Operating Instructions

Force 120

Version: 1.1 (2018-03-02) - en-us

GLP
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PRODUCTS

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Content

1 Representation conventions

This manual contains recurring features that reflect the function of certain information:

Warning
Indicates a hazard with a medium level of risk, that may result in severe injury or death if it is not avoided.

Attention
Risk of equipment damage.

Advice
Indicates a helpful note in the current context.

One or more **bolded** words indicate a term that can be found exactly the same on the product.

One or more *italicized* words indicates an index entry or an important technical term.

1. Instructions are numbered.

   ✓ As are results or outcomes of these actions.

2 Safety

2.1 General safety information

Important information

- Read documentation carefully

- Observe the safety information in this chapter

- Follow instructions and warnings

- Only use equipment as instructed in this document

- Observe notes and symbols on the product

- Keep documentation on hand for later reference

- Pass documentation on to the next user

- Keep available near the system at all times

- Observe documentation for additional components used as well

Danger through electrical voltage

- Only connect equipment to a grounded safety socket

- The corresponding fuse must be the correct size for the equipment

- Completely cut the power to the equipment before installation, cleaning, maintenance, or repairs

- Do not clean equipment under running water or by immersing in liquid

Proper handling

- Do not make any modifications to the equipment

- Do not drop equipment or expose it to severe mechanical pressure. The equipment can sustain heavy damage from the impact.

- Regularly check equipment for damage. If damaged, turn the equipment off and fully disconnect from the power supply. Contact customer service or retailer.

Maintenance and repair

- Do not repair equipment yourself. Contact customer service or retailer.

2.2 Intended use

This device is developed for commercial use. Private use is not permitted.

It may only be operated indoors in a dry environment.

Protect against moisture and spray water.

Several devices must not be stacked on top of each other.

The device serves as a wind machine to generate moving light effects at events. It may not be used for any other purpose.

This device is not intended to be used by people with limited physical, sensory or mental capabilities or lack of experience and/or lack of knowledge unless supervised or instructed by a person responsible for their safety the device.

The manufacturer is not liable for damage caused by improper use of the device.

3 Transport and storage

! **Attention**
Do not drop equipment or expose it to severe mechanical pressure. The product can sustain damage from the impact.
Only store equipment in dry areas.

Use the supplied or appropriate packaging material for storage and transport.

To lift the device, use the carrying handles on the casing.

4 Scope of delivery

i **Advice**
Check the scope of delivery for completeness after unpacking.
Check device for visible damage.

Number/component	Description
1 x Force 120	
1 x PowerCON True1	
1 x Operating Instructions	

i **Advice**
Order optional accessories directly from your specialist retailer. List to be found
online at www.germanlightproducts.com.

5 Description of devices
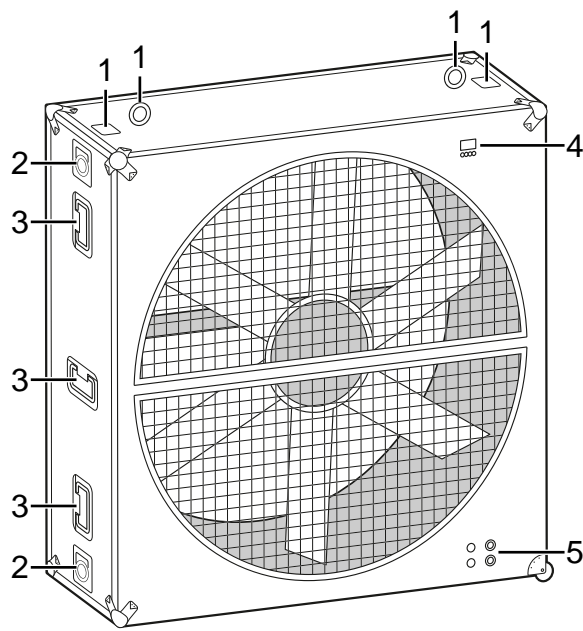
Image 1: Description - Force 120 (back)

1 Safety eyelets   **4** Display with buttons
2 D-rings/suspensions (two-sided)   **5** Connections
3 Carrying handles (two-sided)

6 Assembly and connection

6.1 Set up device

The device can be operated standing and hanging. With safety factor 12, a maximum of two devices can be operated among each other.

> **!** **Attention**
>
> High air flows. Objects in the area can be damaged or damage the Force 120.
>
> ■ Make sure that there are no light, unsecured objects up to 3 meters in front of and behind the device.

Stationary

Condition(s)

■ The installation site has sufficient carrying capacity (at least 100 kg).

1. Place the device on the ground with the rubber feet.

2. Orient the device so that the front is clearly visible.

3. Secure the device with safety ropes.

   ✓ The device is set up and can be connected.

Hanging

1. Attach the brackets to the D-Rings.

2. Secure the device with safety ropes.

   ✓ The device is suspended and can be connected.

6.2 Connect the device

Connection panel
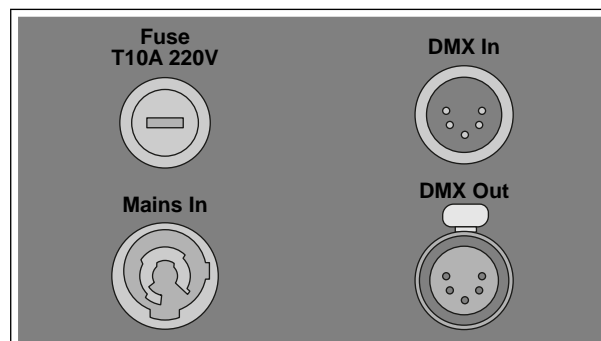
Image 2: Connection panel

Fuse: Fuse holder   **DMX in:** DMX input (5-pin)
Mains in: Input PowerCON True1   **DMX out:** DMX output (5-pin)

Connect the device

Conditions

■ The device is set. ([see chapter 6.1](#))

1. To establish the signal connection, connect the device and other devices or the controller with a DMX cable. Therefore plug in the DMX cable **DMX in** and **DMX out**.

2. Plug in the PowerCON True1 cable into the PowerCON True1 input **Mains in** of the device.

3. Plug in the plug of the PowerCON True1 cable into a socket.

   ✓ The device is now connected and ready for use.

7 Operation

7.1 Control device

Control panel

Image 3: Control panel

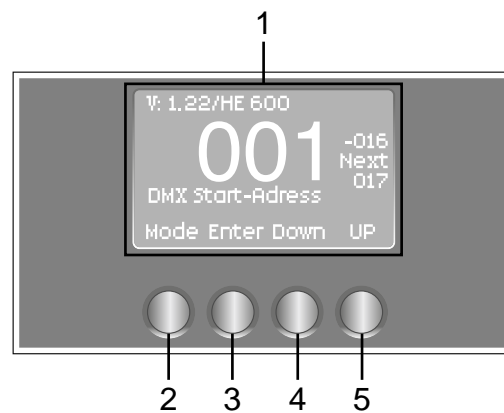|	
1 Display	**4** **DOWN**: Navigate up/increase value
2 **MODE**: Opens the main menu	**5** **UP**: Navigate down/decrease value
3 **ENTER**: Open menu item or confirm setting	

Use DMX control

    Conditions

- The device is connected with a DMX control.
- The fan is not covered by other objects.

▸ Control the speed, acceleration and lighting with a DMX control.

    ✓ The device conducts the setup.

7.2 Menu structure

The menu structure consists of up to 5 menu levels.

7.2.1 DMX start address and setup

DMX start address

Level 2	Level 3	Level 4	Level 5	Value	Description
1 - 505					DMX start address

Setup

Level 2	Level 3	Level 4	Level 5	Value	Description
DMX mode	Normal				
	High resolution				
DMX input	**Wired DMX**				Use wired DMX as input

7.2.2 Settings

Level 2	Level 3	Level 4	Level 5	Value	Description
Shutter	Error Blackout	ON / **OFF**			Light output is stopped if an error occurs
	No DMX Blackout	ON / **OFF**			Light output is stopped if DMX fails for 3 seconds
Init Positions	Save				Save current positions as initial positions after reset without DMX
	Reset				Reset initial positions after reset without DMX
Dimming Curve	Linear				Set the desired dimming curve
	Soft				
	Extra Soft				
DMX hold	**Hold**				Last DMX values are hold if DMX fails
	Off				Fixture blacks out if DMX fails
	Fade out				Last DMX values are hold if DMX fails
PWM frequency	Set 582-618 Hz, 1200Hz, 2400Hz				Sets the LED PWM frequency
Display	Contrast	0 - **50** -100 %			Contrast of the display
	Brightness	0 - **100** %			Brightness of the display (auto brightness has to be disabled)
	Blackout time	1 - **10** -30 s			Time after which the display blacks out after last keystroke (auto blackout has to be enabled)
	Display orientation	Normal			Flip display up/down
		Inverted			

Level 2	Level 3	Level 4	Level 5	Value	Description
		Auto			Display is flipped automatically by the acceleration sensor if fixture is hanging
	No DMX Flash	**ON** / OFF			Display flashes if DMX fails
Reset factory settings	Confirm (yes/no)				Resets all values to default (except for serial number)

7.2.3 Information

Level 2	Level 3	Level 4	Level 5	Value	Description
System errors				List	Show all recent errors (permanent)
System versions	Main (SW/HW)				Show all versions: Software (main application, boot loader) & hardware
Fixture information	Fixture hours	Total hours		0-99999 h	Time the fixture is running in total
		Resetable hours		0-99999 h	(resettable)
	Boot count			0-99999	Count how often the fixture was switched on
DMX input monitor	Fan			**0 - 255**	Show all DMX values
	Speed/angle			**0 - 255**	
	Special/ control			**0 - 255**	
	Shutter			**0 - 255**	
	Dimmer			**0 - 255**	
	Red			**0 - 255**	
	Green			**0 - 255**	
	Blue			**0 - 255**	
	Color			**0 - 255**	

7.2.4 Manual control

Level 2	Level 3	Level 4	Level 5	Value	Description
Reset	Full system reset	Confirm (yes/no)			
Manual DMX	Fan	**0 - 255**			
	Speed/angle	**0 - 255**			
	Special/ control	**0 - 255**			
	Shutter	**0 - 255**			
	Dimmer	**0 - 255**			
	Red	**0 - 255**			
	Green	**0 - 255**			
	Blue	**0 - 255**			
	Color	**0 - 255**			
	Reset all values	Confirm (yes/no)			Set all manual DMX values to 0

7.2.5 Test

Level 2	Level 3	Level 4	Level 5	Value	Description
Pan	ON / **OFF**				
Color test	ON / **OFF**				
All test	ON / **OFF**				

7.2.6 Service

Level 2	Level 3	Level 4	Level 5	Value	Description
Key code	**0** - 255				Enter code first to get in the service menu (reset automatically after fixture restart or after 10min with no display input)
Serial	0 - 99999				Last 5 digits of the serial number. Needed for correct working RDM
LED calibration	LED1	Red	0 - **128** - 255		
		Green	0 - **128** - 255		
		Blue	0 - **128** - 255		

7.3 Switch off device

▸ Disconnect the device from the power supply.

    ✓ The device is switched off.

8 Cleaning and maintenance

Force 120 is a low-maintenance device. Depending on the operating environment, surfaces must cleaned on a regular basis.

Warning

Danger of electrical shock. Electric cables can cause serious injury if they come into contact with cleaning agents.

- Disconnect the mains plug before cleaning.
- Observe local health and safety regulations.
- Wait until the device has cooled down after previous operation.
- Do not repair the device yourself. Contact the customer service or retailer. (see chapter 11)

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1. Clean the surface with a dry, soft and clean cloth.

! **Attention**

Do not use aggressive detergents, alcohol or other chemical agents.

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2. Suck or sweep away dust from the openings.
   - ✓ The cleaning is complete.

9 Technical data

Version	Force 120
Device dimensions	400 x 1,400 x 1,400 mm 15.75 x 55.12 x 55.12 inch
Weight (net)	94 kg 208 lbs
Supply voltage	100-240 VAC, 50-60Hz
Power (at 230 V)	1,000 W
DMX allocation	5 pin XLR: (+) = pin 3; (-) = pin 2; Ground = pin 1
Protection class	IP20
Minimum / maximum ambient temperature	-20 – 45 °C -4 – 113 °F
Maximum fan speed	750 revolutions/min.
Minimum fan speed	30 revolutions/min.

10 Recycling/disposal/environmental protection

Recycling

Dispose of packaging material in an environmentally friendly manner in accordance with local waste disposal regulations.

Dispose of residues of operating materials in accordance with locally or operationally applicable disposal regulations.

After decommissioning and disassembly of the system or individual components, these must be disposed of in agreement with the manufacturer according to local regulations.

Do not dispose of batteries and rechargeable batteries in household waste. Dispose of batteries and rechargeable batteries at designated collection points.

This device is marked in accordance with the European Directive 2012/19/EU on waste electrical and electronic equipment.

Electrical and electronic devices must not be disposed of with household waste. Their components must be supplied separately for reuse and disposal.

At the end of its service life, return the device free-of-charge to the manufacturer, point of sale or a public collection point set up for this purpose.

11 Contact

Manufacturer

GLP German Light Products, Inc.

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San Fernando, CA 91340

Support

Online	www.germanlightproducts.com
	To use the online support, it is required to go through a one-time registration process. Then log into the online support using your registered user account.
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