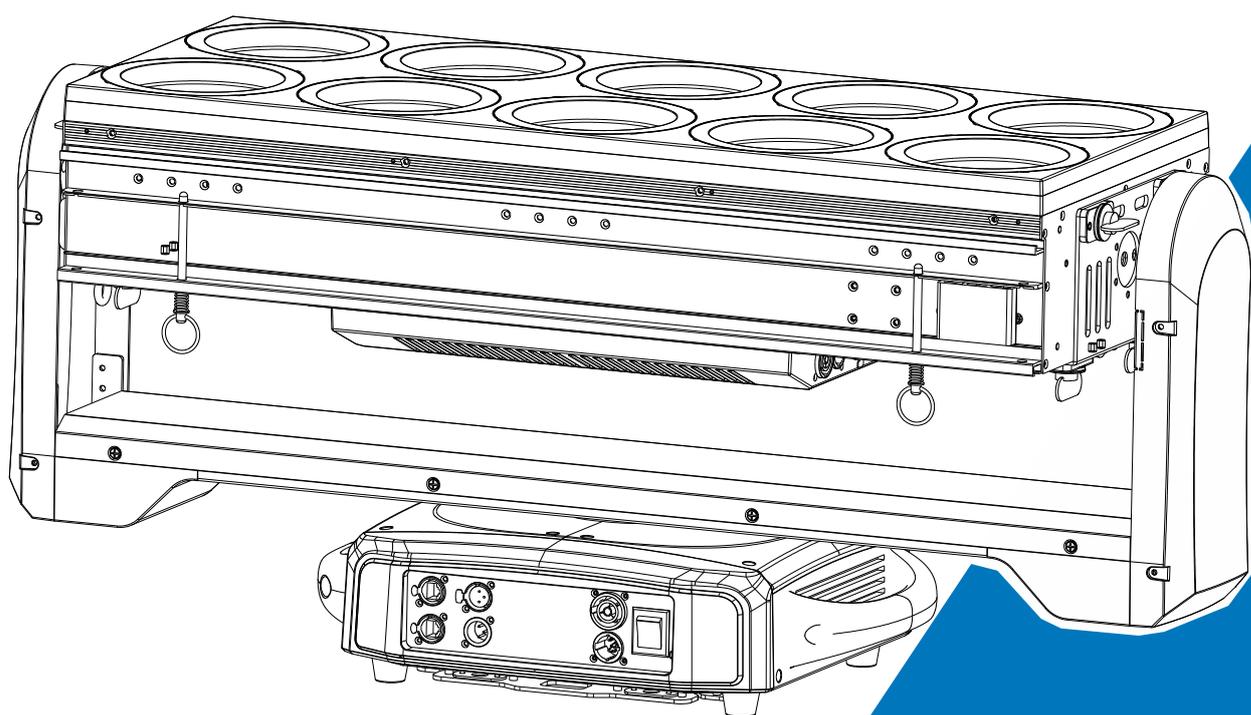


Acme®

STORM



User Manual

Please read the instruction carefully before use

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01/ Safety Instructions



Please read the instruction carefully which includes important information about the installation, usage and maintenance.

WARNING

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 65°C. DO NOT touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut

off the mains power immediately.

- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 0.5 meters.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

01/ Consignes de sécurité



Veillez lire attentivement les instructions qui contiennent des informations importantes sur l'installation, l'utilisation et l'entretien.

ATTENTION

Veillez conserver ce guide de l'utilisateur pour une consultation future. Si vous vendez l'appareil à un autre utilisateur, assurez-vous qu'il reçoive également ce manuel d'instructions.

Important:

Les dommages causés par le non-respect de ce manuel d'utilisation ne sont pas couverts par la garantie. Le revendeur n'acceptera aucune responsabilité pour les défauts ou problèmes qui en résultent.

- Déballez et vérifiez soigneusement qu'il n'y a pas de dommages dus au transport avant d'utiliser l'appareil.
- Ce produit est destiné à un usage intérieur uniquement. Il doit donc être utilisé uniquement dans un endroit sec.
- L'installation et la mise en fonctionnement doit être effectué par un opérateur qualifié.
- NE PAS permettre aux enfants d'utiliser l'appareil.
- Utilisez une chaîne de sécurité lors de la fixation de l'unité. Manipulez l'appareil en portant sa base au lieu de la tête uniquement.
- L'unité doit être installée dans un endroit avec une ventilation adéquate, à au moins 50cm des surfaces adjacentes.
- Assurez-vous qu'aucune fente d'aération du luminaire n'est obstruée, sinon il risque de surchauffer.
- Avant toute utilisation, assurez-vous que vous connectez ce luminaire à la tension appropriée conformément aux spécifications que vous trouverez dans ce manuel ou sur l'étiquette des spécifications collée sur la base du luminaire.
- Il est important de relier le file jaune/vert à la terre afin d'éviter tout choc électrique.
- Température ambiante minimale TA: 0°C. Température ambiante maximale TA: 40°C. N'utilisez pas ce luminaire à des températures inférieures ou supérieures.
- NE PAS connecter le luminaire à un pack de gradateurs.
- Gardez les matériaux inflammables à l'écart du luminaire pendant le fonctionnement

pour éviter tout risque d'incendie.

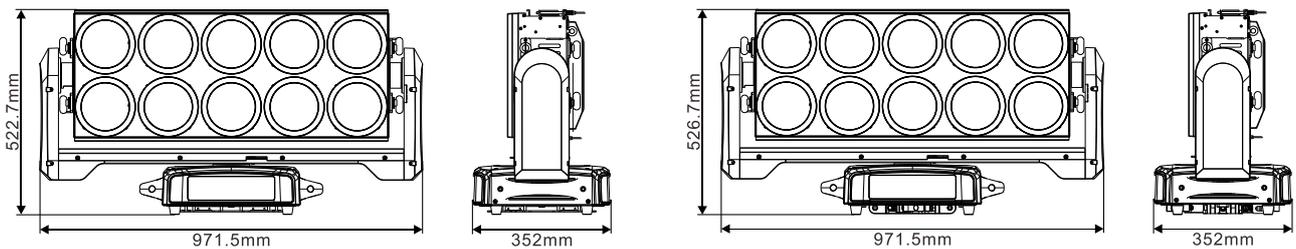
- Assurez-vous que le cordon d'alimentation n'est pas pincé ou endommagé; remplacez-le immédiatement s'il est endommagé.
- La température de surface de l'unité peut atteindre 65°C. NE PAS toucher les capots à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau ou du métal ne pénètrent dans l'appareil. Si cela se produit, coupez immédiatement l'alimentation secteur.
- NE PAS utiliser le luminaire dans un environnement sale ou poussiéreux. Cette appareil doit être nettoyer régulièrement.
- NE touchez AUCUN file pendant le fonctionnement car il pourrait y avoir un risque de choc électrique.
- Évitez l'enchevêtrement du cordon d'alimentation avec d'autres fils.
- La distance minimale de projection sur des objets ou sur des surfaces doit être supérieure à 0.5 mètres.
- En cas de problème de fonctionnement grave, arrêtez immédiatement d'utiliser l'appareil.
- N'allumez et n'éteignez jamais ce luminaire à maintes reprises.
- Le boîtier, les lentilles ou le filtre ultraviolet doivent être remplacés s'ils sont visiblement endommagés.
- NE PAS ouvrir le boîtier car il ne contient aucune pièce réparable par l'utilisateur.
- NE PAS mettre ce luminaire en fonctionnement s'il est endommagé. N'effectuez pas de réparations vous-même. Les réparations ne doivent être effectuées par des personnes non qualifiées, cela peut entraîner des dommages ou des dysfonctionnements. Veuillez contacter le centre d'assistance technique agréé le plus proche si nécessaire.
- Débranchez ce produit du secteur avant de procéder à l'entretien.
- Utiliser l'emballage d'origine si l'appareil doit être transporté.
- Évitez une exposition directe des yeux à la source lumineuse lorsque le produit est allumé.
- N'utilisez PAS ce produit si vous constatez des dommages sur le boîtier, les blindages ou les câbles. Faites remplacer immédiatement les pièces endommagées par un technicien agréé.

02/ Technical Specifications

| | | |
|--------------------------|--|-----------------------------------|
| Power Voltage | 100-240V~ 50/60Hz | |
| Power Consumption | 1025W | |
| Light Source | 10x100W LED | |
| | 10x6x0.5W LED (RGB) | |
| | 10x24x0.5W LED (RGB) | |
| Field Angle | 6° | |
| Dimmer/Strobe | 0-100% smooth dimming; outstanding strobe effect with variable speed | |
| Movement | Pan | 540° |
| | Tilt | 244° |
| | Pan/Tilt Resolution | 16 bit |
| | Automatic pan/tilt position correction | |
| | Fixation | Pan/Tilt lock |
| Control | DMX Channel | 16/88/37/100 Channels |
| | Control Mode | DMX512 |
| | | RDM |
| | | Art-Net |
| | | sACN |
| Firmware Upgrade | Firmware Upgrade via DMX link | |
| Construction | Display | LCD display |
| | Battery backup for user setup without mains connection | |
| | Data In/Out | 5-pin XLR (3-pin XLR is optional) |
| | | RJ45 Connector |
| | Power In/Out | Power Connector in/out |
| Protection Rating | IP20 | |

Description for power cord set should be used: Listed SJT flexible cord with rating: 300V, 90°C, 14AWGx3C, molded with 5-15P attachment plug and terminated with cord connector model SAC3FX with rating 250V, 16A by NINGBO HAISHU DISTRICT SEETRONIC ELECTRONIC CO LTD. The power cord shall be at least 914mm (It is to be measured from the face of attachment plug to the face of connector).

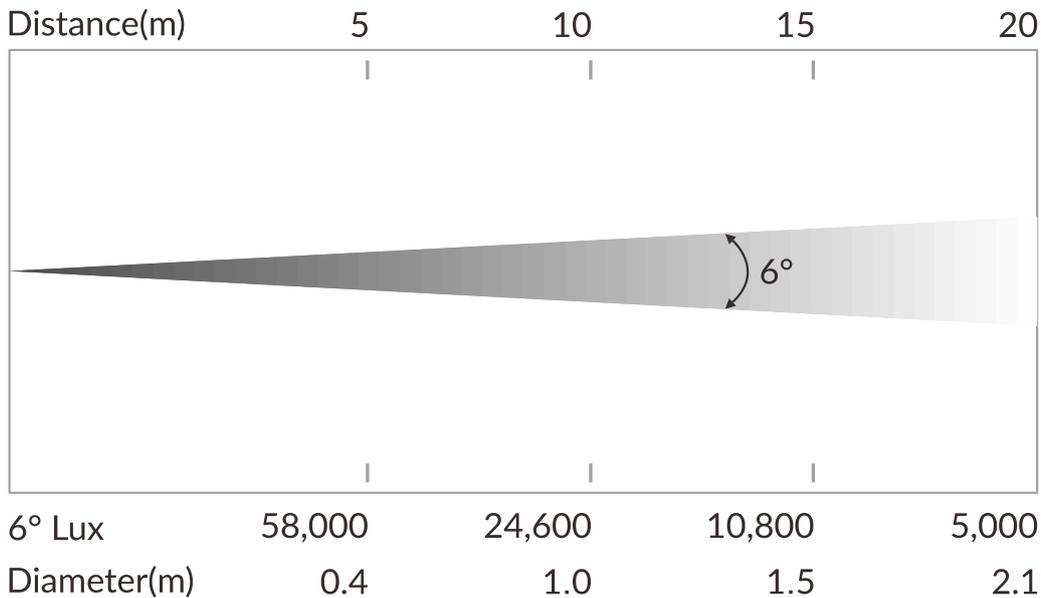
| | | |
|-------------------|--|-------------------|
| Features | Unique tungsten effect | |
| | Multi-point surface light and multi-point back light with pixel control and rainbow effect | |
| | Excellent high output beam with sharp effect | |
| | High output, low energy consumption, good heat dissipation, long service life | |
| | Applied to concert, TV stations, variety shows and other professional performance | |
| | 2 x fixed clamps for 50mm truss; Screw holes for installing clamps are reserved for 70mm truss (version with fixed clamps) | |
| Dimensions | 971.5x352x522.7 mm (version with omega bracket holes) | 38.2"x13.9"x20.6" |
| Dimensions | 971.5x352x526.7 mm (version with fixed foldable clamps) | 38.2"x13.9"x20.7" |
| Weight | 42.1 kg (version with omega bracket holes) | 92.8 lbs |
| Weight | 42.9 kg (version with fixed foldable clamps) | 94.6 lbs |



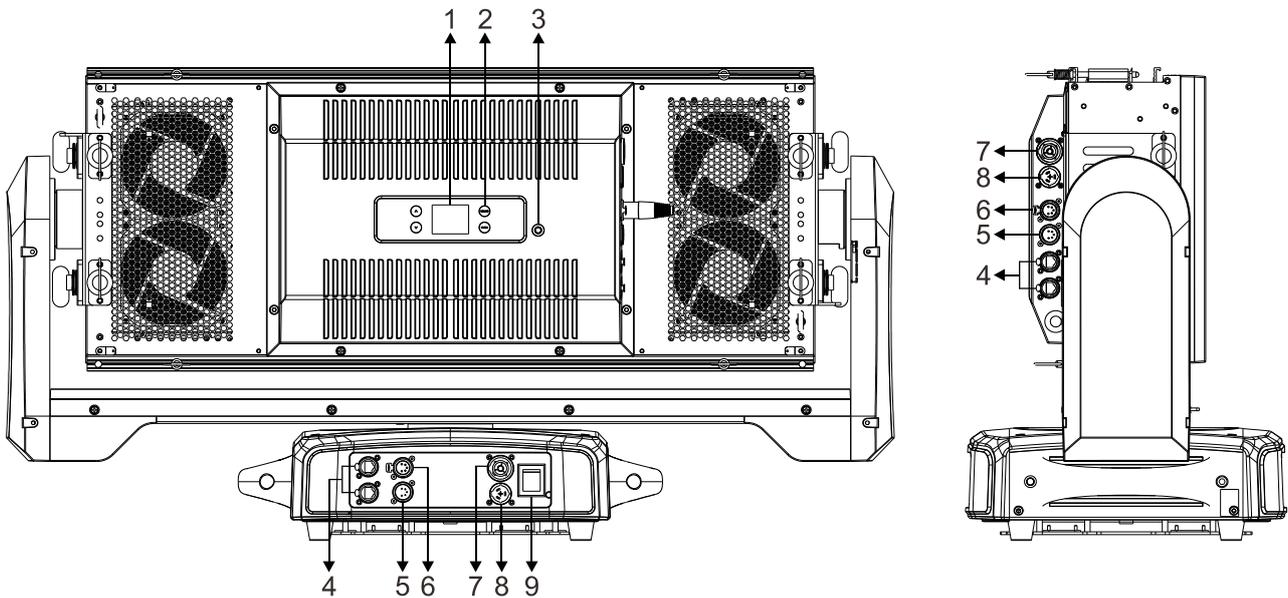
version with omega bracket holes

version with fixed foldable clamps

Photometric Diagram:



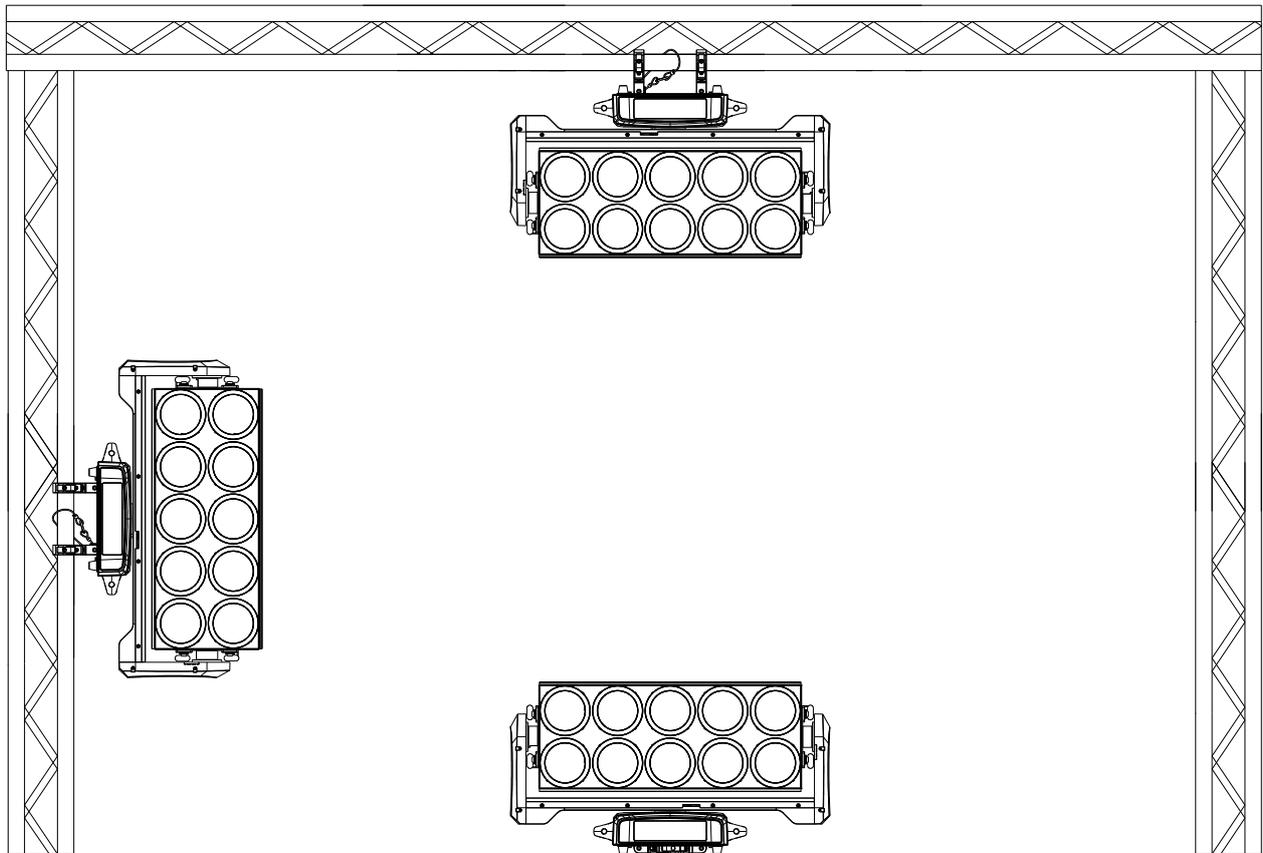
03/ Control Panel



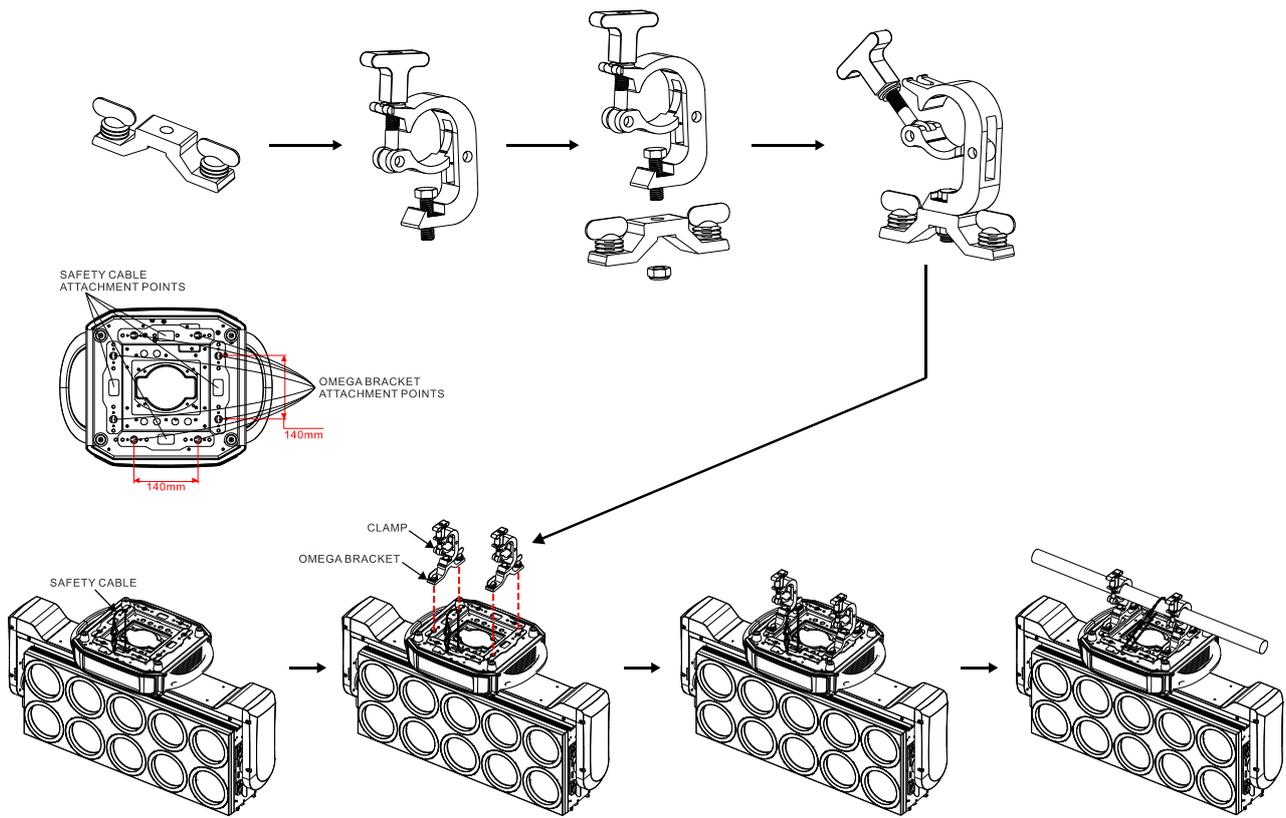
| | | |
|--------------------|--|---|
| 1. Display | To show the various menus and the selected function | |
| 2. Buttons | MENU | To enter into move backward or leave the menu |
| | ▲ UP | To go backward to move up in the menu |
| | ▼ DOWN | To go forward to move down in the menu |
| | ENTER | To perform the desired functions |
| 3. BATTERY DISPLAY | | |
| 4. ETHERNET | Transfers fixture's information to a main controller | |
| 5. DMX IN | For DMX512 link, use 5-pin XLR cable to link the unit and DMX controller to input DMX signal (3-pin XLR cable is optional) | |
| 6. DMX OUT | For DMX512 link, use 5-pin XLR cable to link the next units to output DMX signal (3-pin XLR cable is optional) | |
| 7. POWER OUT | To connect to the next fixture | |
| 8. POWER IN | To connect to supply power | |
| 9. POWER SWITCH | Turns on/off the power | |

04/ Fixture Installation

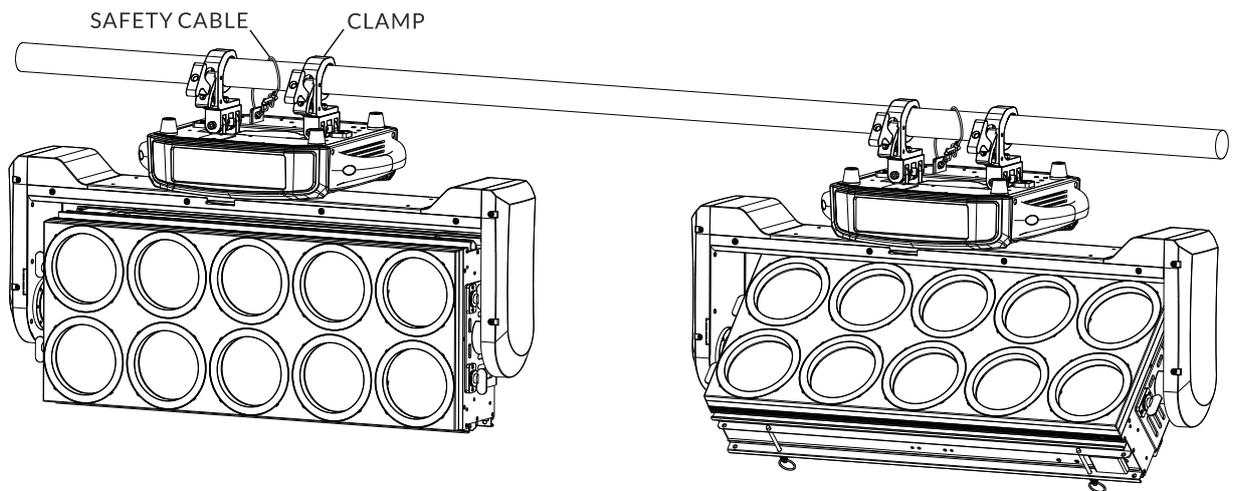
- ▶ DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.
- ▶ Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.
- ▶ This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on trussing, or standing on the floor. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.



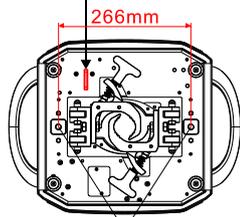
Steps for installing the omega brackets:



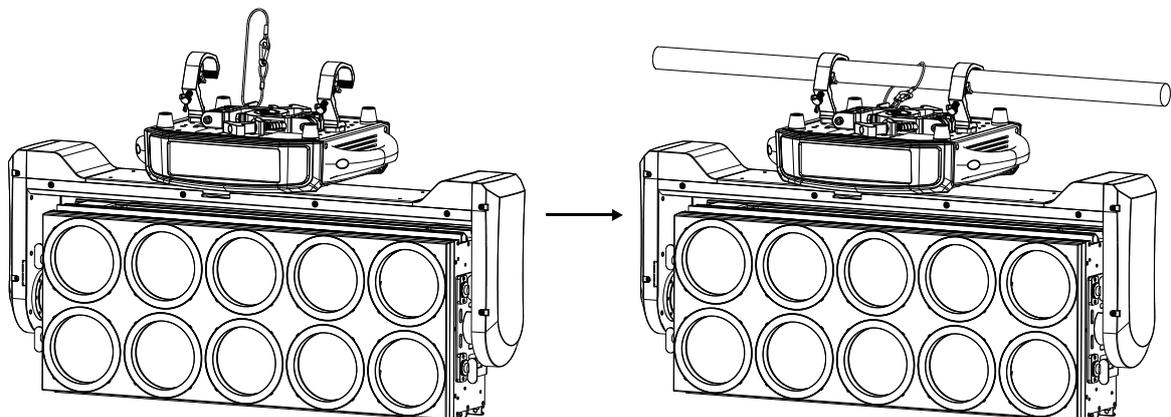
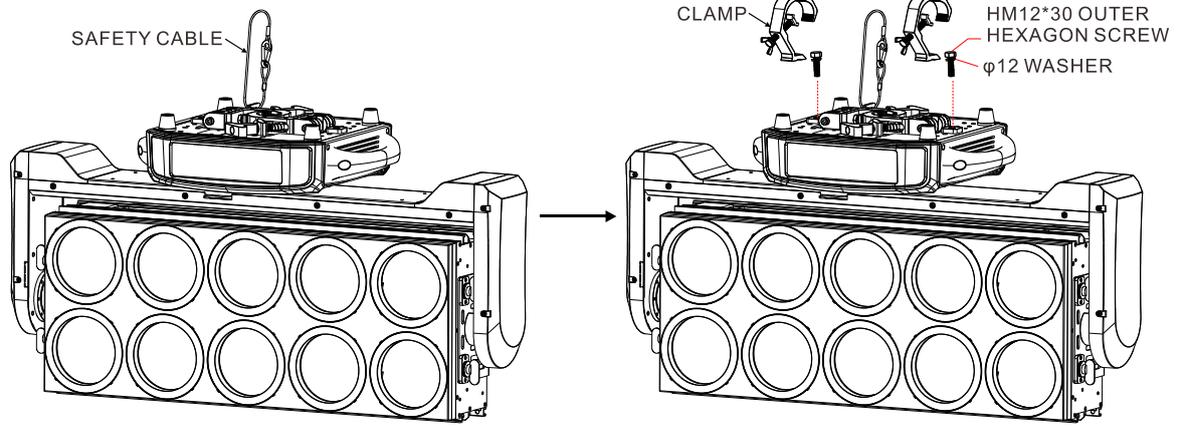
Hanging the fixture:



SAFETY CABLE
ATTACHMENT POINT

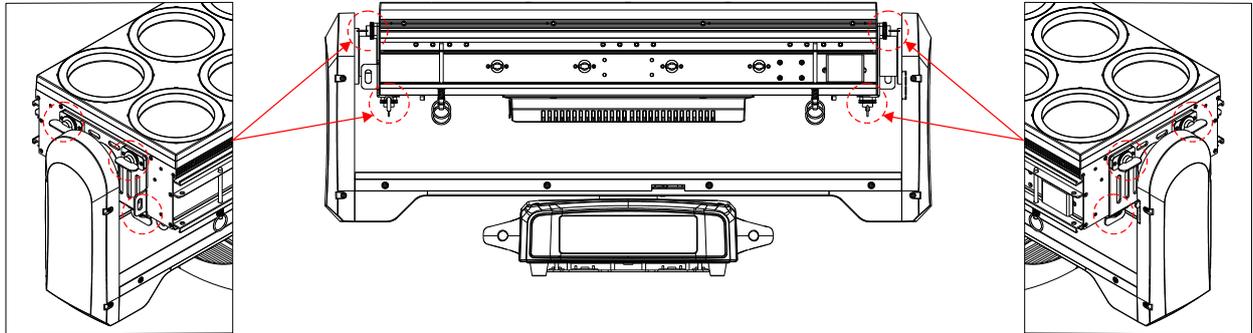


SCREW HOLES (SUITABLE FOR HM12 SCREWS)
RESERVED FOR CLAMPS FOR TRUSS
LARGER THAN 50MM IN DIAMETER

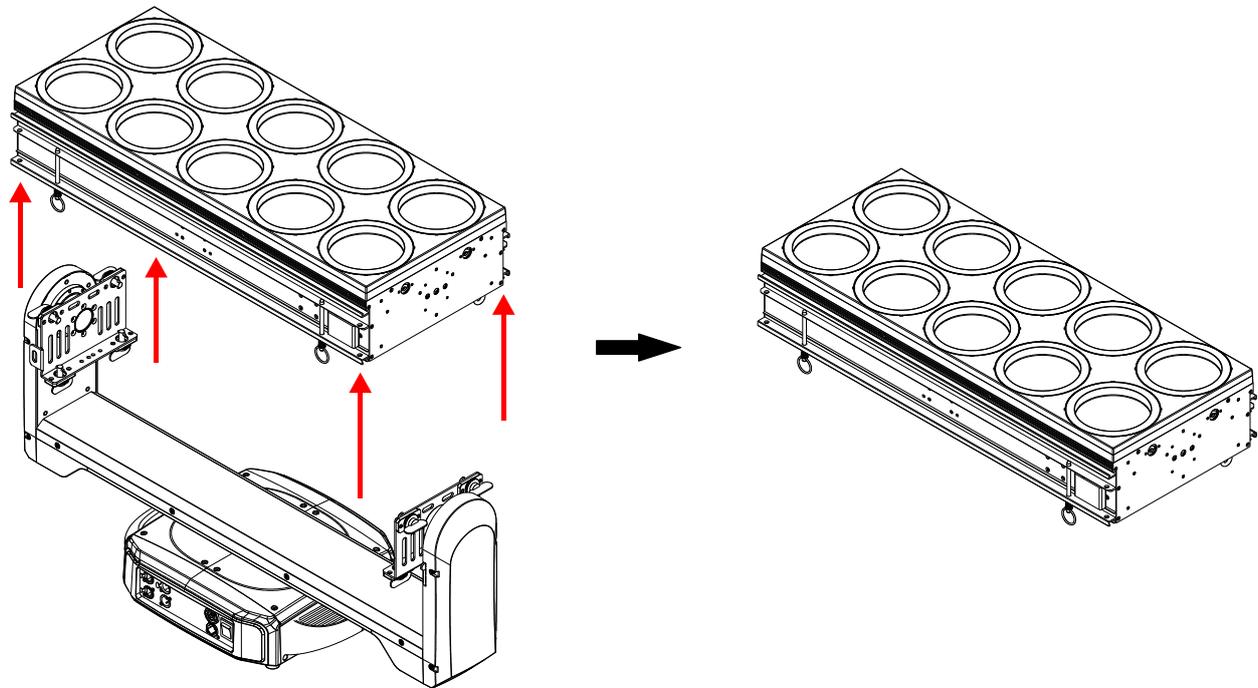


Separate fixture's head from its base:

1. As shown in the figure, place the fixture horizontally and secure the XY axis locks. Then loosen the eight quick-lock bolts on the head of the fixture.



2. Lift fixture's head upwards to separate it from its base.

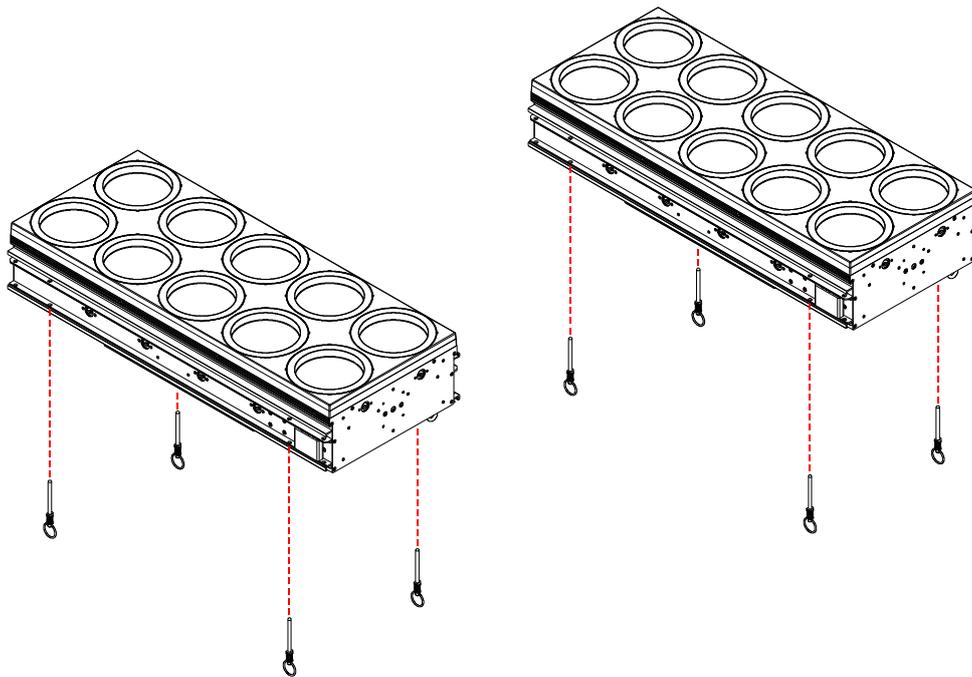


3. To reassemble fixture's head back into its base, follow the above steps in reverse order.

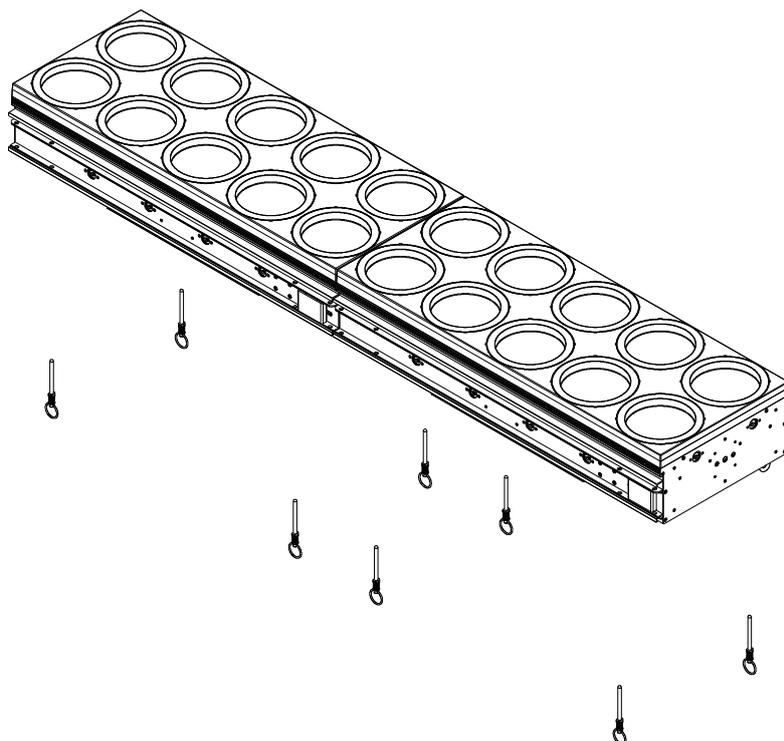
Align the fixtures horizontally:

1. Remove the eight locking pins from the fixtures.

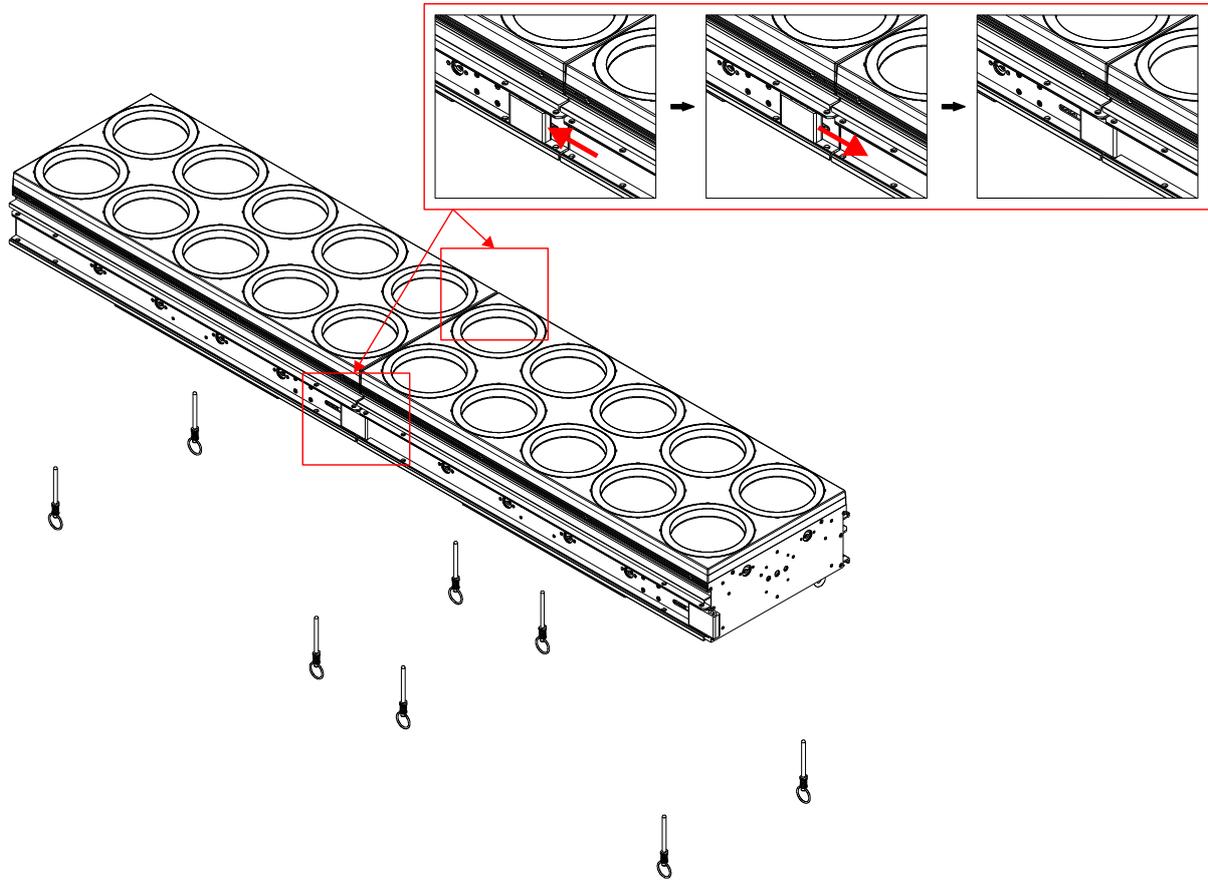
Note: All locking pins are fixed to fixture by a short retaining cable. When the head is installed in the base assembly, the cables must be secured in the provided clips to keep from interfering with the tilt movement of the fixture.



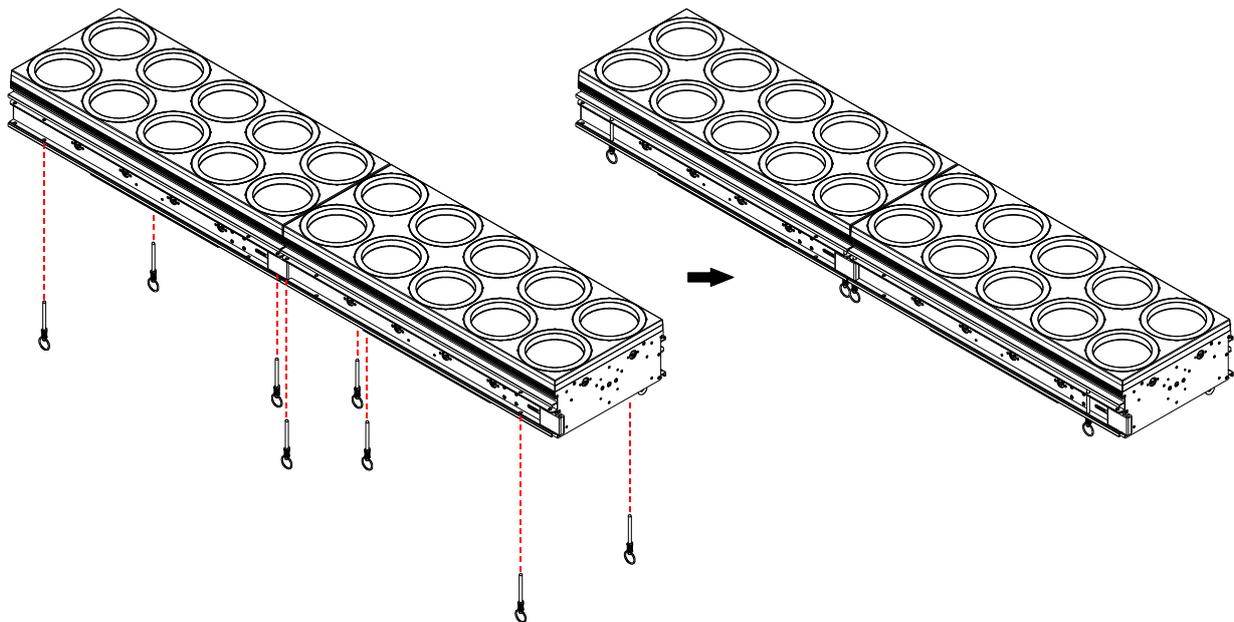
2. Align and fit the fixtures together.



3. Lightly push the sliders on both sides of the fixtures to the left to unlock them, then move the sliders to the right to secure the fixtures together.



4. Insert the locking pins, and the fixtures are now aligned and connected.



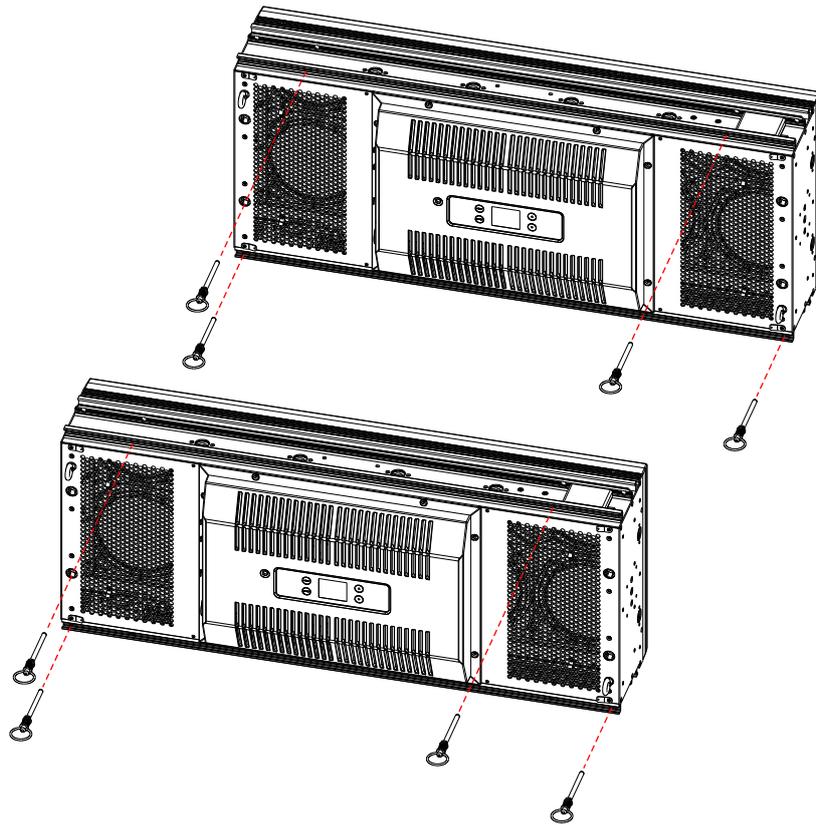
5. If you need to align more fixtures, repeat the steps above.

6. To detach the fixtures, simply reverse the steps mentioned above.

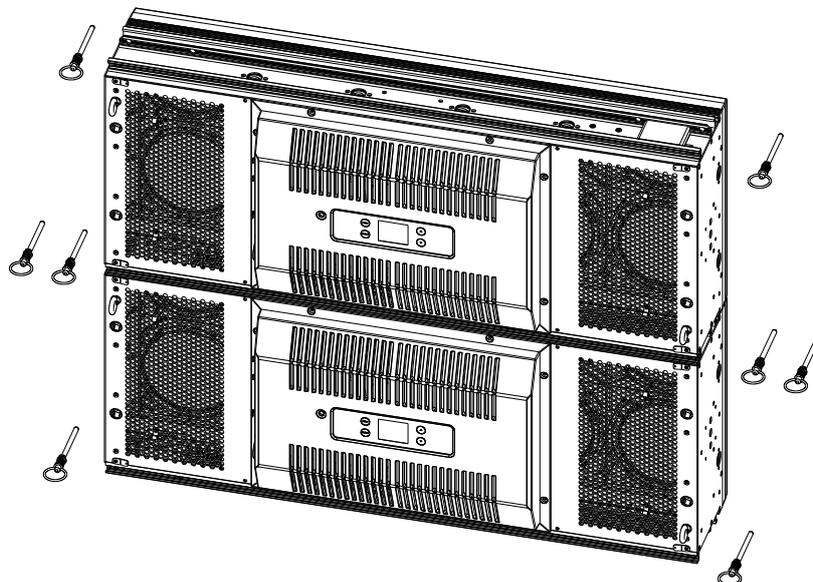
Align the fixtures vertically:

1. Remove the eight locking pins from the fixtures.

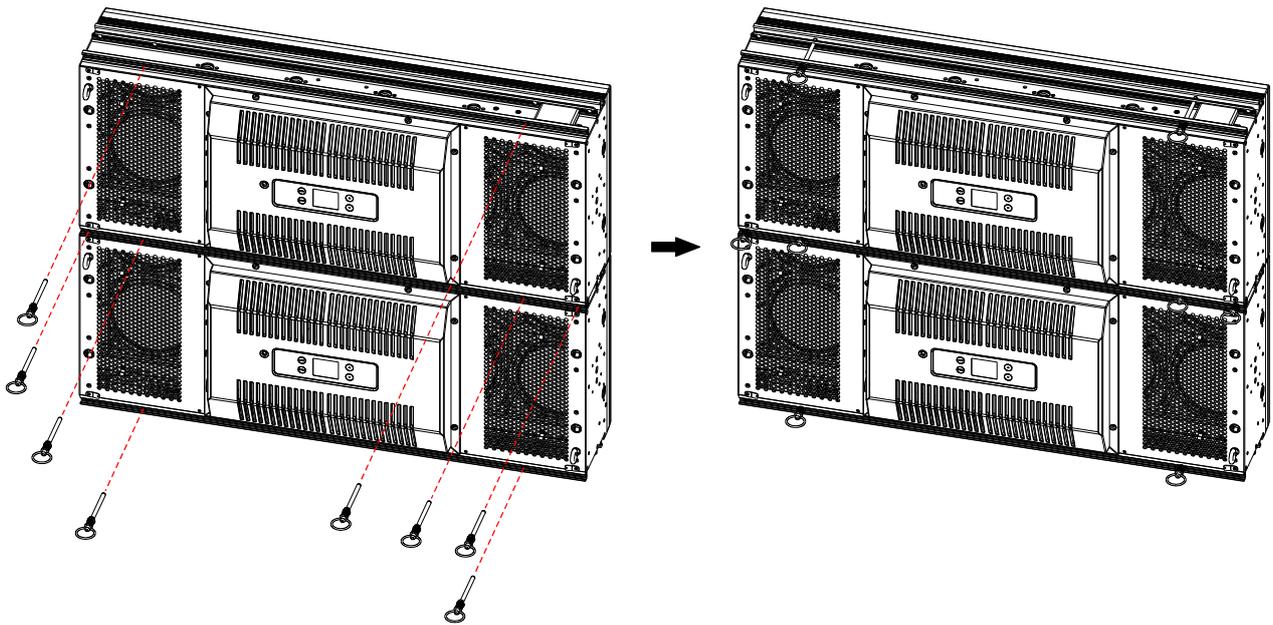
Note: All locking pins are fixed to fixture by a short retaining cable. When the head is installed in the base assembly, the cables must be secured in the provided clips to keep from interfering with the tilt movement of the fixture.



2. Align and fit the fixtures together.



3. Insert the locking pins, and the fixtures are now aligned and connected.



4. If you need to align more fixtures, repeat the steps above.

5. To detach the fixtures, simply reverse the steps mentioned above.

05/ How To Set The Unit

5.1 Main Functions

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

The main functions are shown below:

| MENU | SUBMENU | OPTIONS | | |
|------------------|------------------|----------------|---------------------------|--|
| DMX Settings | DMX Address | 1-497 (16 CH) | (Default=1) | |
| | | 1-425 (88 CH) | | |
| | | 1-476 (37 CH) | | |
| | | 1-413 (100 CH) | | |
| | DMX Channel Mode | Mode 1 (16) | | |
| | | Mode 2 (88) | | |
| | | Mode 3 (37) | | |
| | | Mode 4 (100) | | |
| | No DMX Status | Blackout | | |
| | | Hold | | |
| | | Manual | | |
| | View DMX Value | | | |
| | Connect Option | Auto | | |
| | | DMX | | |
| | | Art-Net | | |
| | | sACN | | |
| | Network | IP Address | Default 1:002.xxx.xxx.xxx | |
| | | | Default 2:010.xxx.xxx.xxx | |
| | | | Manual:xxx.xxx.xxx.xxx | |
| | | Subnet Mask | xxx.xxx.xxx.xxx | |
| Art-Net Settings | Net | 0-127 | (Default=0) | |
| | Sub-Net | 0-15 | (Default=0) | |
| | Universe | 0-15 | (Default=0) | |
| sACN Settings | sACN Universe | 1-32000 | (Default=1) | |
| | sACN Priority | 0-200 | (Default=100) | |
| | | | | |

| MENU | SUBMENU | OPTIONS | |
|--------------------|------------------|--------------|--|
| | Artnet to DMX | Off On | |
| Fixture Settings | Pan Invert | No Yes | |
| | Tilt Invert | No Yes | |
| | P/T Feedback | No Yes | |
| | Dimmer Curve | Linear | |
| | | Square Law | |
| | | Inv SQ Law | |
| | | S Curve | |
| | Dimmer Speed | Fast | |
| | | Smooth | |
| | | Tungsten | |
| | Power Mode | Standard | |
| | | Quiet | |
| | LED Refresh Rate | 900Hz | |
| | | 1000Hz | |
| | | 1100Hz | |
| | | 1200Hz | |
| | | 1300Hz | |
| | | 1400Hz | |
| | | 1500Hz | |
| | | 2500Hz | |
| | | 4000Hz | |
| | | 5000Hz | |
| | | 6000Hz | |
| 10KHz | | | |
| 15KHz | | | |
| 20KHz | | | |
| 25KHz | | | |
| Amber Glow | 0-100 | (Default=20) | |
| Invert Pixel Order | No | | |
| | Yes | | |

| MENU | SUBMENU | OPTIONS | | | |
|------------------|---------------------|--------------|--------------|------------|--------|
| Display Settings | Display Invert | No | | | |
| | | Yes | | | |
| | Backlight Intensity | 1-10 | (Default=10) | | |
| | Temperature Unit | °C | | | |
| | | °F | | | |
| | Language | English | | | |
| Chinese | | | | | |
| Fixture Test | Auto Test | | | | |
| | Manual Test | Mode 1 | | Mode 2 | |
| | | Clear | No/Yes | Clear | No/Yes |
| | | Dimmer | 0-255 | Dimmer | 0-255 |
| | | Strobe | 0-255 | Strobe | 0-255 |
| | | LED. W1 | 0-255 | Pixel | 0-255 |
| | | Back. R1 | 0-255 | LED. W | 0-255 |
| | | Back.G1 | 0-255 | Back Red | 0-255 |
| | | Back. B1 | 0-255 | Back Green | 0-255 |
| | | | 0-255 | Back Blue | 0-255 |
| | | LED. W10 | 0-255 | Ring R | 0-255 |
| | | Back. R10 | 0-255 | Ring G | 0-255 |
| | | Back. G10 | 0-255 | Ring B | 0-255 |
| | | Back. B10 | 0-255 | Ring Pixel | 0-255 |
| | | Ring R1 | 0-255 | | |
| | | Ring G1 | 0-255 | | |
| | | Ring B1 | 0-255 | | |
| | | Ring Pixel 1 | 0-255 | | |
| | | | 0-255 | | |
| | | Ring R10 | 0-255 | | |
| Ring G10 | | 0-255 | | | |
| Ring B10 | 0-255 | | | | |
| Ring Pixel 10 | 0-255 | | | | |

| MENU | SUBMENU | OPTIONS | | |
|---------------------|------------------|-----------------|--------------|-----|
| Fixture Information | Fixture Use Hour | | | |
| | LED Use Hour | Total LED Hour | | |
| | | LED On Hour | | |
| | | LED Hours Reset | Password=050 | |
| | Temperature | | Current | Max |
| | | LED 1 | | |
| | | LED 2 | | |
| | | LED 3 | | |
| | | LED 4 | | |
| | | LED 5 | | |
| | Fan State | H_FAN 1 | | |
| | | H_FAN 2 | | |
| | | H_FAN 3 | | |
| | | H_FAN 4 | | |
| | | H_FAN 5 | | |
| | | H_FAN 6 | | |
| | | H_FAN 7 | | |
| | Firmware Version | | | |
| | RDM UID | | | |
| | Error Logs | Fixture Errors | | |
| Reset Error Log | | No | | |
| | | Yes | Password=050 | |
| Reset Function | All Reset | No | | |
| | | Yes | | |
| Special Function | Factory Settings | No | | |
| | | Yes | | |

DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **DMX Address**, **DMX Channel Mode**, **No DMX Status**, **View DMX Value**, **Connect Option**, **Network**, **Art-Net Settings**, **sACN Settings** or **Artnet to DMX**.

DMX Address

Select **DMX Address**, press ENTER.

Use UP/DOWN button to select an address, confirm your selection with ENTER.

| CHANNEL MODE | DMX ADDRESS |
|--------------|-------------|
| Mode 1 (16) | 1-497 |
| Mode 2 (88) | 1-425 |
| Mode 3 (37) | 1-476 |
| Mode 4 (100) | 1-413 |

To exit the menu, press MENU, or wait 30 seconds.

DMX Channel Mode

Select **DMX Channel Mode**, press ENTER.

Use UP/DOWN button to select between **Mode 1 (16)**, **Mode 2 (88)**, **Mode 3 (37)** and **Mode 4 (100)**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

No DMX Status

Select **No DMX Status**, press ENTER.

Use UP/DOWN button to select one of the following status:

Blackout (Fixture blacks out if DMX signal stops)

Hold (The device continues to operate in the current mode with the last active DMX values until the signal returns)

Manual (The device accepts the DMX value stored in the 'Manual Test' menu)

Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

View DMX Value

Select **View DMX Value**, press ENTER.

Use UP/DOWN button to select the desired DMX channel, for which the value is to be displayed.

To exit the menu, press MENU, or wait 30 seconds.

Connect Option

Select **Connect Option**, press ENTER.

Use UP/DOWN button to select **Auto**, **DMX**, **Art-Net** or **sACN**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Network

Select **Network**, press ENTER.

Use UP/DOWN button to select **IP Address** or **Subnet Mask**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Art-Net Settings

Select **Art-Net Settings**, press ENTER.

Use UP/DOWN button to select **Net**, **Sub-Net** or **Universe**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

sACN Settings

Select **sACN Settings**, press ENTER.

Use UP/DOWN button to select **sACN Universe** or **sACN Priority**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Artnet to DMX

Select **Artnet to DMX**, press ENTER.

Use UP/DOWN button to select **Off** or **On**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Settings

Enter the control menu and select **Fixture Settings**, press ENTER. Use the UP/DOWN button to select **Pan Invert**, **Tilt Invert**, **P/T Feedback**, **Dimmer Curve**, **Dimmer Speed**, **Power Mode**, **LED Refresh Rate**, **Amber Glow** or **Invert Pixel Order**.

Pan Invert

Select **Pan Invert**, press ENTER.

Use UP/DOWN button to select **No** (pan invert deactivated) or **Yes** (pan invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Tilt Invert

Select **Tilt Invert**, press ENTER.

Use UP/DOWN button to select **No** (tilt invert deactivated) or **Yes** (tilt invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

P/T Feedback

Select **P/T Feedback**, press ENTER.

Use UP/DOWN button to select **No** (pan/tilt feedback deactivated) or **Yes** (pan/tilt feedback activated), confirm your selection with ENTER.

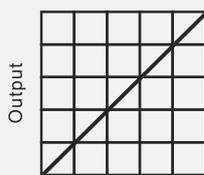
To exit the menu, press MENU, or wait 30 seconds.

Dimmer Curve

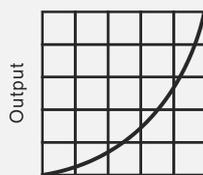
Select **Dimmer Curve**, press ENTER.

Use UP/DOWN button to select **Linear**, **Square Law**, **Inv SQ Law** or **S Curve**, confirm your selection with ENTER.

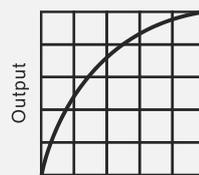
Dimmer Modes



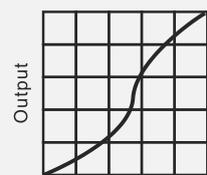
Optically Linear



Square Law



Inverse Square Law



S-curve

To exit the menu, press MENU, or wait 30 seconds.

Dimmer Speed

Select **Dimmer Speed**, press ENTER.

Use UP/DOWN button to select **Fast**, **Smooth** or **Tungsten**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Power Mode

Select **Power Mode**, press ENTER.

Use UP/DOWN button to select **Standard** or **Quiet**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

LED Refresh Rate

Select **LED Refresh Rate**, press ENTER.

Use UP/DOWN button to select **900Hz**, **1000Hz**, **1100Hz**, **1200Hz**, **1300Hz**, **1400Hz**, **1500Hz**, **2500Hz**, **4000Hz**, **5000Hz**, **6000Hz**, **10KHz**, **15KHz**, **20KHz** or **25KHz**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Amber Glow

Select **Amber Glow**, press ENTER.

Use UP/DOWN button to select a value between **0** and **100**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Invert Pixel Order

Select **Invert Pixel Order**, press ENTER.

Use UP/DOWN button to select **No** or **Yes**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Display Settings

Enter the control menu and select **Display Settings**, press ENTER. Use the UP/DOWN button to select **Display Invert**, **Backlight Intensity**, **Temperature Unit** or **Language**.

Display Invert

Select **Display Invert**, press ENTER.

Use UP/DOWN button to select **No** (display normal) or **Yes** (display inverted), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Backlight Intensity

Select **Backlight Intensity**, press ENTER.

Use UP/DOWN button to select a value between **1** (dark) and **10** (bright), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Temperature Unit

Select **Temperature Unit**, press ENTER.

Use UP/DOWN button to select **°C** or **°F**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Language

Select **Language**, press ENTER.

Use UP/DOWN button to select **English** or **Chinese**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Test

Enter the control menu and select **Fixture Test**, press ENTER. Use the UP/DOWN button to select **Auto Test** or **Manual Test**.

Auto Test

Select **Auto Test**, press ENTER.

The device immediately performs an automatic self-test.

To end the automatic self-test and exit the menu, press MENU, or wait 30 seconds.

Manual Test

Select **Manual Test**, press ENTER.

Use UP/DOWN button to select the channel for which the manual test is to be performed, confirm your selection with ENTER.

Use UP/DOWN button to select a value, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

(The device returns to its original DMX state after the manual test. The test values are saved automatically when the device is switched off.)

Fixture Information

Enter the control menu and select **Fixture Information**, press ENTER. Use the UP/DOWN button to select **Fixture Use Hour**, **LED Use Hour**, **Temperature**, **Fan State**, **Firmware Version**, **RDM UID** or **Error Logs**.

Fixture Use Hour

Select **Fixture Use Hour**, press ENTER.

The operating hours is displayed.

To exit the menu, press MENU, or wait 30 seconds.

LED Use Hour

Select **LED Use Hour**, press ENTER.

Use UP/DOWN button to select **Total LED Hour** (total time) or **LED On Hour** (current switch-on time), confirm your selection with ENTER.

The total time or current switch-on time is displayed.

Use UP/DOWN button to select **LED Hours Reset**, confirm your selection with ENTER.

Use UP/DOWN button to set the password 050, confirm your selection with ENTER. The LED operating hours is reset.

To exit the menu, press MENU, or wait 30 seconds.

Temperature

Select **Temperature**, press ENTER.

The device temperature is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Fan State

Select **Fan State**, press ENTER.

The fan status is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Firmware Version

Select **Firmware Version**, press ENTER.

The firmware version is displayed.

To exit the menu, press MENU, or wait 30 seconds.

RDM UID

Select **RDM UID**, press ENTER.

The RDM UID is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Error Logs

Select **Error Logs**, press ENTER.

Use UP/DOWN button to select **Fixture Errors**, confirm your selection with ENTER.

The error list is displayed.

Use UP/DOWN button to select **Reset Error Log**, confirm your selection with ENTER.

If you wish to reset the relevant error logs, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The relevant error logs are reset.

To exit the menu, press MENU, or wait 30 seconds.

Reset Function

Enter the control menu and select **Reset Function**, press ENTER. Use the UP/DOWN button to select **All Reset**.

All Reset

Select **All Reset**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset all to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Special Function

Enter the control menu and select **Special Function**, press ENTER. Use the UP/DOWN button to select **Factory Settings**.

Factory Settings

Select **Factory Settings**, press ENTER.

If you wish to reset the device to the factory settings, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

RDM functions: Certain menus of the device and functions can be called up via the RDM protocol.

The parameter IDs are implemented as follows for different commands:

| Parameter ID | Command 'Discovery' | Command 'Set' | Command 'Get' |
|-----------------------------|---------------------|---------------|---------------|
| DISC_UNIQUE_BRANCH | ✓ | | |
| DISC_MUTE | ✓ | | |
| DISC_UN_MUTE | ✓ | | |
| DEVICE_INFO | | | ✓ |
| SUPPORTED_PARAMETERS | | | ✓ |
| SOFTWARE_VERSION_LABEL | | | ✓ |
| DMX_START_ADDRESS | | ✓ | ✓ |
| IDENTIFY_DEVICE | | ✓ | ✓ |
| DEVICE_MODEL_DESCRIPTION | | | ✓ |
| PARAMETER_DESCRIPTION | | | ✓ |
| BOOT_SOFTWARE_VERSION_ID | | | ✓ |
| BOOT_SOFTWARE_VERSION_LABEL | | | ✓ |
| DMX_PERSONALITY | | ✓ | ✓ |
| DMX_PERSONALITY_DESCRIPTION | | | ✓ |
| SLOT_INFO | | | ✓ |
| SLOT_DESCRIPTION | | | ✓ |
| SENSOR_DEFINITION | | | ✓ |
| SENSOR_VALUE | | | ✓ |
| DEVICE_HOURS | | | ✓ |
| LAMP_HOURS | | | ✓ |
| PAN_INVERT | | ✓ | ✓ |
| TILT_INVERT | | ✓ | ✓ |
| RESET_DEVICE | | ✓ | |
| CURVE | | ✓ | |
| DMX_STATE | | ✓ | ✓ |
| DIMMER_SPEED | | ✓ | ✓ |

✓ -Command implemented for the respective parameter ID

5.2 Home Position Adjustment

- ▶ To access the control menus, press the [MENU] button.
- ▶ To access the offset menus, long-press the [ENTER] button.
- ▶ Navigate the offset menus, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

| OFFSET MENU | VALUES |
|---------------|-----------|
| Pan | -128~127 |
| Tilt | -128~127 |
| Frequency(Hz) | 1072~1327 |
| LED. A | 0~255 |
| LED. W | 0~255 |
| LED. A1 | 0~255 |
| LED. W1 | 0~255 |
| | |
| LED. A10 | 0~255 |
| LED. W10 | 0~255 |

Pan

Select **Pan**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Tilt

Select **Tilt**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Frequency(Hz)

Select **Frequency(Hz)**, press ENTER.

Use UP/DOWN button to select a value, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

| Frequency | VALUES |
|-----------|-------------|
| 900Hz | 772~1027 |
| 1000Hz | 872~1127 |
| 1100Hz | 972~1227 |
| 1200Hz | 1072~1327 |
| 1300Hz | 1172~1427 |
| 1400Hz | 1272~1527 |
| 1500Hz | 1372~1627 |
| 2500Hz | 2372~2627 |
| 4000Hz | 3872~4127 |
| 5000Hz | 4872~5127 |
| 6000Hz | 5872~6127 |
| 10000Hz | 9872~10127 |
| 15000Hz | 14872~15127 |
| 20000Hz | 19872~20127 |
| 25000Hz | 24872~25127 |

LED. A

Select **LED. A**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

LED. W

Select **LED. W**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

LED. A1

Select **LED. A1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

LED. W1

Select **LED. W1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

.....

LED. A10

Select **LED. A10**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

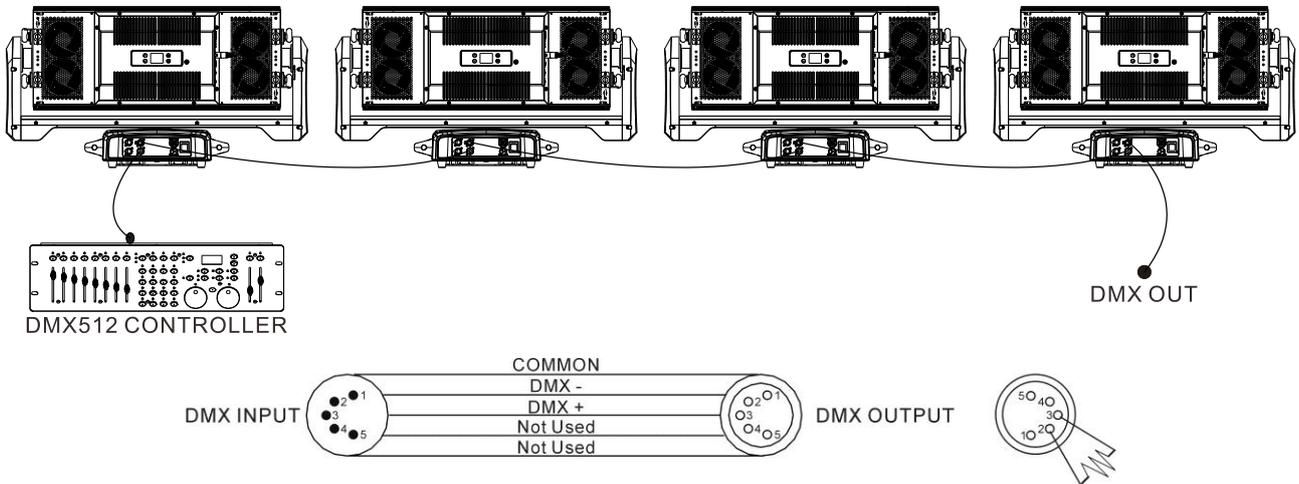
LED. W10

Select **LED. W10**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

6.1 DMX512 Connection



1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a “daisy chain” by XLR plug cable from the output of the unit to the input of the next unit. The cable can only be used in series and cannot be connected in parallel. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. When wiring 3 pin XLR connectors: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+). When wiring 5 pin XLR connectors: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

6.2 Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address between 1 and 512 so that the units can receive DMX signal.

Press the MENU button to access the control menus, select DMX Settings, press the ENTER button to confirm. Use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will show on the display. Use the UP/DOWN button to adjust the address between 001 and 512, press the ENTER button to store. To exit the menu, press MENU, or wait 30 seconds.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

| Channel Mode | Unit 1 Address | Unit 2 Address | Unit 3 Address | Unit 4 Address |
|--------------|----------------|----------------|----------------|----------------|
| 16 channels | 1 | 17 | 33 | 49 |
| 88 channels | 1 | 89 | 177 | 265 |
| 37 channels | 1 | 38 | 75 | 112 |
| 100 channels | 1 | 101 | 201 | 301 |

6.3 DMX512 Configuration

Please control the fixture by referring to the configurations below.

Attentions:

- ▶ The unit will maintain the last condition until reset if you cut-off the DMX signal.
- ▶ For the channel Function, keep the value for about 3 seconds, then the corresponding function will take into effect.

16 Channels (Mode 1):

| CHANNEL | VALUE | FUNCTION |
|---------|--|--|
| 1 | 000-255 | PAN 0°→540° |
| 2 | 000-255 | PAN FINE |
| 3 | 000-255 | TILT 0°→244° |
| 4 | 000-255 | TILT FINE |
| 5 | 000-255 | PAN/TILT SPEED Fast to Slow |
| 6 | 000-255 | DIMMER 0%→100% |
| 7 | 000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255 | STROBE Close Open Strobe from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Random Strobe from Slow to Fast Open |
| 8 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | LED MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Random Macro, Fast to Slow |
| 9 | 000-255 | LED WARM WHITE 0%→100% |
| 10 | 000-255 | LED WASH RED 0%→100% |

| | | |
|---------|------------------------|---|
| 11 | 000-255 | LED WASH GREEN 0%→100% |
| 12 | 000-255 | LED WASH BLUE 0%→100% |
| 13 | 000-255 | RING RED 0%→100% |
| 14 | 000-255 | RING GREEN 0%→100% |
| 15 | 000-255 | RING BLUE 0%→100% |
| 16 | 000-015 | RING MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| | 224-239 | Macro 14, Fast to Slow |
| 240-255 | Macro 15, Fast to Slow | |

88 Channels (Mode 2):

| CHANNEL | VALUE | FUNCTION |
|---------|--------------------|---------------------------------------|
| 1 | 000-255 | PAN 0°→540° |
| 2 | 000-255 | PAN FINE |
| 3 | 000-255 | TILT 0°→244° |
| 4 | 000-255 | TILT FINE |
| 5 | 000-255 | PAN/TILT SPEED Fast to Slow |
| 6 | 000-255 | DIMMER 0%→100% |
| 7 | 000-007 008-015 | STROBE Close Open |

| | | |
|----|--|---|
| | 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255 | Strobe from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Random Strobe from Slow to Fast Open |
| 8 | 000-255 | LED 1 WARM WHITE 0%→100% |
| 9 | 000-255 | LED 1 WASH RED 0%→100% |
| 10 | 000-255 | LED 1 WASH GREEN 0%→100% |
| 11 | 000-255 | LED 1 WASH BLUE 0%→100% |
| 12 | 000-255 | LED 2 WARM WHITE 0%→100% |
| 13 | 000-255 | LED 2 WASH RED 0%→100% |
| 14 | 000-255 | LED 2 WASH GREEN 0%→100% |
| 15 | 000-255 | LED 2 WASH BLUE 0%→100% |
| 16 | 000-255 | LED 3 WARM WHITE 0%→100% |
| 17 | 000-255 | LED 3 WASH RED 0%→100% |
| 18 | 000-255 | LED 3 WASH GREEN 0%→100% |
| 19 | 000-255 | LED 3 WASH BLUE 0%→100% |
| 20 | 000-255 | LED 4 WARM WHITE 0%→100% |
| 21 | 000-255 | LED 4 WASH RED 0%→100% |
| 22 | 000-255 | LED 4 WASH GREEN 0%→100% |
| 23 | 000-255 | LED 4 WASH BLUE 0%→100% |
| 24 | 000-255 | LED 5 WARM WHITE 0%→100% |
| 25 | 000-255 | LED 5 WASH RED 0%→100% |

| | | |
|----|---------|-------------------------------------|
| 26 | 000-255 | LED 5 WASH GREEN 0%→100% |
| 27 | 000-255 | LED 5 WASH BLUE 0%→100% |
| 28 | 000-255 | LED 6 WARM WHITE 0%→100% |
| 29 | 000-255 | LED 6 WASH RED 0%→100% |
| 30 | 000-255 | LED 6 WASH GREEN 0%→100% |
| 31 | 000-255 | LED 6 WASH BLUE 0%→100% |
| 32 | 000-255 | LED 7 WARM WHITE 0%→100% |
| 33 | 000-255 | LED 7 WASH RED 0%→100% |
| 34 | 000-255 | LED 7 WASH GREEN 0%→100% |
| 35 | 000-255 | LED 7 WASH BLUE 0%→100% |
| 36 | 000-255 | LED 8 WARM WHITE 0%→100% |
| 37 | 000-255 | LED 8 WASH RED 0%→100% |
| 38 | 000-255 | LED 8 WASH GREEN 0%→100% |
| 39 | 000-255 | LED 8 WASH BLUE 0%→100% |
| 40 | 000-255 | LED 9 WARM WHITE 0%→100% |
| 41 | 000-255 | LED 9 WASH RED 0%→100% |
| 42 | 000-255 | LED 9 WASH GREEN 0%→100% |
| 43 | 000-255 | LED 9 WASH BLUE 0%→100% |
| 44 | 000-255 | LED 10 WARM WHITE 0%→100% |
| 45 | 000-255 | LED 10 WASH RED 0%→100% |
| 46 | 000-255 | LED 10 WASH GREEN 0%→100% |
| 47 | 000-255 | LED 10 WASH BLUE 0%→100% |

| | | |
|---------|------------------------|---|
| 48 | 000-255 | RING 1 RED 0%→100% |
| 49 | 000-255 | RING 1 GREEN 0%→100% |
| 50 | 000-255 | RING 1 BLUE 0%→100% |
| 51 | 000-015 | RING 1 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |
| 52 | 000-255 | RING 2 RED 0%→100% |
| 53 | 000-255 | RING 2 GREEN 0%→100% |
| 54 | 000-255 | RING 2 BLUE 0%→100% |
| 55 | 000-015 | RING 2 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |

| | | |
|---------|------------------------|---|
| 56 | 000-255 | RING 3 RED 0%→100% |
| 57 | 000-255 | RING 3 GREEN 0%→100% |
| 58 | 000-255 | RING 3 BLUE 0%→100% |
| 59 | 000-015 | RING 3 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |
| 60 | 000-255 | RING 4 RED 0%→100% |
| 61 | 000-255 | RING 4 GREEN 0%→100% |
| 62 | 000-255 | RING 4 BLUE 0%→100% |
| 63 | 000-015 | RING 4 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |

| | | |
|---------|------------------------|---|
| 64 | 000-255 | RING 5 RED 0%→100% |
| 65 | 000-255 | RING 5 GREEN 0%→100% |
| 66 | 000-255 | RING 5 BLUE 0%→100% |
| 67 | 000-015 | RING 5 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |
| 68 | 000-255 | RING 6 RED 0%→100% |
| 69 | 000-255 | RING 6 GREEN 0%→100% |
| 70 | 000-255 | RING 6 BLUE 0%→100% |
| 71 | 000-015 | RING 6 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |

| | | |
|---------|------------------------|---|
| 72 | 000-255 | RING 7 RED 0%→100% |
| 73 | 000-255 | RING 7 GREEN 0%→100% |
| 74 | 000-255 | RING 7 BLUE 0%→100% |
| 75 | 000-015 | RING 7 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |
| 76 | 000-255 | RING 8 RED 0%→100% |
| 77 | 000-255 | RING 8 GREEN 0%→100% |
| 78 | 000-255 | RING 8 BLUE 0%→100% |
| 79 | 000-015 | RING 8 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |

| | | |
|---------|------------------------|--|
| 80 | 000-255 | RING 9 RED 0%→100% |
| 81 | 000-255 | RING 9 GREEN 0%→100% |
| 82 | 000-255 | RING 9 BLUE 0%→100% |
| 83 | 000-015 | RING 9 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |
| 84 | 000-255 | RING 10 RED 0%→100% |
| 85 | 000-255 | RING 10 GREEN 0%→100% |
| 86 | 000-255 | RING 10 BLUE 0%→100% |
| 87 | 000-015 | RING 10 MACRO SELECTION&SPEED Null |
| | 016-031 | Macro 1, Fast to Slow |
| | 032-047 | Macro 2, Fast to Slow |
| | 048-063 | Macro 3, Fast to Slow |
| | 064-079 | Macro 4, Fast to Slow |
| | 080-095 | Macro 5, Fast to Slow |
| | 096-111 | Macro 6, Fast to Slow |
| | 112-127 | Macro 7, Fast to Slow |
| | 128-143 | Macro 8, Fast to Slow |
| | 144-159 | Macro 9, Fast to Slow |
| | 160-175 | Macro 10, Fast to Slow |
| | 176-191 | Macro 11, Fast to Slow |
| | 192-207 | Macro 12, Fast to Slow |
| | 208-223 | Macro 13, Fast to Slow |
| 224-239 | Macro 14, Fast to Slow | |
| 240-255 | Macro 15, Fast to Slow | |

| | FUNCTION |
|---------|-------------------------------|
| 000-009 | Null |
| 010-019 | Null |
| 020-029 | Null |
| 030-039 | Dimmer Curve: Linear |
| 040-049 | Dimmer Curve: Square Law |
| 050-059 | Dimmer Curve: Inv SQ Law |
| 060-069 | Dimmer Curve: S |
| 070-079 | Null |
| 080-089 | Null |
| 090-099 | Null |
| 100-109 | Led Frequency Setting Enable |
| 110-119 | Led Frequency Setting Disable |
| 120-121 | 900Hz |
| 122-123 | 1000Hz |
| 124-125 | 1100Hz |
| 126-127 | 1200Hz |
| 128-129 | 1300Hz |
| 130-131 | 1400Hz |
| 132-133 | 1500Hz |
| 134-135 | 2500Hz |
| 136-137 | 4000Hz |
| 138-139 | 5000Hz |
| 140-141 | 6000Hz |
| 142-143 | 10KHz |
| 144-145 | 15KHz |
| 146-147 | 20KHz |
| 148-149 | 25KHz |
| 150-199 | Null |
| 200-209 | Reset All |
| 210-219 | Dimmer Speed: Fast |
| 220-229 | Dimmer Speed: Smooth |
| 230-239 | Dimmer Speed: Tungsten |
| 240-245 | Power Mode: Standard |
| 246-251 | Power Mode: Quiet |
| 252-255 | Null |

37 Channels (Mode 3):

| CHANNEL | VALUE | FUNCTION |
|---------|--|--|
| 1 | 000-255 | PAN 0°→540° |
| 2 | 000-255 | PAN FINE |
| 3 | 000-255 | TILT 0°→244° |
| 4 | 000-255 | TILT FINE |
| 5 | 000-255 | PAN/TILT SPEED Fast to Slow |
| 6 | 000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255 | STROBE Close Open Strobe from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Random Strobe from Slow to Fast Open |
| 7 | 000-255 | DIMMER 0%→100% |
| 8 | 000-255 | LED DIMMER 0%→100% |
| 9 | 000-255 | LED WASH DIMMER 0%→100% |
| 10 | 000-255 | RING DIMMER 0%→100% |
| 11 | 000-255 | LED 1 0%→100% |
| 12 | 000-255 | LED 2 0%→100% |
| 13 | 000-255 | LED 3 0%→100% |
| 14 | 000-255 | LED 4 0%→100% |
| 15 | 000-255 | LED 5 0%→100% |
| 16 | 000-255 | LED 6 0%→100% |
| 17 | 000-255 | LED 7 0%→100% |

| | | |
|---------|--------------|---|
| 18 | 000-255 | LED 8 0%→100% |
| 19 | 000-255 | LED 9 0%→100% |
| 20 | 000-255 | LED 10 0%→100% |
| 21 | 000-015 | LED MACRO SELECTION Null |
| | 016-031 | Macro 1 |
| | 032-047 | Macro 2 |
| | 048-063 | Macro 3 |
| | 064-079 | Macro 4 |
| | 080-095 | Macro 5 |
| | 096-111 | Macro 6 |
| | 112-127 | Macro 7 |
| | 128-143 | Macro 8 |
| | 144-159 | Macro 9 |
| | 160-175 | Macro 10 |
| | 176-191 | Macro 11 |
| | 192-207 | Macro 12 |
| | 208-223 | Macro 13 |
| 224-239 | Macro 14 | |
| 240-255 | Random Macro | |
| 22 | 000-255 | LED MACRO SPEED Fast to Slow |
| 23 | 000-255 | LED MACRO FADE 0%→100% |
| 24 | 000-255 | LED WASH RED 0%→100% |
| 25 | 000-255 | LED WASH GREEN 0%→100% |
| 26 | 000-255 | LED WASH BLUE 0%→100% |
| 27 | 000-015 | LED WASH MACRO SELECTION Null |
| | 016-031 | Macro 1 |
| | 032-047 | Macro 2 |
| | 048-063 | Macro 3 |
| | 064-079 | Macro 4 |
| | 080-095 | Macro 5 |
| | 096-111 | Macro 6 |
| | 112-127 | Macro 7 |
| | 128-143 | Macro 8 |
| | 144-159 | Macro 9 |
| | 160-175 | Macro 10 |
| 176-191 | Macro 11 | |

| | | |
|----|--|--|
| | 192-207 208-223 224-239 240-255 | Macro 12 Macro 13 Macro 14 Random Macro |
| 28 | 000-255 | LED WASH MACRO SPEED Fast to Slow |
| 29 | 000-255 | LED WASH MACRO FADE 0%→100% |
| 30 | 000-255 | RING RED 0%→100% |
| 31 | 000-255 | RING GREEN 0%→100% |
| 32 | 000-255 | RING BLUE 0%→100% |
| 33 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 34 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 | RING MACRO SELECTION Null Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 |

| | | |
|---------|------------------------|---|
| | 240-255 | Random Macro |
| 35 | 000-255 | RING MACRO SPEED Fast to Slow |
| 36 | 000-255 | RING MACRO FADE 0%→100% |
| 37 | | FUNCTION |
| | 000-009 | Null |
| | 010-019 | Null |
| | 020-029 | Null |
| | 030-039 | Dimmer Curve: Linear |
| | 040-049 | Dimmer Curve: Square Law |
| | 050-059 | Dimmer Curve: Inv SQ Law |
| | 060-069 | Dimmer Curve: S |
| | 070-079 | Null |
| | 080-089 | Null |
| | 090-099 | Null |
| | 100-109 | Led Frequency Setting Enable |
| | 110-119 | Led Frequency Setting Disable |
| | 120-121 | 900Hz |
| | 122-123 | 1000Hz |
| | 124-125 | 1100Hz |
| | 126-127 | 1200Hz |
| | 128-129 | 1300Hz |
| | 130-131 | 1400Hz |
| | 132-133 | 1500Hz |
| | 134-135 | 2500Hz |
| | 136-137 | 4000Hz |
| | 138-139 | 5000Hz |
| | 140-141 | 6000Hz |
| | 142-143 | 10KHz |
| | 144-145 | 15KHz |
| | 146-147 | 20KHz |
| 148-149 | 25KHz | |
| 150-199 | Null | |
| 200-209 | Reset All | |
| 210-219 | Dimmer Speed: Fast | |
| 220-229 | Dimmer Speed: Smooth | |
| 230-239 | Dimmer Speed: Tungsten | |
| 240-245 | Power Mode: Standard | |
| 246-251 | Power Mode: Quiet | |
| 252-255 | Null | |

100 Channels (Mode 4):

| CHANNEL | VALUE | FUNCTION |
|---------|--|--|
| 1 | 000-255 | PAN 0°→540° |
| 2 | 000-255 | PAN FINE |
| 3 | 000-255 | TILT 0°→244° |
| 4 | 000-255 | TILT FINE |
| 5 | 000-255 | PAN/TILT SPEED Fast to Slow |
| 6 | 000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255 | STROBE Close Open Strobe from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Random Strobe from Slow to Fast Open |
| 7 | 000-255 | DIMMER 0%→100% |
| 8 | 000-255 | LED DIMMER 0%→100% |
| 9 | 000-255 | LED WASH DIMMER 0%→100% |
| 10 | 000-255 | RING DIMMER 0%→100% |
| 11 | 000-255 | LED 1 0%→100% |
| 12 | 000-255 | LED 2 0%→100% |
| 13 | 000-255 | LED 3 0%→100% |
| 14 | 000-255 | LED 4 0%→100% |
| 15 | 000-255 | LED 5 0%→100% |
| 16 | 000-255 | LED 6 0%→100% |
| 17 | 000-255 | LED 7 0%→100% |

| | | |
|---------|--------------|--|
| 18 | 000-255 | LED 8 0%→100% |
| 19 | 000-255 | LED 9 0%→100% |
| 20 | 000-255 | LED 10 0%→100% |
| 21 | 000-015 | LED MACRO SELECTION Null |
| | 016-031 | Macro 1 |
| | 032-047 | Macro 2 |
| | 048-063 | Macro 3 |
| | 064-079 | Macro 4 |
| | 080-095 | Macro 5 |
| | 096-111 | Macro 6 |
| | 112-127 | Macro 7 |
| | 128-143 | Macro 8 |
| | 144-159 | Macro 9 |
| | 160-175 | Macro 10 |
| | 176-191 | Macro 11 |
| | 192-207 | Macro 12 |
| | 208-223 | Macro 13 |
| 224-239 | Macro 14 | |
| 240-255 | Random Macro | |
| 22 | 000-255 | LED MACRO SPEED Fast to Slow |
| 23 | 000-255 | LED MACRO FADE 0%→100% |
| 24 | 000-255 | LED WASH RED 1 0%→100% |
| 25 | 000-255 | LED WASH GREEN 1 0%→100% |
| 26 | 000-255 | LED WASH BLUE 1 0%→100% |
| 27 | 000-255 | LED WASH RED 2 0%→100% |
| 28 | 000-255 | LED WASH GREEN 2 0%→100% |
| 29 | 000-255 | LED WASH BLUE 2 0%→100% |
| 30 | 000-255 | LED WASH RED 3 0%→100% |
| 31 | 000-255 | LED WASH GREEN 3 0%→100% |
| 32 | 000-255 | LED WASH BLUE 3 0%→100% |

| | | |
|----|---------|---|
| 33 | 000-255 | LED WASH RED 4 0%→100% |
| 34 | 000-255 | LED WASH GREEN 4 0%→100% |
| 35 | 000-255 | LED WASH BLUE 4 0%→100% |
| 36 | 000-255 | LED WASH RED 5 0%→100% |
| 37 | 000-255 | LED WASH GREEN 5 0%→100% |
| 38 | 000-255 | LED WASH BLUE 5 0%→100% |
| 39 | 000-255 | LED WASH RED 6 0%→100% |
| 40 | 000-255 | LED WASH GREEN 6 0%→100% |
| 41 | 000-255 | LED WASH BLUE 6 0%→100% |
| 42 | 000-255 | LED WASH RED 7 0%→100% |
| 43 | 000-255 | LED WASH GREEN 7 0%→100% |
| 44 | 000-255 | LED WASH BLUE 7 0%→100% |
| 45 | 000-255 | LED WASH RED 8 0%→100% |
| 46 | 000-255 | LED WASH GREEN 8 0%→100% |
| 47 | 000-255 | LED WASH BLUE 8 0%→100% |
| 48 | 000-255 | LED WASH RED 9 0%→100% |
| 49 | 000-255 | LED WASH GREEN 9 0%→100% |
| 50 | 000-255 | LED WASH BLUE 9 0%→100% |
| 51 | 000-255 | LED WASH RED 10 0%→100% |
| 52 | 000-255 | LED WASH GREEN 10 0%→100% |
| 53 | 000-255 | LED WASH BLUE 10 0%→100% |
| 54 | 000-015 | LED WASH MACRO SELECTION Null |

| | | |
|----|--|--|
| | 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Random Macro |
| 55 | 000-255 | LED WASH MACRO SPEED Fast to Slow |
| 56 | 000-255 | LED WASH MACRO FADE 0%→100% |
| 57 | 000-255 | RING 1 RED 0%→100% |
| 58 | 000-255 | RING 1 GREEN 0%→100% |
| 59 | 000-255 | RING 1 BLUE 0%→100% |
| 60 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 1 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 61 | 000-255 | RING 2 RED 0%→100% |
| 62 | 000-255 | RING 2 GREEN 0%→100% |

| | | |
|----|--|--|
| 63 | 000-255 | RING 2 BLUE 0%→100% |
| 64 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 2 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 65 | 000-255 | RING 3 RED 0%→100% |
| 66 | 000-255 | RING 3 GREEN 0%→100% |
| 67 | 000-255 | RING 3 BLUE 0%→100% |
| 68 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 3 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 69 | 000-255 | RING 4 RED 0%→100% |
| 70 | 000-255 | RING 4 GREEN 0%→100% |

| | | |
|----|--|--|
| 71 | 000-255 | RING 4 BLUE 0%→100% |
| 72 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 4 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 73 | 000-255 | RING 5 RED 0%→100% |
| 74 | 000-255 | RING 5 GREEN 0%→100% |
| 75 | 000-255 | RING 5 BLUE 0%→100% |
| 76 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 5 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 77 | 000-255 | RING 6 RED 0%→100% |
| 78 | 000-255 | RING 6 GREEN 0%→100% |

| | | |
|----|--|--|
| 79 | 000-255 | RING 6 BLUE 0%→100% |
| 80 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 6 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 81 | 000-255 | RING 7 RED 0%→100% |
| 82 | 000-255 | RING 7 GREEN 0%→100% |
| 83 | 000-255 | RING 7 BLUE 0%→100% |
| 84 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 7 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 85 | 000-255 | RING 8 RED 0%→100% |
| 86 | 000-255 | RING 8 GREEN 0%→100% |

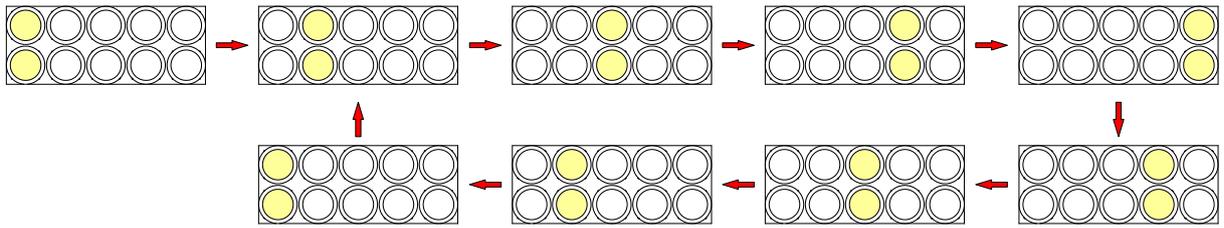
| | | |
|----|--|--|
| 87 | 000-255 | RING 8 BLUE 0%→100% |
| 88 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 8 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 89 | 000-255 | RING 9 RED 0%→100% |
| 90 | 000-255 | RING 9 GREEN 0%→100% |
| 91 | 000-255 | RING 9 BLUE 0%→100% |
| 92 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 9 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 93 | 000-255 | RING 10 RED 0%→100% |
| 94 | 000-255 | RING 10 GREEN 0%→100% |

| | | |
|-----|--|---|
| 95 | 000-255 | RING 10 BLUE 0%→100% |
| 96 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING 10 MACRO SELECTION&SPEED Null Macro 1, Fast to Slow Macro 2, Fast to Slow Macro 3, Fast to Slow Macro 4, Fast to Slow Macro 5, Fast to Slow Macro 6, Fast to Slow Macro 7, Fast to Slow Macro 8, Fast to Slow Macro 9, Fast to Slow Macro 10, Fast to Slow Macro 11, Fast to Slow Macro 12, Fast to Slow Macro 13, Fast to Slow Macro 14, Fast to Slow Macro 15, Fast to Slow |
| 97 | 000-015 016-031 032-047 048-063 064-079 080-095 096-111 112-127 128-143 144-159 160-175 176-191 192-207 208-223 224-239 240-255 | RING MACRO SELECTION Null Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Random Macro |
| 98 | 000-255 | RING MACRO SPEED Fast to Slow |
| 99 | 000-255 | RING MACRO FADE 0%→100% |
| 100 | 000-009 010-019 020-029 030-039 040-049 050-059 | FUNCTION Null Null Null Dimmer Curve: Linear Dimmer Curve: Square Law Dimmer Curve: Inv SQ Law |

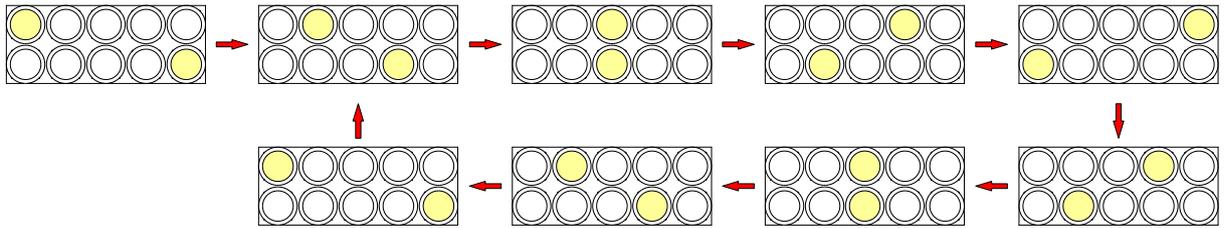
| | |
|---------|-------------------------------|
| 060-069 | Dimmer Curve: S |
| 070-079 | Null |
| 080-089 | Null |
| 090-099 | Null |
| 100-109 | Led Frequency Setting Enable |
| 110-119 | Led Frequency Setting Disable |
| 120-121 | 900Hz |
| 122-123 | 1000Hz |
| 124-125 | 1100Hz |
| 126-127 | 1200Hz |
| 128-129 | 1300Hz |
| 130-131 | 1400Hz |
| 132-133 | 1500Hz |
| 134-135 | 2500Hz |
| 136-137 | 4000Hz |
| 138-139 | 5000Hz |
| 140-141 | 6000Hz |
| 142-143 | 10KHz |
| 144-145 | 15KHz |
| 146-147 | 20KHz |
| 148-149 | 25KHz |
| 150-199 | Null |
| 200-209 | Reset All |
| 210-219 | Dimmer Speed: Fast |
| 220-229 | Dimmer Speed: Smooth |
| 230-239 | Dimmer Speed: Tungsten |
| 240-245 | Power Mode: Standard |
| 246-251 | Power Mode: Quiet |
| 252-255 | Null |

LED / LED WASH MACRO SELECTION:

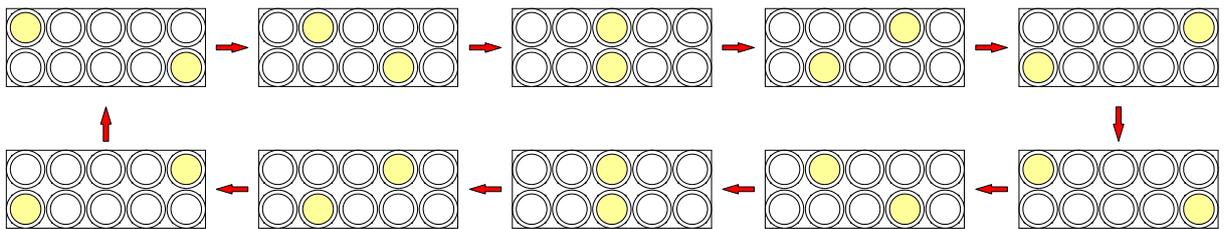
016-031:



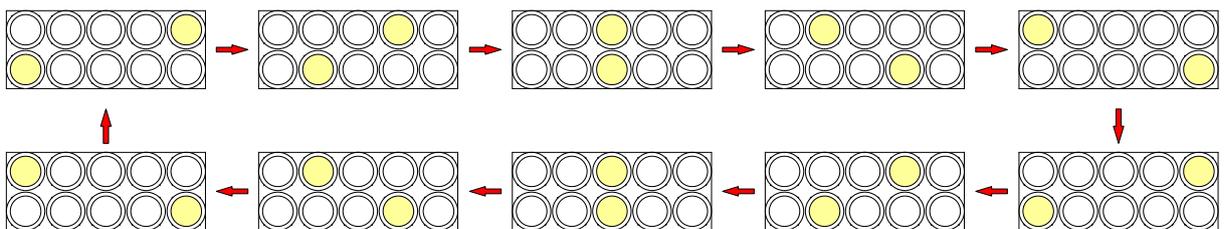
032-047:



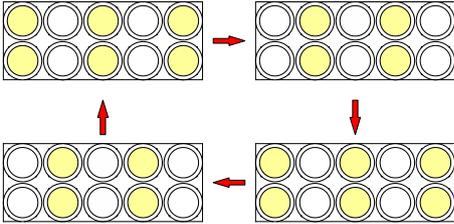
048-063:



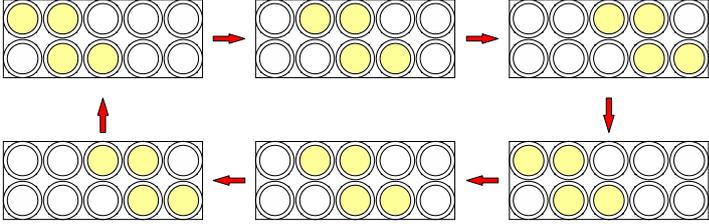
064-079:



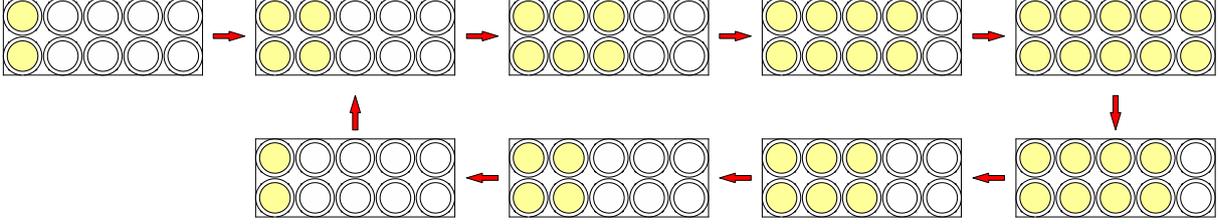
080-095:



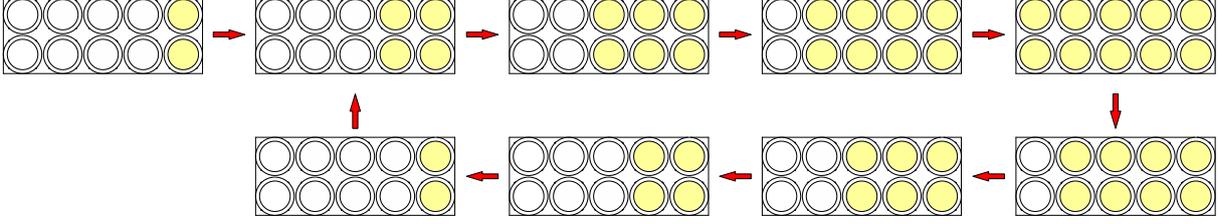
096-111:



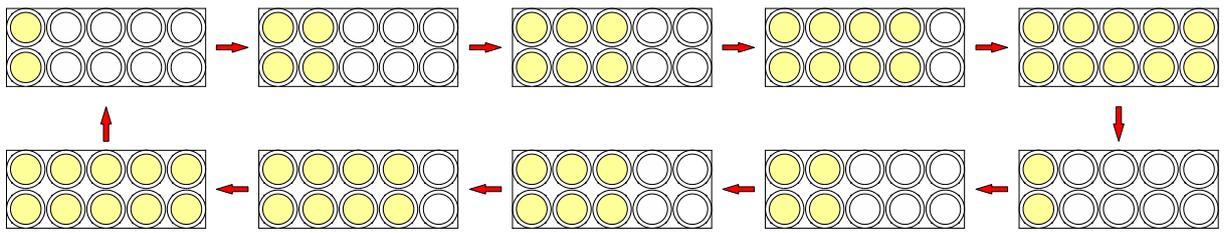
112-127:



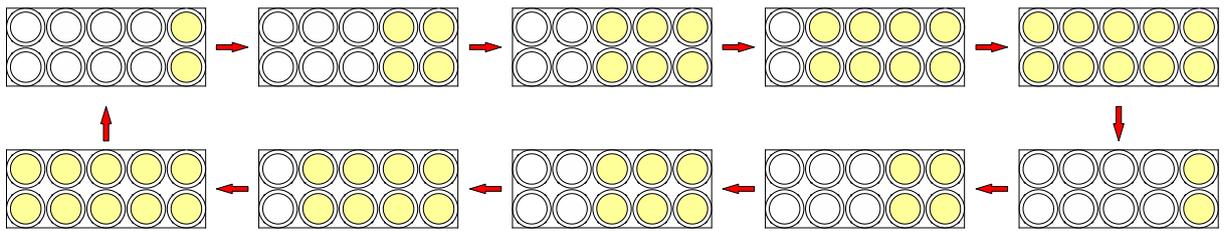
128-143:



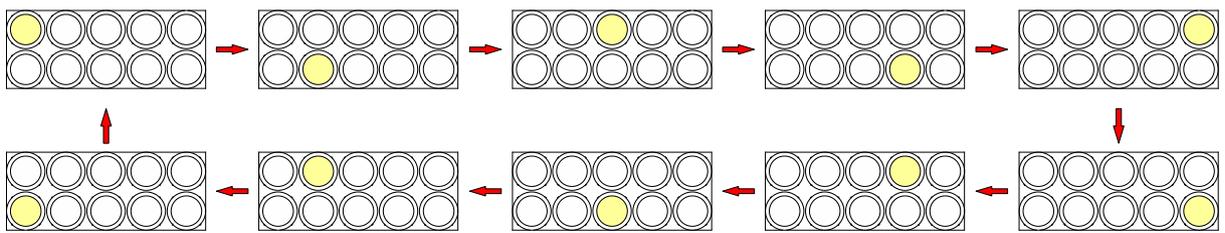
144-159:



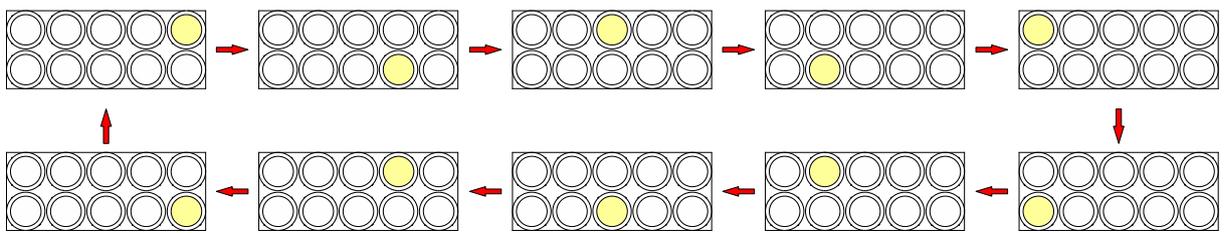
160-175:



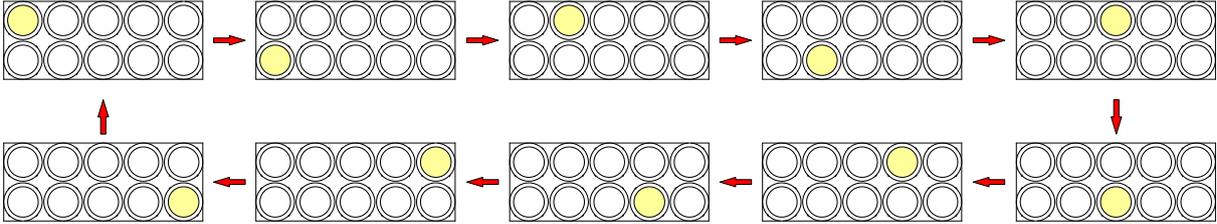
176-191:



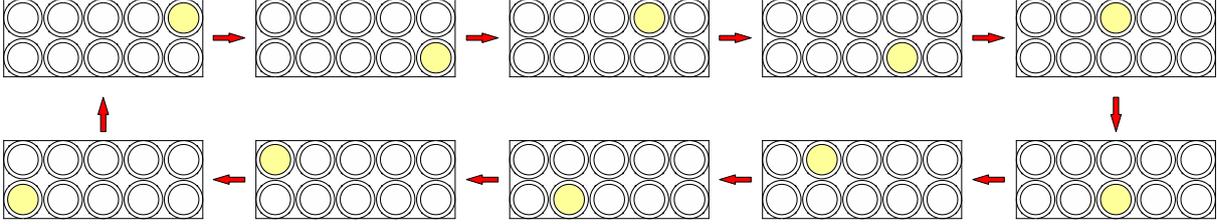
192-207:



208-223:

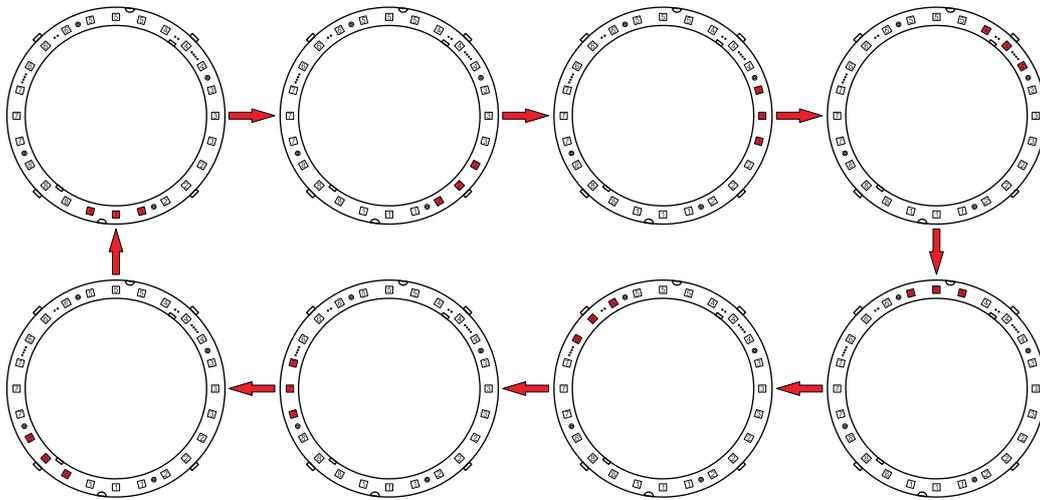


224-239:

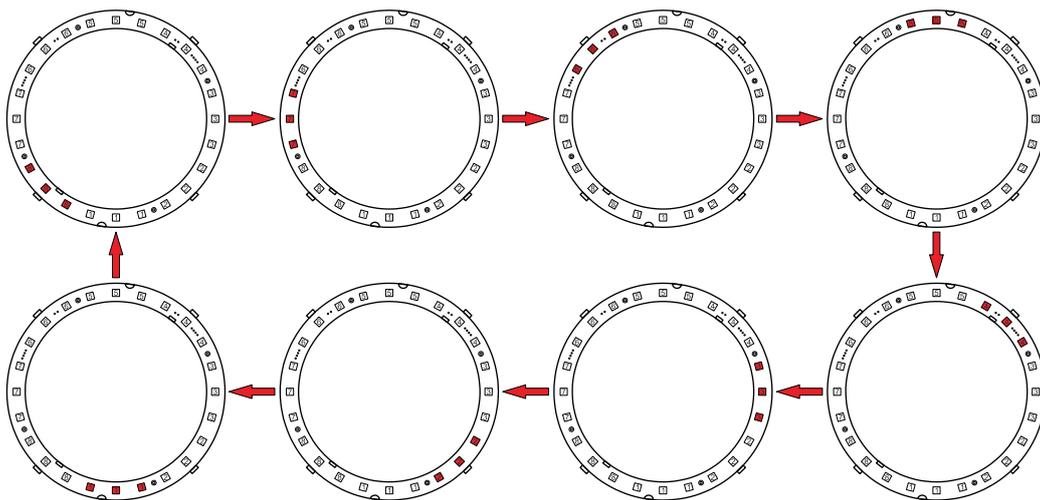


RING MACRO SELECTION - A:

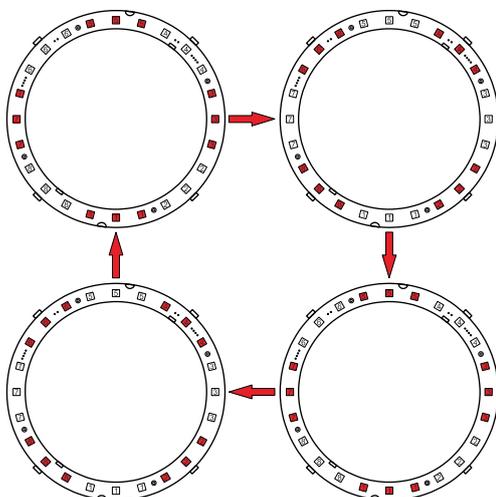
016-031:



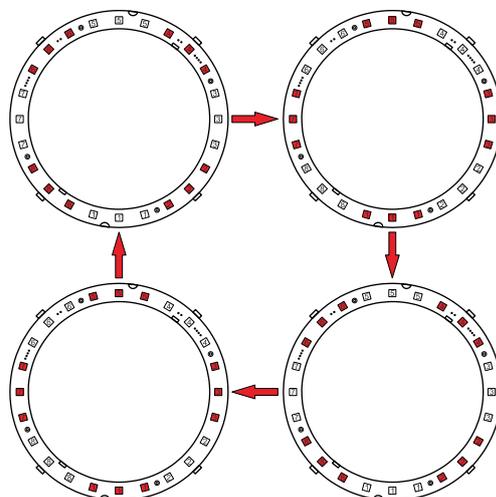
032-047:



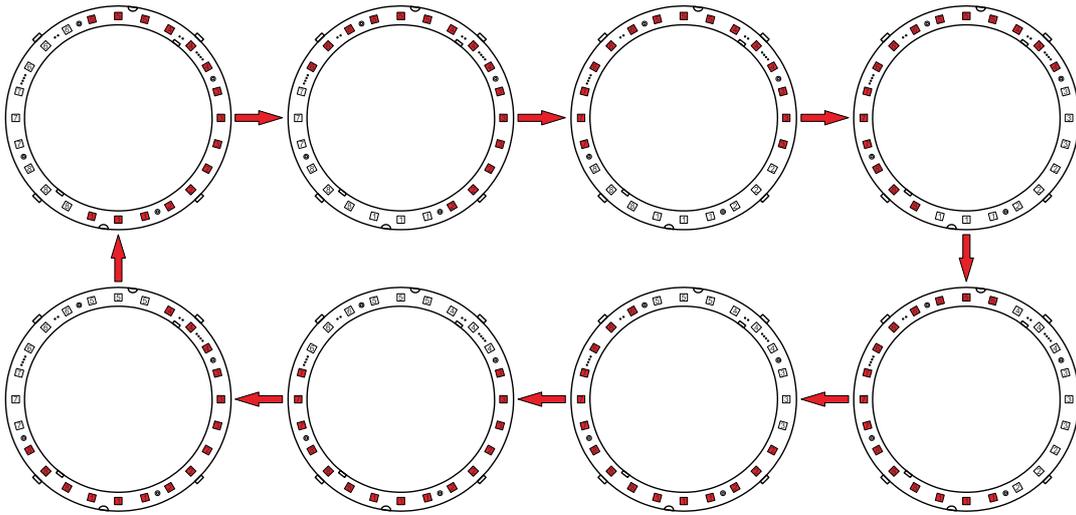
048-063:



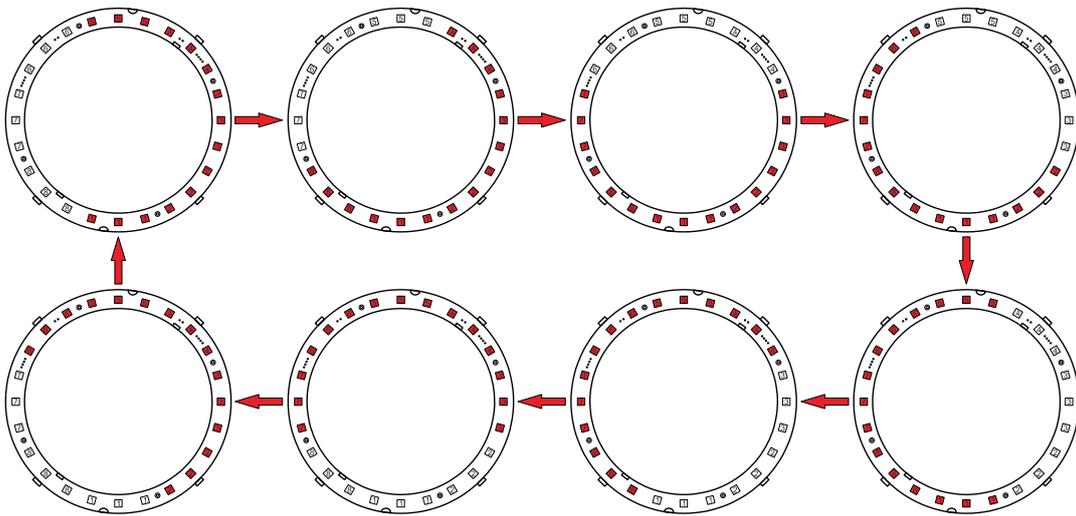
064-079:



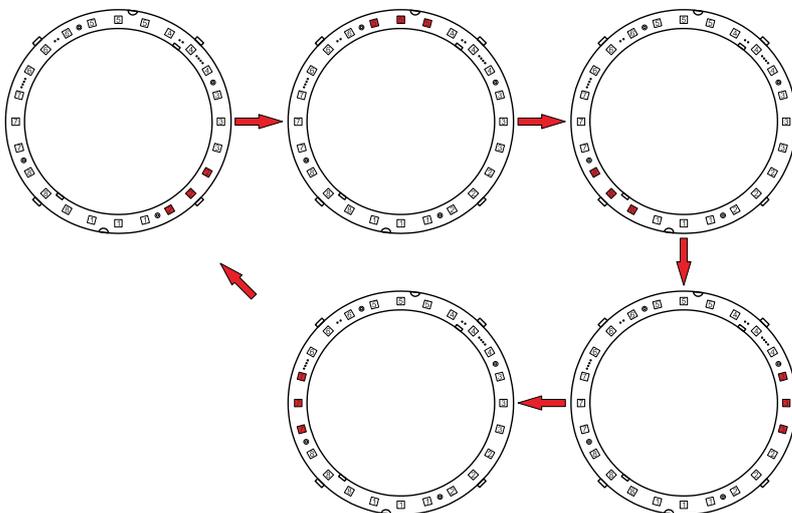
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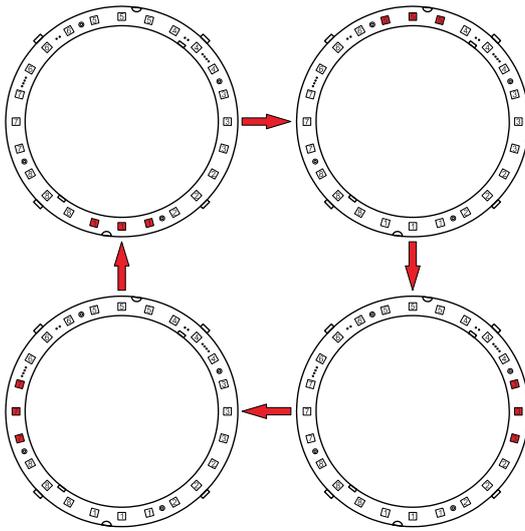
096-111:



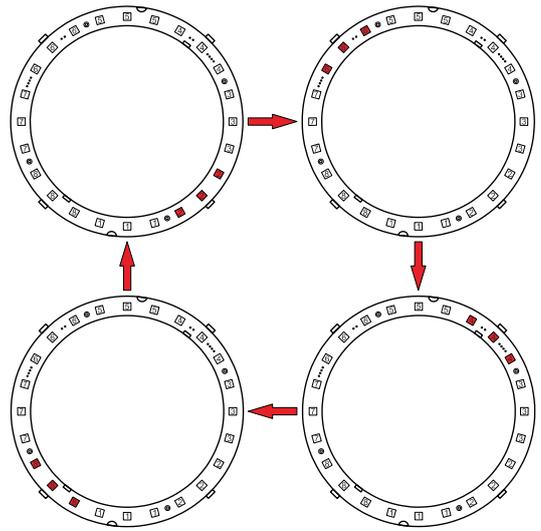
112-127:



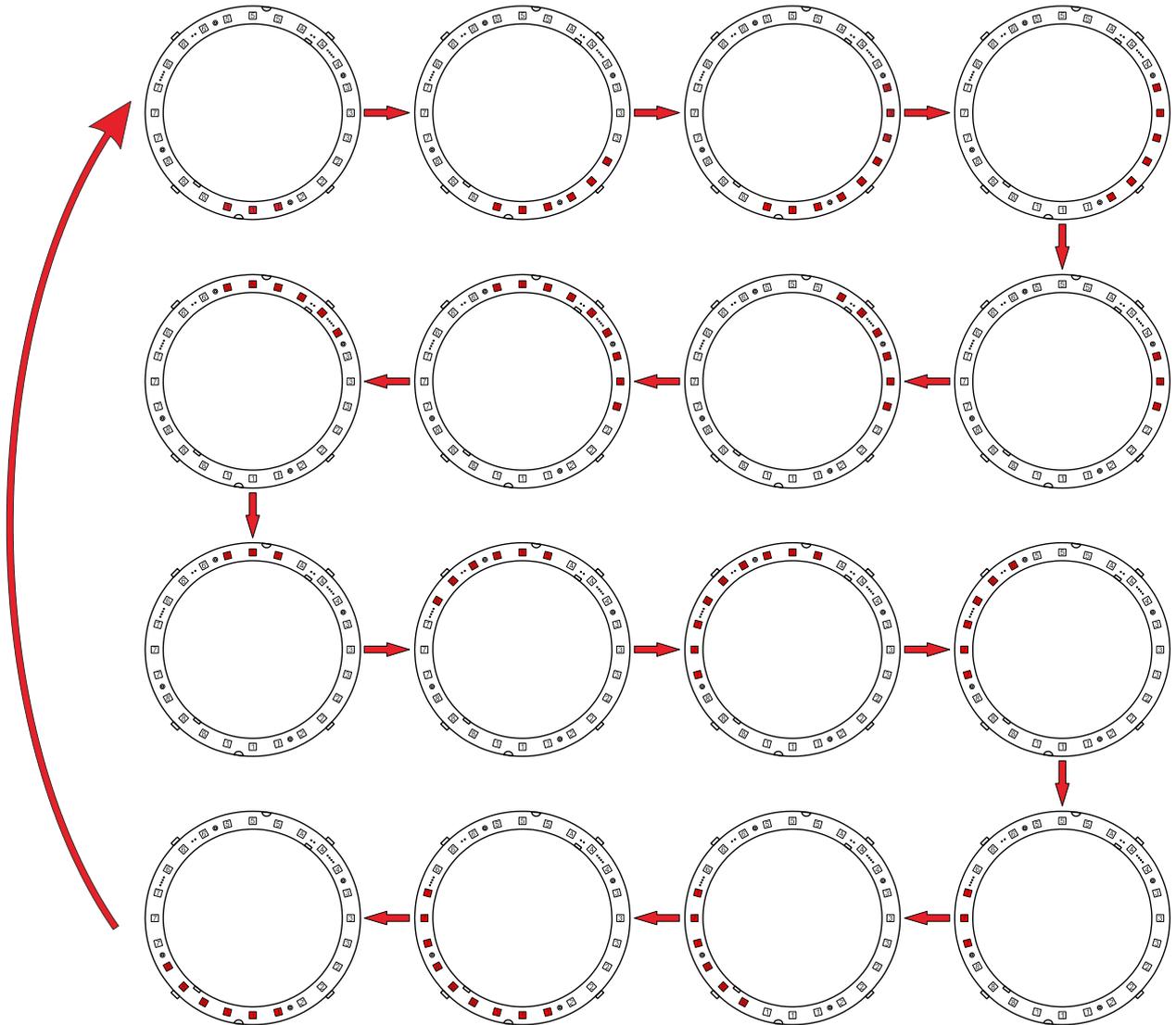
128-143:



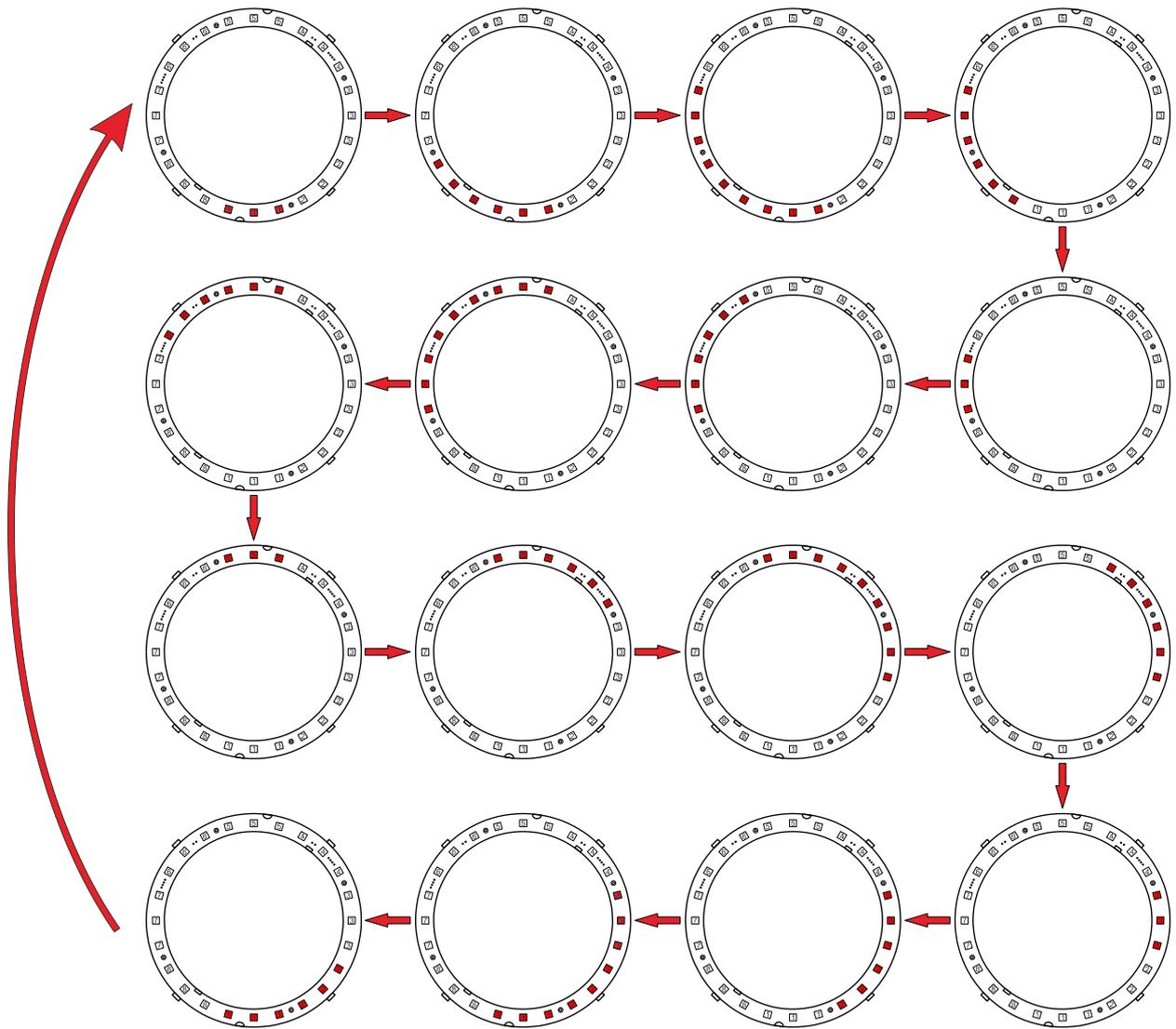
144-159:



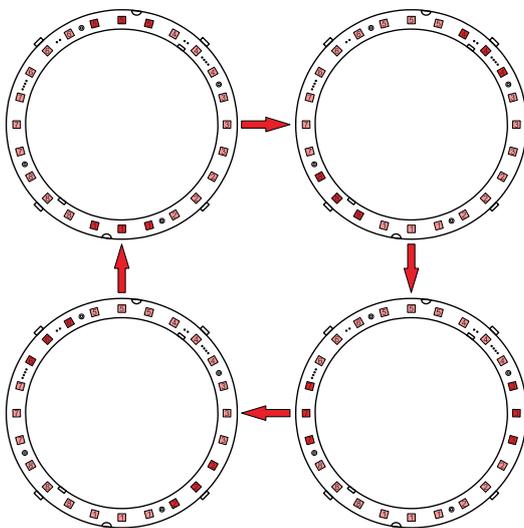
160-175:



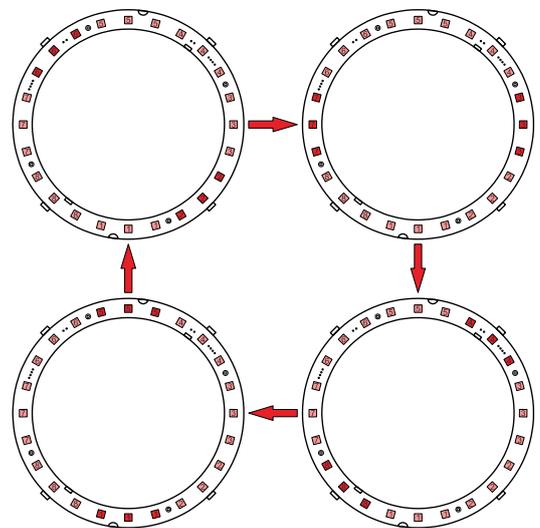
176-191:



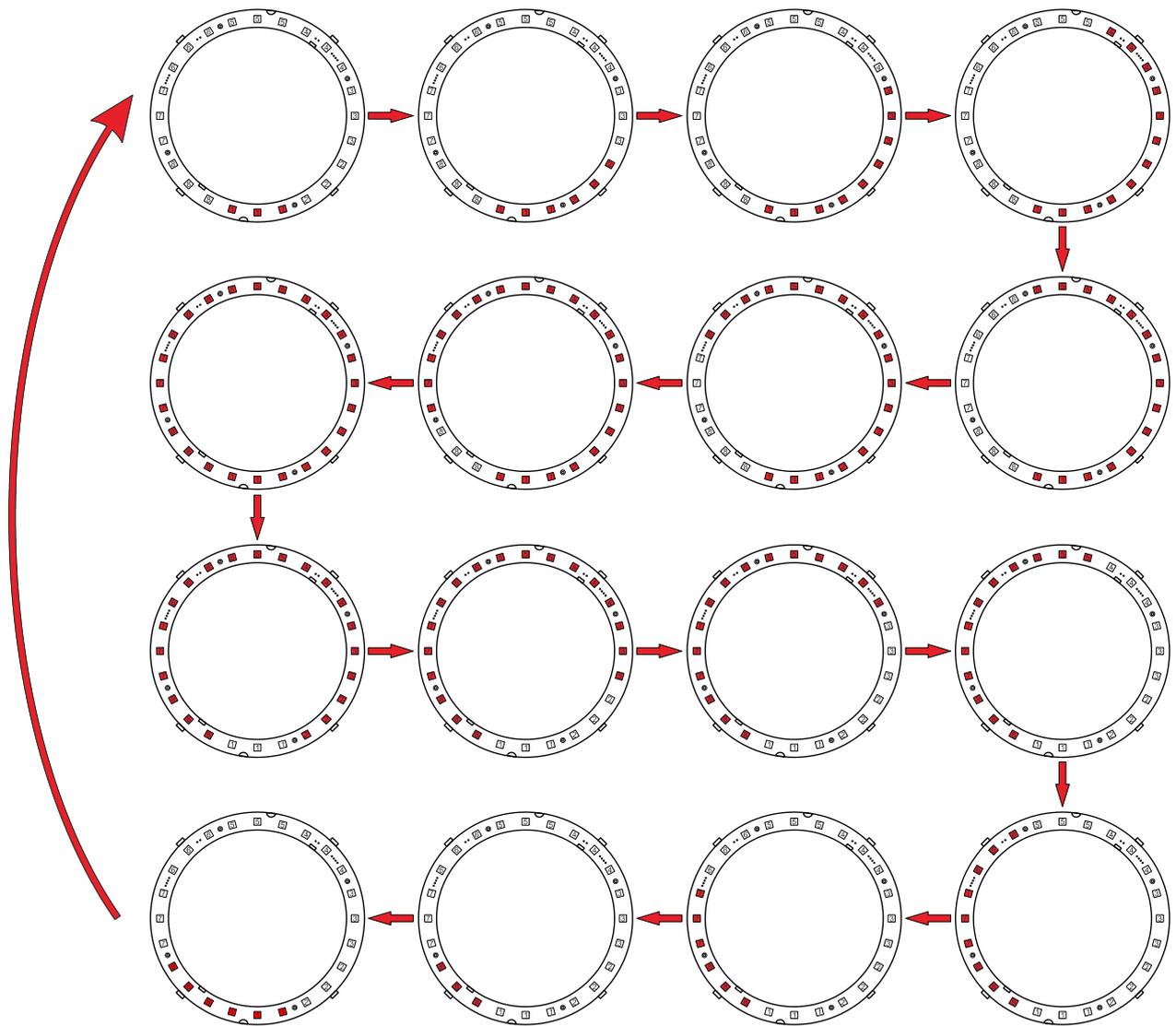
192-207:



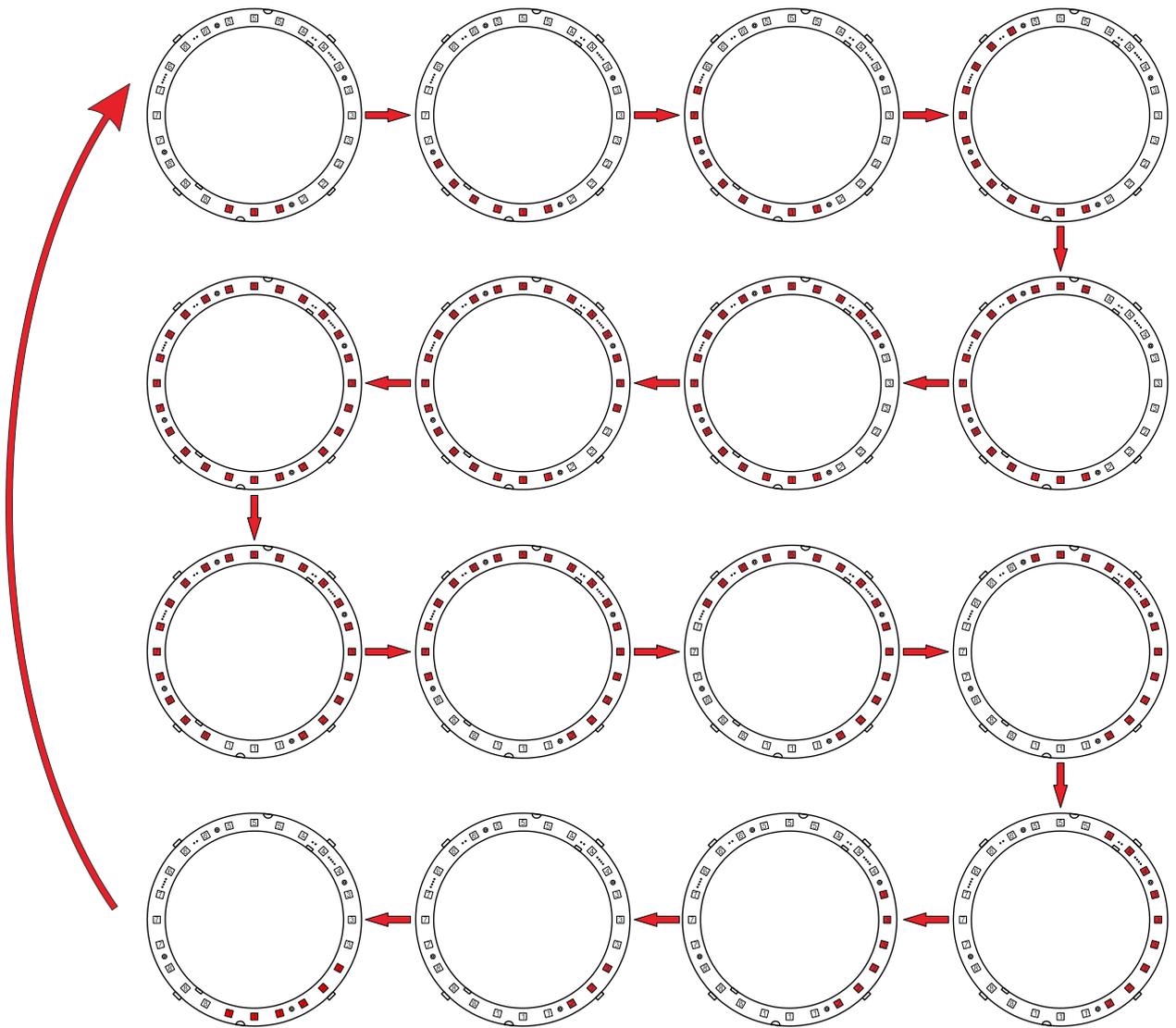
208-223:



224-239:

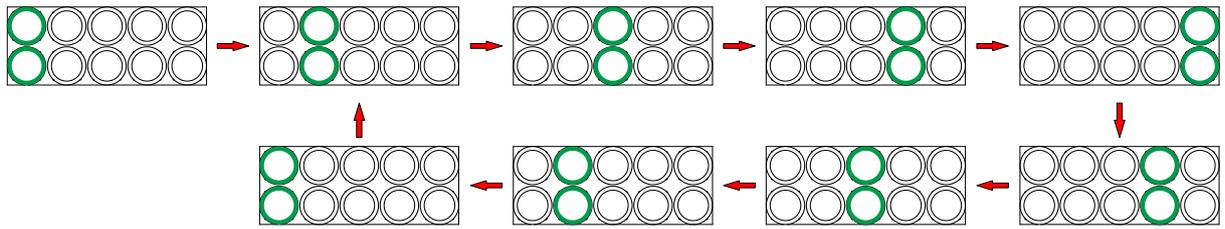


240-255:

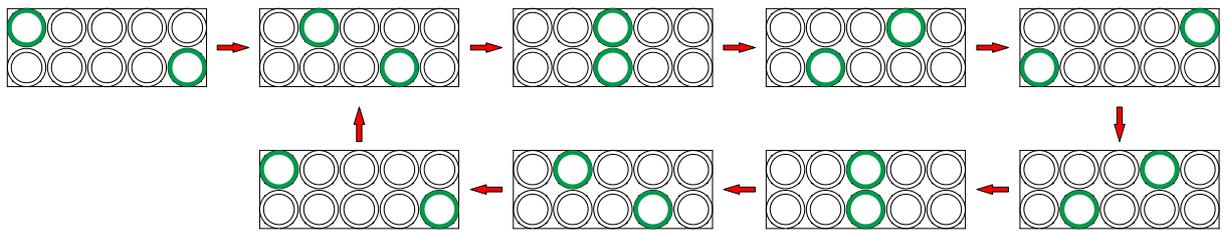


RING MACRO SELECTION - B:

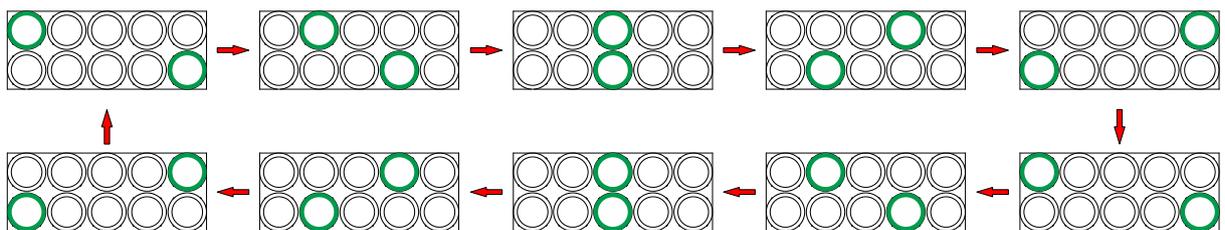
016-031:



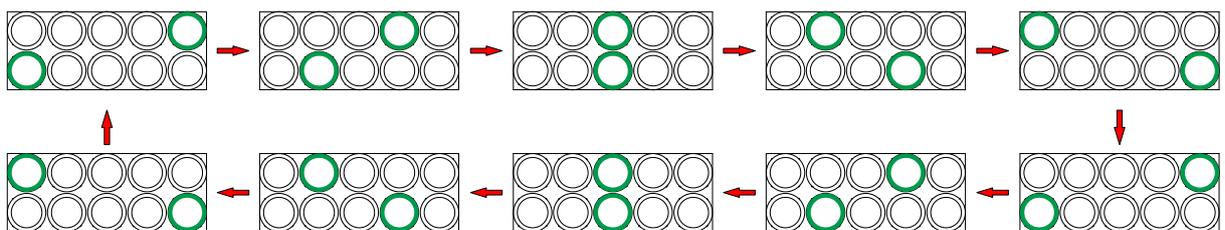
032-047:



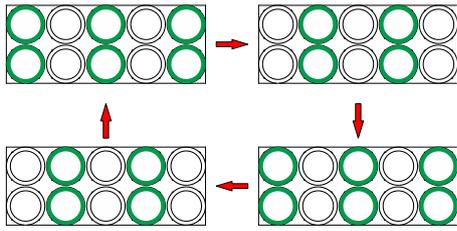
048-063:



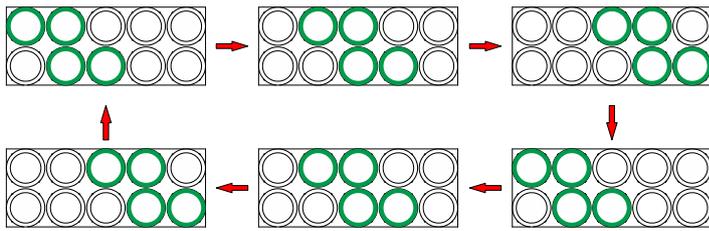
064-079:



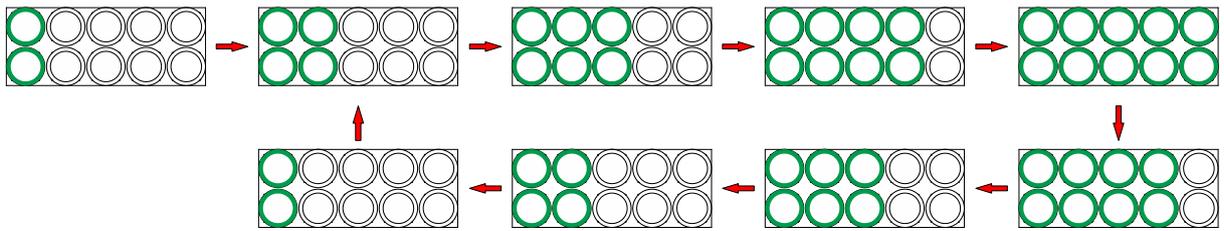
080-095:



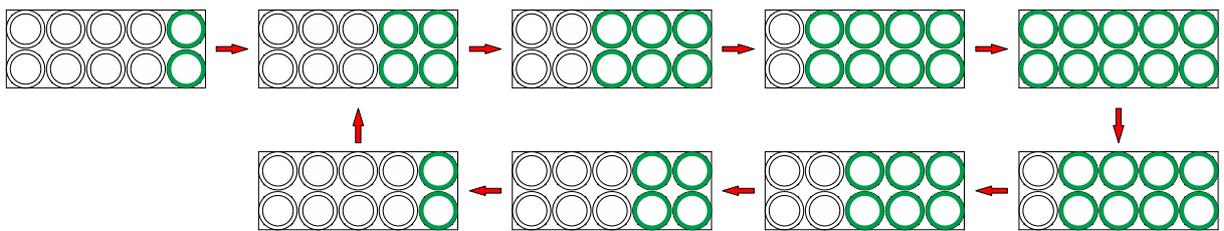
096-111:



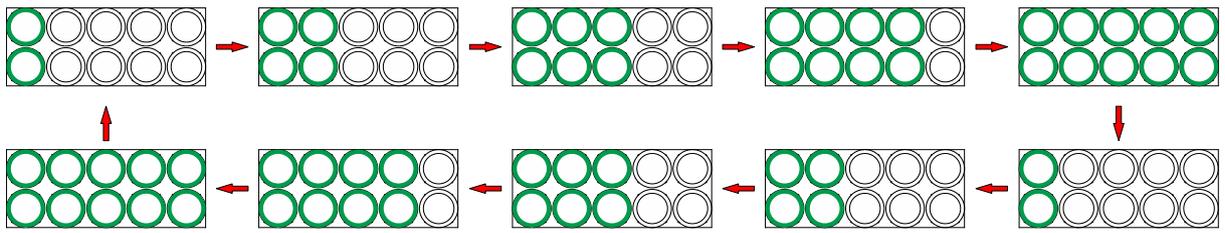
112-127:



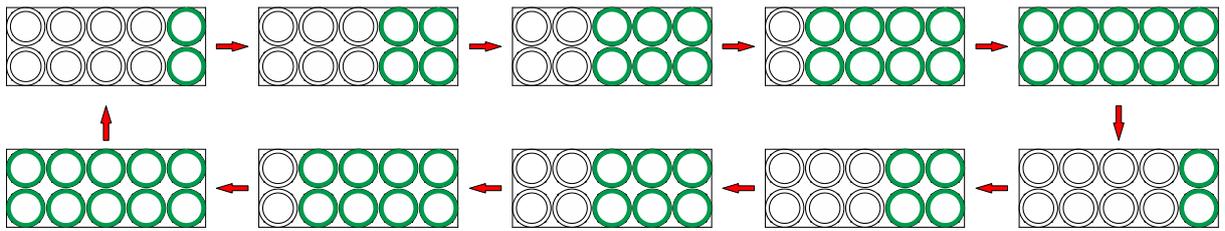
128-143:



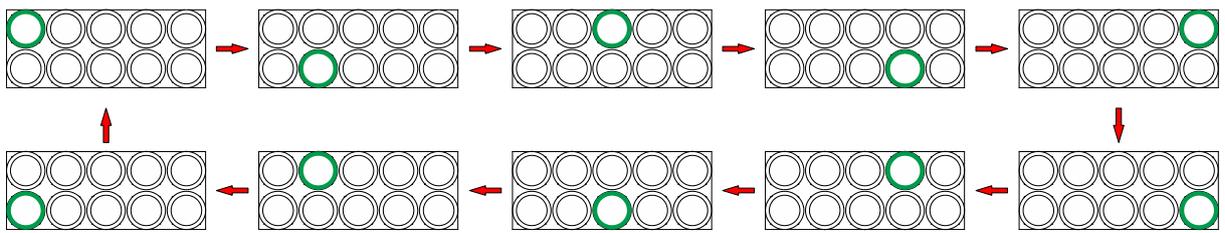
144-159:



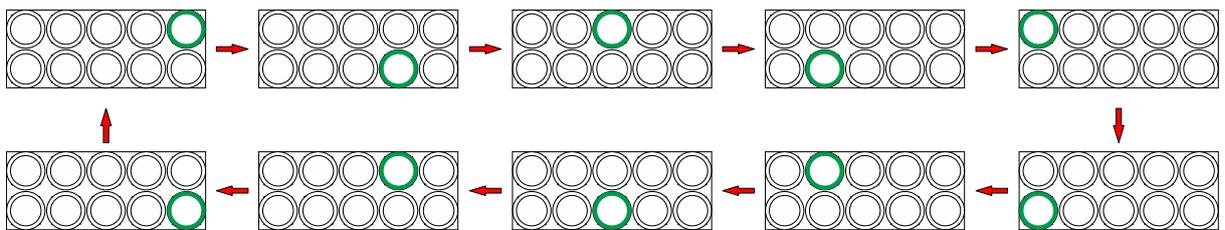
160-175:



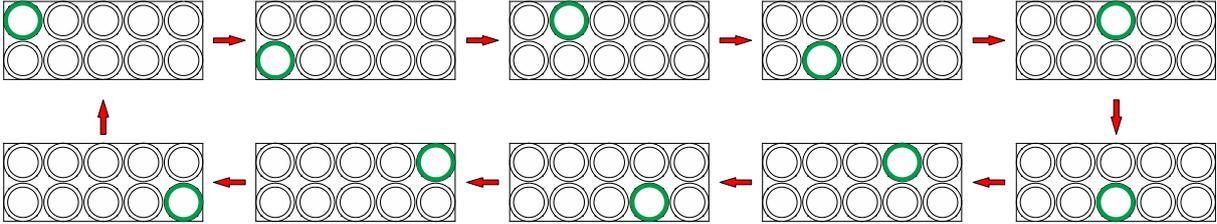
176-191:



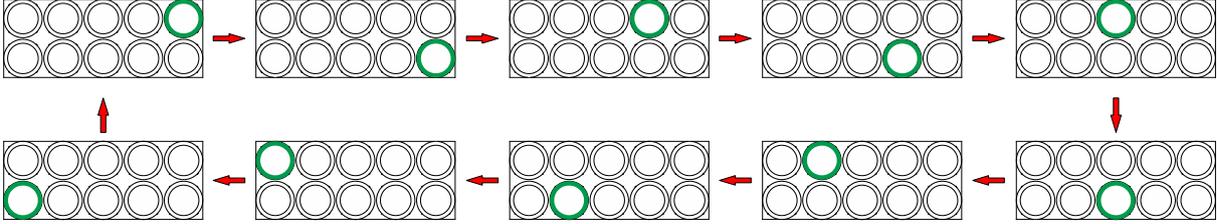
192-207:



208-223:



224-239:



07/ Error Information

Error codes are shown continuously in the display when the fixture fails and they will not disappear until the fixture is repaired.

CPU-B/C/D Error

Check whether the 485 (DATA) leads on the PCB board are installed in place or disconnected.

Check whether the related 485 (DATA) signal circuit on the PCB board is damaged.

Pan Reset Error

Check whether the position of the pan where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the pan operating range.

Check whether the Hall element on the pan is damaged.

Check whether the lead connecting the Hall element on the pan and the PCB board is in poor contact or disconnected.

Check whether the motor on the pan is damaged.

Check whether the related circuit of the motor drive board on the pan is damaged.

Pan Encode Error

Check whether the encoder on the pan is damaged.

Check whether the lead connecting the encoder on the pan and the PCB board is in poor contact or disconnected.

Tilt Reset Error

Check whether the position of the tilt where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the tilt operating range.

Check whether the Hall element on the tilt is damaged.

Check whether the lead connecting the Hall element on the tilt and the PCB board is in poor contact or disconnected.

Check whether the motor on the tilt is damaged.

Check whether the related circuit of the motor drive board on the tilt is damaged.

Tilt Encode Error

Check whether the encoder on the tilt is damaged.

Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

LED Temp. 1/2/3/4/5 Error

Check whether the temperature detecting board is normal.

Check whether the components of the temperature detecting board are damaged.

Check whether the lead on the temperature detecting board is installed in place or disconnected.

HeadFan1/2/3/4/5/6/7 Start Error

Check whether the fan is not running.

Check whether the fan leads are installed in place or disconnected.

Check whether the fan is damaged.

Check whether there are obstacles in the fan operating range.

Color Cal IC Error

Check if the color calibration IC is damaged.

Check whether the color calibration IC board is inserted well and whether the electronic components are well soldered.

Check if the motherboard is malfunctioning.

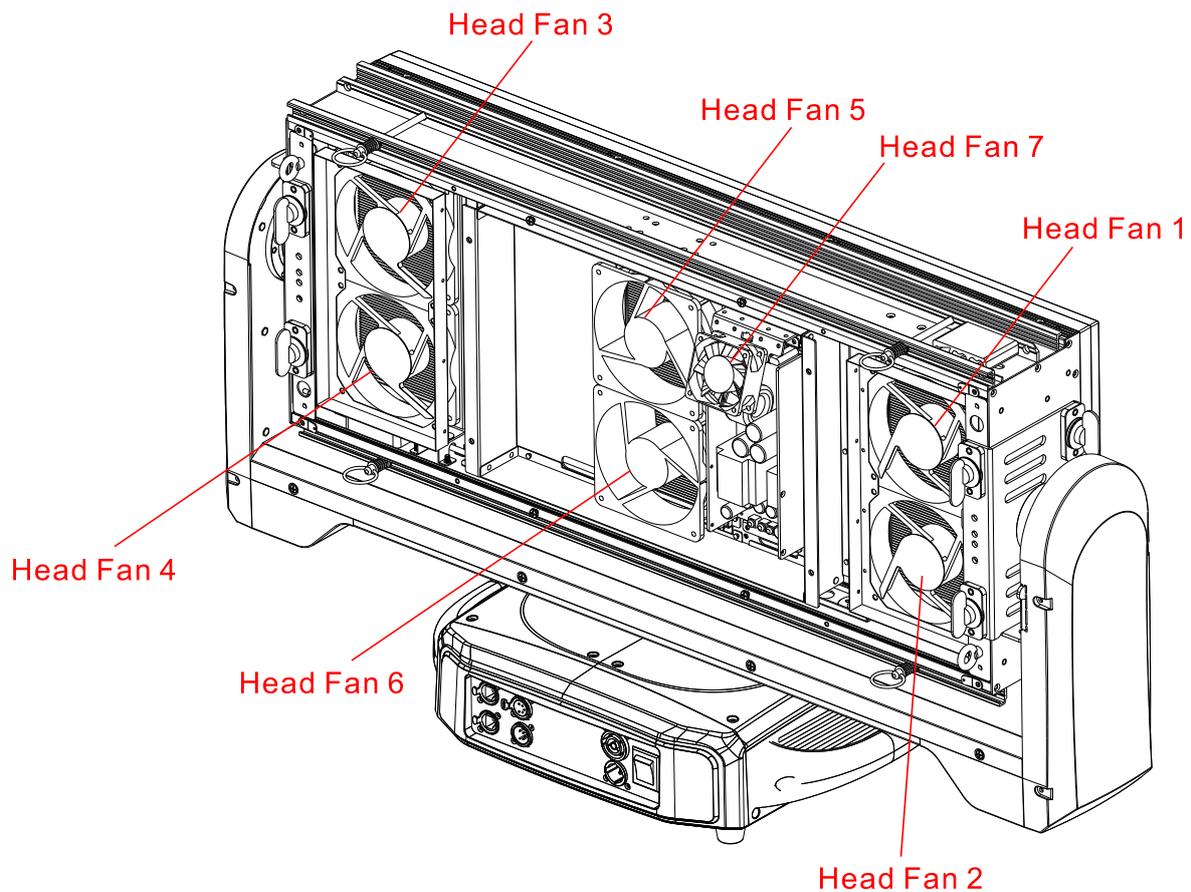
Check whether the R76 bit resistors and other components on the motherboard are well soldered.

LED Timeout Use

LED Too Hot Off

When the fixture temperature reaches 80°C, it will automatically turn off to protect the fixture.

Position of cooling fans:



08/ Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for troubleshooting:

A. The unit does not work, no light and the fan does not work

- ▶ Check the connected power.
- ▶ Measure the voltage.
- ▶ Check the power indicator to see whether it can be lit up or not.

B. Not responding to the DMX controller

- ▶ Check whether the DMX connectors and the DMX cables are connected correctly.
- ▶ Check whether the DMX address is correctly set.
- ▶ If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
- ▶ Try it with another DMX controller.
- ▶ Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.

C. One of the channels is not working well

- ▶ The stepper motor might be damaged or the cable connected to the PCB might be broken.
- ▶ The motor's drive IC on the PCB might be out of condition.

09/ Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- ▶ A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- ▶ Always dry the parts carefully.
- ▶ Clean the external optical lens at least every 20 days.

Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 2014/30/EU.

EN 55032: 2015+A1: 2020; EN IEC 61000-3-2: 2019+A1: 2021;
EN 61000-3-3: 2013+A1: 2019+A2: 2021;
EN 55035: 2017+A11: 2020.

&

Harmonized Standard

EN IEC 60598-1: 2021; EN IEC 60598-2-17: 2018;
EN 62493: 2015.

Safety of household and similar electrical appliances
Part 1: General requirements and tests

Certifications

cETLus Approved (Control #5000057)



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