

HERO 700F

700W LED Moving Head Framing



USER MANUAL

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Caution!



Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!



Avoid looking directly into the light source!

Wear protective glasses and other PPE (personal protective equipment) when working on or near the fixture.



Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label. Make sure it is grounded when using it!

Unplug mains lead before opening the housing!

Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the powercord from time to time.

Make sure to replace the fuse with another of the same type and rating.



For your own safety, please read this user manual carefully before you initial start-up.

Follow operating safety precautions and pay attention to warning signs methods and equipment on the user manual.



Warning! This symbol indicates a hot surface. Certain parts of the housing can become hot during operation. After use, wait for a cool-down period of at least 10 minutes before handling or transporting the device.



T =45°C

Indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture. IP 20 rating.

The ambient temperature must always be between -5° C and +45° C.

Every person involved with the installation, operation and maintenance of this device has to

- be qualified
- follow the instructions of this manual
- consider this manual to be part of the total product
- keep this manual for the entire service life of the product
- pass this manual on to every further owner or user of the product
- download the latest version of the user manual from the Internet

Introduction

Thank you for having chosen Hero 700F. You will see you acquired a powerful and versatile device.

Unpack your item. Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

Safety instructions

This fixture is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

This device has left our premises in absolutely perfect condition. Always disconnect from the mains, when the device is not in use or before cleaning it. Keep away children and amateurs from the device! There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.

Installation

Read 'Safety information' before installing the fixture

The fixture is designed for indoor use only and must be used in a dry location with adequate ventilation. Ensure that none of the fixture's ventilation slots are blocked.

Fasten the fixture to a secure structure or surface. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed in this user manual using a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

Fastening the fixture to a flat surface

The fixture can be fastened to a hard, fixed, flat surface that is oriented at any angle. Ensure that the surface and all fasteners used can support at least 10 times the weight of all fixtures and equipment to be installed on it.

Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed below with a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

Mounting the fixture on a truss

The fixture can be clamped to a truss or similar rigging structure in any orientation. When installing the fixture hanging vertically down, you can use an open-type clamp such as a G-clamp. When installing in any other orientation, you must use a half-coupler clamp that completely encircles the truss chord.

To clamp the fixture to a truss:

1. Check that the rigging structure can support at least 10 times the weight of all fixtures and equipment to be installed on it.
2. Block access under the work area.
3. Fold the legs of the mounting bracket together and bolt a rigging clamp securely to the mounting bracket. The bolt used must be M12. It must pass through both mounting bracket legs and be fastened with a self-locking nut.
4. Working from a stable platform, hang the fixture with its clamp on the truss and fasten the clamp securely.
5. Secure the fixture with a safety cable as directed below.

Securing with a safety cable

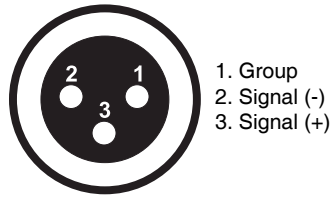
Secure the fixture with a safety cable (or other secondary attachment) that is approved for the weight of the fixture so that the safety cable will hold the fixture if a primary attachment fails.

Loop the safety cable through the eyebolt in the back of the fixture and around a secure anchoring point. Do not loop the safety cable around the fixture's mounting bracket only, as this will leave the fixture unsecured if it separates from the bracket.

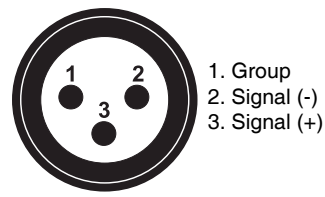
DMX-512 connection/connection between fixtures

Occupation of the XLR-connection:

DMX OUT



DMX IN



If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

Building a serial DMX-chain:

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

DMX-512 connection with DMX terminator:

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 resistor between Signal (–) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

Connection with the mains:

The Hero 700F is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.

This fixture must be earthed. To use the fixture, a plug must be fixed.

The correct assembly of a sufficient plug may be done by professional persons only.

The conductors in the cable are marked by the following table.

Connect the device to the mains with the enclosed power supply cable.

Cable color	Connection	International
Brown	Live	L
Blue	Neutral	N
Yellow/green	Earth(Ground)	

Operation

The Hero 700F can operate in three different modes. In each mode you can run the fixture as a stand alone fixture or in a master/slave configuration. This next section will detail the differences in the operating modes.

Addressing

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to listen to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to listen to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to listen to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

Universal DMX Control

This function allows you to use a universal DMX-512 controller to control the chases and patterns, dimmer and strobe. A DMX controller allows you to create unique programs tailored to your individual needs.

RDM control

The Hero 700F RDM can communicate using RDM (Remote Device Management) in accordance with ESTA's American National Standard E1.20-2006: Entertainment Technology RDM Remote Device Management Over DMX512 Networks.

RDM is a bi-directional communications protocol for use in DMX512 control systems, it is the open standard for DMX512 device configuration and status monitoring.

The RDM protocol allows data packets to be inserted into a DMX512 data stream without affecting existing non-RDM equipment. It allows a console or dedicated RDM controller to send commands to and receive messages from specific fixtures.

With RDM function, you can set the DMX address of your fixtures remotely. This is especially useful when the device is installed in a remote area.

Each Hero 700F has a factory set RDM UID (unique identification number).

Stand-alone Mode

In this mode, you can run internal program without a controller.

1. Press the **Setting** icon in in the touch screen.
2. Select the **Fixture Set** tab.
3. Press **Up** or **Down** button and select **Run Mode** and select **Host**.
4. The fixture will run internal programs.

Master-Slave Operation

This function will allow you to link up to 16 units together and operate without a controller. In a Master-Slave set up one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

1. Using approved DMX data cables, daisy chain your units together via the XLR connector on the rear of the units.
2. For the Master unit press the **Setting - Fixture set - Run Mode - Host** icon in in the touch screen.
3. For the slave units press the **DMX address** icon in the touch screen. Set the DMX address to 001.
4. The slave units will now follow the Master unit.

Control Menu Map

The control panel on the front of the fixture, provides access to the system menu and is where all necessary system adjustments are made to the fixture. LCD touch screen makes it very easy to navigate the system menus.

During normal operation, pressing **MENU** button once will access the fixture's main menu.

Once in the main menu you can navigate through the different functions and access the sub-menus with the **UP**, **DOWN**, and **ENTER** buttons.

Once you reach a field that requires adjusting, press the **ENTER** button to activate that field and use the **UP** and **DOWN** buttons to adjust the field. Pressing the **ENTER** button once more will confirm your setting.

You may exit the main menu at any time without making any adjustments by pressing the **MENU** button.

Main Menu	Level 1	Level 2	Function
Setting	DMX channel	001-512	DMX address setting
	RMD function	Off	Control mode, RDM
		On	
	Language	Chinese	Language, Chinese
		English	Language, English
	Screen rotatio	Off	Display Reverse 180°
		On	
	Screen automatically turning	Off	Screen automatically
		On	
	Screen saver	Off	Screen always on
		On	Black screen after 30 seconds
	DMX signal	Keep	According to the original state continues to run
		Reset	The motor returns to position and stops runn
	X reverse	Off	X reverse movement
		On	
	Y reversal	Off	Y reverse movement
		On	
	XY swap	Off	The exchange of XY channels (including fine-tuning)
		On	
	XY encoder	Off	Using encoder (light coupling) judging out-of-step and automatically correct position
		On	Do not use the encoder (light coupling) correct position

Running mode	Self-walk mode	DMX	Receive DMX signals from console or host
		Since the go	Self-walk and send DMX signal to slave
		Voice control	
	Manual control		Manual control into the interface
	Light fixture reset		All motors begin to reset
	XY reset		x, y motors start reset
	MT reset		The small motor begins to reset
System informatio	Software Version		Software Version
	Temperatureinformation		Fixture temperature
	Fan information		Display fan speed informat
	The system time	Total light bubble	Total light bubble time
		The bright bubble	Time of this bright bubble
		Total used	Cumulative usage time
		The use	The use of this boot since time
		The access time	9999 means no encryption and can be used for a long time;Other numerical said the rest of the time, have the encryption;
	Sensors to monitor	X hall Y Hall Color hall CMY Cyan Hall CMY magenta hall CMY yellow hall CTO Hall Fixed pattern hall Glass design hall Glass rotates hole pattern Adjustable JiaoHuoEr Enlarge hole	Optocoupler Hall status viewing,When the magnetic is detected, it is 0, otherwise it is 1
		Prism rotating hall. X coding state Y coding state	
		X encodes the step value Y code the step value	Were walking direction, step value should be increased, walking in the opposite direction, step value should be reduced.
	System error		
	DMX monitoring		
Dimming curve	SCurve (sinusoidal)		The default is linear dimming curve, reference the dimming curve
	InSquare (log)		
	Square (index)		
	Linear (straight line)		

Motor calibration	The X axis		
	The Y axis		
	Color		
	Gobo		
	Gobo 2		
	Gobo 2 Rotating		
	Gobo 3		
	Gobo 3 disc stroke		
	Display finger zero		
	Cyan		
	Magenta		
	yellow		
	Color temperature		
	Focusing		
	Zoom		
	Prism zero		
	Prism stroke		
	Prism rotating		
	Frost zeros		
	Frost trip		
	Cutting rotary disc		
	The aperture		
	Cut 1		
	Cut 1		
	... Cut 8		
	power		0-255 power regulati

DMX Protocol

36 CH mode	Function	DMX value	Function Control
CH1	Pan	0-255	Pan movement by 540°
CH2	Pan fine	0-255	Fine control of pan movement
CH3	Tilt	0-255	Tilt movement by 270°
CH4	Tilt fine	0-255	Fine control of tilt movement
CH5	Pan/Tilt speed	0-255	Pan/Tilt speed, decreasing
CH6	Strobe	0-3	Closed
		4-127	Pulse strobe slow to fast
		128-191	Fade strobe, slow - fast
		192-251	Random strobe slow to fast
		252-255	Open
CH7	Dimmer	0-255	0-100 linear dimmer
CH8	C	0-255	
CH9	M	0-255	
CH10	Y	0-255	
CH11	CTO	0-255	

CH12	Color	0-127	Linear color
		128-137	Color 1
		138-146	Color 2
		147-155	Color 3
		156-164	Color 4
		165-173	Color 5
		174-191	Color 6
		192-222	Forwards rainbow effect fast to slow
		223-224	Stop
		225-255	Backwards rainbow effect slow to fast
CH13	light frost	0	No function
		1-255	0-100% linear insertion
CH 14	Gobo	0-4	Open/hole
		5-9	Gobo1
		10-14	Gobo2
		15-19	Gobo3
		20-24	Gobo4
		25-29	Gobo5
		30-34	Gobo6
		35-39	Gobo7
		40-44	Gobo8
		45-49	Gobo9
		50-54	Gobo10
		55-59	Gobo11
		60-64	Gobo12
		65-69	Shaking gobos from slow to fast 1
		70-74	Shaking gobos from slow to fast 2
		75-79	Shaking gobos from slow to fast 3
		80-84	Shaking gobos from slow to fast 4
		85-89	Shaking gobos from slow to fast 5
		90-94	Shaking gobos from slow to fast 6
		95-99	Shaking gobos from slow to fast 7
		100-104	Shaking gobos from slow to fast 8
		105-109	Shaking gobos from slow to fast 9
		110-114	Shaking gobos from slow to fast 10
		115-119	Shaking gobos from slow to fast 11
		120-124	Shaking gobos from slow to fast 12
		125-190	Forwards rainbow effect fast to slow
		191-192	Stop
		193-255	Backwards rainbow effect slow to fast
CH15	Rot. gobo	0-9	Open/hole
		10-19	Gobo 1
		20-29	Gobo 2
		30-39	Gobo 3
		40-49	Gobo4
		50-59	Gobo5
		60-69	Gobo6
		70-79	Shaking gobos from slow to fast 1
		80-89	Shaking gobos from slow to fast 2
		90-99	Shaking gobos from slow to fast 3
		100-109	Shaking gobos from slow to fast 4
		110-119	Shaking gobos from slow to fast 5
		120-129	Shaking gobos from slow to fast 6
		130-190	Forwards rainbow effect fast to slow

		191-192	Stop
		193-255	Backwards rainbow effect slow to fast
CH16	Gobo Auto	0-127	0-400°
		128-190	Forwards rainbow effect fast to slow
		191-192	Stop
		193-255	Backwards rainbow effect slow to fast
CH17	Effect Insertion	0-10	Open/hole
		11-255	linear insertion
CH18	Effect	0-2	Stop
		3-128	Forwards rainbow effect fast to slow
		129-255	Backwards rainbow effect slow to fast
CH19	Focus	0-255	From far to near
CH20	Focus fine	0-255	
CH21	Zoom	0-255	From small to large
CH22	Prism1	0-127	Open position (hole)
		128-255	Prism1
CH23	Prism1 rotation	0-127	0-400°
		128-187	Forwards rainbow effect fast to slow
		188-195	Stop
		196-255	Backwards rainbow effect slow to fast
CH24	Prism Auto fine	0-255	
CH25	Heavy frost	0-127	No function
		128-255	Frost
CH26	Cutting slice1	0-255	linear insertion
CH27	a slice 2	0-255	linear insertion
CH28	a slice 3	0-255	linear insertion
CH29	a slice 4	0-255	linear insertion
CH30	a slice 5	0-255	linear insertion
CH31	a slice 6	0-255	linear insertion
CH32	a slice7	0-255	linear insertion
CH33	a slice 8	0-255	linear insertion
CH34	Cutting disc	0-255	linear insertion
CH35	Iris	0-255	range from large to small
CH36	function	210-215	Reset over 6 seconds XY
		220-235	Reset effect motor in more than 6 seconds
		240-255	Reset all in more than 6 seconds

Fixture Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (I.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

To clean the fixture:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Vacuum or gently blow away dust and loose particles from the outside of the fixture with low-pressure compressed air.
3. Clean the surfaces by wiping gently with a soft, clean lint-free cloth moistened with a weak detergent solution. Do not rub glass surfaces hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water.
4. Check that the fixture is dry before reapplying power.

Fuse Replacement

This fuse is located in a fuseholder next to the MAINS OUT socket on the connections panel.

To replace a fuse:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Unscrew the cap of the fuseholder and remove the fuse. Replace with a fuse of the same size and rating only.
3. Reinstall the fuseholder cap before reapplying power.

Troubleshooting

Listed below are a few common problems that you may encounter, with solutions.

The fixture does not work, no light

- Check the connection of power and main fuse. Be sure the external fuse has not blown.
- Measure the mains voltage on the main connector.

Specifications

Model	Hero 700F
Power supply:	AC100 - 240V, 50/60Hz
Light source:	700W white LED
Color temperature:	8000K
Color Rendition:	CRI ≥70 or CRI 95 optional
Pan:	540°
Tilt:	270°
Zoom:	5.5°~50°motorized
Power connection:	PowerCON in & out
Signal connection:	3-pin XLR in & out(5-pin optional)
DMX channel:	36
Control mode:	RDM, DMX, Auto program, Sound, Master-slave
Housing:	Colour black, ABS+PC
Size:	420 x 290 x 800 mm
N.W.:	32.7 kg
Dimming:	0%-100% dimming
Accessories(included):	Power cable, safety rope, manual
Accessories (optional):	Omega bracket
Enviroment:	IP20

Please note: All information is subject to change without prior notice.