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AVTech BEEZOOM1940 4 In 1 LED Moving Head

AVTech BEEZOOM1940 4 In 1 LED Moving Head User Manual

Contents

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Unpacking

- Thank you for choosing our fixture. For your own safety, please read this manual before installing the device. This manual covers important information on installation and applications. Please install and operate the fixture with the following instructions. Meanwhile, please keep this manual well for future needs.
- This fixture is made of a new type of high-temperature strength of engineering plastics and cast aluminium casing with a nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with the international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. It is applicable for large-scale live performances, theatre, studios, nightclubs and discos.

4-IN -1 LEDs(RGBW) which feature high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. Please check whether the following items are included inside the box:

- Moving Head————One
- Hanging Bracket——Two
- Safety Cable————one
- Signal Cable—-One
- Power Cable—-One
- User Manual—-One

Product dimension
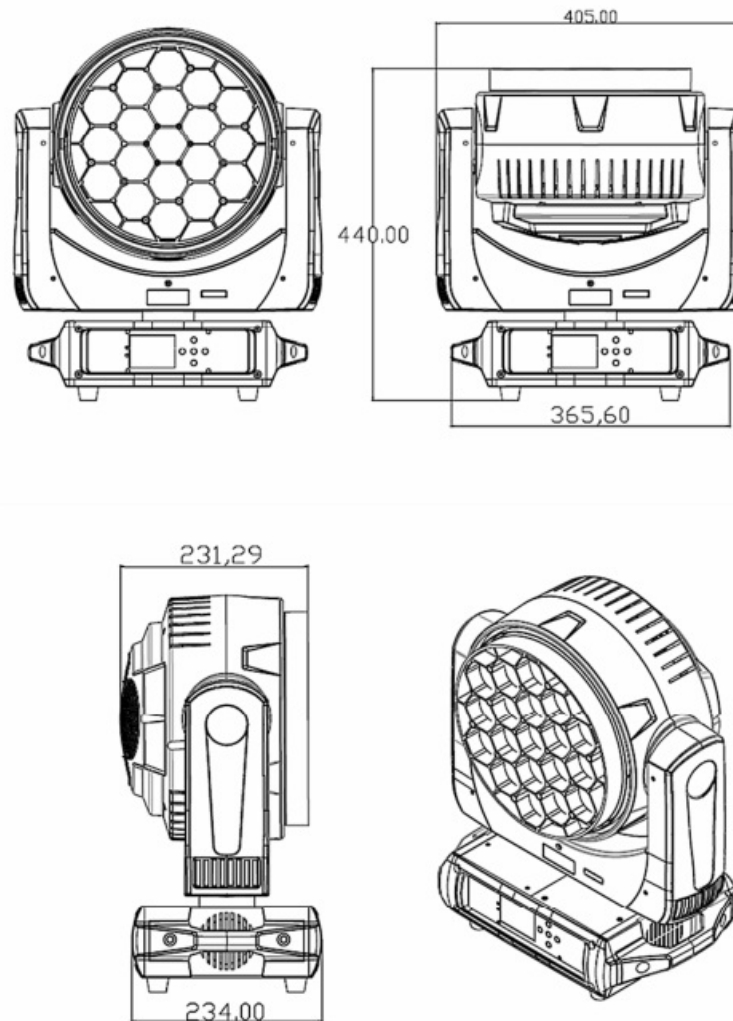
Safety Instructions

CAUTION!

Be careful with your operations. With a dangerous voltage, you can suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. 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 written in this user 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.

- If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.
- This device falls under protection class I. Therefore it is essential that the device be earthed.
- The electric connection must carry out by a qualified person.
- The device shall only be used with rate voltage and frequency.

- Make sure that the available voltage is not higher than stated at the end of this manual.
- Make sure the power cord is never crimped or damaged by sharp edges. If this is the case, the replacement of the cable must be done by an authorized dealer. Always disconnect from the mains, when the device is not in use or before cleaning it.
- Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- 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, it should decrease gradually.
- Please don't project the beam onto combustible substances. Fixtures cannot be installed on combustible substances, keep more than 50cm distance with the wall for smooth airflow, so there should be no shelter for fans and ventilation for heat radiation.
- If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard

Operation Instructions

- The fixture is for beam wash and effect use.
- Don't turn on the fixture if it's been through severe temperature differences like after transportation because it might damage the light due to the environmental changes. So make sure to operate the fixture until it is at normal temperature.
- This light should be kept away from strong shaking during any transportation or movement.
- Don't pull up the light by only the head, or it might cause damage to the mechanical parts.
- Don't expose the fixture to overheating, moisture or an environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.
- Make sure the installation place is in good safe condition before installing the fixture.
- Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
- Make sure the lenses are in good condition. It's recommended to replace the units if there are any damages or severe scratches.
- Make sure the fixture is operated by qualified personnel who know the fixture before using it.
- Keep the original packages if any second shipment is needed.
- Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
- It is not i n warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp brok e, etc.

Mounting and Installation

Cautions: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel. Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight. Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable. Never stand directly below the device when mounting, removing, or servicing the fixture from a
periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.
Clamp Mounting: The product provides a unique mounting bracket assembly that integrates the bottom of the base, the included "Omega Bracket," and the safety cable rigging point in one unit (see the illustration below).

When mounting this fixture to the truss be sure to secure an appropriately rated clamp to the included omega bracket using an M10 screw fitted through the centre hole of the "omega bracket". As an added safety measure be sure to attach at least one properly rated safety cable to the fixture using on of the safety cable rigging points integrated in the base assembly

① Omega Bracket
② Safety Clamp
③ Safety Cable
④ 1/4 Turn Quick-Lock Fasteners
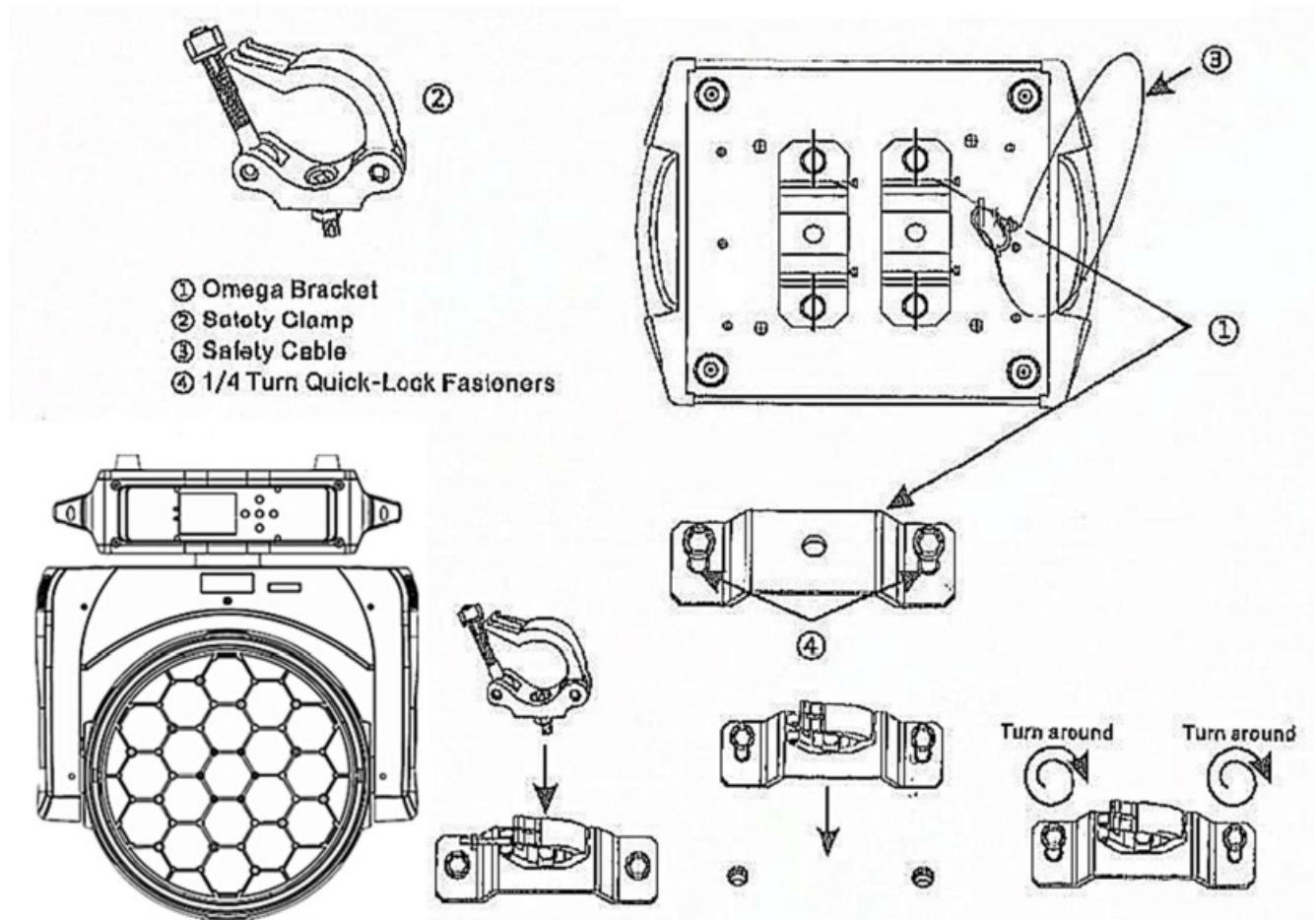
Regardless of the rigging option you choose for our fixture, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging po int for the safety cable and never secure a safety cable to a carrying handle.

DMX-512 control connections

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving h eads be connected together through serial linking. The cable needed should be a two-core, screened cable with XLR input and output connectors. Please refer to the diagram below. DMX-512 connection with DMX terminator

DMX IN

POWER IN

DMX Output
3-Pin XLR Socket

DMX Input
3-Pin XLR Socket

1: Ground
2: Data (-)
3: Data (+)

2=DMX"-"

3=DMX"+"

1=GND

DMX IN

DMX OUT
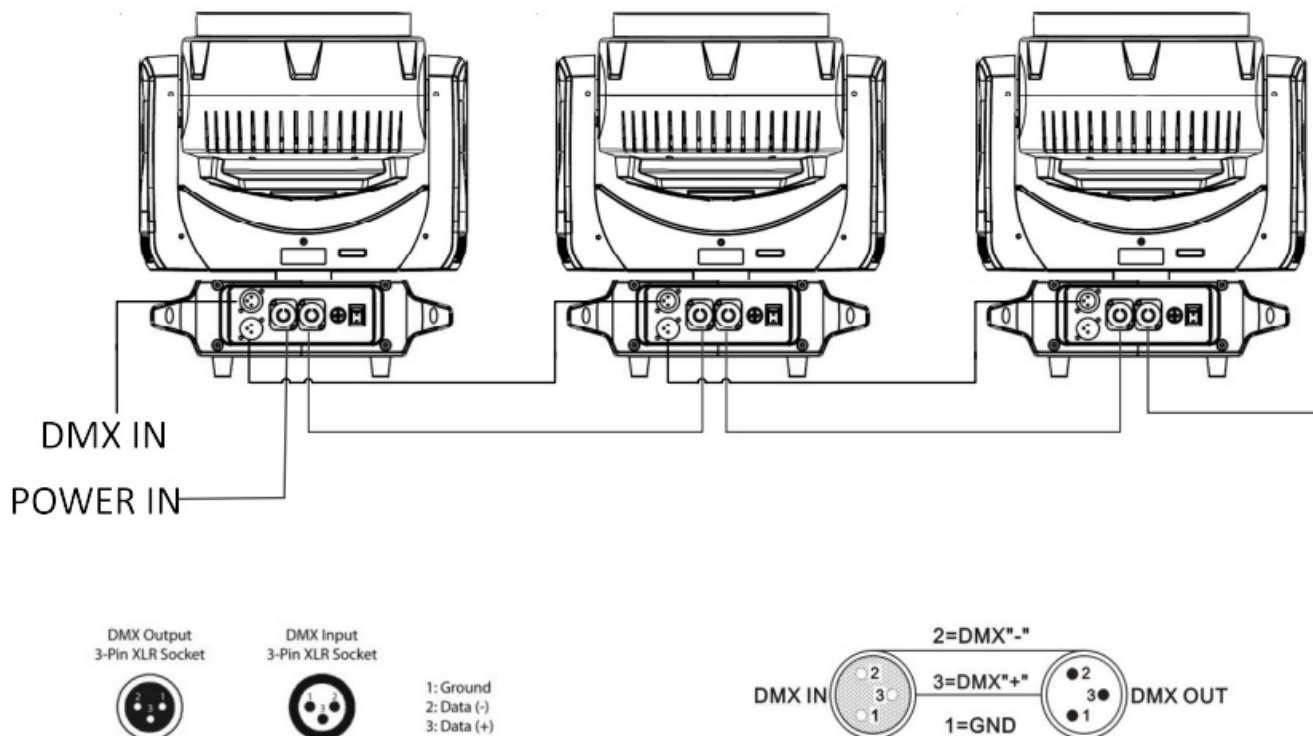
For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see the illustrations below.

120 Ω

PIN 3
PIN 2
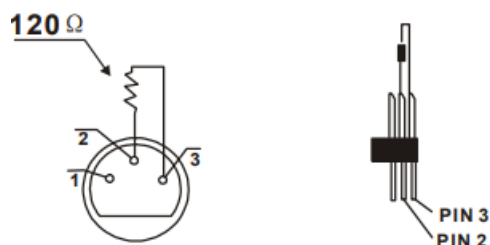
DMX Channels

22channels mode

CH	Function	DMX	Details
1	Pan	0-255	Pan movement control
2	Pan fine	0-255	Pan fine control
3	Tilt	0-255	Tilt movement control
4	Tilt fine	0-255	Pan fine control
5	Pan/Tilt speed	0-255	Speed from fast to slow
6	ZOOM	0-255	Zoom
		0-127	0 to 60 degree

7	LENS rotation	128-191	Unlimited clockwise rotation from fast to slow
		192-255	Unlimited anticlockwise rotation from fast to slow
8	Dimmer	0-255	0-100 linear dimmer from dark to bright
9	Strobe	0-3	No function, Light off
		4-200	Strobe with the same step from slow to fast
		201-255	Random strobe from slow to fast
10	R	0-255	1-100% Red linear dimmer from dark to bright
11	G	0-255	1-100% Green linear dimmer from dark to bright
12	B	0-255	1-100% Blue linear dimmer from dark to bright
13	W	0-255	1-100% White linear dimmer from dark to bright
14	Colour temperature	0-255	Linear color temperature control
15	Marco	0-255	Marco color change
16	Static effect	0-9	No function
		10-84	Each 5 DMX value is a kind of static effect(15 kinds)
		85-255	16th kind of effect
17	Dynamic effect	0-9	No function
		10-199	Each 5 DMX value is a kind of dynamic effect(38 kinds)
		200-255	39th kind of effect
18	Dynamic effect speed	0-127	Anti-clockwise rotate from fast to slow, operate against 17 CH
		128-255	Clockwise rotate from slow to fast, operate against 17 CH
19	LED ring strobe	0-3	No function, Light off
		4-250	LED ring strobe
		251-255	No function, Light on
20	LED ring macro	0-51	Macro color
		52-255	The dynamic effect, every 4 DMX channels is one kind of effect, a totally 51 kinds
21	Macro speed	0-255	LED ring macro effect from slow to fast
22	Reset	0-239	No function
		240-255	Reset with 5 seconds

26 channels mode

CH	Function	DMX	Details
1	Pan	0-255	Pan movement control

2	Pan fine	0-255	Pan fine control
3	Tilt	0-255	Tilt movement control
4	Tilt fine	0-255	Pan fine control
5	Pan/Tilt speed	0-255	Speed from fast to slow
6	ZOOM	0-255	Zoom
7	LENS rotation	0-127	0 to 60 degree
		128-191	Unlimited clockwise rotation from fast to slow
		192-255	Unlimited anticlockwise rotation from fast to slow
8	Dimmer	0-255	0-100 linear dimmer from dark to bright
9	Strobe	0-3	No function, Light off
		4-200	Strobe with the same step from slow to fast
		201-255	Random strobe from slow to fast
10	R	0-255	1-100% Red linear dimmer from dark to bright
11	G	0-255	1-100% Green linear dimmer from dark to bright
12	B	0-255	1-100% Blue linear dimmer from dark to bright
13	W	0-255	1-100% White linear dimmer from dark to bright
14	Colour temperature	0-255	Linear color temperature control
15	Marco Color	0-255	Marco color change
16	Static effect	0-9	No function
		10-84	Each 5 DMX value is a kind of static effect(15 kinds)
		85-255	16th kind of effect
17	Dynamic effect	0-9	No function
		10-199	Each 5 DMX value is a kind of dynamic effect(38 kinds)
		200-255	39th kind of effect
18	Dynamic effect speed	0-127	Anti-clockwise rotate from fast to slow, operate against 17 CH
		128-255	Clockwise rotate from slow to fast, operate against 17 CH
19	Background R	0-255	Background colour Red dimmer
20	Background G	0-255	Background colour Green dimmer
21	Background B	0-255	Background colour Blue dimmer
22	Background W	0-255	Background color White dimmer
23	LED ring strobe	0-3	No function, Light off
		4-250	LED ring strobe
		251-255	No function, Light on

CH	Function	DMX	Details
24	LED ring macro	0-51	Macro color
		52-255	Dynamic effect, every 4 DMX channels is one kind of effect, a totally 5 1 kinds
25	Macro speed	0-255	LED ring macro effect from slow to fast
26	Reset	0-239	No function
		240-255	Reset with 5 seconds

36 Channels mode

CH	Function	DMX	Details
1	Red	0-255	Red dimmer
2	Red Fine	0-255	Red fine control
3	Green	0-255	Green dimmer
4	Green Fine	0-255	Green fine control
5	Blue	0-255	Blue dimmer
6	Blue Fine	0-255	Blue fine control
7	White	0-255	White dimmer
8	White Fine	0-255	White fine control
9	CTO	0-255	Colour temperature linear control
10	Macro color	0-255	Marco color effect
11	strobe	0-3	No function, Light off
		4-103	Strobe with the same step from slow to fast
		104-107	No function, light up
		108-207	Pulse strobe from slow to fast
		208-212	No function, light up
		213-251	Random strobe from slow to fast
		252-255	No function, light up
12	Dimmer	0-255	0-100 linear dimmer from dark to bright
13	Dimmer Fine	0-255	Dimmer fine control
14	Pan	0-255	Pan movement control
15	Pan Fine	0-255	Pan fine control
16	Tilt	0-255	Tilt movement control
17	Tilt Fine	0-255	Pan fine control
18	Function	0-255	

19	Reset	0-250	No function
		251-255	Reset with 5 seconds
20	Zoom	0-255	ZOOM
21	LENS Rotation	0-127	0 to 60 degree
		128-191	Unlimited clockwise rotation from fast to slow
		192-255	Unlimited anticlockwise rotation from fast to slow
22	Shape Selection	0-255	Selecting shape(0-70 workable)
23	Shape Speed	0-255	Shape speed control
24	Shape Fade	0-255	Shape fade
25	Shape R	0-255	Shape in Red colour
26	Shape G	0-255	Shape in Green colour
27	Shape B	0-255	Shape in Blue colour
28	Shape W	0-255	Shape in White color
29	Shape Dimmer	0-255	Shape dimmer 0-100%
30	Background Dimmer	0-255	Background dimmer 0-100%
31	Shape Transition	0-255	Shape change
32	Shape Offset	0-255	Shape offset
33	Foreground strobe	0-255	Foreground strobe control
34	Background strobe	0-255	Background strobe control
35	Background selection	0-255	Background selection
36	Frequency	0-255	Shape and frequency selectable

78Channels mode

CH	Function	DMX	Details
1	Red	0-255	Red dimmer
2	Red Fine	0-255	Red fine control
3	Green	0-255	Green dimmer
4	Green Fine	0-255	Green fine control
5	Blue	0-255	Blue dimmer
6	Blue Fine	0-255	Blue fine control
7	White	0-255	White dimmer
8	White Fine	0-255	White fine control
9	CTO	0-255	Color temperature linear control

10	Macro Color	0-255	Marco color
11	strobe	0-3	No function, Light off
		4-103	Strobe with the same step from slow to fast
		104-107	No function, light up
		108-207	Pulse strobe from slow to fast
		208-212	No function, light up
		213-251	Random strobe from slow to fast
		252-255	No function, light up
12	Dimmer	0-255	0-100 linear dimmer from dark to bright
13	Dimmer Fine	0-255	Dimmer fine control
14	Pan	0-255	Pan movement control
15	Pan Fine	0-255	Pan fine control
16	Tilt	0-255	Tilt movement control
17	Tilt Fine	0-255	Pan fine control
18	Function	0-255	Revered channel, no function at this moment
19	Reset	0-250	No function
		251-255	Reset with 5 seconds
20	Zoom	0-255	Zoom
21	Zoom Rotation	0-127	0 to 60 degree
		128-191	Unlimited clockwise rotation from fast to slow
		192-255	Unlimited anticlockwise rotation from fast to slow
22	Red dimmer 1	0-255	LED 1 red dimmer
23	Green dimmer 1	0-255	LED 1 green dimmer
24	Blue dimmer 1	0-255	LED 1 blue dimmer
25	Red dimmer 2	0-255	LED 2 red dimmer
26	Green dimmer 2	0-255	LED 2 green dimmer
27	Blue dimmer 2	0-255	LED 2 blue dimmer
...	....	....	....
76	Red dimmer 19	0-255	LED 19 red dimmer
77	Green dimmer 19	0-255	LED 19 green dimmer
78	Blue dimmer 19	0-255	LED 19 blue dimmer

Display instruction

```
                              ┌─────────┐      ┌─────────┐
                              │  Addre  │──────│ 001-512 │
                              └─────────┘      └─────────┘
                                                           ┌─────────┐
                                                           │   DMX   │
                                                           ├─────────┤
                              ┌─────────┐    ┌──────────┐  │  Sound  │
                              │ System  │────│ Run Mode │──┤─────────┤
                              │ Setup   │    └──────────┘  │ Auto 1  │
                              └─────────┘                  ├─────────┤
                                                           │ Auto 2  │
                                                           └─────────┘
                                                           ┌─────────┐
                                                           │  22CH   │
                                          ┌──────────┐     ├─────────┤
                                          │ Channel  │     │  26CH   │
                                          │  mode    │─────┤─────────┤
                                          └──────────┘     │  36CH   │
                                                           ├─────────┤
                                                           │  78CH   │
                                                           └─────────┘
                                          ┌──────────┐     ┌────┐
                                          │Invert Pan│─────│ ON │
                                          └──────────┘     │ OFF│
                                          ┌──────────┐     ┌────┐
                                          │Invert Tilt│────│ ON │
                                          └──────────┘     │ OFF│
                                          ┌──────────┐     ┌────┐
                                          │Hall Croct│─────│ ON │
                                          └──────────┘     │ OFF│
        ┌──────┐                          ┌──────────┐     ┌────┐
        │ MENU │──────                    │Encoder Crct│───│ ON │
        └──────┘                          └──────────┘     │ OFF│
                                          ┌──────────┐     ┌────┐
                                          │Signal keep│────│ ON │
                                          └──────────┘     │ OFF│
                                          ┌──────────┐     ┌────┐
                                          │Screen Saver│───│ On │
                                          └──────────┘     │ Off│
                                                           ┌──────┐
                                          ┌──────────┐     │ Auto │
                                          │ Invert   │─────│ ON   │
                                          │ Screen   │     │ OFF  │
                                          └──────────┘     └──────┘
                                          ┌──────────┐     ┌────┐
                                          │ Update   │─────│ ON │
                                          │ Slave    │     │ Off│
                                          └──────────┘     └────┘
                                          ┌──────────┐     ┌────┐
                                          │ Language │─────│ EN │
                                          └──────────┘     │ 中文│
                                          ┌──────────────┐
                                          │ Load Default │
                                          └──────────────┘
```

Manual	Manual control each channel

Motor Calibration:
- PAN
- TILT
- Focus
- ROTATION
- Balance-Red
- Balance-Green
- Balance-Blue
- Balance-White
- ....
- ....
- Power
- MIC
- Change passport

Don't change the data unless it's necessary

Note	System information

Reset:
- Reset effect
- Reset Scan
- Reset All

Key Features

- Voltage: AC100V 240V 50-60HZ
- Rated Power: 760W
- LED Source: 19x40W high power RGBW 4 in 1 LEDs
- Zoom: 7°-50°
- Strobe: 0-25Hz
- Control Mode: DMX512, Sound-activated, Master/slave
- DMX Channels: 22/26/36/78 four channel mode
- Dimmer: 0-100% linear dimmer
- Pan: 540°+16 bit fine
- Tilt: 220°+16 bit fine
- Display: LCD colourful display

- I P: IP20
- Fixture dimension: 405*234*440mm
- N.W:15.2 Kg
- G.W: 18.7 Kg
- Package dimension: 62*39*51 CM (1pc/ctn)

Special Points.

1. Each LED can be controlled individually. With a unique honeycomb design ned lens.
2. The front lens can rotate without limitation in forward and reverse directions to create amazing effects.
3. Can be used as a beam, wash or effect light use (Kaleido effects).
4. With an extra LED ring for an eye-candy effect, and an LED ring with a macro effect.

Maintenance and Cleaning

The following points have to be considered during the inspection

1. All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2. There must not be any deformations on the housing, colour lenses, fixations and installation spots (ceiling, suspension, trussing).
3. Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
4. The electric power supply cables must not show any damage, material fatigue or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

 CAUTION!

Disconnect from mains before starting maintenance operation.

In order to keep the lights in good condition and extend their lifetime, we suggest regular cleaning to the lights.

1. Clean the inside and outside lens each week to avoid the weakness of the lights due to the accumulation of dust.
2. Clean the fan each week.
3. A detailed electric check by an approved electrical engineer every three month,

make sure that the circuit contacts are in good condition, preventing the poor contact of a circuit from overheating. We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents. There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".Should you need any spare parts, please order genuine parts from your local dealer.

Documents / Resources
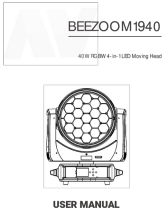
[AVTech BEEZOOM1940 4 In 1 LED Moving Head](#) [pdf] User Manual
BEEZOOM1940 4 In 1 LED Moving Head, BEEZOOM1940, 4 In 1 LED Moving Head, 1 LED Moving Head, LED Moving Head, Moving Head, Head

References

- **[User Manual](#)**