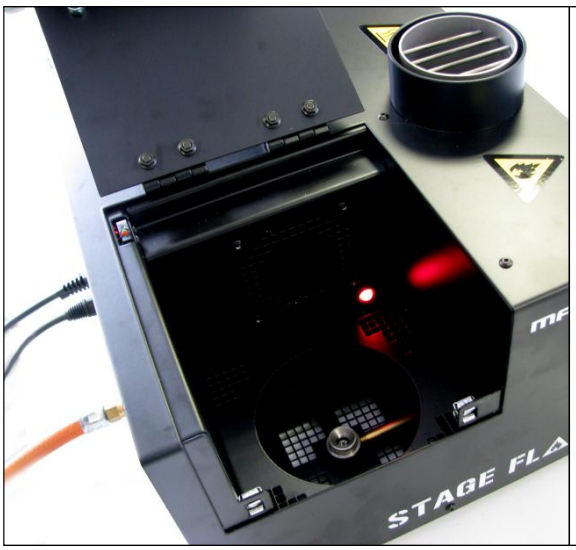
Consult the DMX controller manual for usage and safety instructions.

5.



Set the Stage Flame power button to "on".

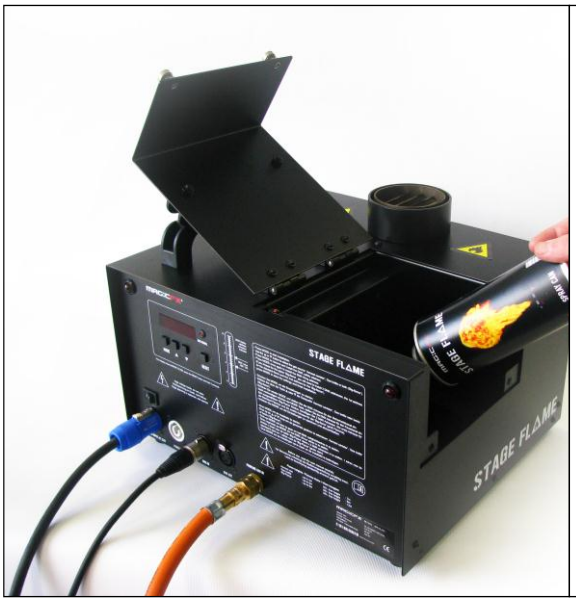
6.



If you are going to use an aerosol can then open the cover of the Stage Flame.

The Stage Flame indicates that the door is open and automatically disables itself for use. In addition, a LED light will turn on making it possible to see in places that would otherwise be dark in the Stage Flame.

7.



The aerosol cans are described elsewhere in this manual.
Screw the aerosol can into the holder until it is securely locked in place. Ensure that it is securely in place.

Only replace an aerosol can during a show when the Stage Flame is set to "safe mode".

Consult the DMX settings to see how the Stage Flame can be put into "safe mode".

8.

The temperature will rise after the Stage Flame has been is use for a period of time. So always let the Stage Flame cool off before replacing the aerosol can. Always remember that escaping gas can ignite at high temperatures.

After you have inserted/replaced the aerosol can, shut the cover of the Stage Flame and secure the fasteners on the side.

9.

If you use a gas bottle, ensure that it is located on a safe flat surface beyond the reach of other heat sources.
Fit the reducer onto the gas bottle.

Use the appropriate spanner to connect the reducer and ensure that no gas can escape.

Ensure that the gas bottle cannot topple. This would allow liquid gas to enter the Stage Flame.

10.

Connect a quick release propane hose to the reducer. All propane hoses in our selection come standardly equipped with quick release connectors.

11.

Flame height can also be controlled by adjusting the reducer. The bolt on top of the reducer should be turned to the maximum extent to allow for the greatest flow.

We recommend turning the bolt to the maximum opening to get the best results. The reducer must never be used without a bolt on the reducer. So never unscrew the bolt completely.

12.

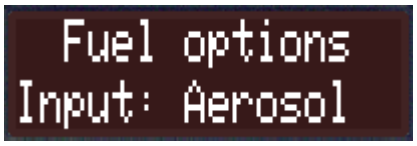
Attach the other quick release connector of the propane hose to the Stage Flame.

13.

The Stage Flame settings should be selected only after all the connections are completed and the gas bottle and/or aerosol can is installed.

When readying the device, ensure that free channels are used on the DMX controller and that these channels are in safe mode. Safe mode means that those channels are set to a value of zero when readying the Stage Flame. Consult the DMX controller manual for instructions on changing its settings.

14.



Press the MENU button so you can change settings for the Stage Flame.

The Stage Flame has three different options for creating flames. These options are dependent on the gas sources you choose to use.
The three options are:
Option 1 – Aerosol can
Option 2 – Propane cylinder
Option 3 – Big Flame (aerosol can and gas bottle)

You select the desired option by using the UP and DOWN buttons.

15.

Press MENU again to save your selection. Now the DMX addresses need to be entered. First, the "safety" address needs to be set. You select the channel by using the UP and DOWN buttons. Press the MENU button to save the setting.

When using multiple Stage Flames, we recommend that you use the same "safety" channel for all of the devices.

16.

After you have set the “safety” channel, you can set the “fire” channel. You select the channel by using the UP and DOWN buttons. If you have selected the “Big Flame” option then you must set two channels in this step. You can set the “small” flame and the “big” flame. Press the MENU button to save each setting.

You may select separate “fire” channels for each Stage Flame that you have connected. This allows you to put some variety into your show.

17.

At this point, you have completed all the steps to ready the DMX so you must now save the settings. Press the MENU button and the message “options saved” will appear in the window.

If you selected the “Big Flame” option then you should have also connected both an aerosol can and a gas bottle.

4. USAGE

	**TIP:** **This provides you with suggestions and advice on how to perform tasks in an easier or more convenient way.**
	**CAUTION:** **This indicates that the equipment may be damaged if procedures are not carried out in the proper manner.**
	**DANGER WARNING:** **The MAGICFX® Stage Flame may only be operated by authorised adults.** **The Stage Flame may only be operated if all parts are entire and in good working order and properly connected/installed.**

Operate the Stage Flame as follows:

1.

After you have readied the Stage Flame and set the DMX addresses properly, you are clear to operate the Stage Flame.

You previously set a "safety" channel for the Stage Flame so that the device should still be in safety mode. You now take it out of safety mode by setting the channel to between 40% and 60%.

The Stage Flame now counts down for three seconds while it checks the system and activates itself for use.

The LED lighting on the back of the Stage Flame will start blinking in turn.

2.

Press the flash button for the selected "fire" channel on the DMX controller. A flame should now be emitted from the Stage Flame.

Before you shoot flames, always check that there are no persons in the area near the Stage Flame. Ensure that you have a full view of the Stage Flame when it is flaming.

Consult the DMX controller manual for instructions on how to operate it properly.

3.

After you have used the Stage Flame, you must set it to safety mode again. You put the Stage Flame in safety mode by sliding shut the safety channel or setting it to a value outside the 40% to 60% range.

The Stage Flame cannot be used when it is in safety mode.

5. TURNING OFF

Turn off the Stage Flame as follows:

1.

Ensure that the DMX addresses are set to safety mode.

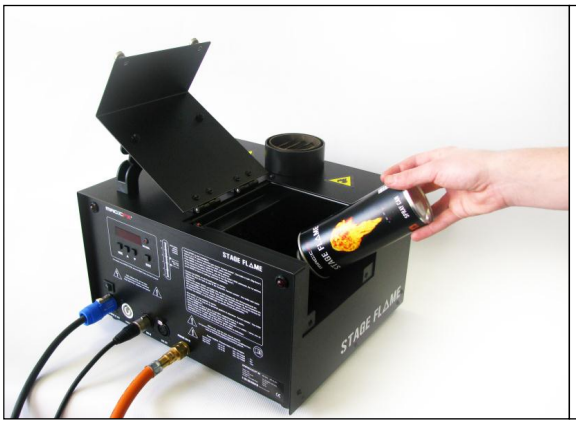
2.

Turn off the Stage Flame power button and disconnect the powerCON cable and DMX plugs.

3.

If a gas bottle was used then this must be shut off first before you disconnect the gas hose.

4.



Wait fifteen minutes until the Stage Flame is cooled off before you remove the aerosol can and pack up the Stage Flame.

6. TECHNICAL SPECIFICATIONS

Dimensions and weight	Length:	360mm (14.2”)
	Breadth:	310mm (12.2”)
	Height:	210mm (8.3”)
	Weight:	11.5 Kg (23.4lbs.)
Power	Input:	AC 230V~50-60Hz
	Consumption:	100W (idle)
	Fuse:	1A 250V 5x20mm
DMX	Input:	3 pin Neutrik XLR Male Socket
	Output:	3 pin Neutrik XLR Female Socket