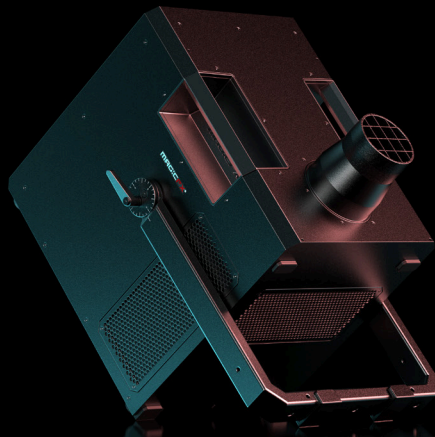


USER AND INSTALLATION MANUAL

MAG:CFX®

ENGLISH

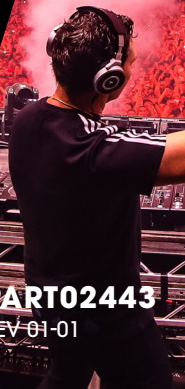
/ECO2JET® Bracket



CE ACCESSORIES

PART02443

REV 01-01



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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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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INTRODUCTION

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).

TARGET GROUP

This manual is targeted at authorised personnel in the event industry that install and operate the ECO2JET® Bracket.

Authorised personnel are those who:

- Are appointed by their supervisor to install and/or operate the ECO2JET® Bracket.
- Are trained in recognizing and avoiding hazards related to SFX applications at events.
- Are familiar with and abide by the applicable local, national and international laws and regulations.

LANGUAGE

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

ABBREVIATIONS

Abbreviation	Description
SFX	Special effects
ECO2JET®	MAGICFX® ECO2JET®
ECO2JET® Bracket	MAGICFX® ECO2JET® Bracket

Abbreviations

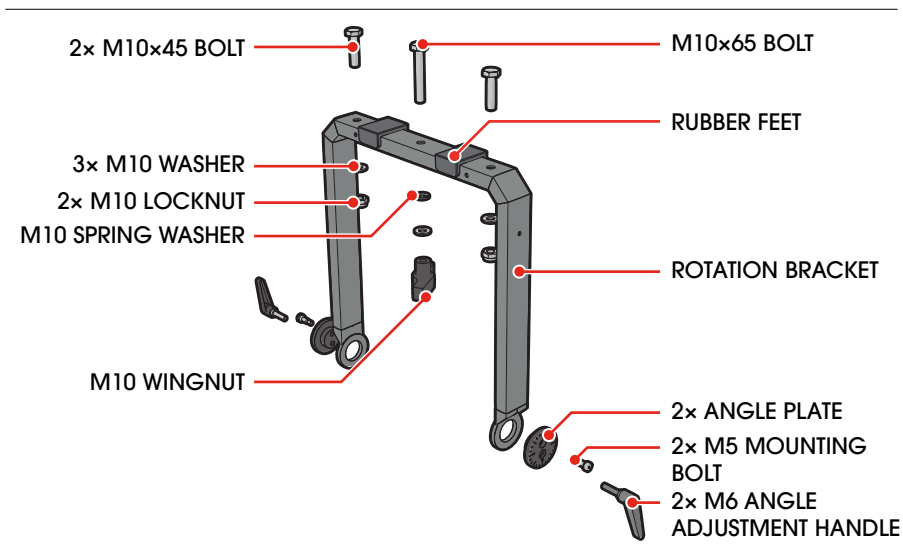
REVISION TABLE

Doc nr	Revision	Date	Description	Author	Approved
PART02443	01-00	19-03-2024	Initial release	MBO	RD
PART02443	01-01	02-05-2024	Added rigging notice Updated product label Updated DoC	MBO	NvdE

1. DESCRIPTION

The ECO2JET® Bracket is an accessory that is designed for the ECO2JET®. With the ECO2JET® Bracket it is possible to hang the ECO2JET® below a truss in different angles and positions. The ECO2JET® Bracket can also be used as a stand to place the ECO2JET® on a floor or stage.

1.1. MAIN PARTS



Main parts

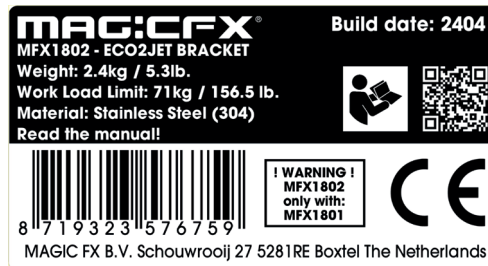
The ECO2JET® Bracket has additional holes that can be used to securely mount the ECO2JET® in a fixed position using screws.

1.2. TECHNICAL DATA

Product	Product Name	ECO2JET® Bracket	
	Product Code	MFX1802	
	Product Type	Accessories	
Main Dimensions	Length	365 mm	14.4 in
	Width	335 mm	13.2 in
	Height	50 mm	2 in
Weight	Empty Weight	2.4 kg	5.3 lbs
Work Load Limit	WLL	71 kg	156.5 lbs
Environment	Minimum Temperature	- 20 °C	- 4 °F
	Maximum Temperature	50 °C	122 °F
	Humidity (Relative)	20 to 90 % (non-condensing)	

Technical data

1.3. PRODUCT IDENTIFICATION



Type plate

1.4. ACCESSORIES

Code	Product	Included
MFX3104	Doughty Quick Trigger Clamp (100 kg) M10	
MFX3106	Doughty Half Coupler (100 kg) M10	

Accessories

Please contact MAGIC FX for additional possibilities.

For information about the accessories of the ECO2JET® (MFX1801), refer to the ECO2JET® User and Installation Manual (PART02302).

2. SAFETY

The ECO2JET® Bracket 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 ECO2JET® Bracket.

The ECO2JET® Bracket must be used in surroundings that:

- Have a reasonably stable temperature of between -20 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 free of chlorine fumes.
- Are not situated in the vicinity of a source of vibration.

2.1. GENERAL SAFETY RULES

- Only authorised persons may work with the ECO2JET® Bracket.
- Do not use the ECO2JET® Bracket if alterations have been made other than by or on behalf of MAGIC FX.
- The ECO2JET® Bracket may not be used when damaged or if it has fallen before.
- The ECO2JET® Bracket needs to be inspected by qualified personnel before use.
- Make sure that children, unauthorised people and animals do not obtain access to the ECO2JET® Bracket.
- Do not remove or bypass any safeguards 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 & OUTDOOR USE

The ECO2JET® Bracket is designed for outdoor use and use in well-ventilated indoor spaces.

The ECO2JET® Bracket can withstand rain.

2.3. RIGGING

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


⚠ WARNING

MAGIC FX is not responsible for any rigging equipment and accessories provided by third party manufacturers. Verify that the Work Load Limit (WLL) of all additional hardware rigging accessories is respected.

NOTICE

In compliance with Machinery Directive 2006/42/EG, our product incorporates a safety factor of 7 against rupture. This factor is crucial for applications involving machinery used above people, ensuring enhanced safety for users and bystanders.

2.4. SAFETY SYMBOLS

Symbol	Meaning	Position
	Read the manual carefully before use!	Inside of the bracket

Safety symbols

2.5. SAFETY WARNINGS

⚠ WARNING

Using a damaged or an improper installed ECO2JET® Bracket can lead to death, serious injury or property damage. Always inspect the ECO2JET® Bracket thoroughly before operation.

⚠ WARNING

Do not use the ECO2JET® Bracket if alterations have been made other than by or on behalf of MAGIC FX.

⚠ WARNING

The ECO2JET® Bracket is specifically designed for the ECO2JET®. Do not use the ECO2JET® Bracket with other equipment than the ECO2JET®.

⚠ WARNING

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

⚠ WARNING

A poorly mounted machine may come loose when the machine is operated. This can lead to death, serious injury and/or property damage. Always inspect if the machine is mounted firmly and correctly as according to the instructions in this manual.

⚠ CAUTION

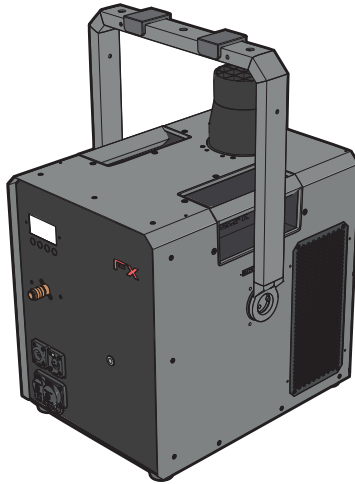
MAGIC FX does not assume responsibility for hanging the ECO2JET® using only the additional 5mm holes. These holes are designed solely to enhance stability and should not be relied upon as the primary method of support and or hanging.

3. INSTALLATION AND USE

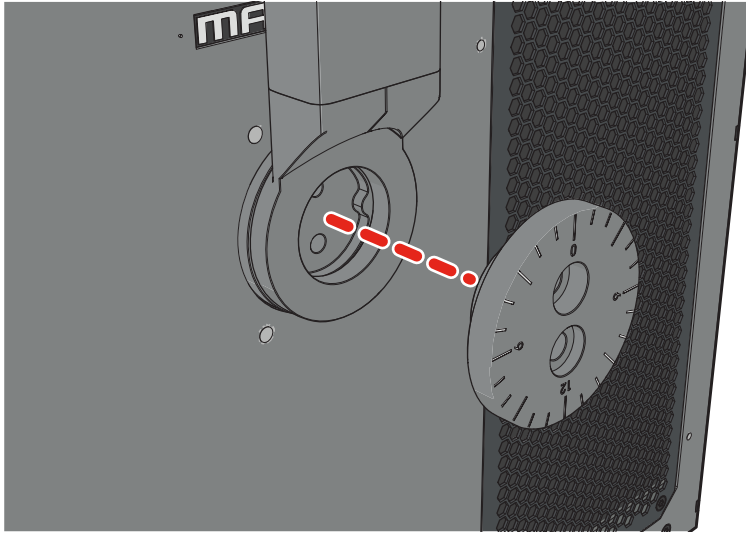
When the ECO2JET® will be used under a certain angle it is highly recommended to use the ECO2JET® Bracket. Mount the ECO2JET® Bracket to the ECO2JET® using the supplied fasteners and fix the ECO2JET® Bracket to a truss using the proposed truss clamps.

3.1. MOUNT THE ECO2JET® BRACKET

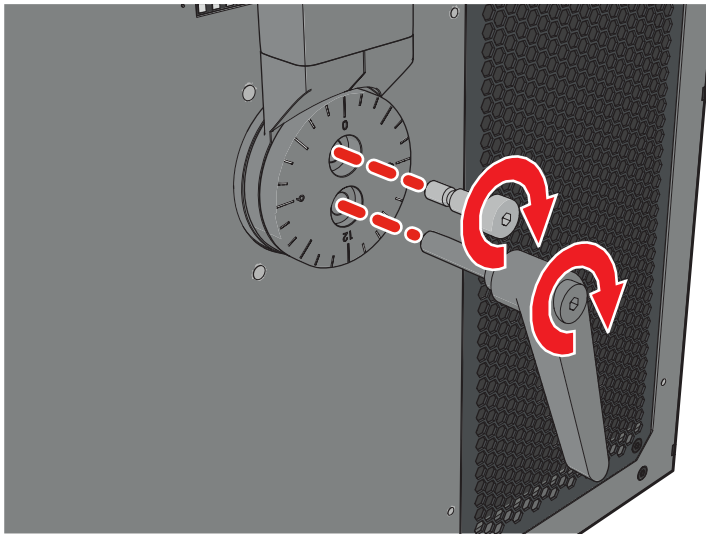
1. Hold the ECO2JET® Bracket in place in vertical position.
-



2. Place the angle plate over the bracket with the hole corresponding with the notch on the ECO2JET®.

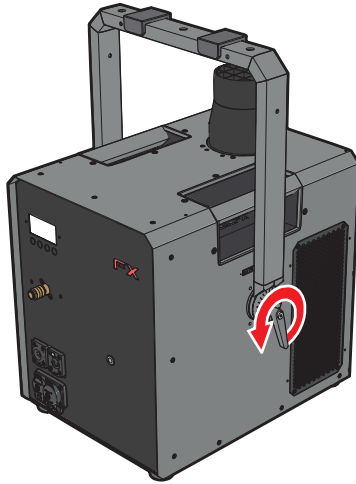


3. Insert the M5 mounting bolt and the M6 angle adjustment handle.

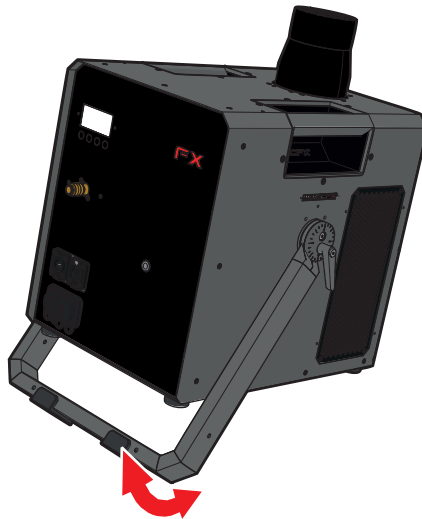


3.2. INSTALL ON STAGE

1. Loosen the angle adjustment handle.
-



2. Move the loose ECO2JET® Bracket to acquire the desired angle of the ECO2JET®.
-



NOTICE

With a clamp and a wingnut attached, the ECO2JET® Bracket can not be rotated over the ECO2JET® nozzle.

NOTICE

The rubber feet prevent the ECO2JET® Bracket from slipping.

3.3. MOUNT ON A TRUSS

NOTICE

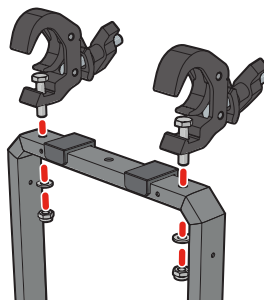
Clamps are not included in the delivery. See chapter 1.4. for the possibilities.

1. Mount clamps to the ECO2JET® BRACKET using the provided nuts and bolts. There are different options:

- A Mount two Doughty quick trigger clamps (MFX3104).

Materials needed:

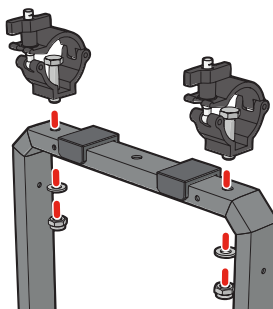
- 2x Doughty quick trigger clamp (MFX3104)
- 2x M10x45 Bolt
- 2x M10 Washer
- 2x M10 Locknut



- B Mount two Doughty half couplers (MFX3106).

Materials needed:

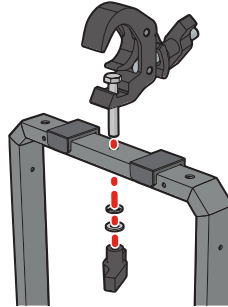
- 2x Doughty half coupler (MFX3106)
- 2x M10x45 Bolt
- 2x M10 Washer
- 2x M10 Locknut



C Mount one Doughty quick trigger clamp (MFX3104).

Materials needed:

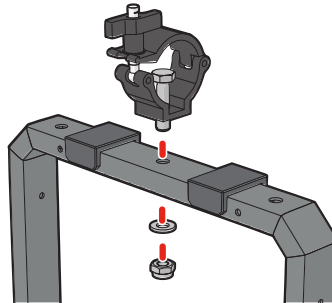
- Doughty quick trigger clamp (MFX3104)
- M10×65 Bolt
- M10 Spring washer
- M10 Washer
- M10 Wingnut



D Mount one Doughty half coupler (MFX3106).

Materials needed:

- Doughty half coupler (MFX3106)
- M10×45 Bolt
- M10 Washer
- M10 Locknut



WARNING

Always use two clamps in motion truss systems because of unknown accelerations and decelerations. See options A and B.

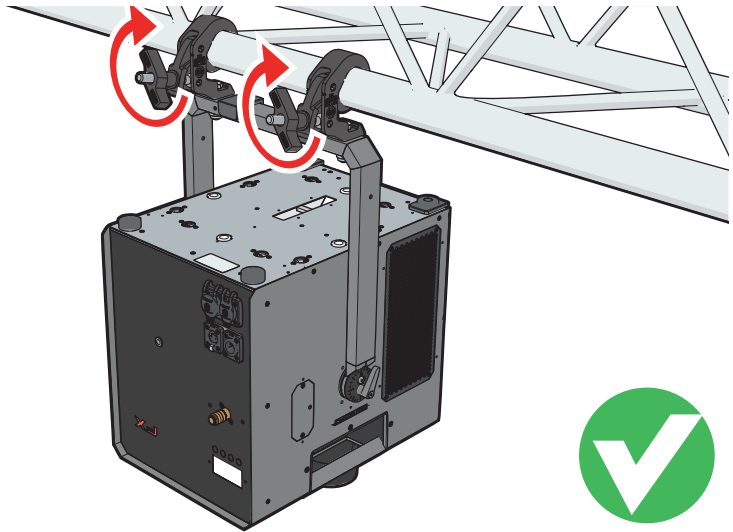
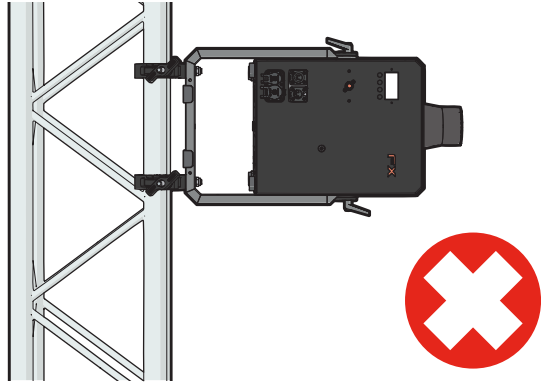
NOTICE

Mounting with a single clamp positioned at the center offers angular flexibility.

2. Mount the ECO2JET® Bracket with the ECO2JET® in horizontal position onto a horizontal truss.

⚠ DANGER

Do not mount the ECO2JET® Bracket to the truss sideways. Only suspend the ECO2JET® Bracket from the truss.



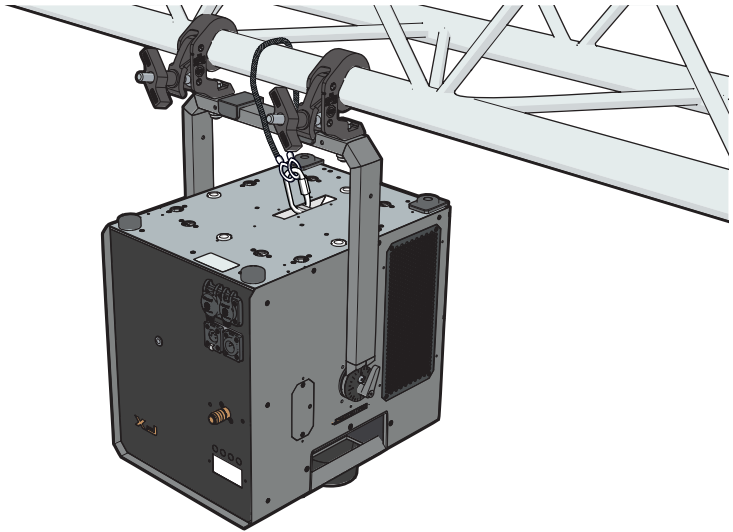
⚠ CAUTION

Take the recoil of the ECO2JET® into account. Make sure the construction is prepared for the counter force of firing the effect.

3. Secure the ECO2JET® onto the truss with use of the safety bracket on the bottom of the ECO2JET®. Make sure the safety steel is as short as possible. If needed, wind the cable around the truss to pull it tight.

⚠ CAUTION

The safety steel and the emergency link need to have a minimal workload of 40 kg.



4. By default, the machine is programmed to autoflip the display. However, to preserve a particular configuration use “flip mode” in the menu. This will allow to preserve a desired setting without any automatic adjustments.
5. Make sure that the installation complies with all relevant safety requirements, such as creating a safety zone and a free output zone, see Section 2.5.

4. TROUBLESHOOTING

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

5. MAINTENANCE

To maximize the service life of the ECO2JET® Bracket, it's essential to follow a regular maintenance routine.

Regular cleaning

Dirt, dust, and debris can accumulate on the bracket over time, potentially causing corrosion or other damage. Regularly clean the bracket using a mild detergent solution and a soft cloth or brush. Avoid using abrasive materials or harsh chemicals that could damage the surface.

Inspect weldings

Welded joints are critical points of structural integrity. Periodically inspect the welds on the bracket to ensure there are no cracks, signs of fatigue, or other defects. Any issues should be addressed promptly to prevent further damage.

Functionality check

Test the functionality of the bracket regularly to ensure it is performing as intended. This may involve checking the attachment points, moving parts, or any other features specific to the bracket's design. If you notice any issues or abnormalities during testing, investigate further and make any necessary repairs or adjustments.

Environmental considerations

Consider the operating environment of the bracket. If the bracket is exposed to harsh conditions such as extreme temperatures, moisture, or corrosive substances, take extra precautions to protect it and increase its longevity. This may include applying protective coatings or installing additional shielding.

⚠ DANGER

Do not replace parts yourself; always consult MAGIC FX if necessary.

6. EC DECLARATION OF CONFORMITY

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

Name machine	: ECO2JET® Bracket
Type	: MFX1802
Work Load Limit	: 71 kg 156.5 lbs
Serial number	: N/A
Year of construction	: on product

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

- Directive 2006/42/EC Machinery Directive

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 13155:2020 Crane - Safety - Non-fixed load lifting attachments

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

Name manufacturer	: MAGIC FX B.V.
Address	: Schouwrooij 27, 5281 RE BOXTEL
Country	: The Netherlands

CEO : B. Veroude

Date : 30-04-2024

Signature



MAG:CFX[®]

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