



STARSHINE LIGHTS

PRODUCT MANUAL



PROFESSIONAL STAGE LIGHTING

F22 381W MOVING HEAD BEAM LIGHT

PRODUCT MANUAL

18CH DMX512	381W MSD SOURCE	DUAL PRISM SYSTEM
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READ BEFORE USE

Please read this manual carefully before installing, operating, or servicing the fixture. Keep it available for future reference.

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DOCUMENT SCOPE

This manual covers installation, safety, panel operation, operating parameters, DMX control, and warranty information for the F22 381W Moving Head Beam Light.



1. Safety, Maintenance & Responsibility

1.1 Maintenance

- To reduce the risk of electric shock or fire, do not expose the fixture to rain or moisture.
- Intermittent operation can help extend the service life of the fixture and lamp.
- Clean the cooling fans, fan filters, and optical lenses regularly to maintain reliable performance.
- Do not use alcohol or other organic solvents on the housing.

1.2 Responsibility Statement

The product is supplied in complete packaging and is designed for professional use. All users must comply with the warnings and operating instructions in this manual. Damage caused by misuse, incorrect installation, unauthorized modification, or failure to follow this manual is not covered by the manufacturer or dealer warranty.

NOTICE

Specifications and information may be changed without prior notice.

1.3 Safety Precautions

- Do not install or operate the fixture in damp locations or in ambient temperatures above 60°C.
- Always mount the fixture on a safe, stable, and load-rated structure.
- Installation and removal must be performed by qualified personnel.
- Mains voltage variation should remain within $\pm 10\%$. Excess voltage can shorten lamp life; insufficient voltage can reduce performance.
- After switching off the lamp, allow at least 20 minutes for full cooling before restarting.
- Avoid frequent power cycling. Intermittent use generally provides better lamp and component life.
- Read this manual completely before use.

HOT SURFACE / HIGH INTENSITY LIGHT

Allow the fixture to cool before servicing. Never look directly into the beam and keep combustible materials away from the optical output.



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2. Product Overview & Specifications



F22 is a professional 381W moving head beam fixture designed for stage, touring, club, event, and installation applications. It combines a narrow beam, electronic focus, dual prism effects, a color wheel, a gobo wheel, frost, high-speed strobe, and precise 16-bit pan/tilt control.

Specification		Value
Model		F22
Input voltage		AC 90-240 V
Frequency		50/60 Hz
Light source		MSD 381W
Rated power		500 W
DMX channels		18CH
Color temperature		5600-8000 K
Output	aperture	165 mm
Color system		14 colors + open white
Gobo	system	17 gobos + open white; shake, scrolling, speed adjustment, and positioning
Effects		7-color effect, frost, 16-facet prism, 48-facet honeycomb prism
Prism	control	Bidirectional rotation and positioning
Dimming		0-100% linear dimming
Strobe		0.5-14 flashes/s; synchronized, asynchronous, and random modes
Display		LCD; English and Simplified Chinese
Optics		Combined lens; 0-3.9° beam angle; electronic focus up to 20 m
Pan		540° with 16-bit fine control
Tilt		280° with 16-bit fine control and automatic correction
Control		DMX512 with RDM; 3-pin and 5-pin XLR
Protection		Thermal protection
Fixture dimensions		410 × 310 × 580 mm
Packing dimensions		480 × 400 × 560 mm
Net weight		21 kg
Gross weight		23 kg



3. DMX Connection & Rigging

3.1 DMX Cable Connection

Use cable compliant with EIA RS-485: two-conductor twisted pair, shielded, 120 Ω characteristic impedance, 22-24 AWG, and low capacitance. Do not use microphone cable or any cable with unsuitable electrical characteristics.

Use 3-pin or 5-pin XLR male/female connectors. Install a 120 Ω terminating resistor (minimum 1/4 W) between pins 2 and 3 at the last fixture in the DMX chain.

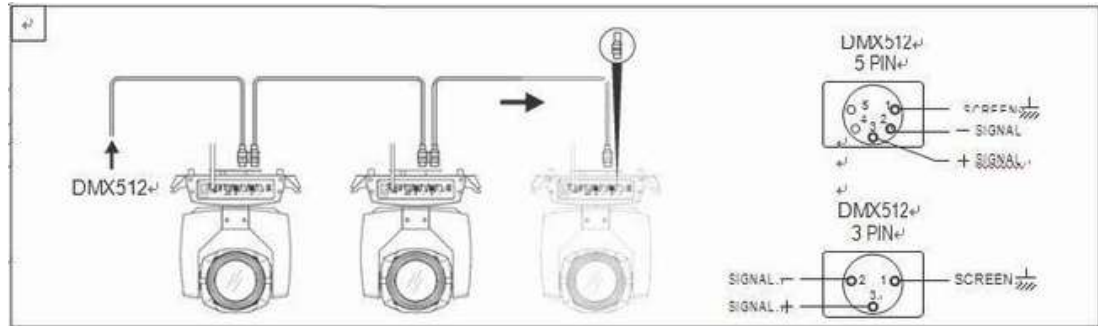


Figure 1. Typical DMX daisy-chain and connector pinout.

IMPORTANT

Conductors must not contact each other or the metal connector shell. Connect the cable shield to pin 1 and to the connector shielding as specified.

3.2 Rigging (Optional)

- The fixture may be clamped in any required orientation, provided the mounting structure is stable and correctly load-rated.
- Use two suitable clamps. Lock each quarter-turn fastener by rotating it clockwise.
- Attach an independent safety cable to the designated safety point. Do not attach the safety cable to the carry handle.
- All clamps, fasteners, structures, wiring, and accessories must support at least ten times the total installed load.
- Use M12 hardware rated Grade 8.8 or higher where applicable, and tighten all nuts securely.
- Confirm that the pan and tilt locks are released before operation.
- Maintain at least 1 m clearance from combustible materials and illuminated surfaces.

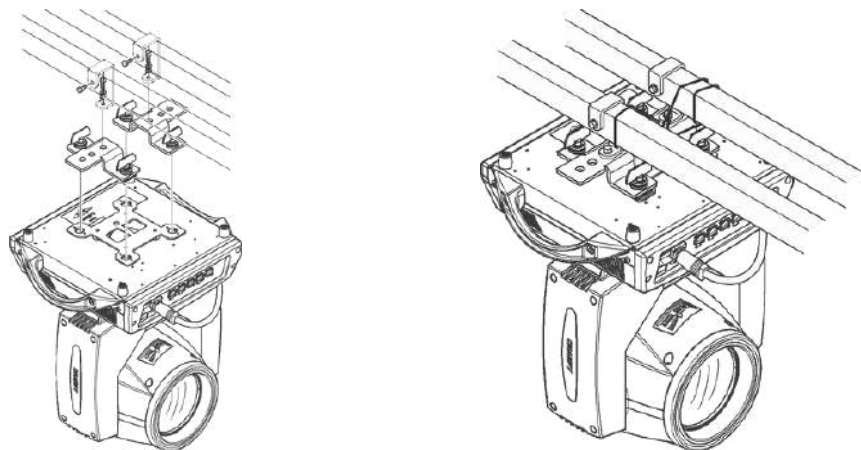


Figure 2. Overhead installation examples.



4. Control Panel Operation

4.1 Panel Overview

The controlpanel includes aTFT touch display and a rotary encoder with push-to-confirm function. Settings can be viewed and edited using either interface.

DISPLAY CARE

Do not touch the TFT screen with sharp or pointed objects.

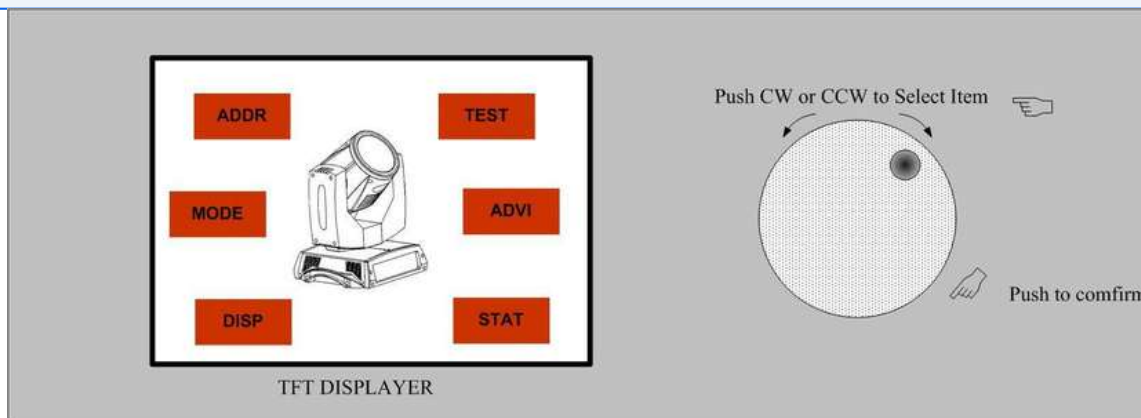


Figure 3. TFT touch display and encoder controls.

4.2 Operating with Touch or Encoder

- Touch interface: tap menu item or value to view fixture status or modify parameters.
- Encoder interface: rotate the encoder to select an item, press to confirm, rotate again to change the value, and press once more to save.

4.3 Setting a Numeric Value

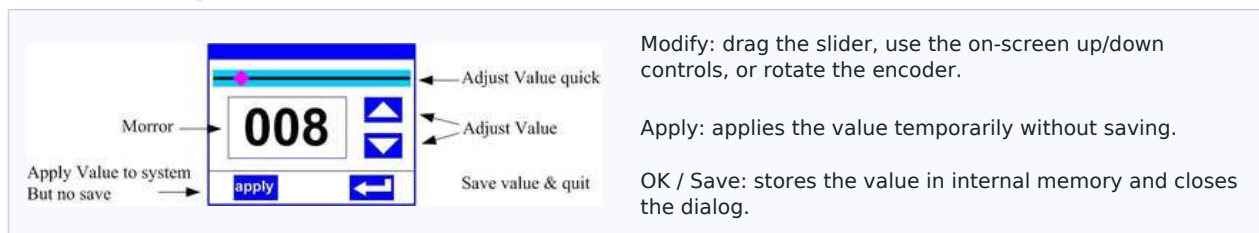


Figure 4. Numeric value dialog.

4.4 Boolean and Confirmation Settings

For ON/OFF parameters, tap the required value to save it immediately. For protected or critical actions, a confirmation dialog appears; select SURE to continue.

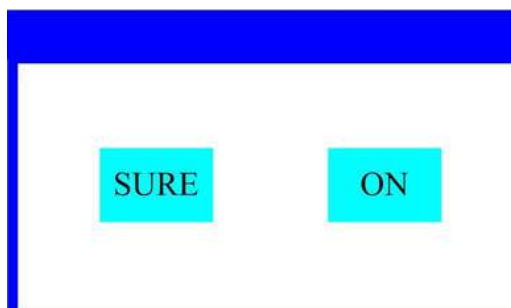


Figure 5. Confirmation dialog.

5. Menu Structure & Core Settings

5.1 Main Menu

Menu	Purpose
ADDRESS	Set the DMX start address.
WORKMODE	Select DMX, Auto Run, or Sound Control; configure master/slave and lamp control.
DISPLAY	Set language, screen saver, rotation, and touch options.
TEST	Manually test fixture functions with 0-255 values.
ADVANCE	Set pan/tilt inversion, correction, offsets, lamp start behavior, and factory settings.
STATUS	View current operating status and software version; clear DMX data or reset the fixture.

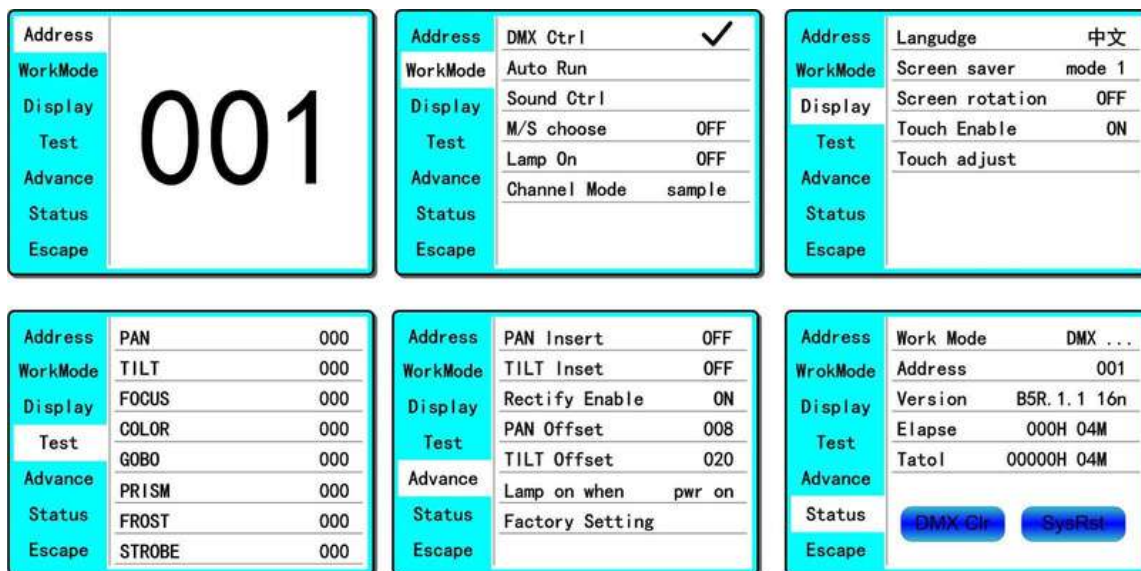


Figure 6. Parameter menu pages.

5.2 DMX Address



Open ADDRESS and set a value from 1 to 512. The start address must not exceed 512 minus the number of channels used. Tap the value area, edit the number, and select OK/ENTER to save.



5.3 Work Mode

Setting	Description
DMX Control	The fixture receives and follows data from a DMX controller.
Auto Run	The fixture runs its internal programs and ignores external DMX data.
Sound Control	The fixture responds to strong audio signals and holds the last scene when no trigger is detected.
M/S Choose	Available in Auto Run or Sound Control. When ON, the master sends program data to connected slave fixtures.
Lamp On	Turns the discharge lamp on or off. Allow at least 30 seconds between repeated lamp operations.
Channel Mode	Select the supported channel mode (simple or extended, where available).

Address	DMX Ctrl	✓
WorkMode	Auto Run	
Display	Sound Ctrl	
Test	M/S choose	OFF
Advance	Lamp On	OFF
Status	Channel Mode	sample
Escape		

Figure 7. Work mode page.



6. Display, Test & Advanced Parameters

6.1 Display Settings

Setting	Description
Language	Select Simplified Chinese or English.
Screen Saver	Mode 1: display off after 10 seconds. Mode 2: show the DMX address or logo. OFF: keep the main menu illuminated.
Screen Rotation	Rotate the display orientation.
Touch Enable	Enable or disable touchscreen operation. When disabled, use the rotary encoder.
Touch Adjust	Touch calibration; normally not required.

Address	Language	中文
WorkMode	Screen saver	mode 1
Display	Screen rotation	OFF
Test	Touch Enable	ON
Advance	Touch adjust	
Status		
Escape		

6.2 Manual Test

Testable functions
PAN, TILT, FOCUS, COLOR
GOBO, PRISM, FROST, STROBE

Each parameter accepts a value from 0 to 255. While the TEST page is active, the fixture does not respond to external DMX data.

Address	PAN	000
WorkMode	TILT	000
Display	FOCUS	000
Test	COLOR	000
Advance	GOBO	000
Status	PRISM	000
Escape	FROST	000
	STROBE	000

6.3 Advanced Run Parameters

Parameter	Function
Pan Invert	Reverse pan movement.
Tilt Invert	Reverse tilt movement.
Rectify Enable	When ON, the fixture automatically corrects pan/tilt position if steps are lost.
Pan Offset	Adjust the pan home position.
Tilt Offset	Adjust the tilt home position.
Lamp On When	Choose lamp startup behavior: at power-on, after reset, or manual.
Factory Setting	Restore operating parameters to factory defaults.

Address	PAN Inset	OFF
WorkMode	TILT Inset	OFF
Display	Rectify Enable	ON
Test	PAN Offset	008
Advance	TILT Offset	020
Status	Lamp on when	pwr on
Escape	Factory Setting	

6.4 Status Page

The STATUS page displays the current work mode, DMX address, hardware/software version, elapsed operating time, and total operating time.

Select DMXClr to clear all DMX values to 0, or SysRst to reset the fixture.

Address	Work Mode	DMX ...
WorkMode	Address	001
Display	Version	B5R. 1.1 16n
Test	Elapse	000H 04M
Advance	Total	00000H 04M
Status	DMX Clr SysRst	
Escape		

Figure 8. Status page.



7. DMX Channel Description

The F22 uses an 18-channel DMX mode. Use the following table to program the fixture. Values are shown as standard 8-bit DMX ranges (0-255).

7.1 Channels 1-13

Channel	Function	DMX Value	Description
CH1	Pan	0-255	0-540°
CH2	Pan Fine	0-255	Fine adjustment, approximately 0-2°
CH3	Tilt	0-255	0-270°
CH4	Tilt Fine	0-255	Fine adjustment, approximately 0-1°
CH5	Pan/Tilt Speed	0-255	Fast to slow
CH6	Dimmer	0-255	0-100% dimming
CH7	Strobe	0-3	Closed / blackout
CH7	Strobe	4-103	Pulse strobe, slow to fast
CH7	Strobe	104-107	Open
CH7	Strobe	108-207	Ramp strobe, slow to fast
CH7	Strobe	208-212	Open
CH7	Strobe	213-251	Random strobe, slow to fast
CH7	Strobe	252-255	Open
CH8	Frost / Atomization	0-127	No effect
CH8	Frost / Atomization	128-255	Insert frost effect
CH9	Color Wheel	0-255	Color selection and wheel effects
CH10	Gobo Wheel	0-255	Gobo selection and effects
CH11	Rainbow Effect	0-127	No effect
CH11	Rainbow Effect	128-255	Insert rainbow / colorful effect
CH12	Prism 1	0-255	Prism 1 selection / insertion
CH13	Prism 1 Rotation	0-127	Prism angle, 0-400°
CH13	Prism 1 Rotation	128-187	Forward rotation, fast to slow
CH13	Prism 1 Rotation	188-195	Stop
CH13	Prism 1 Rotation	196-255	Reverse rotation, slow to fast



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7.2 Channels 14-18

Channel	Function	DMX Value	Description
CH14	Prism 2	0-255	Prism 2 selection / insertion
CH15	Prism 2 Rotation	0-127	Prism angle, 0-400°
CH15	Prism 2 Rotation	128-187	Forward rotation, fast to slow
CH15	Prism 2 Rotation	188-195	Stop
CH15	Prism 2 Rotation	196-255	Reverse rotation, slow to fast
CH16	Focus	0-255	Far to near
CH17	Lamp Control	100-105	Hold for more than 3 seconds to switch lamp OFF
CH17	Lamp Control	200-205	Hold for more than 3 seconds to switch lamp ON
CH18	Reset	255	Hold for more than 3 seconds to reset fixture

PROGRAMMING NOTE

For lamp control and reset functions, hold the specified DMX value for more than 3 seconds.



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8. Product Warranty Card

Customer Name	_____	Manufacturer	Starshine Lights
Model	F22	Purchase Date	_____
Company	_____	Contact Person	_____
Address	_____	Telephone	_____

VALIDATION

The information above must be completed accurately and stamped or confirmed by the end user and point of sale. Incomplete documentation may affect warranty eligibility.

8.1 Warranty Period

This product is warranted for one year from the date of purchase, subject to the terms below.

8.2 Warranty Service

During the warranty period, a product used under normal conditions may be repaired without charge when the valid warranty card and proof of purchase are presented to the designated service center or manufacturer.

8.3 Exclusions

- 1. Invalid, missing, altered, or incomplete warranty documentation.
- 2. Missing dealer or point-of-sale information on the warranty card.
- 3. Failure or damage caused by force majeure.
- 4. Damage during transportation, handling, loading, or unloading.
- 5. Failure or damage caused by not following the operating instructions.
- 6. Unauthorized disassembly, repair, or modification by non-qualified personnel.
- 7. Use of control systems or accessories not approved or supplied by the manufacturer.
- 8. Consumable parts, including the lamp / light source.

CUSTOMER SUPPORT

Website: www.starshinelights.com
 Product: F22 381W Moving Head Beam Light
 Document: English Product Manual

Thank you for choosing Starshine Lights.



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