ENGLISH

MAGICFX®

USER AND INSTALLATION MANUAL

PROSHOT

CE

CONFETTI & STREAMER FX

PART02710 rev 01-00

DISCLAIMER

⚠ WARNING	Risk of serious personal injury or product damage. Failure to read and follow the instructions can result in serious injury or damage to the product. Always read the entire manual and follow all instructions before installing or using the product.

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. Always check the latest version of the manual.

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.

TABLE OF CONTENTS

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.
⚠ 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 PROSHOT.

Authorised personnel are those who:

- Are appointed by their supervisor to install and/or operate the PROSHOT.
- 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.

OTHER DOCUMENTATION

Document	Document number
ARM SYSTEM Configuration Manual	PART02323
ARM CONTROLLER User and Installation Manual	PART01882

Other related documentation

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
DMX	Digital Multiplex
RDM	Remote Device Management
ARM SYSTEM	MAGICFX® SFX SAFETY ARM SYSTEM
ARM CONTROLLER	MAGICFX® SFX SAFETY ARM CONTROLLER
E-STOP	MAGICFX® SFX SAFETY E-STOP
TERMINATOR	MAGICFX® SFX SAFETY TERMINATOR
PROSHOT	MAGICFX® PROSHOT

Abbreviations

REVISION TABLE

Doc nr	Revision	Date	Description	Author	Approved
PART02710	01 - 00	20-04-2026	Initial release	MB	RD

Revisions

1. DESCRIPTION

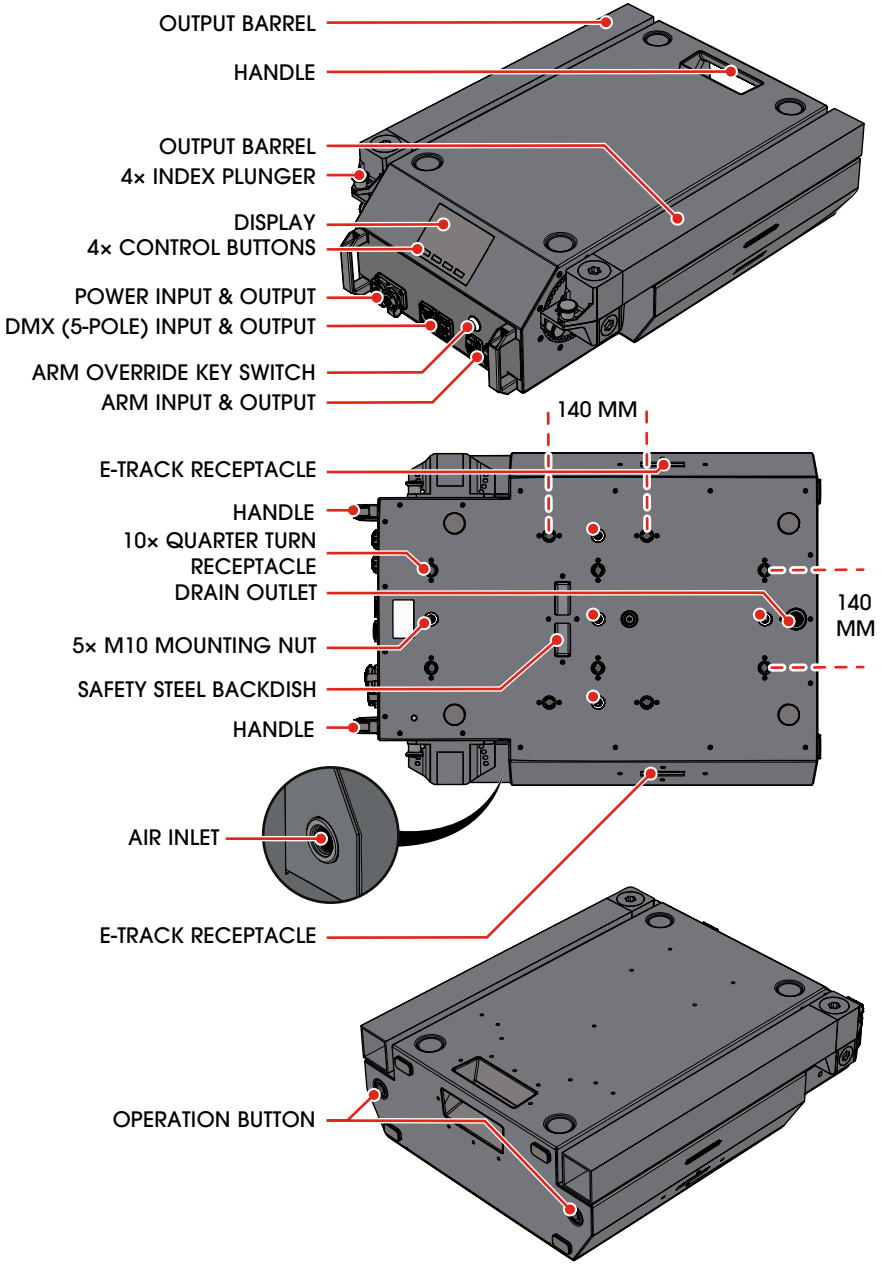
The PROSHOT is a special effects machine that fires confetti or streamers into the air. The PROSHOT is intended for indoor and outdoor use. At the desired moment the air flows from the tank via the barrel out of the machine. This results in the confetti or streamers leaving the output barrel at high velocity into the air up to 22 metres (72.2 feet) far*.

The machine is equipped with an onboard compressor to pressurize the air tanks. When the machine is loaded with MAGICFX® CONFETTI or MAGICFX® STREAMERS, a single push on the physical button on the PROSHOT will charge the air tank to 8 bar pressure, and maintain the pressure at 8 bar until the shot is fired. If for any reason the pressure drops, and cannot be compensated, the system will block the shot for safety reasons.

The PROSHOT is operated with DMX and RDM. The PROSHOT can be operated in sequence with multiple machines. Furthermore, the PROSHOT is configured for safety control with an ARM SYSTEM.

* The output distance depends on input material and environmental conditions.

1.1 MAIN PARTS



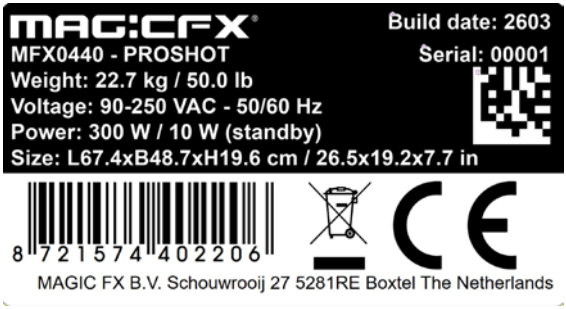
1.2 TECHNICAL DATA

Product	Product Name	PROSHOT	
	Product Code	MFX0440	
	Product Type	CONFETTI & STREAMER FX	
Main Dimensions	Length	674 mm	26.5 in
	Width	487 mm	19.2 in
	Height	196 mm	7.7 in
Weight	Weight	22.7 kg	50 lb.
Package	Length	800 mm	31.5 in
	Width	600 mm	23.62 in
	Height	220 mm	8.66 in
	Packaged Weight	27 kg	59.5 lb.
Environment	Minimum Temperature	- 5 °C	14 °F
	Maximum Temperature	50 °C	122 °F
	Humidity (Relative)	20 to 90 % (non-condensing)	
Electrical	Voltage Input	90 - 250 VAC	
	Voltage Frequency	50 - 60 Hz	
	Power Consumption	300 W	
	Idle Power *	10 W	
	Power Connector	Neutrik® powerCON TRUE1 (in&out)	
Controlling	Control Options	DMX	
	Control Protocols	DMX512-A (ANSI E1.11) RDM (ANSI E1.20)	
	Control Connectors	Neutrik® 5-pole male/ female XLR	
Safety controlling	ARM Connector	Neutrik® etherCON RJ45 (in&out)	
Configuring	Configure Options	On device RDM	
Pressure tank	Maximum pressure	8 bar	116 psi
	Volume	2 × 2 L	2 × 0.5 gal
Usage	Consumable(s)	MAGICFX® CONFETTI MAGICFX® STREAMERS	

Technical data

* These values are a computed average measured over a longer period of time after the device has finished its initial heating.

1.3 PRODUCT IDENTIFICATION



Type plate

1.4 ACCESSORIES

Code	Product	Included
MFX0313	Schuko to Neutrik® powerCON TRUE1 cable - 1.5 m	
MFX1804	Omega Bracket (Set of 2)	
MFX3104	Doughty Quick Trigger Clamp (100 kg) M10	
MFX3106	Doughty Half Coupler (100 kg) M10	
MFX3110	Safety Cable SWL 60 kg L=1000mm	
MFX0441	PROSHOT Flightcase (for 3 pcs)	
MFX0442	PROSHOT E-Track Strap	
MFX0443	PROSHOT E-Track D Ring	
MFX0444	PROSHOT - Cap Sticker (50 pcs)	

Accessories

Please contact MAGIC FX for additional possibilities.

For information about the accessories of the ARM CONTROLLER (MFX3220), refer to the ARM CONTROLLER User and Installation Manual (PART01882).

1.5 INPUT & OUTPUT

The output barrel has a payload of 1.3 liters (0.34 gallons) per barrel and can be filled with MAGICFX® confetti or streamers. The maximum load per shot depends on the type of input material. The output distance depends on the type of input material and the load.

Consumable	Max. output distance	
Speedfill Pro - Confetti - 55 × 17 mm	12 m	39.4 ft
Speedfill Pro - Confetti - Shapes 40 mm	15 m	49.2 ft
Speedfill Pro - Streamers - 5 m × 1.5 cm	12 m	39.4 ft
Speedfill Pro - Streamers - 10 m × 1.5 cm	20 m	65.6 ft
Speedfill Pro - Streamers - 10 m × 2.5 cm	22 m	72.2 ft

Projectile types and related loads and output

NOTE Wind and other weather conditions will influence the output distance. The provided output values are estimates only. Always verify actual output distance under current conditions before use.

1.6 ARM CONTROL

The PROSHOT is designed to operate safely using the MAGICFX® ARM SYSTEM, which provides an interlocked safety control system. The system is normally armed and disarmed via the ARM CONTROLLER, which includes a key switch, emergency stop (E-STOP), and a reset button. The safety signal is transmitted via EtherCON cabling between the ARM CONTROLLER and connected machines.

The ARM SYSTEM ensures that in the event of a signal failure, the output valve is blocked, preventing unintended output. This design minimises the risk of harm or damage due to unexpected activation.

The use of the ARM CONTROLLER is strongly advised. Only in specific applications can the ARM system be overridden and the unit controlled via DMX only. In such cases, the machine must be used in conjunction with other appropriate and approved safety systems.

An override key switch is located on the PROSHOT, allowing the machine to operate without an ARM CONTROLLER connected. This function is intended for use only when alternative safety provisions are in place. When the override is active (key set to OFF), the status bar indicates that the system is armed and ready for operation via DMX.

For more information about the ARM SYSTEM and to learn how to configure a complete safety system, refer to the ARM SYSTEM Configuration Manual (PART02323).

Do not use the ARM SYSTEM and override mode at the same time. These control modes are mutually exclusive. If both are activated simultaneously, the PROSHOT will not operate correctly and the safety logic may be affected. Operate the unit using either the ARM SYSTEM or override mode, never both at the same time.

1.7 ARM OVERRIDE KEY

⚠ WARNING	Risk of serious injury due to unsafe operation. Overriding the ARM system without other approved safety systems in place could lead to injury. Only override the ARM system when using other approved safety systems.
⚠ WARNING	Risk of serious injury or product damage due to unauthorized or accidental activation. Leaving the key in the machine can result in unintended operation, causing injury or property damage. Always remove the key after setting the desired position to prevent unauthorized use or accidental activation.
⚠ WARNING	Risk of serious injury due to unsafe operation. Always check the display for error codes and verify the status of the system before operating the machine.
NOTE	If the SFX Safety Arm System is turned off while an ARM controller is connected, the display will show an error.

If no ARM CONTROLLER is connected, the safety system can be manually overridden using the key switch located on the PROSHOT. Turning the key to OFF disables the need for an external ARM system. The machine becomes armed and can fire via DMX. The full screen FX logo is displayed on screen, indicating the system is armed and active.

When the key is set to **ON**, the system requires a valid ARM signal from an ARM CONTROLLER in order to operate. Without this signal, the machine remains in a safe, disarmed state.

The machine is labelled accordingly to indicate the override status:

Key position	Result
ON	The system needs to be armed by an ARM CONTROLLER.
OFF	ARM system disabled: override active and the full screen FX logo is indicating the system is armed.

1.8 DMX CONTROL

NOTICE	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.

1.8.1 STANDARD PERSONALITY

The PROSHOT is controlled with 1 enable address and 2 start addresses:

DMX Address	Address range	Channels
Enable address	1 - 512	1 Enable
Start address	1 - 511	1 Trigger Tank 1 (R)
		2 Trigger Tank 2 (L)

DMX addresses

The enable address cannot be the same as the start address. The system will ensure these ranges cannot overlap. Operation of the channels results in the following:

Channel	DMX Value	Result
1 Enable	0 - 99	-
	100 - 154	Enabled
	155 - 255	-
1 Trigger Tank 1 (R)	0 - 199	-
	200 - 255	Output effect tank 1 (R)
2 Trigger Tank 2 (L)	0 - 199	-
	200 - 255	Output effect tank 2 (L)

Operation of the DMX channels

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

1.8.2 REVERSED PERSONALITY

When the personality reverses, the tank indexing also reverses.

The PROSHOT is controlled with 1 enable address and 2 start addresses:

DMX Address	Address range	Channels
Enable address	1 - 512	1 Enable
Start address	1 - 511	1 Trigger Tank 1 (L)
		2 Trigger Tank 2 (R)

DMX addresses

The enable address cannot be the same as the start address. The system will ensure these ranges cannot overlap. Operation of the channels results in the following:

Channel	DMX Value	Result
1 Enable	0 - 99	-
	100 - 154	Enabled
	155 - 255	-
1 Trigger Tank 1 (L)	0 - 199	-
	200 - 255	Output effect tank 1 (L)
2 Trigger Tank 2 (R)	0 - 199	-
	200 - 255	Output effect tank 2 (R)

Operation of the DMX channels

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

1.9 DISPLAY PANEL

The PROSHOT has a display on the front. Use the display panel to view the status, change settings, and set DMX and RDM parameters. The display panel functions as a touchscreen and supports operation with the physical buttons if touch input is not possible.

Icon	Meaning
	Tank status indicators
	Tank is active and ready to fire.
	Tank is in idle state.
	Tank is in warning state.
	Tank is in error state and cannot fire.

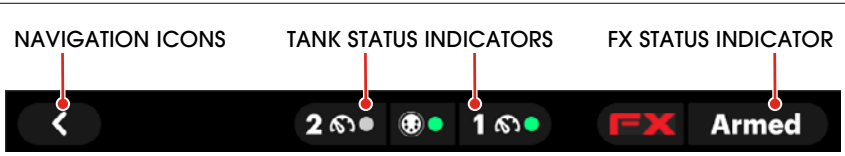
Display panel icons

Icon	Meaning	
	DMX signal indicator	
	Battery mode indicator	
	FX logo status indicator	
	Solid red	The product is armed through the external ARM system.
	Blinking red	The product is armed and DMX is enabled, or the ARM system is disabled via key switch override while DMX remains enabled.

Display panel icons

1.9.1 TOP BAR STATUS INDICATORS

The top bar is visible on most operational and settings screens on the display panel. It gives real-time status information.



Display panel

Navigation icons

On settings screens the top bar can show navigation icons.

- Back: return to the previous screen.

Tank status indicators

Each tank has a status indicator:

- Green: Tank is active and ready to fire.
- Gray: Tank is in idle state.
- Yellow: Tank is in warning state.
- Red: Tank is in error state and cannot fire.

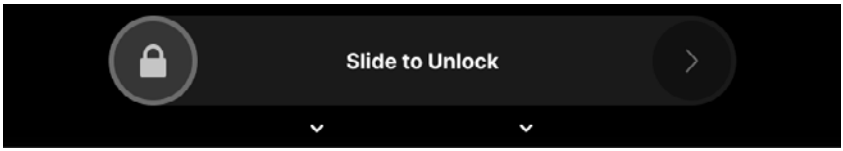
Status indicator

The status indicator shows the system state. Possible states include;

- Disarmed
- Armed
- Override
- Battery (Battery Mode; firing functions are disabled)
- Identify

1.9.2 UNLOCKING THE DISPLAY PANEL

NOTE	During boot, the display panel shows a logo screen and does not accept input. When the PROSHOT is in an armed or ready-to-fire state, the display panel shows an FX logo screen and prevents interaction.
NOTE	The PROSHOT automatically locks after 15 seconds on screens that are not intended for configuration changes.



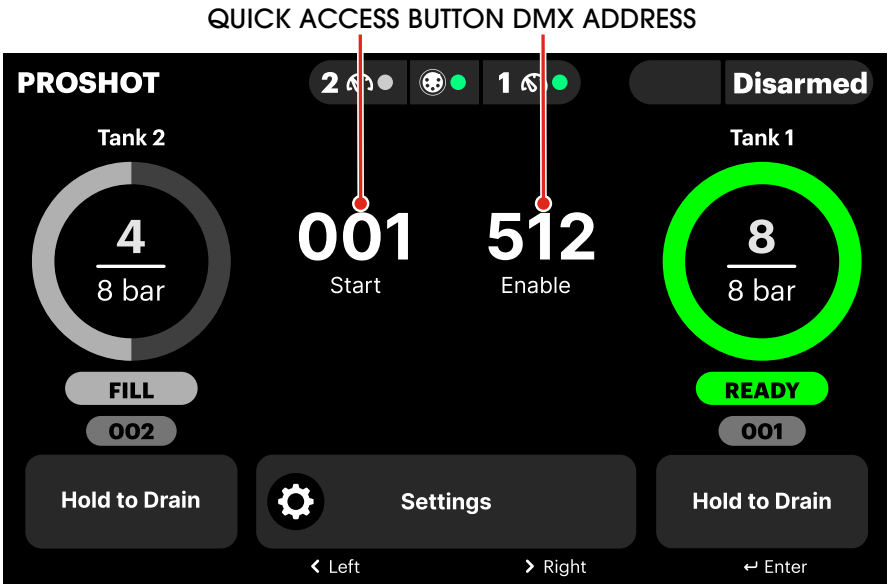
Unlocking the display panel

Unlock the display panel using one of these methods;

- Use the on-screen slide-to-unlock control on the display panel.
- Press and hold the middle two physical buttons at the same time for 2 seconds. The on-screen slider shows the unlock progress.

1.10 USING THE DISPLAY PANEL

1.10.1 HOME SCREEN



Home screen

The display panel shows the home screen after you unlock it. From the home screen you can:

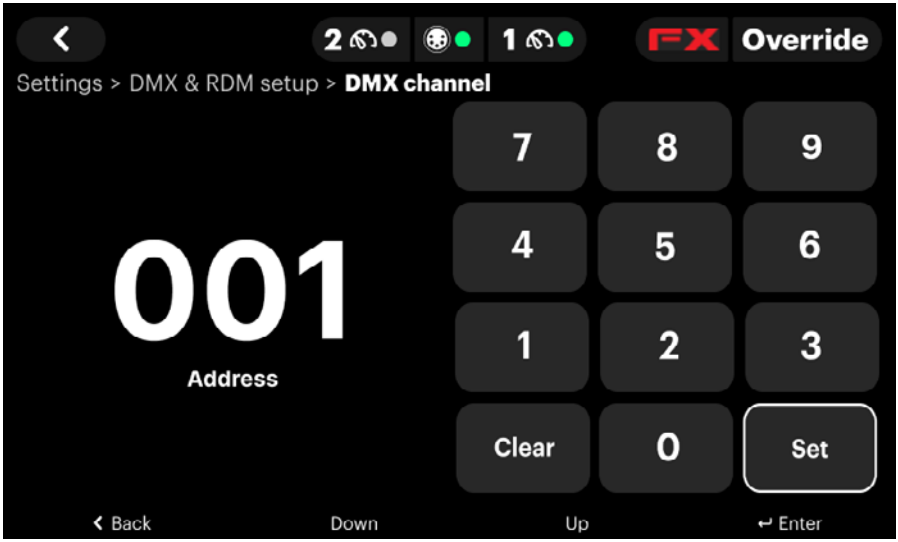
- Monitor tank pressures and tank states.
- Use manual tank controls (pressurize and drain).
- Open DMX address settings with quick access.
- Open the settings menu.

1.11 DMX & RDM SETUP

1.11.1 DMX SETUP

Set a DMX address as follows;

1. Open the settings menu.
2. Open the DMX & RDM setup menu.
3. Open the enable DMX address or start DMX address menu.



Setting a DMX address

4. Enter a value between 1 and 512.
   For DMX start address the max is 511.
   For DMX enable address the max is 512.
5. Press Set to confirm.

NOTE	If you use the physical buttons, press and hold the up or down button to change the DMX address.

1.11.2 SELECTING A DMX PERSONALITY

Select a DMX personality as follows;

1. Open the settings menu.
2. Open the DMX & RDM setup menu.
3. Open the DMX personality menu.
4. Select a DMX personality;
   - Standard (2 channels)
   - Reversed (2 channels)

The display panel shows the channel mapping;

Standard:
Start channel > Tank 1 (R) ; Start channel + 1 > Tank 2 (L); Enable channel > Device enabled

Reversed:
Start channel > Tank 1 (L) ; Start channel + 1 > Tank 2 (R); Enable channel > Device enabled

1.11.3 RDM SETUP

Setup RDM as follows;

1. Open the settings menu.
2. Open the DMX & RDM setup menu.
3. Press the RDM button to toggle RDM on or off.

NOTE To update the device, RDM must be enabled.

1.12 OTHER SETTINGS

The following tables show the other settings and its functions.

1.12.1 FX SETTINGS

Menu function	Explanation
Pressurise tank 1	Pressurize tank 1 to prepare system for confetti shot.
Pressurise tank 2	Pressurize tank 2 to prepare system for confetti shot.
Fly mode	Repressurizes a tank during boot if the PROSHOT was powered off while the tank was pressurised.

1.12.2 SYSTEM SETTINGS

Menu function	Explanation
Dim display when idle	Dims the display panel when the PROSHOT is idle.
Button LEDs	Enable or disable button LEDs.
Enable touchscreen	Enable or disable the touchscreen.
Display Flip	Change the display orientation from normal to upside down.

1.12.3 DEVICE INFO

Menu function	Explanation
Device details	Displays device identification and version details.
Statistics	Displays device status and usage information.
Error log	Displays logged errors and related information.

1.13 BATTERY MODE

Battery mode lets the user configure and service the PROSHOT without mains power.

NOTE The battery mode is for setup only and cannot be used to pressurise and fire.

The battery level is indicated by four battery level indicators when the system is in battery mode.

When the device is turned off, pressing and holding any of the four display buttons for 1 second will start the device in battery mode.

In Battery mode, you can change key settings such as;

- DMX addresses
- DMX personality
- FX settings
- System settings

Firing functions are disabled. The PROSHOT cannot be armed through the ARM safety system, and cannot be enabled using DMX.

The PROSHOT powers off automatically after 60 seconds if there is no user interaction or RDM communication.

1.14 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 an RDM compatible controller.

The following RDM parameters are supported by the PROSHOT.

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	
DMX_PERSONALITY_DESCRIPTION		X	
DMX_PERSONALITY		X	X
DMX_ENABLE_ADDRESS		X	X
DMX_START_ADDRESS		X	X
IDENTIFY_DEVICE		X	X
DEVICE_LABEL		X	X

RDM parameters

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

2. SAFETY

The PROSHOT 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 PROSHOT.

2.1 OPERATING CONDITIONS

NOTICE	Risk of malfunction or product damage. Using the PROSHOT outside the specified operating conditions can result in malfunction or damage to the product. Always use the PROSHOT within the specified operating conditions.

- Temperature: Stable between -5 and 50 °C (between 14 and 122 °F)
- Relative humidity: 20% - 90% (non condensing)
- Free of dust, corrosive gases and high concentrations of organic vapors.
- Away from a source of vibration.

2.2 GENERAL SAFETY RULES

⚠ DANGER	Risk of serious injury or death due to presence of people or animals in the direct output area. Never use the PROSHOT if there are people or animals in the direct output area. See Chapter 2.10 Risk Zones for details.
⚠ WARNING	Risk of serious injury or product damage due to unsafe operation. Only authorized persons may operate the PROSHOT.
⚠ WARNING	Risk of serious injury or product damage due to unsafe or accidental operation. Only authorized persons may operate the PROSHOT. Never allow children, unauthorized persons or animals to obtain access to the PROSHOT. See Chapter 2.10 Risk Zones for details.
⚠ WARNING	Risk of fire due to overloading the electrical circuit. Overloading the electrical system can cause fire, electrical shock or damage to the electrical system. Never connect more units to a single circuit than the fuse rating allows. See Chapter 1.2 Technical data to calculate the total load.

⚠ WARNING	Risk of serious injury or product damage due to unsafe operation. Removing safeguards, safety caps, or safety symbols can result in injury or product damage. Never remove any safeguards, safety caps, or safety symbols from the PROSHOT.
⚠ WARNING	Risk of serious injury or product damage due to unsafe operation. Use of the PROSHOT without all required safety components in good condition and functioning properly can result in injury or product damage. Always ensure that all required safety machines are in good condition and functioning properly before use.
⚠ WARNING	Risk of serious injury or product damage due to unsafe operation. Reduced visibility can lead to injury or product damage due to unsafe operation. Always ensure sufficient lighting of the surroundings before operating the PROSHOT.
NOTICE	Risk of product damage or damage to the surroundings. Always check that there are no objects within the output distance when using the PROSHOT. See Chapter 1.5 for details.
NOTICE	Risk of product damage or damage to the surroundings. Always keep the workplace clean and free of unnecessary items when operating the PROSHOT.

2.3 TRANSPORT

⚠ WARNING	Risk of serious injury or death due to explosion. Transporting or moving the machine when the tank is pressurized can result in explosion. Never transport or move the machine when the tank is pressurized.

Depressurise the tanks before airplane transport by turning the device on and off again.

2.4 OUTDOOR USE

The PROSHOT is designed for indoor and outdoor use.

The PROSHOT may be used indoors in large event halls and arenas.

⚠ WARNING	Risk of serious injury or product damage due to insufficient space when using the PROSHOT indoors. Restricted space can result in injury or damage. Always use the PROSHOT indoors in locations that provide sufficient space for safe operation.

2.5 RIGGING

Always follow all applicable OSHA and ANSI guidelines for safe rigging and trussing.

2.6 NOISE LEVELS

The maximum measured noise level of the product during pressurizing is 60 dB(A) at a distance of 1 m (39.4 in).

The maximum measured noise level during simultaneous firing of 2 barrels is 108 dB(A) at a distance of 1 m (39.4 in). Follow European and national guidelines regarding hearing protection.

2.7 CONFETTI & STREAMERS

⚠ WARNING	Risk of serious injury or product damage due to use of unapproved consumables. Using any objects other than MAGICFX® confetti, streamers, or other approved MAGICFX® consumables can cause malfunction, blockage, or uncontrolled discharge. Always use MAGICFX® confetti, streamers, or other approved MAGICFX® consumables in the PROSHOT.

2.8 SAFETY SYMBOLS

Symbol	Meaning	Position
	This symbol indicates that you must read the instruction manual before installing, operating, or servicing the PROSHOT. Follow all instructions to ensure safe and correct use.	Front of the machine.
	This symbol indicates the area must be kept free of people, animals, and objects at all times. Entering or placing objects in this area could cause serious injury or damage.	In the manual.

Safety symbols

Symbol	Meaning	Position
	This symbol indicates that entry is strictly prohibited for unauthorized persons and animals. Only authorized personnel may enter the designated area. Failure to keep unauthorized persons and animals clear could result in death or serious injury.	In the manual.

Safety symbols

2.9 SAFETY WARNINGS

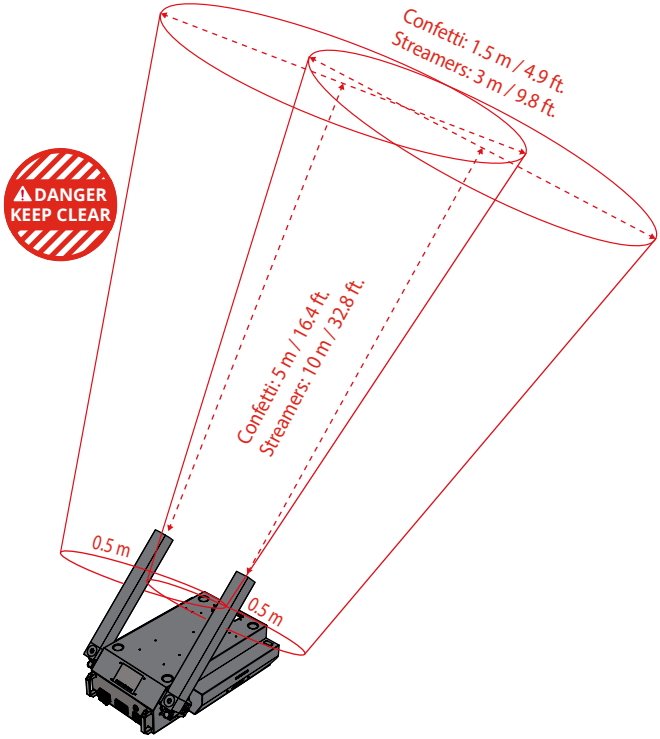
⚠ WARNING	Risk of death, serious injury or property damage. Using a damaged or improperly installed PROSHOT can lead to fatal or severe accidents or cause significant property damage. Always inspect the PROSHOT thoroughly before operation.
⚠ WARNING	Risk of injury or product damage due to unauthorized or accidental activation. Leaving the key in the machine can result in unintended operation, causing injury or property damage. Always remove the key after setting the desired position to prevent unauthorized use or accidental activation.
⚠ WARNING	Risk of death, serious injury, or product damage. Use of the PROSHOT after unauthorized alterations can lead to hazardous operation or malfunction. Never use the PROSHOT if any alterations have been made other than by or on behalf of MAGIC FX.
⚠ WARNING	Risk of death or serious injury due to missing or obscured safety symbols on the PROSHOT. Absence or poor visibility of safety symbols can lead to unrecognized hazards, resulting in fatal or severe accidents. Always ensure all safety symbols are correctly in place and clearly visible. See section 2.8 for the location and description of all required safety symbols.
⚠ WARNING	Risk of fire, electric shock or damage to the electrical system due to overloading the electrical circuit. Overloading the electrical system can cause fire, electrical shock or damage to the electrical system. Never connect more units to a single circuit than the fuse rating allows. See Chapter 1.2 Technical data to calculate the total load.
NOTICE	Risk of property damage due to objects near the output area. Objects placed too close to the output can be damaged or overthrown by the PROSHOT during operation. Always ensure there are no objects near the output area that can be damaged or overthrown by the PROSHOT.

NOTICE	Risk of malfunction or product damage due to use of wet consumables. Wet consumables can cause the PROSHOT to malfunction or become damaged. Never use wet consumables with the PROSHOT.

2.10 RISK ZONES

⚠ DANGER	Risk of death or serious injury due to electrocution. Contact between consumables and high-voltage lines can lead to electrocution. Always ensure that the consumables from the machine cannot come into contact with high-voltage lines or other high-voltage infrastructure.
⚠ WARNING	Risk of injuries or damage to the PROSHOT. Blockages of the output barrel can cause injuries or damage to the PROSHOT when the PROSHOT is used. Always inspect the output barrel before operation and remove any obstructing material.
⚠ WARNING	Risk of death or serious injury due to unexpected activation of the PROSHOT. Entering the hazardous zone while the PROSHOT is enabled can result in fatal or severe injury. Always verify that the PROSHOT is disabled by confirming that the full screen FX logo is off before entering the hazardous zone.
NOTE	Overlap of risk zones is permitted in setups with multiple PROSHOT units, provided that all air inlets remain unobstructed.
NOTE	When the PROSHOT is installed in a tilted position, the risk zones shift accordingly. Ensure that the entire risk zone, including all areas beneath the output, is kept clear of unauthorized people, animals, and flammable objects.
NOTE	Wind and other weather conditions will influence the output distance, and influence the risk zones. The provided risk zones are calculated based on the estimated output distance. Always verify actual output distance under current conditions before use.

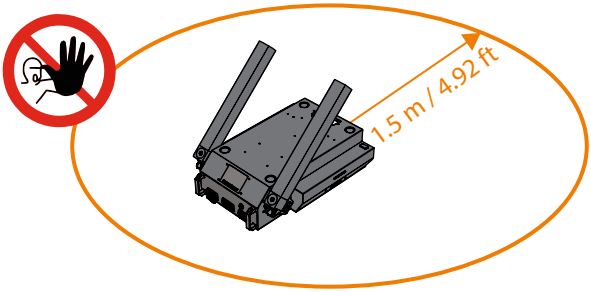
2.10.1 DANGER ZONE



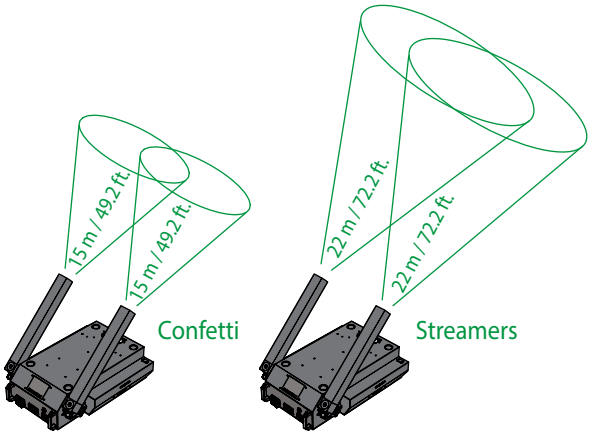
⚠ WARNING

Risk of death or serious injury due to discharge from the pressurised PROSHOT. Failure to establish a danger zone around the barrels can result in fatal or severe injury. Always establish a danger zone around the barrels of the PROSHOT when it is pressurised. The danger zone when using confetti must extend at least 5 meter (16.4 in) in front of and 1.5 meter (4.9 in) to each side of the barrels, as indicated in the illustration. The danger zone when using streamers must extend at least 10 meter (32.8 in) in front of and 3 meter (9.8 in) to each side of the barrels, as indicated in the illustration.

2.10.2 HAZARDOUS ZONE



⚠ WARNING	Risk of death or serious injury due to unauthorized personnel or animals present in the designated area. Failure to keep this area clear can result in fatal or severe injury. Always ensure that unauthorized personnel and animals are kept clear of this area during PROSHOT operation.
⚠ WARNING	Risk of death, serious injury, or property damage due to the presence of flammable objects or materials in the designated area. Fire or explosion can result in fatal injury or significant damage. Always ensure there are no flammable objects or materials in this area during PROSHOT operation.
⚠ WARNING	Risk of death or serious injury due to unexpected discharge from the PROSHOT. Failure to establish a properly sized hazardous zone around the output barrel can result in fatal or severe injury. Always create a hazardous zone around the output barrels of the PROSHOT as indicated in the illustration.
NOTICE	The total size of the output effect depends on the type of consumable used with the PROSHOT.



⚠ WARNING	Risk of serious injury or property damage due to loose objects being projected by pressurized air from the PROSHOT. Pressurized air is ejected over the total output range and can propel loose objects, resulting in injury or damage. Always ensure there are no loose objects in the output range of the PROSHOT before operation.
⚠ WARNING	Risk of crushing injury. An unstable or incorrectly installed unit can tip over or fall down. Always ensure that the machine is installed in accord with the installation instructions.

3. INSTALLATION AND USE

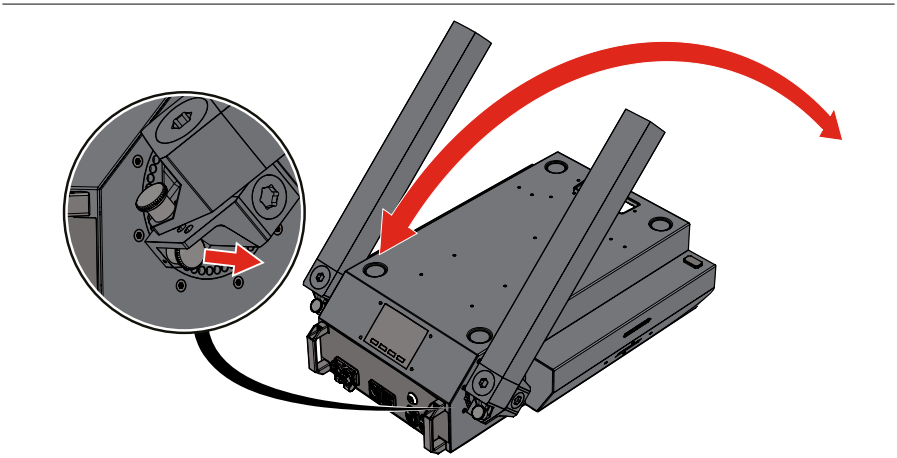
The PROSHOT can be positioned on a stage or floor, or can be mounted on a truss, at any angle. It is also possible to place the PROSHOT on it's back.

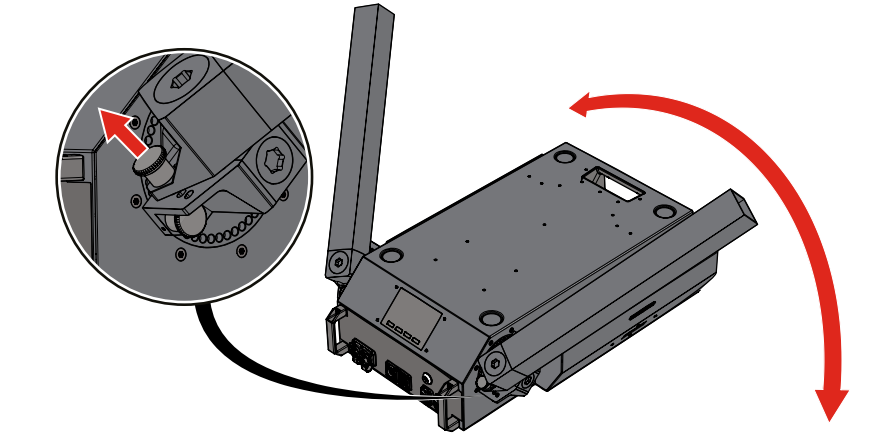
3.1 INSTALL ON STAGE

⚠ WARNING	Risk of serious injury or product damage due to restricted movement of the barrel. Obstructed barrels can cause hazardous operation or product damage. Always ensure the barrels of the PROSHOT can move through their full range of motion before operation.
NOTE	The PROSHOT can be stacked up to five units high. Ensure the surface is stable and level, and make sure they are securely fastened so that they cannot tip over.

1. Install the PROSHOT on a firm and preferably level surface.
2. Inspect the machine and remove any foreign objects and material that will block or obscure the output barrel or the air inlets of the machine during operation.
3. Take the necessary safety precautions, including defining the risk zones around the output barrel of the PROSHOT:
    a. Keep the danger zone clear of any people, animals, and objects.
    b. Keep the hazardous zone clear of any flammable objects/materials, unauthorized personnel and animals.

4. Pull the index plunger and set the tank in the desired position. Make sure the index plunger is properly in place.





⚠ WARNING	Risk of serious injury or death due to the output barrels not being installed properly. Never use the machine when the index plunger is not properly in place or working properly. Not doing so can result in serious injury or death.

3.2 ATTACHING E-TRACK STRAPS

Use E-track straps to secure the PROSHOT. To attach the straps:

1. Place the straps in the E-track receptacle on the PROSHOT.
2. Attach the other ends of the straps to an anchor point on the floor or truss.

3.3 MOUNT ON A TRUSS

The following options are available for truss mounting:

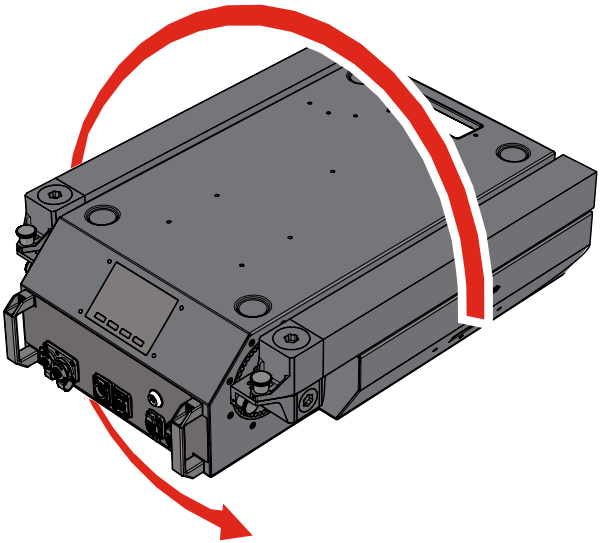
- Omega Brackets (MFX1804)
- Doughty Quick Trigger Clamp (100 kg) M10 (MFX3104)
- Doughty Half Coupler (100 kg) M10 (MFX3106)

NOTE	Installing the PROSHOT in a motion truss is not recommended.

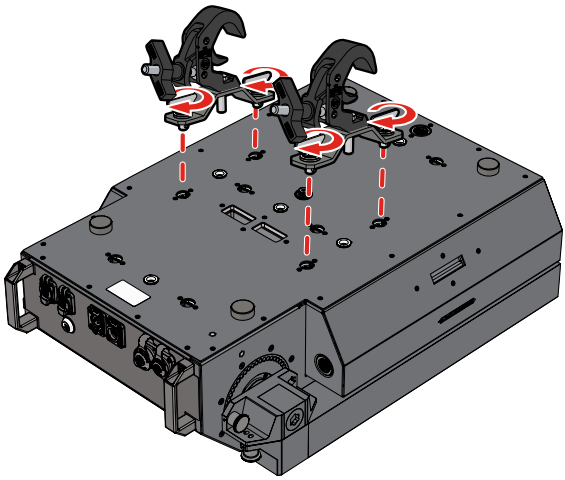
3.3.1 MOUNT WITH OMEGA BRACKETS

The PROSHOT can be suspended from a truss by attaching Omega Brackets with clamps to the bottom of the machine.

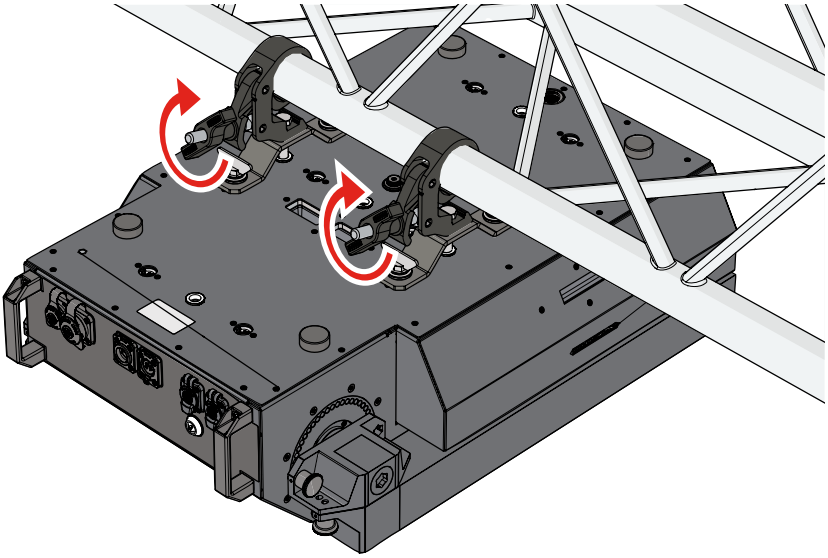
1. Flip the PROSHOT upside down.



2. Mount clamps (MFX3104 or MFX3106) to the Omega Brackets (MFX1804) using the provided bolts and nuts.
3. Attach the Omega Brackets to the quarter turn receptacles in the PROSHOT.



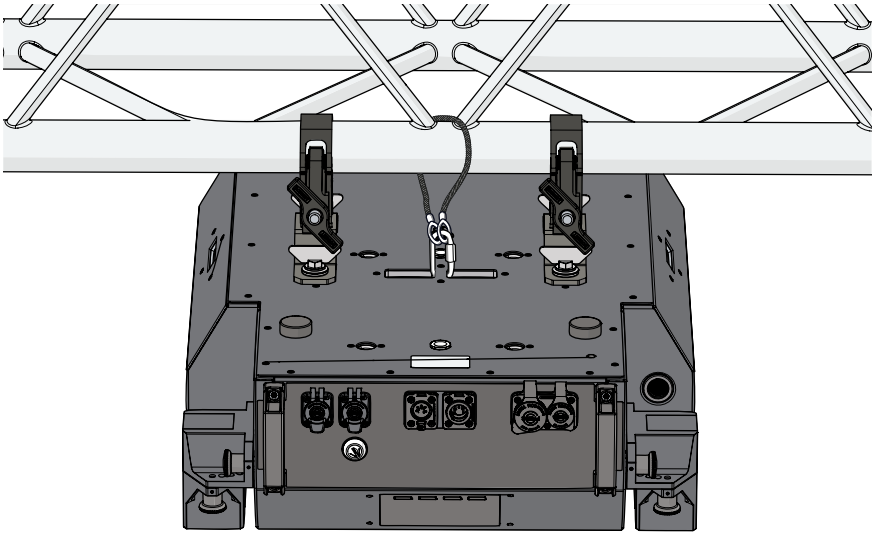
4. Mount the PROSHOT in a horizontal position onto a horizontal truss. Vertical truss mounting is not permitted.
   The distance between the mounting holes is exactly the same as the distance between two truss tubes. The PROSHOT can be mounted parallel to the trusses.



⚠ WARNING	Risk of serious injury or structural damage due to inadequate preparation for the recoil force of the PROSHOT. Failure to prepare the supporting construction for the counter force of firing can result in injury or damage. Always ensure the supporting construction is prepared to withstand the counter force of firing the PROSHOT.
NOTE	The spacing of clamp points is specifically designed for mounting across 12" box trusses.

5. Secure the PROSHOT onto the truss with use of a safety wire on the bottom of the PROSHOT. Make sure the safety wire is as short as possible. If needed, wind the cable around the truss to pull it tight.

⚠ CAUTION	Risk of death or serious injury due to the PROSHOT falling if the safety steel or emergency link fails. Using components with insufficient workload capacity can cause the unit to fall, resulting in fatal or severe injury. Always use a safety steel and emergency link with a minimum workload capacity of 30 kg.

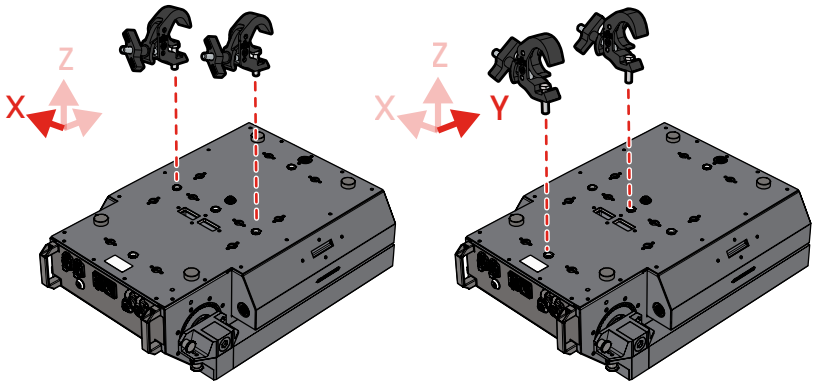


6. Make sure that the installation complies with all relevant safety requirements, such as creating a safety zone and a free output zone, see Section 2.10

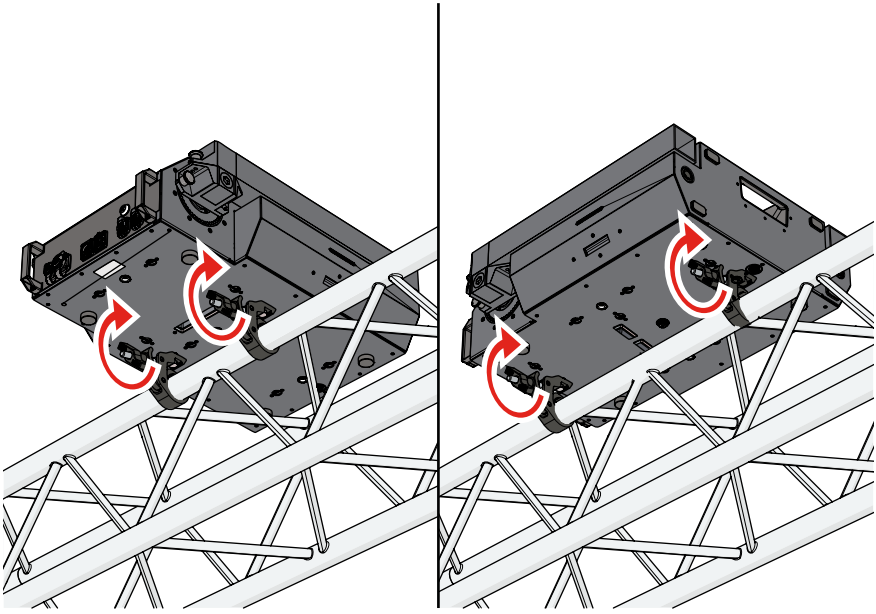
3.3.2 MOUNT WITH CLAMPS ONLY

This chapter describes the 100 kg Doughty Quick Trigger Clamps (MFX3104) as an example. The 100 kg Doughty Half Couplers (MFX3106) follow a similar process.

1. Attach the clamps (MFX3104 or MFX3106) to the M10 mounting holes on the bottom side of the PROSHOT with the provided bolts.



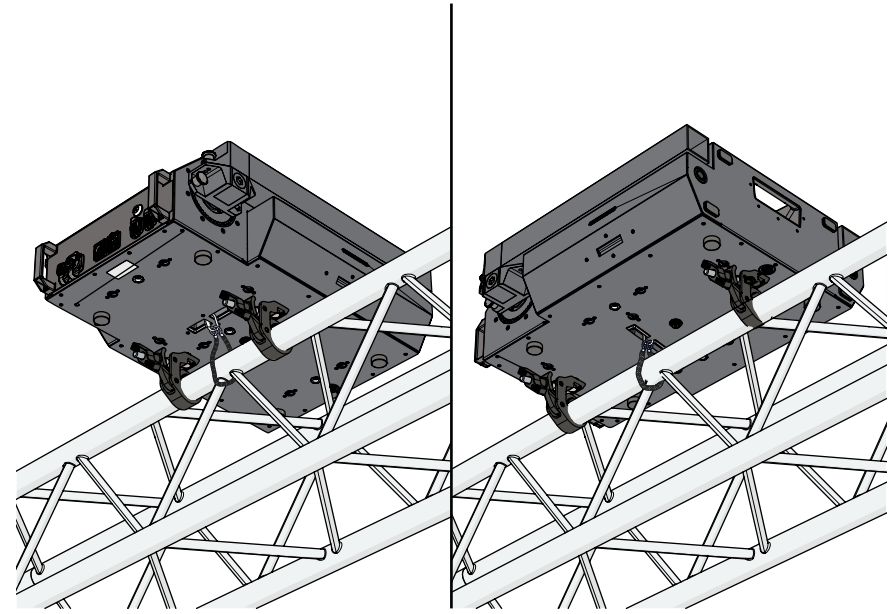
2. Mount the clamps firmly on a truss.



⚠ WARNING	Risk of serious injury or structural damage due to inadequate preparation for the recoil force of the PROSHOT. Failure to prepare the supporting construction for the counter force of firing can result in injury or damage. Always ensure the supporting construction is prepared to withstand the counter force of firing the PROSHOT.

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

⚠ WARNING	Risk of death or serious injury due to the PROSHOT falling if the safety steel or emergency link fails. Using components with insufficient workload capacity can cause the unit to fall, resulting in fatal or severe injury. Always use a safety steel and emergency link with a minimum workload capacity of 30 kg.

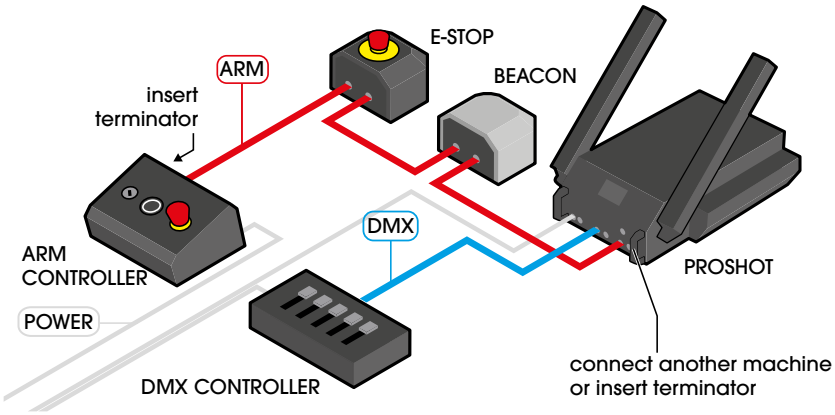


4. Make sure that the installation complies with all relevant safety requirements, such as creating a safety zone and a free output zone, see Section 2.10
5. Inspect the machine and remove any foreign objects and material that will block or obscure the output barrel or the air inlets of the machine during operation.

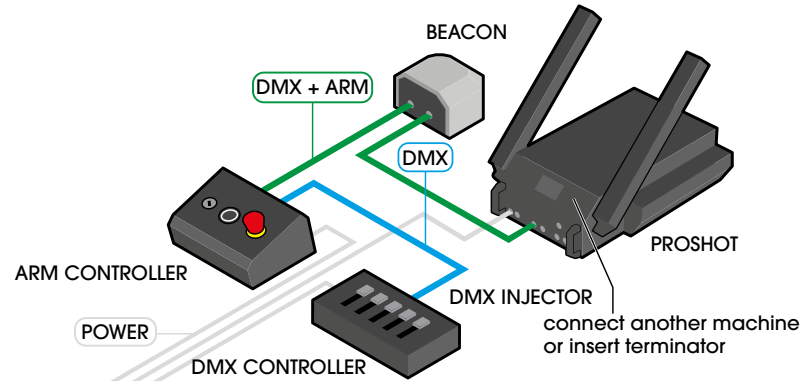
3.4 CONNECT THE MACHINE

1. Install the ARM CONTROLLER in compliance with the instructions from the ARM CONTROLLER User and Installation Manual (PART01882).
2. Connect the PowerCon TRUE1 power cable to the power input of the PROSHOT. Connect the other end to a 100-250 Vac (50-60 Hz) power source.
3. Connect the correct cables between the ARM CONTROLLER, the PROSHOT, the control equipment, and other ARM SYSTEM components and machines (if applicable). Check the following variants for connection details.

A The PROSHOT is controlled with DMX. The DMX signal and the ARM signal have separate cables.



B The PROSHOT is controlled with DMX. The DMX signal and the ARM signal are combined.



4. If controlled with DMX: Use the display and buttons or a RDM controller to assign DMX addresses, see Chapter 1.9

For more connection and configuration options, refer to the ARM SYSTEM Configuration Manual (PART02323).

⚠ WARNING	Risk of fire, electric shock or damage to the electrical system due to overloading the electrical circuit. Never connect more units to a single circuit than the fuse rating allows. See Chapter 1.2 Technical data to calculate the total load.
NOTE	Insert a TERMINATOR in the last ARM output of each line to close the safety circuit. The ARM SYSTEM will not operate if a line remains open.
NOTE	Always plug a DMX Terminator into the DMX output of the final unit in the control sequence to improve signal reliability.

3.5 USING THE ARM OVERRIDE KEY SWITCH

⚠ WARNING	Risk of serious injury due to unsafe operation. Overriding the ARM system without other approved safety systems in place could lead to injury. Only override the ARM system when using other approved safety systems.

In installations where an ARM CONTROLLER is not feasible, the PROSHOT may be armed by disabling the ARM system via the onboard override key switch. This should only be done where other safety systems have been implemented to restrict unauthorized access and mitigate risks.

1. Connect the correct cables between the PROSHOT, the control equipment, and other components and machines (if applicable).
2. Set the key switch to OFF.
   If the machine is connected to power, the full screen FX logo is displayed on screen, indicating the system is now armed and the PROSHOT is ready to be operated.

3.6 TESTING THE SYSTEM (OPTIONAL)

⚠ WARNING	Risk of serious injury or product damage due to excessive residual pressure in the PROSHOT during valve testing. Unexpected discharge or release can cause injury or damage. Always ensure the pressure in the PROSHOT is below 1 bar (14.5 psi) before testing the valve.

1. Turn off the DMX effect channel.
2. Set the safety key on the ARM CONTROLLER to the ON position.
3. Activate the enable address. The full screen FX logo starts flashing slowly. The requirements for the Test Mode have been met.

4. Turn on the DMX effect channel to test the valve.
5. After the test, turn off the DMX effect channel.
6. Switch off ARM and/or turn off DMX enable to exit the Test Mode.

The system also supports device self-test through the device self-test menu screens.

There is an option to perform an automated low pressure pneumatic system test and a manual valve test. The manual valve test allows the user to verify each valve operation using audible cues of the valves.

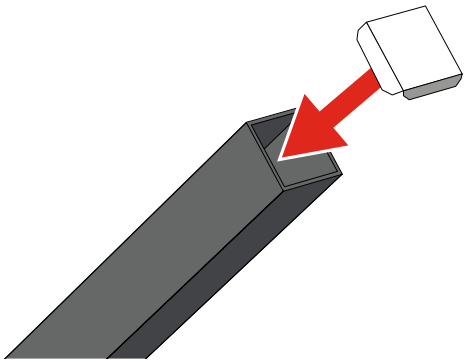
The automated low pressure pneumatic system test is a smart self test that tests the compressor, valves and pressure sensors at lower pressure for correct connections.

NOTE	Make sure to arm the PROSHOT, or disable the ARM system before running the low pressure pneumatic system test or the manual valve test.

3.7 FILL WITH CONFETTI AND/OR STREAMERS

⚠ WARNING	Risk of death or serious injury due to unexpected release of pressurized air or confetti and/or streamers when loading the PROSHOT. Loading the product with the vent valve closed or with residual pressure can result in fatal or severe injury. Always ensure the PROSHOT is not pressurised before loading.

1. Fill the barrel using the PRO SPEEDFILL.
   Refer to the PRO SPEEDFILL leaflet for instructions.
2. Place a cap sticker (MFX0444) on top of the output barrel.



3.8 FILL WITH PRESSURISED AIR

⚠ WARNING	Risk of death or serious injury due to persons, animals, or objects in the shooting direction of the PROSHOT. Failure to keep the shooting direction clear can result in fatal or severe injury. Always keep the shooting direction of the PROSHOT clear of persons, animals, or objects.
⚠ WARNING	Risk of death or serious injury due to unauthorized persons, animals, or objects entering the shooting direction of the PROSHOT. Failure to prevent access can result in fatal or severe injury. Always ensure unauthorized persons, animals, or objects are not able to get in front of the shooting direction of the PROSHOT.

The operation buttons work separately for each tank side.

1. Power the machine.
2. Press the operation button on the front of the machine. The button lights up, the meaning is:
   - OFF: Tank is not pressurized
   - White: Tank is being pressurised
   - Green: Tank is ready to fire
   - Orange: Tank is draining, warning is present
   - Red: Tank is in error state, error situation must be corrected before function can continue
3. After a maximum of 2 minutes, the pressure will be at the maximum pressure of 8 bar (116 psi). The compressor will automatically stop at the set pressure.

NOTE	The tanks can individually be drained by holding the halo buttons if needed.

3.9 FIRE WITH DMX

⚠ WARNING	Risk of death or serious injury due to people, animals, or objects present in the danger zone of the PROSHOT. Failure to keep the danger zone clear can result in fatal or severe injury. Always ensure the danger zone is clear of people, animals, and objects before operating the PROSHOT.

Instructions		DMX addresses
1.	Power the machine.	
2.	Make sure the prescribed risk zone is clear of all obstructions, as described in Section 2.10	
3.	Set the safety key on the ARM CONTROLLER in the ON position. Make sure the safety key on the PROSHOT is set to ON. The FX logo on the display lights in red, indicating the system is now armed and the PROSHOT and other connected SFX machines are ready to be operated. If no ARM CONTROLLER is used, set the safety key on the PROSHOT to OFF. The FX LED lights in red, indicating the system is now armed and the PROSHOT is ready to be operated.	
4.	Enable the PROSHOT via the enable address.	Enable address: Value range 100 - 154
5.	When it's showtime, activate the effect by setting the **Effect Trigger**. The two barrels are controlled separately, so activate both start addresses to fire both barrels at the same time.	Start address: Value range 200 - 255
6.	Enjoy the view!	
7.	To stop the effect, set the **Effect trigger** to 0.	Start address: 0
8.	Disable the PROSHOT by setting the enable address to 0. The PROSHOT only pressurises again once the button is pressed.	Enable address: 0

3.10 USE THE EMERGENCY STOP

NOTE	This chapter only applies when an ARM CONTROLLER is connected.

1. When an emergency occurs or is about to occur with the PROSHOT, press the emergency stop button on the ARM CONTROLLER or on an external E-STOP (if present).
   As a result the pressurized air can't leave the tank and any related hazard/or property damage is stopped and prevented.
2. Set the safety key on the ARM CONTROLLER in the OFF position.
3. Resolve the emergency situation and inspect the PROSHOT.
4. Release the emergency stop and perform a reset. For instructions, refer to the ARM CONTROLLER User and Installation Manual (PART01882).
5. If DMX is used, set the enable and effect channel back to 0.

The machine is ready to be used again.

3.11 CLEAN UP

1. Make sure that the pressure is 0 bar. The machine automatically drains the pressure once the power is off.
2. Disconnect the cables.
3. Clean the output barrels.
4. Rotate the barrels to the home position.

4. TROUBLESHOOTING

This section provides a structured approach to diagnosing and resolving issues with the PROSHOT.

Follow the steps in order. If a problem persists, discontinue use and contact MAGIC FX service.

4.1 PRE-CHECK

Before troubleshooting, verify the following:

- DMX signal is present and properly terminated.
- ARM system is correctly connected, or override mode is used intentionally.
- No visible damage or mechanical obstruction is present.
- Tanks are not unintentionally pressurized.
- Air inlet and drain outlet are free of debris and not obstructed.
- Filters (air inlet and drain) are clean and allow proper airflow.

4.2 COMMON ISSUES

Problem	Possible cause	Solution
System pressurises immediately on startup	Fly mode enabled while the system was powered down under pressure.	Disable Fly mode or depressurize the system before shutdown.
Touchscreen is unresponsive or behaves erratically	Moisture or environmental conditions affecting the touch sensor.	Disable the touchscreen and operate using the physical buttons.
Device is not detected via RDM	RDM disabled or DMX wiring incorrect.	Enable RDM in settings and verify the DMX signal chain.
Tank does not pressurize correctly	Air inlet blocked or filter clogged.	Inspect air inlet and clean filters.
Tank does not drain properly	Drain outlet blocked or filter contaminated.	Inspect drain outlet and clean filters.

4.3 ERROR CODES

Action legend:

- 🟢 OK - Continue operation
- 🟡 ATTENTION - System is operational, but requires attention.
- 🔴 STOP - Safety critical issue. If unresolved, contact MAGIC FX.

4.3.1 CORE & INTERFACE

Code	Description	Action
COREx	Core initialization failure.	🔴 STOP — Restart unit. If issue persists, power off and contact service.
DSP-1	Display failure.	🟡 ATTENTION — Restart unit. If issue persists, contact service.
DSP-2	Display communication error.	🟡 ATTENTION — Restart unit. If issue persists, contact service.
TCH-1	Touch communication error.	🟢 OK — Clean surface. Use physical controls as fallback.

4.3.2 POWER SYSTEM

Code	Description	Action
PWR-1	Battery not detected.	● OK — Install or reseat battery.
PWR-2	Battery critical level.	● ATTENTION — Connect external power immediately or power down.
PWR-3	Battery low.	● OK — Recharge or replace battery.
PWR-4	Input voltage below threshold.	● ATTENTION — Restore stable power input.

Troubleshooting

4.3.3 SAFETY SYSTEM

Code	Description	Action
ARM-1	Safety system compromised.	● STOP — Power off immediately. Do not use. Contact service.
ARM-2	ARM configuration conflict.	● ATTENTION — Do not use ARM system and override simultaneously.

Troubleshooting

4.3.4 COMMUNICATION

Code	Description	Action
DMX-1	DMX input error.	● ATTENTION - Use a single DMX source. Verify wiring and termination.

Troubleshooting

4.3.5 PNEUMATIC SYSTEM

Code	Description	Action
TK1-1/TK2-1	Trigger failure.	● STOP - Check barrel and shot path for obstruction. Restart unit.
TK1-2/TK2-2	Drain failure.	● STOP - Inspect vents, drain outlet, and filters for blockage.
TK1-3/TK2-3	Pressure not rising.	● STOP - Inspect air inlet and filters for blockage or restriction.

Troubleshooting

4.3.6 PRESSURE SENSORS

Code	Description	Action
PS1-1/PS2-1	Sensor out of range.	● STOP - Restart unit. If issue persists, service required.
PS1-2/PS2-2	Sensor read failure.	● STOP - Restart unit. If issue persists, service required.

Troubleshooting

4.3.7 VALVES & COMPRESSOR

Code	Description	Action
CMP-1	Compressor control fault.	● STOP - Restart unit. If issue persists, discontinue use.
T1F/T2F/T1D/ T2D	Valve control fault.	● STOP - Restart unit. If issue persists, discontinue use.

Troubleshooting

4.4 FINAL NOTE

If a fault cannot be resolved with the actions above:

- Power down the unit.
- Remove it from operation.
- Contact MAGIC FX service.

Do not operate a unit that presents unresolved errors or abnormal behavior.

5. MAINTENANCE

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

Regularly clean the filters in the Air inlet and Drain outlet.

Contact MAGIC FX if the PROSHOT is not functioning correctly.

⚠ WARNING	Risk of serious injury, product damage, or loss of warranty due to unauthorized replacement of parts. Improper replacement can lead to serious injury or product damage. Never replace parts yourself. Always consult MAGIC FX if replacement is necessary.

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 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	: PROSHOT
Type	: MFX0440
Voltage	: 90-250 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

The following harmonized standards were applied:

- NEN-EN-IEC 62368-1:2020 Audio/video, information and communication technology equipment - Part 1: Safety requirements
- NEN-EN-IEC 61000-6-1:2007 Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments
- 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	: 1-4-2026
Signature	

MAGICFX®

WWW.MAGICFX.COM