# NEO 400 GOBO LASER

USER MANUAL

⚠ 1. The luminaire shall be installed by a qualified electrician and wired in accordance with the latest IEE electrical regulations or the national requirements.
2. No supplied water-proof box, installation should be adviced by qualified professional.
3. The external flexible cable can not be replaced. If the cable is damaged, the luminaire should be discarded.

1.1 Drawing

140

140

4-M10

232

482

603

413

280

411
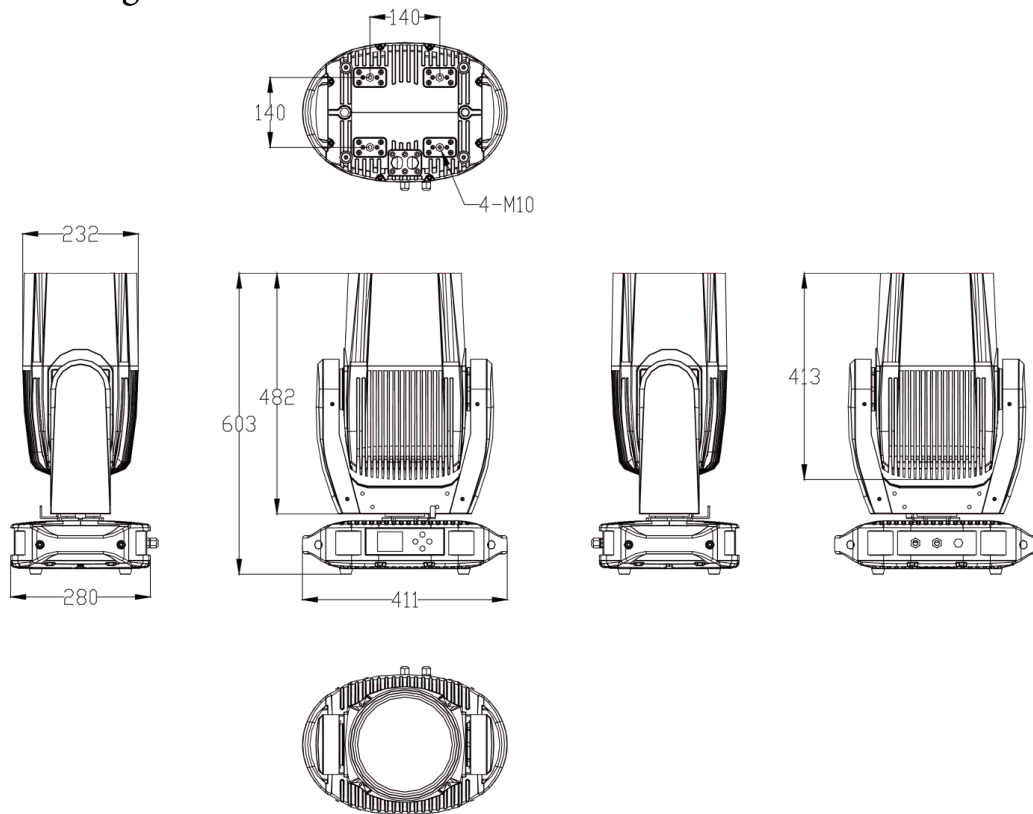
1.2 Safety Notes

IMPORTANT

- This product must be installed b   y a qualified professional.
- In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes
- The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

CAUTION!

- Make sure that the available voltage is not higher than stated on the rear panel.
- Do not touch the power cables if your hands are wet.
- The earth wire must   always be connected to the ground. Therefore it is essential to connect the yellow/green conductor to earth.
- Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time. The electric connection, repairs and servicing must be carried out by a qualified employee.
- Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.
- Do not switch the fixture on and off in short i ntervals as this would reduce the lamp's life.
- Do not touch the device's housing bare hands during its operation (housing becomes hot)! The surface of the product's casing can reac h up to 70° C (158° F) during operation. Avoid contact by persons and materi als. Do not install the product in a location where there is a risk of accidental contact. Allow the product to cool for at least 10 minutes before handling.
- For replacement use lamps and fuses of same type and rating only.
- Please protect the fixture and avoid destroy during transport and installation. If there is any damage to the coating, the shell may be corroded.
- When hanging lamps and lanterns, it is necessary to verify that facilities and hooks can bear at least 10 times the weight of lamps and lante rns.
- Fix the safety rope at the correct holes only. Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- The maximum ambient temperature 45°C must never be exceeded. Do not operate the product if the ambient temperature (Ta) exceeds 45° C (115° F).
- During the initial start -up some smoke or smell may arise. This is a normal process and does not necessarily   mean that the device is defective.

Electrical Warning

- The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person
- For replacement use lamps and fuses of same type and rating only.
- The lens has to be replaced when it is obviously damaged, so that its function is impa ired, e.g. due to cracks or deep scratches!

Keep the product well away from flammable materials

- Keep all combustible materials (e.g. fabric, wood, paper) at least 500 mm (20 in.) away from the product.
- Ensure that there is free and unobstructed airflow around the product. Provide a minimum clearance of 150 mm (6 in.) around fans and air vents.
- Do not illuminate surfaces within 3 m (10 ft.) of the product.
- Do not install a fuse that has a higher rating than the one originally installed in the product . Do not bypass fuses.
- Do not stick filters, masks or other materials onto optical components.
- If the fixture seems to be abnormally hot, shows signs of melting or emits smoke, disconnect the fixture from power immediately and allow it to cool. Do not touch the fixture without heatproof safety gloves. Keep the fixture well away from combustible and flammable materials.

<div align="center">

NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK   - MAY INDUCE BLINDNESS!

</div>

Do not point the front of the fixture towards the sun or other strong light sources. The front lens focuses and concentrates light just like a magnifying glass. Strong light can cause internal damage to the fixture, melting components or starting an internal fire within seconds.

To avoid problems from strong light sources:

- Do not expose the front of a fixture to sunlight or any other strong light source. Avoid pointing other high -powered beam lights directly at the fixture.
- Do not focus a light beam from one lighting fixture directly towards another.
- For outdoor applications during daylight, make sure that the front face of any fixture is shielded or points away from the sun, even when not in use.
- Do not expose the product to heat (from other lighting fixtures for example).

2 INSTALLATION

2.1 MOUNTING

Truss installation

- Keep all combustible materials (e.g. fabric, wood, paper) at least 500 mm (20 in.) away from the product.
- For overhead use, always install a safety cable that can hold at least 10 times the weight of the fixture.
- For overhead instal lation, the fixture must be always secured with a safety wire that can bear at least 10 times the weight of the fixture；
- Secure the fixture with a safety cable through the rear safety eye and truss as shown.　　　　　.
- Ensure that the structure (truss) to which you 　　　are attaching the fixture is secure

HANGING

- You could place the light on the floor. Please make sure the surface is plane and the reliability of the floor is sufficient.
- Bolt a rigging clamp securely to the mounting yoke. The bolts used must be M10, grade 8.8 steel minimum, and fastened with a self-locking nut.
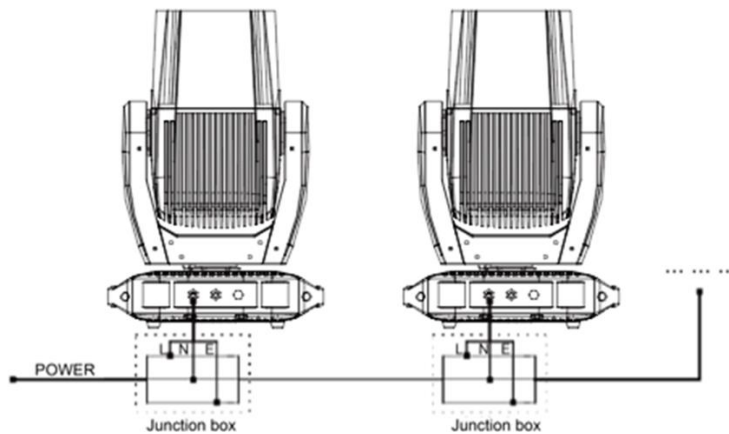
140

140

Safety rope hole

M10
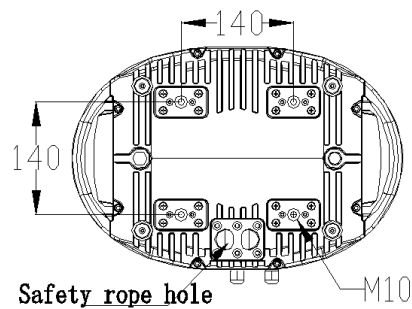
2.2 POWER CONNECTIONS

- This product has an auto-ranging power supply that can work with an input voltage range of 100 –240 V~277V, 50/60 Hz.

AC Plug

Connection	Wire (U.S.	Wire(Europe)	Screw Color
AC Live	Black	Brown	Yellow/Brass
AC Neutral	White	Blue	Silver
AC Ground	Green/Yellow	Green/Yellow	Green

2.3 Data network requirements

- Connect the DMX512 controller to the units in series. A DMX 512 data link is required in order to control the fixture via DMX. The fixture has 3/5 -pin XLR connectors for DMX data input and output.
- Each unit has 13 DMX channels so the DMX Addresses should increase by increments of 1, (Nx1)+1, (Nx2)+1, (Nx3)+1...
- Any DMX address in the range from 001 to 512 may be used.

PINS	FUNCTIONS
Pin1（Shield）	GND/0V
Pin2（black）	Data input（-）
Pin3（white）	Data input（+）
Pin4（green）	Data output（-）
Pin5（red）	Data output（+）

TO CREATE IMPRESSIVE RESULTS
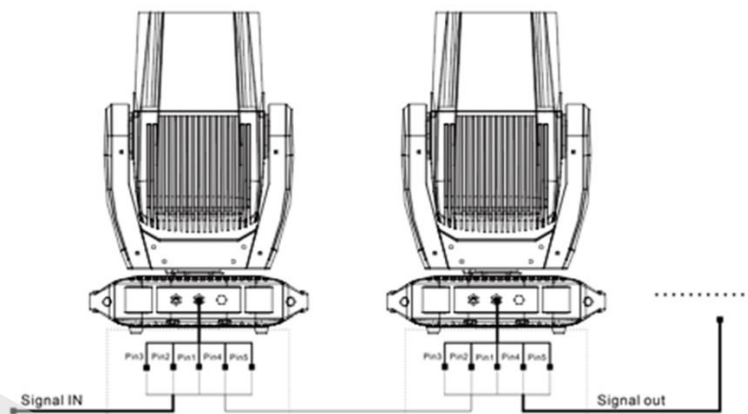
3 FUNCTIONS AND SETTINGS

3.1 DISPLAY OPERATION

- LEFT ：Used to access the menu or to return a previous menu option;
- RIGHT：Used to selec t and store the current menu or confirm the current function value or option within a menu;
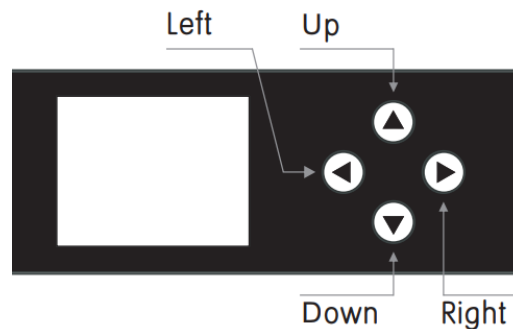- UP：Navigates downwards through the menu list and increases the numeric value when in a function；
- DOWN：Navigates upwards through the menu list and decreases the numeric value when in a function；
-
- When the display locked, please unlock the display as below:
  1. Keep pressing BACK around 5sec, until the display shows inset password.
  2. Press "up down up down, enter" to unlock.

3.2 Menu Map

ADDRESS	001 – 512 (Default 001)			DMX address setting
PERSON	BASIC			Use the menu to select desired channel mode
	STANDARD（Default）			
	EXTEND			
RUNMODE	DMX512（Default）			S elect Signal
	AUTO			Default : DMX512
	CUSTOM1			CUSTOM1 -2 Set up get into EDIT MENU edit
	CUSTOM2			
OPTION	PAN INVERT	NORMAL（Default）		PAN m oving direction selection
		INVERT		
	TILT INVERT	NORMAL（Default）		TILT moving direction selection
		INVERT		
	PERFORM	STUDIO		Fan mode low speed
		POWER		Fast rotation of fan， all power
		LIVE（Default）		Automatic rotation of fan
	BLACKOUT	OFF（Default）		Select OFF b lackout without delay
		ON		Select ON Blackout delay 3s
	DIMMER	DIM4（Default）		Dimming curves OFF （fast）to DIM4 （slow）；

TO CREATE IMPRESSIVE RESULTS

		OFF			
	LED PWM	1200Hz（Default）			Sets the PWM frequency
		2400Hz			
		4000Hz			
		6000Hz			
		25000Hz			
	DMX ERROR	SAVE（Default）			Hold after loss of DMX signal
		BLACK			Blackout after loss of DMX signal
	DISPLAY TIME	On			Display backlight always on
		30s			Turns off display backlight after 30s /1min /2min of inactivity
		1min（Default）			
		2min			
	DISPLAY LOCK	OFF			Locks display (passcode is <UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)
		ON（Default）			
	LOAD PARA	OFF			Not upload data
		ON（Default）			Upload data
	SETTING	RECOVERY	****		Restore default factory settings.
		CLEAN EDIT1	****		Clean customer self-editing scene 1
		CLEAN EDIT2	****		Clean customer self-editing scene 2
		WDMX HIDE	NO		Hide wireless mode WDMX reset and signal hide and the default is wired mode only
			YES		
	PT ENCODER	OFF			XY Encoder switch .
		ON			OFF is close ; ON is open.
	LANGUAGE	English			Language
		Chinese			
	WDMX RESET	NO			Do not clear the receiver's message.
		YES			Clear the receiver's message
	SIGNAL	ONLY XLRDMX			ONLY XLR is wire only
		XLRDMX FIRST			XLR FIRST is wire first
		ONLY WDMX			ONLY WDMX is wireless only
		WDMX FIRST			WDMX FIRS is wireless first
		WDMX TO XLRDMX			WDMX TO DMX is wireless to wired
EDIT	EDIT 1-2	STEP 1-30	PAN	0-255	Edit the custom programs 1-30 Select play 【EDIT 1】 in RUNMOEDE CUSTOM 1; Select play 【EDIT 2】 in RUNMOEDE CUSTOM 2
			TILT	0-255	
			PT SPEED	0-255	
			COLOR	0-255	
			GOBO.ROTA	0-255	
			ROTA.GOBO	0-255	
			COLOR GOBO	0-255	
			PRISM 1	0-255	

		PRISM 2	0-255	
		FOCUS	0-255	
		DIMMER	0-255	
		S TROBE	0-25 5	
		TIME	0-255	
		USE	YES/NO	S elect YES to run the steps user need.
MANUAL	AUTO TEST			
	CHANNEL	PAN	0-255	Manual control channel
		TILT	0-255	
		PT SPEED	0-255	
		COLOR	0-255	
		GOBO.ROTA	0-255	
		ROTA.GOBO	0-255	
		COLOR GOBO	0-255	
		PRISM 1	0-255	
		PRISM 2	0-255	
		FOCUS	0-255	
		DIMMER	0-255	
		STROBE	0-25	
	DEBUG HIDE	YES		Factory testing mode. All stepper motors are not controlled by signal, It only works again after the reset.
		NO		
	RESET	ALL RESET		S elect Yes/No to ca rry out all reset
		PT RESET		S elect Yes/No to carry out P/T reset
		COLOR SYS TEM		COLOR/ GOBO reset
		OTHER		Focus reset
INFO	FIXTURE HOURS			Hours of fixture use
	LED USE HOURS			LED use time
	TEMPERATURE			LED temperature
	VERSION			S oftware versions
	RDM	UID	0x388Axxxxxxxx	Check fixture's ID
		LABEL	NEO 400 GOBO LASER	Check fixture's LABEL
	SYSTEM ERROR	MEMORY IC		Memory IC
		ANGLESENSOR		Angle Sensor
		PAN SENSOR		Pan Sensor
		PAN ENCODER		Pan Encoder
		PAN DRIVEIC		Pan Drive IC
		TILT SENSOR		Tilt Sensor
		TILT ENCODER		Tilt Encoder
		TILT DRIVEIC		Tilt Drive IC

		TEMPERATURE		Temperature
		COLOR RESET		Color reset
		GOBO RESET		gobo reset
		RGOBO RESET		Rgobo reset
		COLOR GOBO RESET		Color gobo reset
		PRISM 1 RESET		Prism 1 reset
		PRISM 2 RESET		Prism 2 reset
		FOCUS RESET		Focus reset
SERVICE		PAN	±127	Pan position fine adjustment
		TILT	±127	Tilt position fine adjustment
		COLOR	±127	Color position fine adjustment
		GOBO.ROTA	±127	Rotate Gobo position fine adjustment
	****	ROTA.GOBO	±127	Gobo position fine adjustment
		COLOR GOBO	±127	Color gobo position fine adjustment
		PRISM 1	±127	Prism1 position fine adjustment
		PRISM 2	±127	Prism2 position fine adjustment
		FOCUS	±127	Focus position fine adjustment
		OTHER	±127	

All passwords of this   product are <UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)

4 USING A DMX512 CONTROLLER

4.1 DMX CONTROL

BASIC (13CH)	STANDARD (18CH)	Extend (19CH)	Value	Function
CH.1	CH.1	CH.1	000 -255	PAN 0 -540°
-	CH.2	CH.2	000 -255	PAN FINE
CH.2	CH.3	CH.3	000 -255	TILT 0-270°
-	CH.4	CH.4	000 -255	TILT FINE
CH.3	CH.5	CH.5	000 -255	PT Speed
CH.4	CH.6	CH.6		COLOR WHEEL 9+1
			000 -007	WHITE
			008 -013	COLOR 1
			014 -019	COLOR 2
			020 -025	COLOR 3
			026 -031	COLOR 4
			032 -037	COLOR 5
			038 -043	COLOR 6
			044 -049	COLOR 7
			050 -055	COLOR 8
			056 -063	COLOR 9
			064 -191	COLOR WHELL1 0 -360°
			192 -222	COLOR WHELL1 RAINBOW EFFECT(SPEED 100% ->1)
			223 -224	STOP
			225 -255	COLOR WHELL1 RAINBOW EFFECT(SPEED 1 ->100%)
-	-	CH.7	000 -255	COLOR WHEEL FINE
CH.5	CH.7	CH.8		ROTATING G OBO 8+1
			000 -010	ROTATING WHITE
			011 -016	ROTATING GOBO 1
			017 -022	ROTATING GOBO 2
			023 -028	ROTATING GOBO 3
			029 -034	ROTATING GOBO 4
			035 -040	ROTATING GOBO 5
			041 -046	ROTATING GOBO 6
			047 -052	ROTATING GOBO 7
			053 -058	ROTATING GOB O 8
			059 -066	ROTATING GOBO 1 SHAKE (SPEED 1 —> 100%)
			067 -074	ROTATING GOBO 2 SHAKE (SPEED 1 —> 100%)
			075 -082	ROTATING GOBO 3 SHAKE (SPEED 1 —> 100%)
			083 -090	ROTATING GOBO 4 SHAKE (SPEED 1 —> 100%)

TO CREATE IMPRESSIVE RESULTS

			091 -098	ROTATING GOBO 5 SHAKE (SPEED 1 —> 100%)
			099 -106	ROTATING GOBO 6 SHAKE (SPEED 1 —> 100%)
			107 -114	ROTATING GOBO 7 SHAKE (SPEED 1 —> 100%)
			115 -122	ROTATING GOBO 8 SHAKE (SPEED 1 —> 100%)
			123 -127	WHITE
			128 -190	ROTATING GOBO FLOWING WATER EFFECT (SPEED 100 —> 1%)
			191 -192	STOP WATER EFFECT
			193 -255	ROTATING GOBO FLOWING WATER EFFECT (SPEED 1 —> 100%)
CH.6	CH.8	CH.9		GOBO ROTATING
			0 -120	ROTATING GOBO ANGLE ADJUSTMENT (0 —> 360°)
			121 -125	STOP
			126 -165	ROTATING GOBO SHAKE (SPEED 1 —> 100%)
			166 -170	STOP
			171 -210	ROTATING GOBO POSITIVE ROTATION (SPEED 100% —> 1)
			211 -215	STOP
			216 -255	ROTATING GOBO REVERSE ROTATION (SPEED 1 —> 100%)
-	CH.9	CH.10	000 -255	GOBO ROTATING FINE
CH.7	CH.10	CH.11		COLOR EFFECT WHEEL
			0 -10	WHITE
			11 -145	COLOR EFFECT IN SERT AND ADJUST THE ANGLE (0 —> 360°)
			146 -150	STOP
			151 -200	COLOR EFFECT INSERT AND POSITIVE ROTATION (SPEED 100% —> 1)
			201 -205	STOP
			206 -255	COLOR EFFECT INSERT AND REVERSE ROTATION (SPEED 1 —> 100%)
CH.8	CH.11	CH.12		PRISM 1
			0 -10	WHITE
			11 -145	PRISM INSERT AND ADJUST THE ANGLE (0 —> 360°)
			146 -150	STOP
			151 -200	PRISM INSERT AND POSITIVE ROTATION (SPEED 100% —> 1)
			201 -205	STOP ROTATION
			206 -255	PRISM INSERT AND REVERSE ROTATION (SPEED 1 —> 100%)
CH.9	CH.12	CH.13		PRISM 2
			0 -10	WHITE
			11 -145	PRISM INSERT AND ADJUST THE ANGLE (0 —> 360°)
			146 -150	STOP
			151 -200	PRISM INSERT AND POSITIVE ROTATION (SPEED 100% —> 1)
			201 -205	STOP ROTATION
			206 -255	PRISM INSERT AND REVERSE ROTATION (SPEED 1 —> 100%)
CH.10	CH.13	CH.14	000 -255	FOCUS
-	CH.14	CH.15	000 -255	FOCUS FINE

TO CREATE IMPRESSIVE RESULTS

CH.11	CH.15	CH.16	000 -255	DIMMER
-	CH.16	CH.17	000 -255	DIMMER FINE
CH.12	CH.17	CH.18	STROBE	
			0 -9	NO FUNCTION
			10 -99	STROBE （ FROM SLOW TO FAST ）
			100 -109	NO FUNCTION
			110 -179	LIGHTNING STRO BE
			180 -189	NO FUNCTION
			190 -255	RANDOM SROBE
CH.13	CH.18	CH.19	CONTROL	
			000 -010	NO FUNCTION
			011 -020	PAN/TILT BLACK ACTIVATED
			021 -030	PAN/TILT BLACK DEACTIVATED
			031 -040	PAN INVERT
			041 -050	TILT INVERT
			051 -060	PAN/TILT INVERT O FF
			061 -100	RESERVED
			101 -110	DIM4
			111 -120	OFF
			121 -150	RESERVED
			151 -160	1200Hz
			161 -170	2400Hz
			171 -180	4000Hz
			181 -190	6000Hz
			191 -200	25000Hz
			201 -210	ALL RESET
			211 -220	XY RESET
			221 -230	COLOR \GOBO SYSTEM RESET
			231 -240	FOCUS RESET
			241 -255	RESERVED