

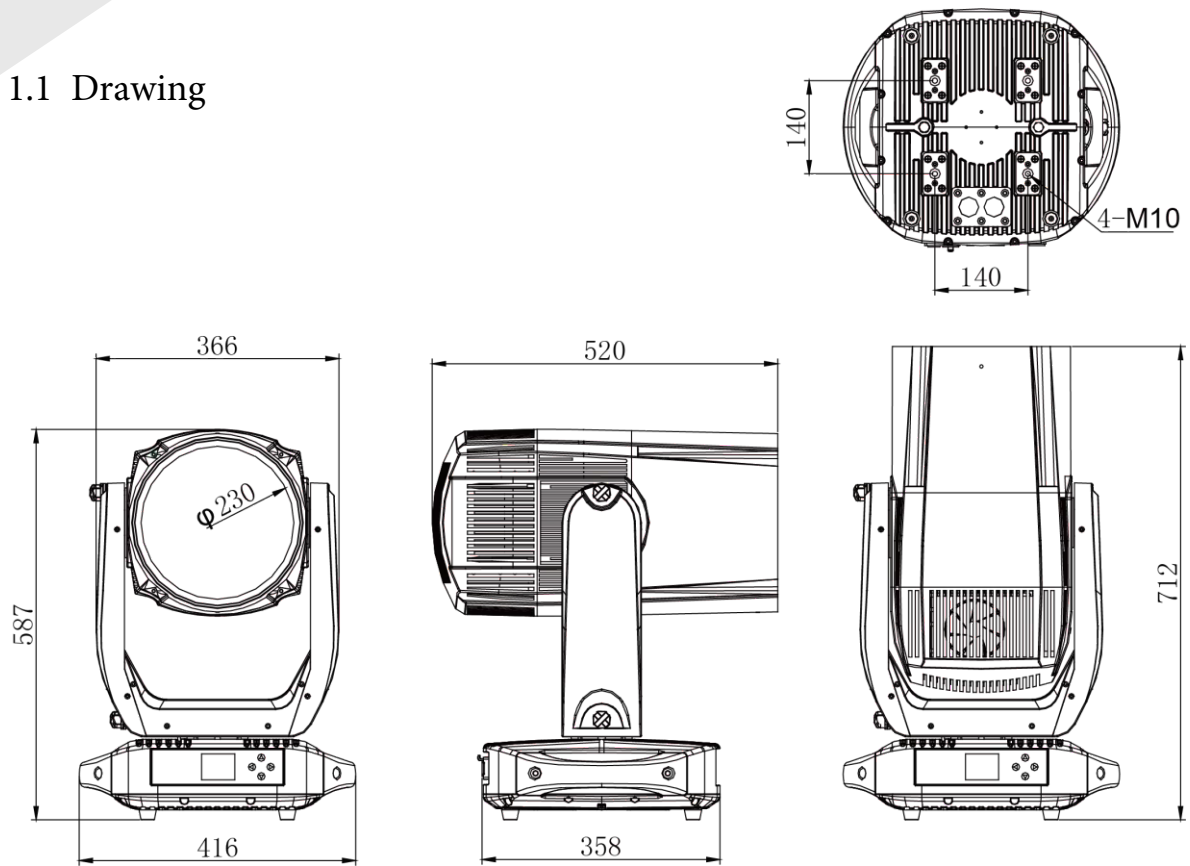
NEO 400 PRO GOBO LASER

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 advised 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



1.2 Safety Notes

IMPORTANT

- This product must be installed by 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 intervals 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 reach up to 60° C (contact by persons and materials. 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 facility at least 10 times the weight of lamps and lanterns.
- 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 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 impaired, 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 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 10 m (40 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.

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

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

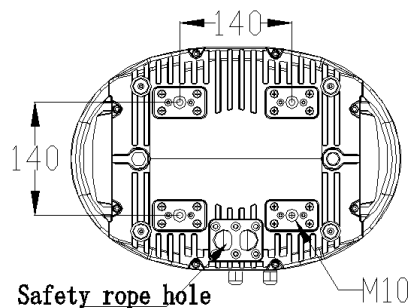
2.1 MOUNTING

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 installation, 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.

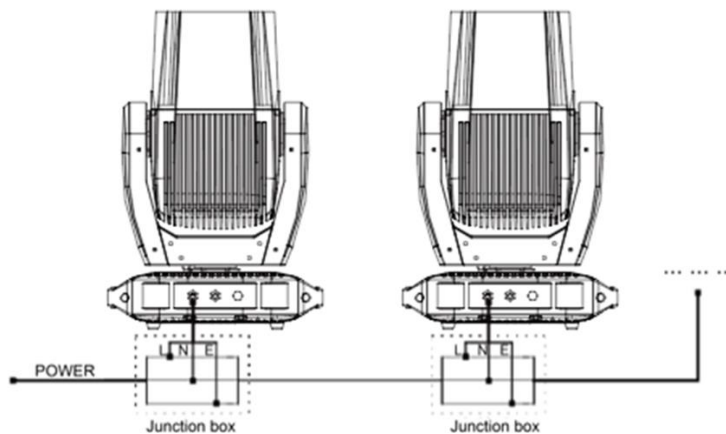


2.2 POWER CONNECTIONS

- ◆ 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

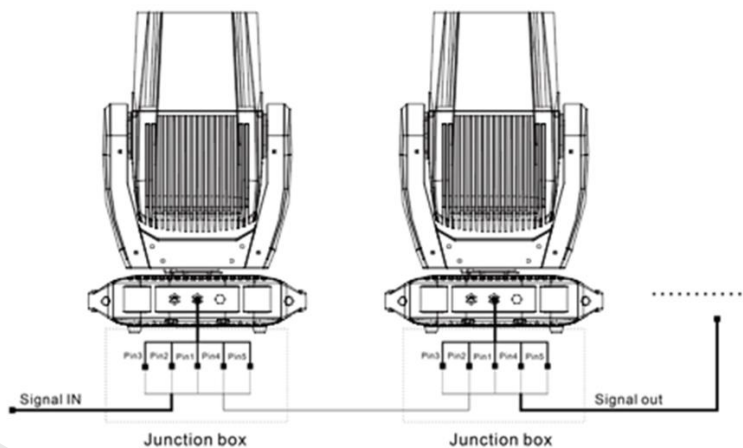
| Connection | Wire (U.S.) | Wire(Europe) | Screw Color |
|------------|--------------|--------------|--------------|
| AC Live | Black | Brown | Yellow/Brass |
| AC Neutral | White | Blue | Silver |
| AC Ground | Green/Yellow | Green/Yellow | Green |



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, $(N \times 1) + 1$, $(N \times 2) + 1$, $(N \times 3) + 1 \dots$
- ◆ Any DMX address in the range from 001 to 512 may be used.

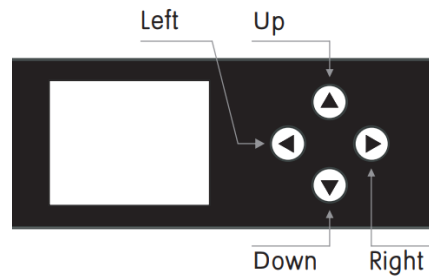
| PINS | FUNCTIONS |
|---------------|-----------------|
| Pin1 (Shield) | GND/0V |
| Pin2 (black) | Data input (-) |
| Pin3 (white) | Data input (+) |
| Pin4 (green) | Data output (-) |
| Pin5 (red) | Data output (+) |



3 FUNCTIONS AND SETTINGS

3.1 DISPLAY OPERATION

- ◆ LEFT : Used to access the menu or to return a previous menu option;
- ◆ RIGHT : Used to select 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) | | Select Signal | |
| | AUTO | | Default : DMX512 | |
| | CUSTOM1 | | CUSTOM1 -2 Set up get into EDIT MENU | |
| | CUSTOM2 | | edit | |
| OPTION | PAN INVERT | NORMAL (Default) | PAN moving 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 blackout without delay |
| | | ON | | Select ON Blackout delay 3s |
| | DIMMER | DIM4 (Default) | | Dimming curves OFF (fast) to DIM4 (slow) ; |
| | | OFF | | |
| | 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 . OFF is close ; ON is open. | |
| | | ON | | | |
| | FOCUS LIMIT | OFF | | Focus limit off | |
| | | ON | | Focus limit on | |
| 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 | |
| | | | CTO | 0-255 | |
| | | | COLOR | 0-255 | |
| | | | FIXED GOBO | 0-255 | |
| | | | PRISM 1 | 0-255 | |
| | | | PRISM 2 | 0-255 | |
| | | | FOCUS | 0-255 | |
| | | | DIMMER | 0-255 | |
| | | | STROBE | 0-25 | |
| | | | TIME | 0-255 | |
| | | | USE | YES/NO | Select YES to run the steps user need. |
| MANUAL | AUTO TEST | | | | |
| | CHANNEL | PAN | 0-255 | | Manual control channel |
| | | TILT | 0-255 | | |
| | | PT SPEED | 0-255 | | |
| | | CTO | 0-255 | | |
| | | COLOR | 0-255 | | |
| | | FIXED 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 | | Select Yes/No to carry out all reset |
| | | PT RESET | | Select Yes/No to carry out P/T reset |
| | | COLOR SYSTEM | | COLOR/ CTO/ GOBO reset |
| | | OTHER | | Prism1/Prism2/ Focus reset |
| INFO | FIXTURE HOURS | | | Hours of fixture use |
| | LED USE HOURS | | | LED use time |
| | TEMPERATURE | | | LED temperature |
| | VERSION | | | Software versions |
| RDM | UID | 0x388Axxxxxxx | | Check fixture's ID |
| | LABEL | NEO 400 PRO 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 |
| | CTO RESET | | | CTO reset |
| | COLOR RESET | | | Color reset |
| | FIXED GOBO RESET | | | 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 |
| | | CTO | ±127 | CTO position fine adjustment |
| | | COLOR | ±127 | Color position fine adjustment |
| | | FIXED GOBO | ±127 | Gobo position fine adjustment |
| | | PRISM 1 | ±127 | Prism1 position fine adjustment |
| | | PRISM 2 | ±127 | Prism2 position fine adjustment |
| | | FOCUS | ±127 | Focus position fine adjustment |

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

4 USING A DMX512 CONTROLLER

4.1 DMX CONTROL

| BASIC (12CH) | STANDARD (16CH) | Extend (18CH) | Value | Function |
|-----------------|---|------------------|------------------|-------------|
| 1 | 1 | 1 | 000 -255 | PAN 0 -540° |
| - | 2 | 2 | 000 -255 | PAN FINE |
| 2 | 3 | 3 | 000 -255 | TILT 0-270° |
| - | 4 | 4 | 000 -255 | TILT FINE |
| 3 | 5 | 5 | 000 -255 | PT Speed |
| 4 | 6 | 6 | CTO | |
| | | | 0-10 | WHITE |
| | | | 11-127 | CTO |
| | | | 128-244 | CTB |
| | | | 245-255 | WHITE |
| 5 | 7 | 7 | COLOR WHEEL 19+1 | |
| | | | 0-7 | WHITE |
| | | | 8-10 | COLOR 1 |
| | | | 11-13 | COLOR 2 |
| | | | 14-16 | COLOR 3 |
| | | | 17-19 | COLOR 4 |
| | | | 20-22 | COLOR 5 |
| | | | 23-25 | COLOR 6 |
| | | | 26-28 | COLOR 7 |
| | | | 29-31 | COLOR 8 |
| | | | 32-34 | COLOR 9 |
| | | | 35-37 | COLOR 10 |
| | | | 38-40 | COLOR 11 |
| | | | 41-43 | COLOR 12 |
| | | | 44-46 | COLOR 13 |
| | | | 47-49 | COLOR 14 |
| | | | 50-52 | COLOR 15 |
| | | | 53-55 | COLOR 16 |
| | | | 56-58 | COLOR 17 |
| | | | 59-61 | COLOR 18 |
| 62-64 | COLOR 19 | | | |
| 65-191 | 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%) | | | |

| | | | | |
|---------|---|---|-----------------------|---|
| - | - | 8 | 000 -255 | COLOR WHEEL FINE |
| 6 | 8 | 9 | FIXED GOBO WHEEL 29+1 | |
| | | | 0-10 | WHITE |
| | | | 11 -12 | FIXED GOBO WHEEL 1 |
| | | | 13 -14 | FIXED GOBO WHEEL 2 |
| | | | 15 -16 | FIXED GOBO WHEEL 3 |
| | | | 17 -18 | FIXED GOBO WHEEL 4 |
| | | | 19 -20 | FIXED GOBO WHEEL 5 |
| | | | 21 -22 | FIXED GOBO WHEEL 6 |
| | | | 23 -24 | FIXED GOBO WHEEL 7 |
| | | | 25 -26 | FIXED GOBO WHEEL 8 |
| | | | 27 -28 | FIXED GOBO WHEEL 9 |
| | | | 29 -30 | FIXED GOBO WHEEL 10 |
| | | | 31 -32 | FIXED GOBO WHEEL 11 |
| | | | 33 -34 | FIXED GOBO WHEEL 12 |
| | | | 35 -36 | FIXED GOBO WHEEL 13 |
| | | | 37 -38 | FIXED GOBO WHEEL 14 |
| | | | 39 -40 | FIXED GOBO WHEEL 15 |
| | | | 41 -42 | FIXED GOBO WHEEL 16 |
| | | | 43 -44 | FIXED GOBO WHEEL 17 |
| | | | 45 -46 | FIXED GOBO WHEEL 18 |
| | | | 47 -48 | FIXED GOBO WHEEL 19 |
| | | | 49 -50 | FIXED GOBO WHEEL 20 |
| | | | 51 -52 | FIXED GOBO WHEEL 21 |
| | | | 53 -54 | FIXED GOBO WHEEL 22 |
| | | | 55 -56 | FIXED GOBO WHEEL 23 |
| | | | 57 -58 | FIXED GOBO WHEEL 24 |
| | | | 59 -60 | FIXED GOBO WHEEL 25 |
| | | | 61 -62 | FIXED GOBO WHEEL 26 |
| | | | 63 -64 | FIXED GOBO WHEEL 27 |
| | | | 65 -66 | FIXED GOBO WHEEL 28 |
| | | | 67 -68 | FIXED GOBO WHEEL 29 |
| | | | 69 -72 | FIXED GOBO WHEEL 1 SHAKE (SPEED 1 → 100%) |
| | | | 73 -76 | FIXED GOBO WHEEL 2 SHAKE (SPEED 1 → 100%) |
| | | | 77 -80 | FIXED GOBO WHEEL 3 SHAKE (SPEED 1 → 100%) |
| 81 -84 | FIXED GOBO WHEEL 4 SHAKE (SPEED 1 → 100%) | | | |
| 85 -88 | FIXED GOBO WHEEL 5 SHAKE (SPEED 1 → 100%) | | | |
| 89 -92 | FIXED GOBO WHEEL 6 SHAKE (SPEED 1 → 100%) | | | |
| 93 -96 | FIXED GOBO WHEEL 7 SHAKE (SPEED 1 → 100%) | | | |
| 97 -100 | FIXED GOBO WHEEL 8 SHAKE (SPEED 1 → 100%) | | | |

| | | | | |
|---|----|----|----------|---|
| | | | 101 -104 | FIXED GOBO WHEEL 9 SHAKE (SPEED 1 → 100%) |
| | | | 105 -108 | FIXED GOBO WHEEL 10 SHAKE (SPEED 1 → 100%) |
| | | | 109 -112 | FIXED GOBO WHEEL 11 SHAKE (SPEED 1 → 100%) |
| | | | 113 -116 | FIXED GOBO WHEEL 12 SHAKE (SPEED 1 → 100%) |
| | | | 117 -120 | FIXED GOBO WHEEL 13 SHAKE (SPEED 1 → 100%) |
| | | | 121 -124 | FIXED GOBO WHEEL 14 SHAKE (SPEED 1 → 100%) |
| | | | 125 -128 | FIXED GOBO WHEEL 15 SHAKE (SPEED 1 → 100%) |
| | | | 129 -132 | FIXED GOBO WHEEL 16 SHAKE (SPEED 1 → 100%) |
| | | | 133 -136 | FIXED GOBO WHEEL 17 SHAKE (SPEED 1 → 100%) |
| | | | 137 -140 | FIXED GOBO WHEEL 18 SHAKE (SPEED 1 → 100%) |
| | | | 141 -144 | FIXED GOBO WHEEL 19 SHAKE (SPEED 1 → 100%) |
| | | | 145 -148 | FIXED GOBO WHEEL 20 SHAKE (SPEED 1 → 100%) |
| | | | 149 -152 | FIXED GOBO WHEEL 21 SHAKE (SPEED 1 → 100%) |
| | | | 153 -156 | FIXED GOBO WHEEL 22 SHAKE (SPEED 1 → 100%) |
| | | | 157 -160 | FIXED GOBO WHEEL 23 SHAKE (SPEED 1 → 100%) |
| | | | 161 -164 | FIXED GOBO WHEEL 24 SHAKE (SPEED 1 → 100%) |
| | | | 165 -168 | FIXED GOBO WHEEL 25 SHAKE (SPEED 1 → 100%) |
| | | | 169 -172 | FIXED GOBO WHEEL 26 SHAKE (SPEED 1 → 100%) |
| | | | 173 -176 | FIXED GOBO WHEEL 27 SHAKE (SPEED 1 → 100%) |
| | | | 177 -180 | FIXED GOBO WHEEL 28 SHAKE (SPEED 1 → 100%) |
| | | | 181 -184 | FIXED GOBO WHEEL 29 SHAKE (SPEED 1 → 100%) |
| | | | 185 -188 | STOP WATER EFFECT |
| | | | 189 -219 | STATIC GOBO JUMPING WATER EFFECT (SPEED 100 → 1%) |
| | | | 220 -224 | STOP WATER EFFECT |
| | | | 225 -255 | STATIC GOBO FLOWING WATER EFFECT (SPEED 1 → 100%) |
| - | - | 10 | 000 -255 | FIXED GOBO WHEEL FINE |
| 7 | 9 | 11 | 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%) |
| 8 | 10 | 12 | 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%) |