




MAGICFX MFX3220 FX-Arm Controller User Manual

[Home](#) » [MAGICFX](#) » MAGICFX MFX3220 FX-Arm Controller User Manual 

MAGICFX MFX3220 FX-Arm Controller



Contents

- 1 DISCLAIMER
- 2 TRADEMARKS
- 3 LIABILITY
- 4 FOREWORD
- 5 LANGUAGE
- 6 REVISION TABLE
- 7 MEET THE MAGICFX® FX-ARM CONTROLLER!
 - 7.1 MAIN PARTS
 - 7.2 PRODUCT IDENTIFICATION
 - 7.3 TECHNICAL DATA
 - 7.4 ACCESSORIES
- 8 ARM SAFELY!
 - 8.1 GENERAL SAFETY RULES
 - 8.2 CONNECTING FX-MACHINES
 - 8.3 2.3 PRECAUTIONS FOR OPERATION
- 9 LET'S ARM!
 - 9.1 CONNECT THE CONTROLLER
 - 9.2 ARM
 - 9.3 EMERGENCY STOP
 - 9.4 MAINTENANCE
- 10 TROUBLESHOOTING
- 11 CORRECT DISPOSAL
- 12 EC DECLARATION OF CONFORMITY
 - 12.1 DECLARATION OF CONFORMITY
- 13 Documents / Resources
 - 13.1 References
- 14 Related Posts

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.

© 2020 MAGICFX® All rights reserved.

Nothing from this publication may be copied, reproduced and/or published by means of printing, photocopying or by any other means, without the prior written approval of MAGIC FX.

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.

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
PART01882	01-00	23-04-2020	Initial release	ES, MB	RD

MEET THE MAGICFX® FX-ARM CONTROLLER!

The MAGICFX® FX-ARM CONTROLLER is a safety device used for remotely arming special effects machines and providing an emergency stop (hereafter e-stop) button. You can arm and e-stop multiple machines simultaneously or use each special effects machine with a dedicated MAGICFX® FX-ARM CONTROLLER.

The MAGICFX® FX-ARM CONTROLLER does not replace the use of either DMX or 12-24V control of your FX-machine. It is an independent safety circuit that works alongside your separate control solution to increase the safety of your system.

MAIN PARTS



PRODUCT IDENTIFICATION



TECHNICAL DATA

Product	Product Name	MAGICFX® FX-ARM CONTROLLER	
	Product Code	MFX3220	
	Product Type	CONTROL GEAR	
Main Dimensions	Length	158 mm	6.2 in
	Width	180 mm	7.1 in
	Height	102 mm	4.0 in
Weight	Weight	1.9 kg	4.2 lb
Package	Length	309 mm	12.2 in
	Width	364 mm	14.3 in
	Height	187 mm	7.4 in
	Packaged weight	2.7 kg	6 lb
Environment	Minimum Temperature	-10 °C	14 °F
	Maximum Temperature	50 °C	122 °F
Electrical	Voltage Input	100 – 250 Vac	
	Voltage Frequency	50 – 60 Hz	
	Power Consumption	50 W	
	Power Connector	Neutral® pomeron TRUE1 (in)	
	ARM Connector	Neutral® Ethicon, RJ45 (in & Out)	
Controlling	Control Options	Manual	

ACCESSORIES

Code	Product	Included
SPR90050	Key for FX-COMM4NDER and FX-ARM CONTROLLER (pair)	1x
MFX0313	Schake to Neutral® pomeron TRUE1 – cable 1.5 m	

Please contact MAGIC FX for additional possibilities.

ARM SAFELY!

The MAGICFX® FX-ARM CONTROLLER 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® FX-ARM CONTROLLER.

The MAGICFX® FX-ARM CONTROLLER must be used in surroundings that:

- Have a stable temperature of between -10 and 50 °C.

- Are free of dust, corrosive gases and high concentrations of organic vapours.
- Are not situated in the vicinity of a source of vibration.




GENERAL SAFETY RULES

- Only authorised persons may carry out work with the MAGICFX® FX-ARM CONTROLLER.
- Do not use the MAGICFX® FX-ARM CONTROLLER if there are people or animals in the direct output of FX-machines controlled by the MAGICFX® FX-ARM CONTROLLER.
- Make sure that children, unauthorised people and animals do not obtain access to the MAGICFX® FX-ARM CONTROLLER.
- Make sure there are no free-standing objects or objects that can be damaged by the connected machines within the output distance.
- 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.
- Refer to the manual(s) of the connected machine(s) for safety instructions concerning the use of those machines.

CONNECTING FX-MACHINES

The MAGICFX® FX-ARM CONTROLLER uses Arm cables terminated with RJ45 connectors to link to single or multiple effects machines. This is not compatible with any other data protocol and these cables must not be connected to any other product other than specific MAGICFX® effects machines with the integrated safety circuit hardware. Connecting RJ45 leads from other systems carrying other data protocols may damage your hardware.

2.3 PRECAUTIONS FOR OPERATION

 WARNING G	Using a damaged MAGICFX® FX-ARM CONTROLLER can lead to death, serious injury or property damage. Always inspect the controller thoroughly before operation.
 WARNING G	Make sure the Arm cables from this MAGICFX® FX-ARM CONTROLLER are not connected in to any products that are not compatible with this safety device as this may damage your hardware. Likewise, do not connect any RJ45 cables from any other system carrying a different data protocol as this may damage your hardware.
 WARNING G	Only one MAGICFX® FX-ARM CONTROLLER can be used in a single connected system. Connecting more than one controller with RJ45 Arm leads can cause damage to them.

LET'S ARM!

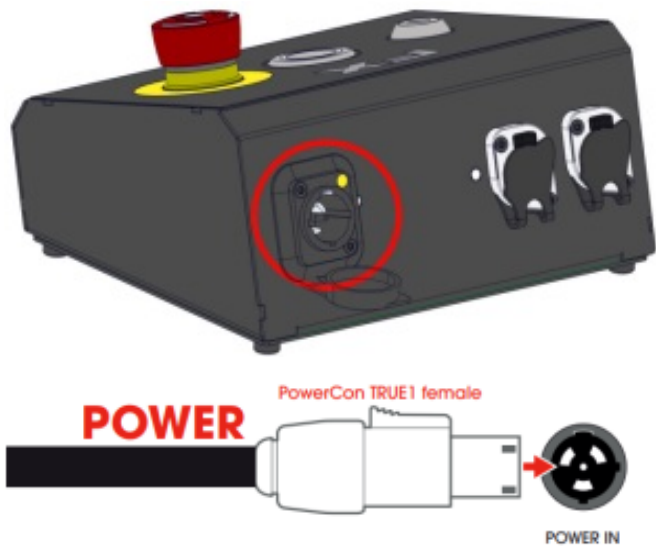
CONNECT THE CONTROLLER

1. Place the controller on a stable surface in a suitable area.
2. Make sure the arm/disarm key is in the `OFF` position and the e-stop button is not pressed in.

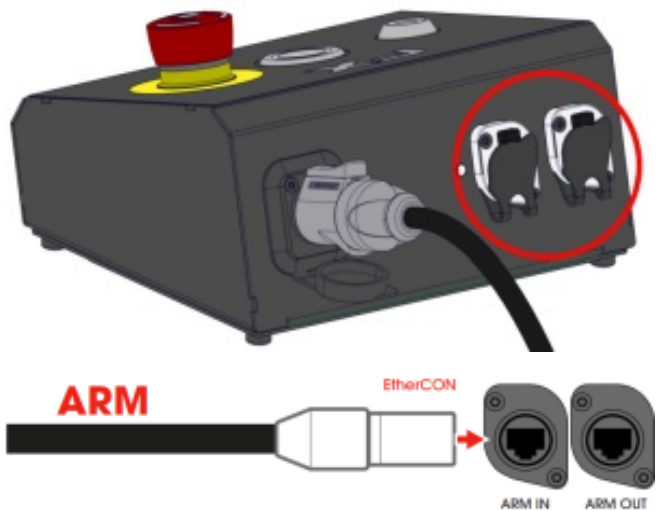
NOTICE


If the e-stop is pressed in it can be released with a clockwise quarter turn.

3. Connect the PowerCon TRUE1 power cable to the power input of the controller.



4. Connect the other end to a power outlet.
5. Connect the FX-machines to the controller with Arm cables, either by a direct cable or daisy chain configuration.



NOTICE	The MAGICFX® FX-ARM CONTROLLER can be placed either at the end of the safety cable line or anywhere within a linked system using the Arm Input and output connectors on the machines. Only one MAGICFX® FX-ARM CONTROLLER can be used in a linked system.
 WARNING	Only one MAGICFX® FX-ARM CONTROLLER can be used in a single connected system. Connecting more than one controller with RJ45 Arm leads can cause damage to them.

6. Remove the key from the keyswitch when you leave the controller unattended.

ARM

1. Place the key in the key switch and set the arm/diarm key in the `OFF` position. Ensure the e-stop button is not pressed in. The e-stop reset button should be lit up white.
2. Press the e-stop reset button. The e-stop reset button light will go off and the e-stop will now illuminate.



NOTICE

You cannot activate the e-stop reset button when the e-stop button is pressed in. Make sure the e-stop is released when trying to activate the e-stop reset button.

3. Set the arm/disarm key in the 'ON' position. The FX LED Indicator lights up red.



4. When you are done with firing the FX-machine, set the arm/disarm key to the 'OFF' position to deactivate the FX-machines.

The FX LED indicator turns off on the FX-ARM CONTROLLER.



EMERGENCY STOP

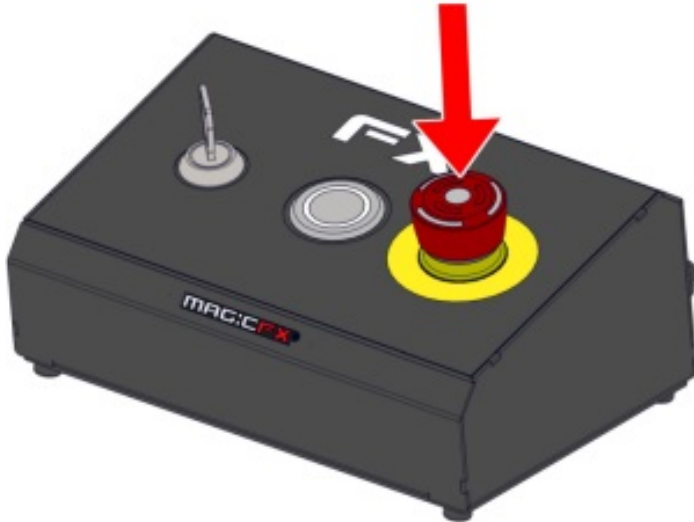
NOTICE

With the key switch in the 'ON' position the e-stop should be illuminated and the FX LED Indicator Red.

1. Press the e-stop button in.

The illuminated e-stop button will turn off.

The FX LED indicator turns off and the e-stop reset button turns on.



2. Set the keyswitch in the 'OFF' position
 3. Wait for danger to be averted, then reset the arm controller by the following steps
 4. Release the e-stop with a clockwise quarter turn. The e-stop reset button will be illuminated white.
 5. Press the e-stop reset button. The e-stop reset button light will go off and the e-stop button will now illuminate.
- The FX-ARM CONTROLLER is ready for use again.

MAINTENANCE

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

Contact MAGIC FX if the MAGICFX® FX-ARM CONTROLLER is not functioning correctly.



Do not replace parts yourself; always consult MAGIC FX.

TROUBLESHOOTING

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

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.

EC DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY

According to Annex III A Machinery Directive 2006/42/EC

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

Name machine	: FX-ARM CONTROLLER
Type	: MFX3220
Voltage	: 100-250Vac 50/60Hz
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

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 60204-1:2006, Safety of machinery – Electrical equipment of machines – Part 1: General requirements.
- NEN-EN-IEC 61000-6-3:2007/A1:2011, 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 B.V
Address	: Schouwrooij 27, 5281 RE BOXTEL
Country	: The Netherlands
CEO	: B. Veroude
Date	: 5-3-2020
Signature	



WWW.MAGICFX.EU

Documents / Resources

	<p>MAGICFX MFX3220 FX-Arm Controller [pdf] User Manual MFX3220, FX-Arm Controller, MFX3220 FX-Arm Controller, Controller Gear</p>
--	---

References

- [MAGIC FX - Mind blowing special effects - MagicFX](#)