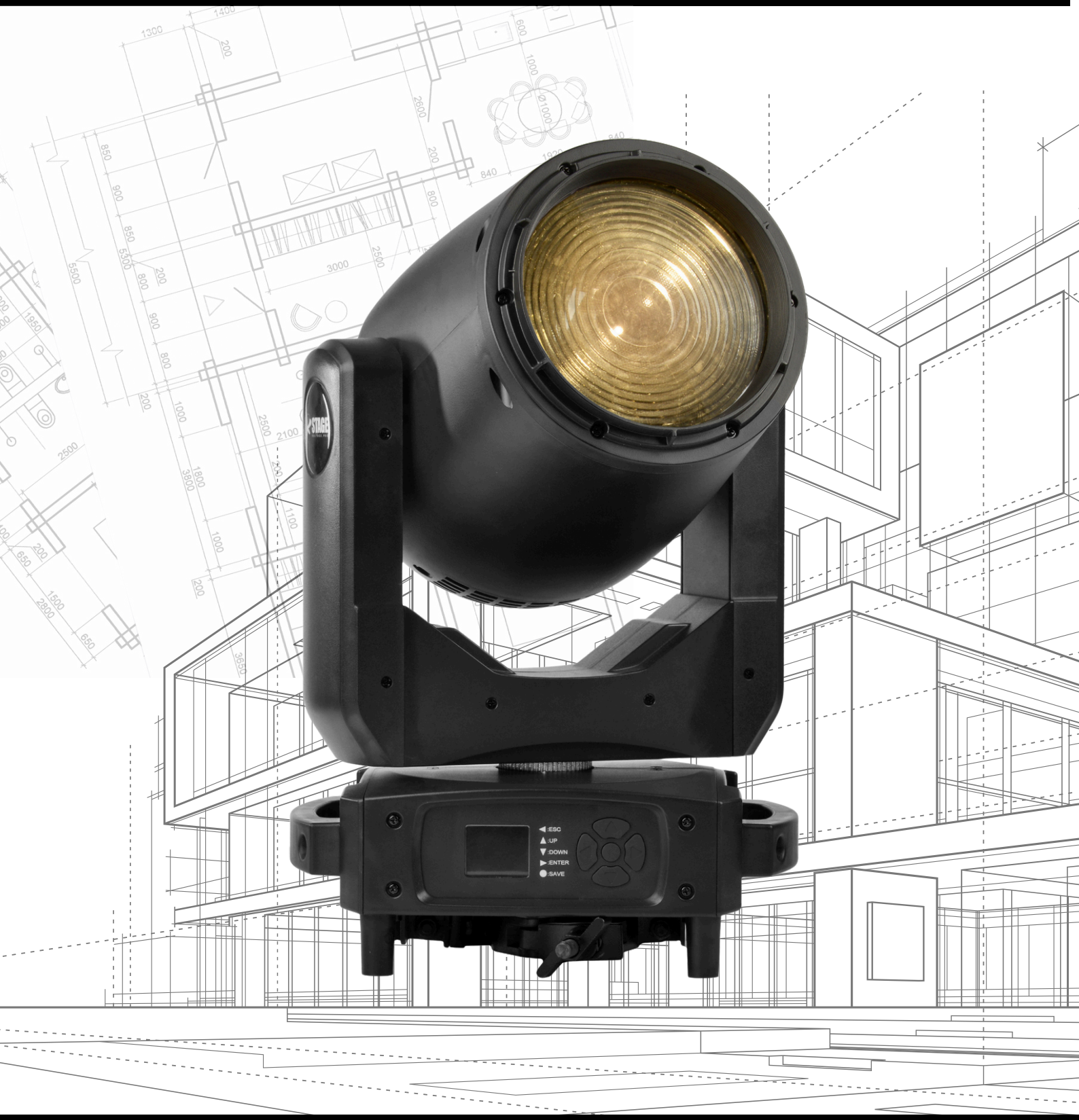
PRO-LINE



F400Z

Moving Head

User manual

PRSTAGE.PRO

1 – INTRODUCTION TO THE MANUAL

Welcome to the F400Z user manual.
This document provides information on the setup, operation, and maintenance of the device.

2 – GENERAL WARNING

Please read the instructions in this user manual carefully, as they contain important safety information regarding installation, use, and maintenance.

⚠ This device is not intended for household use and must be installed by a qualified electrician or experienced technician.

⚠ The device must be properly grounded.

3 – GENERAL WARRANTY TERMS

The device is covered by a 12-month warranty from the date of purchase against manufacturing defects in materials and workmanship.

4 – TECHNICAL SPECIFICATIONS

Light Source:

- LED: 400 w.

Optical System:

- **Focus:** motorized.
- **Beam:** 7°-53°

4 – TECHNICAL SPECIFICATIONS

The 400Z is one of the most compact 400W fixtures available.
Thanks to its advanced optical system, it delivers 30,400 lux at 5 meters (7°). The F400Z is ideal for professional applications, both mobile (concerts, shows, tours, special events) and stationary (clubs, venues), requiring high brightness and versatility.

F400Z functional features:

- Motorized focus.
- Color wheel (13 colors + open position).
- Gobo wheel:
  - Fixed gobo wheel (13 interchangeable gobos + open position).
- Frost filter (soft beam edges).
- Two prisms:
  - 8-facet prism, rotation effect option.
  - 48-facet prism.
- Led RGB ring with macros.
- Rainbow Filter.
- Pan/Tilt mechanism (16 bit)
- Intuitive menu with backlit graphic LCD display.
- Operating voltage: 100-240 V.

Dimmer / Strobe

- Linear dimmer.
- Strobe.

4 – TECHNICAL SPECIFICATIONS

Colors

- Color wheel (13 colors + open position).
- Linear color selection for creating perfect two-color beams.

Gobos

- Fixed – 13 gobos + open position.
- Smooth gobo scrolling.
- Gobo Shake effect (gobo shaking).

Effects

- Indexable rotating prism (8-facet), rotation in both directions.
- Static prism (48-facet).
- Frost filter (blurring the edges of the beam).
- Rainbow effect.
- LED-Ring with various effects

Pan / Tilt

- Pan range: 540°.
- Tilt range: 270°.
- Resolution: 16 bit.
- Move Speed function – smooth and precise movements even at maximum speed.

DMX and control

- 24 DMX channels (default).

Connections

- 2 XLR connectors:
- 3-pin DMX In/Out.
- POWERCONN connector (Neutrik).
- RJ-46 connector (Optional)

Power supply

- Electronic ballast: 100-240 V (50/60 Hz).
- Power consumption: 450 W.

Standard accessories

- 1 omega-type "Fast Lock" mount.

4 – TECHNICAL SPECIFICATIONS

Operating ambient temperature

- from -10°C to +40°C.

Interface

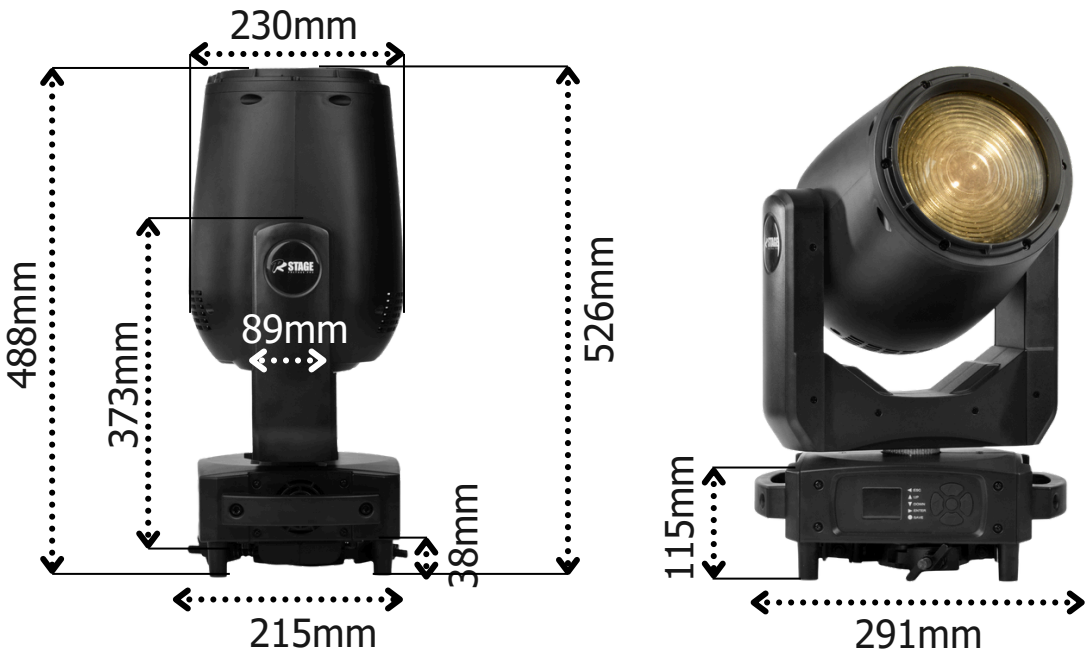
- Graphic LCD display with backlight.

Weight

- 10.55 kg.

Dimensions:

- Without Packaging: 215 × 291 × 488 mm



5 – PACKAGE CONTENTS

Standard package includes:

- 1× F400Z
- 1× POWERCONN Male connector
- 1× 3-pin XLR Male connector
- 1× 3-pin XLR Female connector
- 2× "Fast Lock" Omega brackets (maximum load: 80 kg)
- User manual

6 – IMPORTANT SAFETY INFORMATION

6.1. Fire Prevention:

- Never place the fixture on flammable surfaces.
- Minimum distance from combustible materials: 1.5 m.
- Minimum distance to the nearest illuminated surface: 2 m.
- Replace blown or damaged fuses only with those of the same rating.
- Connect the device to the power supply only through a thermal circuit breaker.

6.2. Electrical Shock Prevention:

- High voltage is present inside the device. Before performing any work that involves touching the internal components, disconnect the device from the power supply.
- The high level of technological complexity of the F400Z requires maintenance by qualified personnel only. Contact an authorized PRstage service center.
- Proper grounding is essential for the device's correct operation.
- Never connect the device without proper grounding.
- The device must be installed in well-ventilated areas.

6.3. Protection from Intense Light Emission:

- Never look directly into the spotlight when it is on.

6.3. Protection from Intense Light Emission:

- Never look directly into the spotlight when it is on.

6.4. Safety:

- The fixture must always be installed using bolts, clamps, and other fasteners that can support its weight.
- Always use an additional safety cable to secure the fixture in case the primary mounting fails.
- The external surface of the device may reach temperatures above 70°C in certain areas. Do not touch the fixture for at least 10 minutes after it has been turned off.

6 – IMPORTANT SAFETY INFORMATION

⚠ 6.4. Safety:

- Never install the fixture in enclosed spaces without adequate air circulation. The ambient temperature should not exceed 40°C.

6.5. Ingress Protection Rating (Solid Particles and Liquids):

- The fixture is classified as standard equipment with an IP20 protection rating, meaning it offers no protection against dust and moisture.
- For outdoor use, PRstage recommends using specialized rain covers or fixtures with protection against liquid or other solid particles. For more details, please consult a PRstage specialist.

7 – VOLTAGE AND FREQUENCY

- The F400Z operates within a voltage range of 100 –240V at a frequency of 50 or 60 Hz.

8 – Installation

- The F400Z can be installed both on the floor and on the ceiling.

Floor Installation:

- The fixture is equipped with four rubber feet on the base for stability. (see Fig. 1, page 9).

Ceiling Mounting:

- It is recommended to use appropriate clamps to secure the fixture to the mounting surface. (see Fig. 2, page 9).
- The supporting structure to which the fixture is suspended must be able to support its weight, as well as the mounting hardware.
- The structure should be rigid enough to prevent vibration during the movement of the F400Z.

Mounting System:

- The base of the fixture has 4 mounting points for hex bolts (not included).
- This allows the F400Z to be mounted using the two “Fast Lock” mounting brackets included in the package.

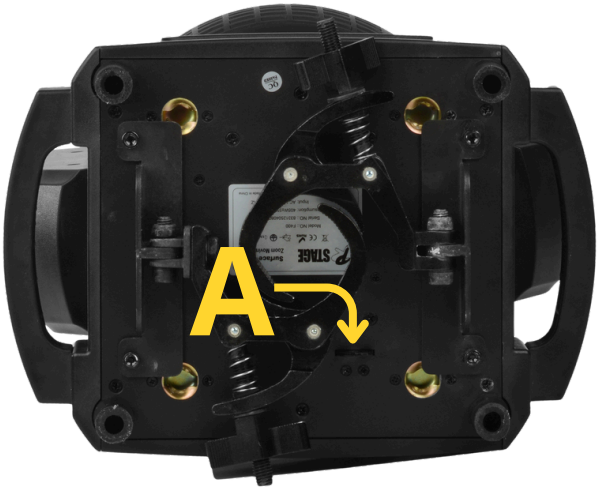
8 – INSTALLATION

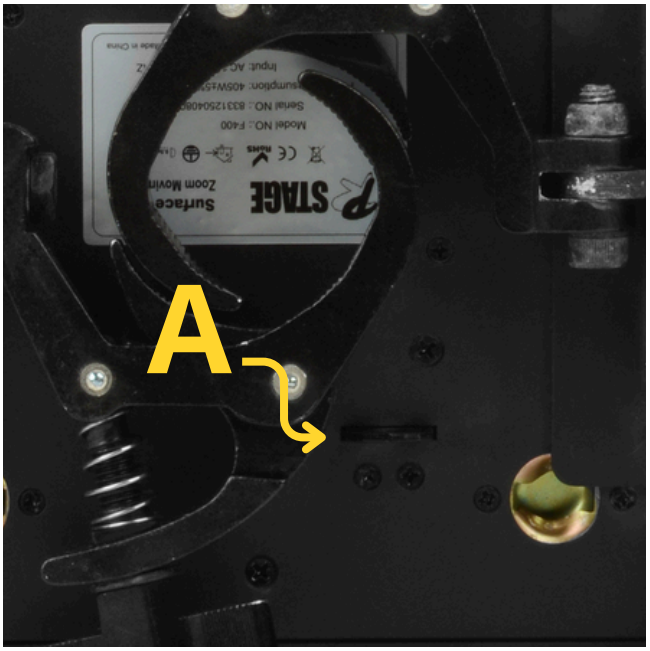
Fig.1

Fig.2

⚠ 8.1 – SAFETY CABLE

- We strongly recommend using a safety cable to secure the F400Z to the mounting truss. This will prevent the fixture from falling in the event of primary mounting failure.
- Ensure that the safety cable is made of metal and is capable of supporting the full weight of the fixture.
- You can attach the safety cable to the hole (A) located at the base of the unit, as shown in the image below.





8.2 – LIQUID PROTECTION

- The projector contains electrical and electronic components that must never come into contact with oil, water, or any other liquids.
- If liquids enter the device, its operation may be compromised or completely fail.

8.3 – MOVEMENT

- The projector has a maximum movement range of:
  - Pan: 540°
  - Tilt: 270°
- Do not place any obstacles in the path of the moving parts of the fixture or position other equipment too close to its range of motion.

8.4 – FORCED VENTILATION

- Upon inspection, you will notice that the device is equipped with air intake vents and cooling fans located at the base and on the head of the fixture.
- Under no circumstances should these vents be blocked or covered during operation.
- Obstructing airflow can lead to severe overheating, which may result in device malfunction or failure.

9 – POWER CONNECTION

- The F400Z operates within a voltage range of 100 –240V at a frequency of 50–60 Hz.
- Before connecting the fixture to the power supply, make sure that the mains voltage matches the device specifications.

To connect:

- Ensure that the plug used supports:
- 8 A at 230 V
- or 16 A at 100–120 V

10 – DMX SIGNAL CONNECTION

The fixture operates using the DMX-512 digital control protocol.

1. DMX Connection

The connection between the DMX controller and the fixture—or between multiple fixtures—must be made using shielded twisted-pair cable (ø 0.5 mm) with XLR connectors (3-pin or 5-pin).

- Make sure the conductors do not touch each other.
- Do not connect the cable shield to the body of the XLR connector—the housing must remain electrically isolated.
- Connect the DMX OUT of the controller to the DMX IN of the first fixture.
- Then connect the DMX OUT of the first fixture to the DMX IN of the second fixture, and so on.
- In this way, all fixtures are connected in a daisy-chain configuration.

10 – DMX SIGNAL CONNECTION

2. DMX Errors

- If the green DMX address indicator is not lit, this indicates one of the following issues:
  - No DMX signal is being received.
  - DMX receiver error.

3. Using a DMX Terminator

In setups with long DMX cable runs, it is recommended to use a DMX terminator.
A terminator is an XLR plug (3-pin or 5-pin) with a 120-ohm resistor connected between pins 2 and 3.
The DMX terminator should be plugged into the DMX OUT of the last fixture in the chain.

10.1 – DMX ADDRESSES

- The F400Z operates in a 24-channel DMX mode.
- If you are using the 24-channel mode, set the following DMX addresses on your controller:
- FIXTURE 1 → A001
- FIXTURE 2 → A025
- FIXTURE 3 → A049
- …
- FIXTURE 6 → A145

To assign the DMX address for the next fixture, simply add 24 to the previous address.

10.2 – SELECTING THE DMX ADDRESS

☞
- Press the Menu button and use the UP/DOWN buttons until you reach the DMX Address section, then press OK.
- Set the desired DMX address.
- Press ENTER to confirm your selection.
- Press the Menu button again and check the address on the main screen.

10.3 – SETTING THE ADDRESS VIA RDM

- The F400Z supports RDM – Remote Device Management.

Important:

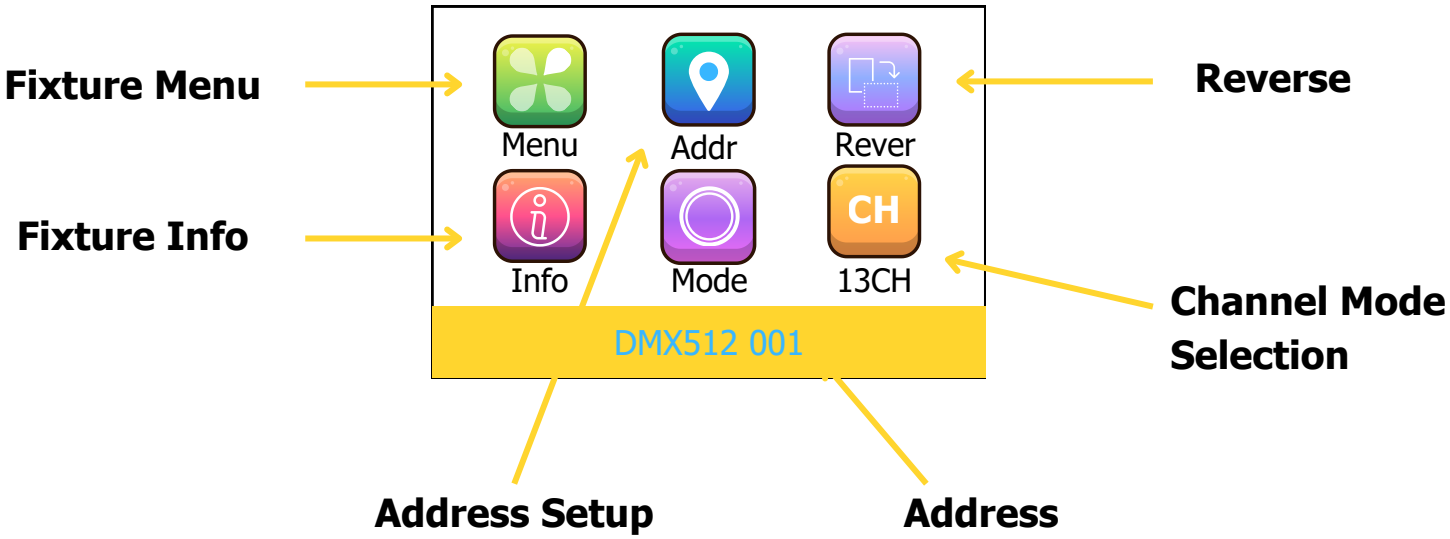
- If your console supports the RDM function, you can set the fixture's address directly from the console.
- Please check with your console's manufacturer to confirm RDM support.

Note:

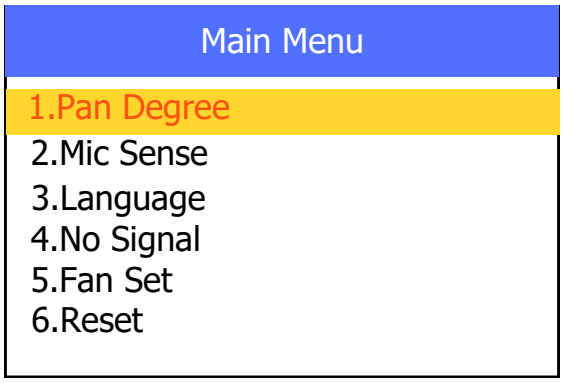
- All devices in the network, including ART-NET, sCAN, and others, must support RDM signal transmission.

11 – DISPLAY FUNCTIONS

- The display on the F400Z shows all available functions. Using these functions, you can change the device's parameters and add additional options.
- Important: Modifying the settings of the F400Z may alter the fixture's functionality, potentially causing it to stop responding to DMX control.
- Before making any changes, carefully follow the instructions below.
- Note:
- The display shows button icons, indicating which buttons to press to select the desired function. ☞



12 – "MAIN MENU" FUNCTIONS



Pan Degree – Pan Movement Mode of the Fixture

- Press OK and use the UP/Down buttons to select the desired mode.
- Press Enter to confirm the selected mode.

Two available modes:

- 540° or 360°

Mic Sense – Microphone Sensitivity

- Press OK and use the UP/Down buttons to select the desired setting.
- Press Enter to confirm the selection.
- The default address of the fixture is set to 001.

Language

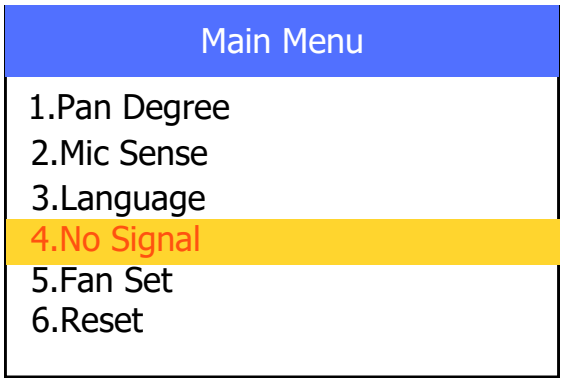
- Press OK and use the UP/Down buttons to select the desired language.
- Press Enter to confirm the selection.

Two available languages:

- English – English
- China – Chinese

⚠ When the fixture is reset to factory settings, the default language is Chinese.

12 – "MAIN MENU" FUNCTIONS



No Signal – Fixture Behavior When Signal Is Lost

- Press OK and use the UP/Down buttons to select either Hold or Black Out.
- Press Enter to confirm the selected mode

Hold – The fixture retains the last received DMX value and continues operating in the same mode until the DMX signal is restored.

- This is useful for preventing sudden effect interruptions during brief signal losses.
- For example, if the light was set to a blue color with a specific gobo, it will remain in that state.

Black Out – The fixture resets its parameters when the DMX signal is lost and returns to its default state (usually turning off the light beam or entering standby mode).
This is useful when you want the fixture to automatically switch off when there's no signal.

When to use each function:

- **Hold** – Best for stable show performance where short signal drops may occur.
- **Black Out** – Use when you prefer the fixture to turn off immediately when DMX is lost.
- If you're using wireless DMX or long cable runs, Hold is usually the safer choice.

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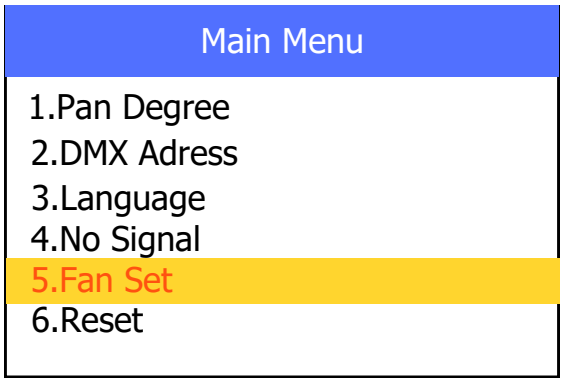
12 – "MAIN MENU" FUNCTIONS



Fan Set – Fan Speed

- Press OK and use the UP/Down buttons to select Auto, Low, or High.
- Press Enter to confirm the selected mode.
- **Auto** – Fan speed adjusts automatically based on the operating conditions.
- **Low** – Minimal fan noise, ideal for theaters and venues with live sound.
- **High** – Maximum cooling, suitable for environments where fan noise is not a concern.

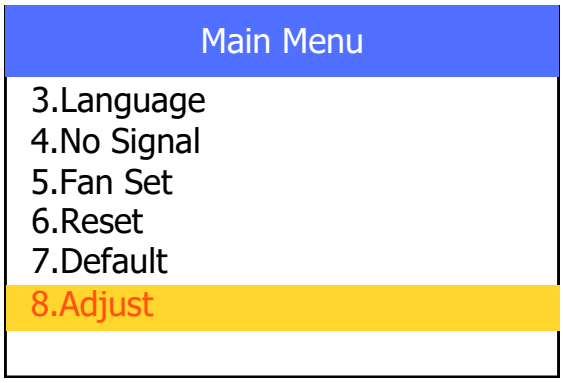
Reset – Device Reset

- Press OK and use the UP/Down buttons to select No or Yes.
- Press Enter to confirm the reset.
- After resetting, the fixture must be reconfigured.

Default – Factory Settings

- Press OK and use the UP/Down buttons to select No or Yes.
- Press Enter to confirm restoring factory defaults.

12 – "MAIN MENU" FUNCTIONS

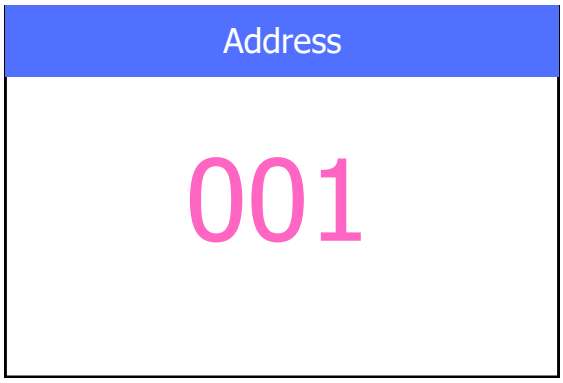


Adjust – Service Menu

⚠ • **Access to the service menu is restricted to PRstage personnel only.**

⚠ • **Any attempt to modify parameters within the service menu may result in equipment malfunction and will void the warranty.**

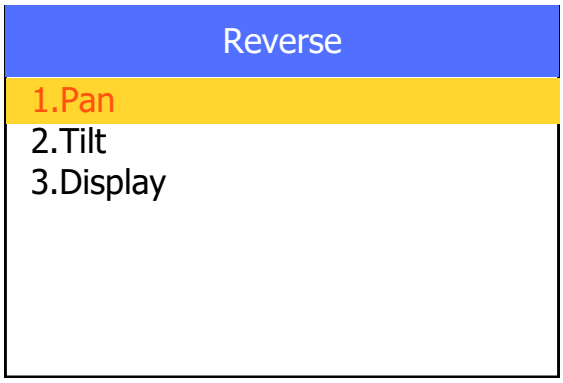
13 – "ADDR" MENU



DMX Address – Address Selection

- Press OK and use the UP/Down buttons to select the desired address.
- Press Enter to confirm the selection.
- The default address of the fixture is set to 001.

14 – "REVERSE" MENU



Invert PAN/TILT – PAN/TILT Reversal

- Press OK and use the UP/Down buttons to select Yes or No.
- Press Enter to confirm the inversion.
- The default setting is OFF.
- If needed, inversion can also be enabled via the RDM protocol.

Display – Display Rotation

- Press OK and use the UP/Down buttons to select Yes or No.
- Press Enter to confirm the display inversion.
- The default setting is OFF (floor mode).
- When mounting the fixture using Fast Lock brackets, it is recommended to set this to Yes for more comfortable operation.

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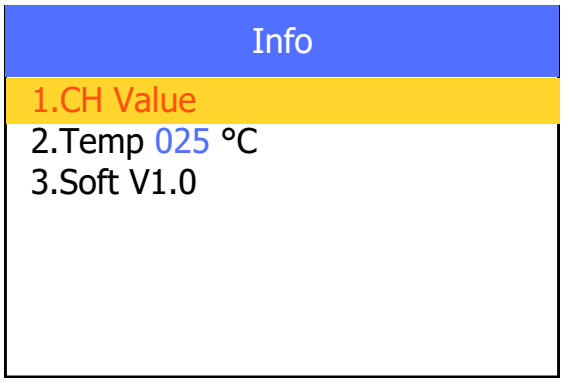
15 – "INFO" MENU



CH Value

- You can view channel levels

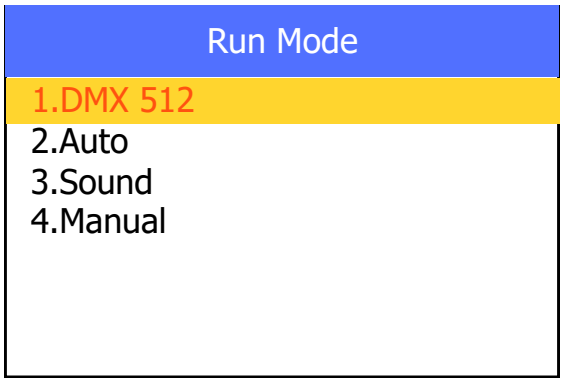
Temp

- The current fixture temperature

Soft

- The firmware version of the device

16 – "RUN MODE" MENU



DMX 512

- To control the spotlight via the DMX 512 protocol.

Auto

- Automatic spotlight program.

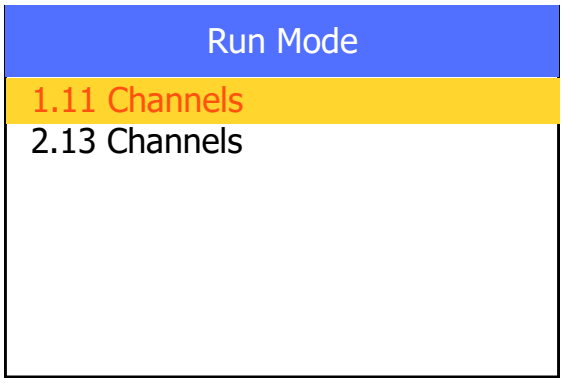
Sound

- Semi-automatic fixture control using the built-in microphone.

Manual

- Allows manual activation of necessary fixture parameters without a DMX console.
- Press OK and use the Up/Down buttons to select the desired parameter.
- Press OK to choose the parameter.
- Use the Up/Down buttons to select a value from 0 to 255.
- Press OK or Enter to confirm.
- To exit, press Menu.

17 – "CHANNEL" MENU



Channel Mode – Channel mode of the spotlight.

- Press OK and use the Up/Down buttons to select the desired mode.
- Press OK or Enter to confirm.

18 – DEVICE ERRORS

- If the Err indicator is on and you see an error message or there is an error message in the 15 System Warning menu. Then refer to the table:

Error	Possible Issue	Solution
MT board connection fails	Motor board not responding. Possible issue: There may be problems with the serial communication line between the display and the motor board, or the motor board may be faulty.	1. Try performing a device reset. 2. Turn off the power and turn it back on after 1 minute. 3. If the error persists, contact the PRstage service center.
X-axis photoelectric switch, or X-axis motor or motor board problem.	Problem with the photoelectric sensor on the X-axis, X-axis motor, or motor board.	1. Try performing a device reset. If the error persists, contact the PRstage service center.
Y-axis photoelectric switch, or Y-axis motor or motor board problem.	Problem with the photoelectric sensor on the Y-axis, Y-axis motor, or motor board.	• Try performing a device reset. • If the error persists, contact the PRstage service center.

18 – DEVICE ERRORS

Error	Possible Issue	Solution
MT board connection fails	Motor board not responding. Possible issue: There may be problems with the serial communication line between the display and the motor board, or the motor board may be faulty.	1. Try performing a device reset. 2. Turn off the power and turn it back on after 1 minute. 3. If the error persists, contact the PRstage service center.
X-axis photoelectric switch, or X-axis motor or motor board problem.	Problem with the photoelectric sensor on the X-axis, X-axis motor, or motor board.	1. Try performing a device reset. 2. If the error persists, contact the PRstage service center.
Y-axis photoelectric switch, or Y-axis motor or motor board problem.	Problem with the photoelectric sensor on the Y-axis, Y-axis motor, or motor board.	1. Try performing a device reset. 2. If the error persists, contact the PRstage service center.
X-axis Hall or motor board have problem.	Hall sensor on the X-axis or motor is faulty.	1. Try performing a device reset. 2. If the error persists, contact the PRstage service center.
Y-axis Hall or motor board have problem.	Hall sensor on the Y-axis or motor is faulty.	1. Try performing a device reset. 2. If the error persists, contact the PRstage service center.

18 – DEVICE ERRORS

Error	Possible Issue	Solution
Color Hall or Color motor have problem.	Hall sensor for the color wheel or color wheel motor is faulty.	1. Try performing a device reset. 2. If the error persists, contact the PRstage service center.
Gobo Hall or Gobo motor have problem.	Hall sensor for the gobo wheel or gobo wheel motor is faulty.	1. Try performing a device reset. 2. If the error persists, contact the PRstage service center.
Focus Hall or focus motor have problem.	Hall sensor for the focus or focus motor is faulty.	1. Try performing a device reset. 2. If the error persists, contact the PRstage service center.
Failed to light ON or OFF, the light striker or lamp have problem.	LED does not turn on or off.	Contact the PRstage service center.

19 – PERIODIC CLEANING

19.1 – Lenses and Reflectors

Even a thin layer of dust can significantly reduce light output.
Regularly clean all lenses and reflectors with a soft cotton cloth dampened with a special cleaning solution.

19.2 – Fans and Vents

Fans and vents should be cleaned approximately every 6 weeks.
The cleaning frequency depends on the operating conditions of the projector.
For cleaning, you can use:

- A brush
- A regular vacuum cleaner
- An air compressor

If the device operates in a dusty environment, clean the fans and air ducts more frequently.

20 – PERIODIC INSPECTIONS

Attention!
Before removing the casing, disconnect the device from the power supply.

Mechanical Parts

Periodically check all mechanical components:

- Gears
- Guides
- Belts and other moving elements

Replace worn parts if necessary.
Check the lubrication of all components, especially those exposed to high temperatures.
Use the appropriate lubricant recommended by PRstage.
Check the tension of the belts and adjust if necessary.

Electrical Components

Check the grounding and the proper connection of all connectors.

- If any loose connections are found, tighten them.

20– PERIODIC INSPECTIONS

Fuse Replacement

- The fuse protecting the lamp and electronic components is located at the base of the F400Z.
- Check the condition of the fuse using a multimeter.
- If the fuse is blown, replace it with one of the same rating.

Attention!
Disassembling the device during the warranty period is prohibited!
This may void the warranty service!

21 – DMX PROTOCOL

11-CHANNEL DMX MODE

1. DIMMER – Linear Dimmer
2. DIMMER fine – Fine Dimmer
3. SHUTTER/STROBE – Shutter/Strobe
4. WHITE – Linear White
5. CTO – Warm Color Temperature 3200K–5800K
6. PAN – Pan 540°
7. PAN fine – Fine Pan
8. TILT – Tilt 270°
9. TILT fine – Fine Tilt
10. ZOOM – Zoom 7°–53°
11. CONTROL – Reset/Dimmer Mode Functions

13-CHANNEL DMX MODE (DEFAULT)

1. PAN – Pan 540°
2. PAN fine – Fine Pan
3. TILT – Tilt 270°
4. TILT fine – Fine Tilt
5. PT SPEED – Pan/Tilt Speed
6. ZOOM – Zoom 7°–53°
7. DIMMER – Linear Dimmer
8. DIMMER fine – Fine Dimmer
9. SHUTTER/STROBE – Shutter/Strobe
10. WHITE – Linear White
11. CTO – Warm Color Temperature 3200K–5800K
12. DIMMER CURVE – Dimmer Curves
13. CONTROL – Reset/Dimmer Mode Functions

21 – DMX PROTOCOL

11-CHANNEL DMX MODE

DMX Channel	Parameter	DMX Value	Function
1	Dimmer	0-255	Linear Dimmer
2	Dimmer fine	0-255	Fine Dimmer
3	Shutter/Strobe	000-003 004-203 204-255	Open Strobe 1-25 flashes/sec. Random strobe"
4	White	0-255	Linear white
5	CTO	000-255	Linear from 5800k to 3200k
6	Pan	0-255	0°-540°
7	Pan Fine	0-255	Fine Pan
8	Tilt	0-255	0°-270°
9	Tilt Fine	0-255	Fine Tilt
10	Zoom	0-255	7°-53°
11	Control	000-149 150-159 160-169 170-249 250-255	No Feature Slow Dimmer Mode (wait 3s) Fast Dimmer Mode (wait 3s) No Feature Global Reset (wait 6s)

21 – DMX PROTOCOL

13-CHANNEL DMX MODE (DEFAULT)

DMX Channel	Parameter	DMX Value	Function
1	Pan	0-255	0°-540°
2	Pan Fine	0-255	Fine Pan
3	Tilt	0-255	0°-270°
4	Tilt Fine	0-255	Fine Tilt
5	Speed Movement	0-255	From fast to slow
6	Zoom	0-255	7°-53°
7	Dimmer	0-255	Linear Dimmer
8	Dimmer fine	0-255	Fine Dimmer
9	Shutter/Strobe	000-003 004-203 204-255	Open Strobe 1-25 flashes/sec. Random strobe"
10	White	0-255	Linear white
11	CTO	000-255	Linear from 5800k to 3200k
12	Dimmer Curve	000-049 050-099 100-149 150-255	Linear Dimmer Quadratic Dimmer Inverse-Quadratic Dimmer S-curve Dimmer
11	Control	000-149 150-159 160-169 170-249 250-255	No Feature Slow Dimmer Mode (wait 3s) Fast Dimmer Mode (wait 3s) No Feature Global Reset (wait 6s)

22 – WARRANTY CARD

Product Information

- Model: F400Z
- Serial Number:
- Date of Sale:
- Seller:

2. Warranty Conditions

- The warranty is valid for 12 months from the date of purchase.
- It covers factory defects and malfunctions not caused by external factors.
- Warranty repairs are carried out at authorized service centers.

3. The warranty does not cover:

- Mechanical damage caused by improper handling.
- Breakdowns caused by incorrect connections or network overloads.
- Ingress of moisture, dust, or foreign objects inside the device.
- Unauthorized repairs and modifications.

22 – WARRANTY CARD

4. Service Conditions

- To obtain warranty repairs, you must provide the completed warranty card and a receipt or other payment document.
- The repair time depends on the complexity of the malfunction.

5. Service Center Contact Information

- Address: Petropavlovsk, Abay St. 29, Office 301
- Phone: +7 (7152) 63 04 04
- WhatsApp: +7(776) 2390086
- Email: info@prstage.pro

- Customer's signature: _____

The information contained in this manual has been carefully prepared and checked.
However, PRstage does not accept liability for any errors that may occur.

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