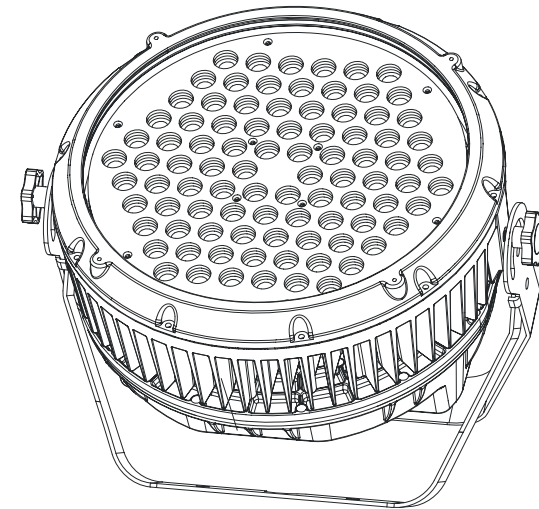




Building wash



BW-903 RGBW

User Manual

Please read the instructions carefully before use

Innovation, Quality, Performance

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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 89/336/EEC.

EN55103-1: 2009 ; EN55103-2: 2009; EN62471: 2008;
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.

& Harmonized Standard

EN60598-2-17:1989 + A2:1991; EN60598-1:2008+ A11: 2009

EN 62471:2008; EN 62493: 2010

Safety of household and similar electrical appliances

Part 1: General requirements

7. Fixture Cleaning

The cleaning of outside glass must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days.

1. Safety Instruction



WARNING

Please read the instructions carefully which includes important information about the installation, operation and maintenance.

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



DANGER!
Safety hazard.
Risk of severe
injury or death



DANGER!
Hazardous
voltage. Risk of
lethal or severe



WARNING!
LED light
emission. Risk of
eye injury



WARNING!
Burn hazard. Hot
surface. Do not
touch



WARNING! Refer
to user manual.

Caution:

- All fixtures are intact from the manufacturer, please operate follow up the user manual, artificial fault are not under guarantee repair.
- Unpack and check carefully there is no transportation damage before using the unit.
- DO install and operate by operator.
- Use safety chain when fixes the unit.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Maximum ambient temperature Ta: 40°C. Don't operate it where the temperature is higher than this.
- DO NOT connect the device to any dimmer pack.
- Make sure there are no flammable materials close to the unit while operating, as it is fire hazard.
- Look over power wires carefully, replace immediately if there is any damage.
- Unit surface temperature may reach up to 60°C. DO NOT touch the housing bare-hand during its operation.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happen, cut off

the mains power immediately.

- DO NOT operate in dirty and dusty environment, also cleaning fixtures regularly.
- DO NOT allow children to operate the fixture.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires together arounding other cables.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- The housing, the lenses must be replaced if they are visibly damaged.
- DO NOT open the unit as there are no user serviceable parts inside. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.

If using a 230V 50Hz power supply, DO NOT connect in series more than 16 units; use another main supply for the next 17 fixtures.
 If using a 120V 60Hz power supply, DO NOT connect in series more than 8 units; use another main supply for the next 9 fixtures.

Installation:

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit’s weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture in the air.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

2. Technical Specifications

- New member of Visio architectural lightings, specially designed to replacing the traditional outdoor 400W discharge fixtures.
- Great heat ventilation and heavy duty design to ensure reliable performance under harsh environment
- It features 90pcs×3W CREE LEDs provides powerful output

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

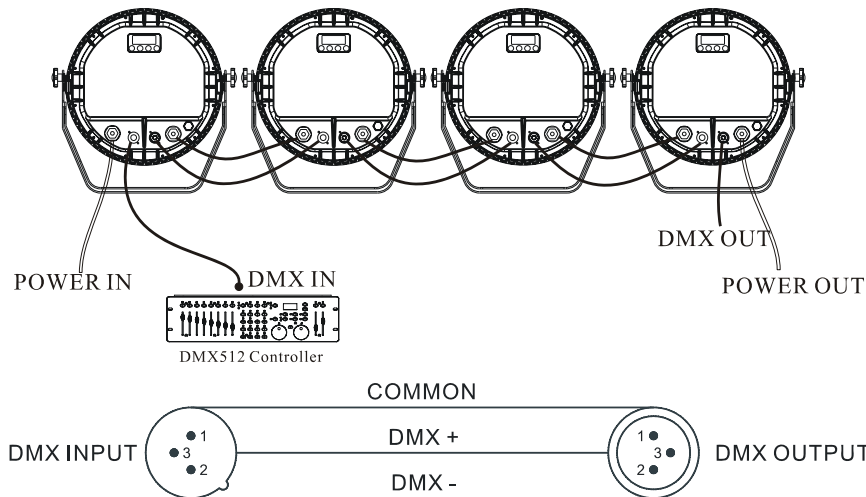
5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin 4/Pin 5: Not used.

6. Troubleshooting

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

Problem	Possible Cause	Action
The unit does not work, no light.	Incorrect power cable connection.	Check the connection of power.
	Incorrect mains voltage.	Measure the mains voltage on the main connector.
The unit does not respond properly to the DMX control.	Incorrect DMX cable connection.	Check DMX connectors and cables to see if link properly. Repair or replace damaged wires.
	Incorrect address assignment to the units.	Check the addresses of the units and the protocol settings.
	Unfinished data connection.	Insert a terminal plug in the output jack of the last unit of the connection.
	It has been set up an operating mode different from the DMX mode used.	Check the operating mode set up.
		Try to use another DMX controller.

5. DMX512 Connections



Termination reduces signal errors and to avoid signal transmission problems and interference. It is always advisable to connect a DMX terminal. (Resistance 120 ohm 1/4W) between pin2(DMX-) and pin3(DMX+) of the last fixture.

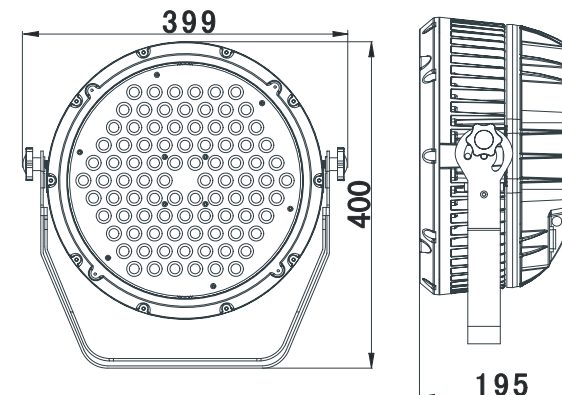
1. If you using a controller with 5 pins DMX output, you need to use a 5 to 3 pin adapter-cable.
2. Connect the unit together in a `daisy chain` by XLR plug from the output of the unit to the input of the next unit. The cable can not branched or split to a `Y` cable. DMX 512 is a very high-speed signal. 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 an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pin XLR.

- Various beam angles, ideal for different applications – for the illumination of buildings, bridges, stadium, landscapes, theme parks and more.

Key Facts:

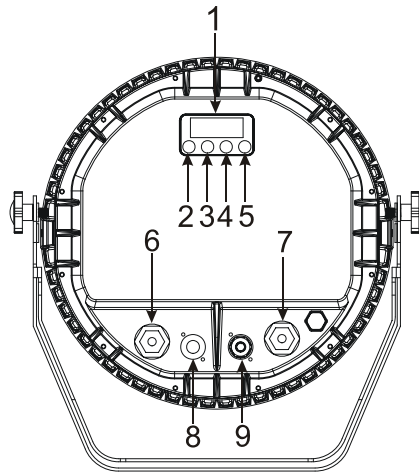
- ◆ Die-cast housing and thermal control for the reliable performance
- ◆ 9000 Lumen Output
- ◆ 1KHz refreshing frequency, flicker-free under HD camera
- ◆ Special design of ventilation system, BW-903 RGBW running full duty cycle

- **Input Voltage:** AC 100-240V 50/60Hz
- **Power Consumption:** 267W
- **Light Source:** 90x3W CREE RGBW LEDs
Red: 18pcs, Green: 24pcs, Blue: 24pcs, White: 24pcs
- **Beam Angle:** 6°, 15°, 25°, 40°, 60°, 80°
- **Lumen Output:** >9000 lm
- **IP Rating:** IP66
- **Dimension:** 399x 400x195mm
- **Weight:** 16.4Kgs
- **Power Cord Daisy Chain:** 16 Fixtures Max. (230V)
8 Fixtures Max. (120V)
- **DMX Signal Daisy Chain:** 64 Fixtures Max.



3. How To Set The Fixture

3.1 Control Panel



1. Display:

To show the various menus and the selected functions

Button:

2. MENU	To select the programming functions
3. DOWN	To go backward in the selected functions
4. UP	To go forward in the selected functions
5. ENTER	To confirm the selected functions

6. POWER IN:

Water proof connectors for power input

7. POWER OUT:

Water proof connectors for power output

8. DMX IN:

Water proof 3-pin XLR connectors for DMX 512 operation

9. DMX OUT:

Water proof connectors for DMX 512 operation with 3-pin XLR plug

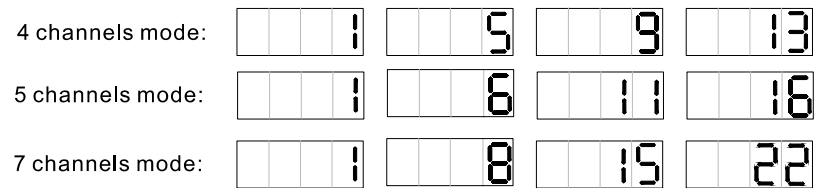
4.3 DMX 512 Configuration

4/5/7 Channels Mode:

DMX512 Configurations									
4 Channels(4 Mode)				5 Channels (4D Mode)					
Ch1	Ch2	Ch3	Ch4	Ch1	Ch2	Ch3	Ch4	Ch5	
RED	GREEN	BLUE	WHITE	RED	GREEN	BLUE	WHITE	DIMMER	
7 Channels (4C Mode)									
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7			
RED	GREEN	BLUE	WHITE	COLOR	DIMMER	STROBE			
				248-255 Preset color32 240-247 Preset color31 232-239 Preset color30 224-231 Preset color29 217-223 Preset color28 209-216 Preset color27 201-208 Preset color26 194-200 Preset color25 186-193 Preset color24 178-185 Preset color23 170-177 Preset color22 163-169 Preset color21 155-162 Preset color20 147-154 Preset color19 140-146 Preset color18 132-139 Preset color17 124-131 Preset color16 116-123 Preset color15 109-115 Preset color14 101-108 Preset color13 093-100 Preset color12 085-092 Preset color11 078-084 Preset color10 070-077 Preset color9 062-069 Preset color8 055-061 Preset color7 047-054 Preset color6 039-046 Preset color5 031-038 Preset color4 024-030 Preset color3 016-023 Preset color2 008-015 Preset color1 001-007 OFF		248-255 OPEN 240-247 RANDOM STROBE 232-239 OPEN 190-231 SLOW CLOSE FAST OPEN 182-189 OPEN 140-181 SLOW OPEN FAST CLOSE 132-139 OPEN 16-131 8-15 OPEN 0-7 OFF			

press the **MENU** button again.

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

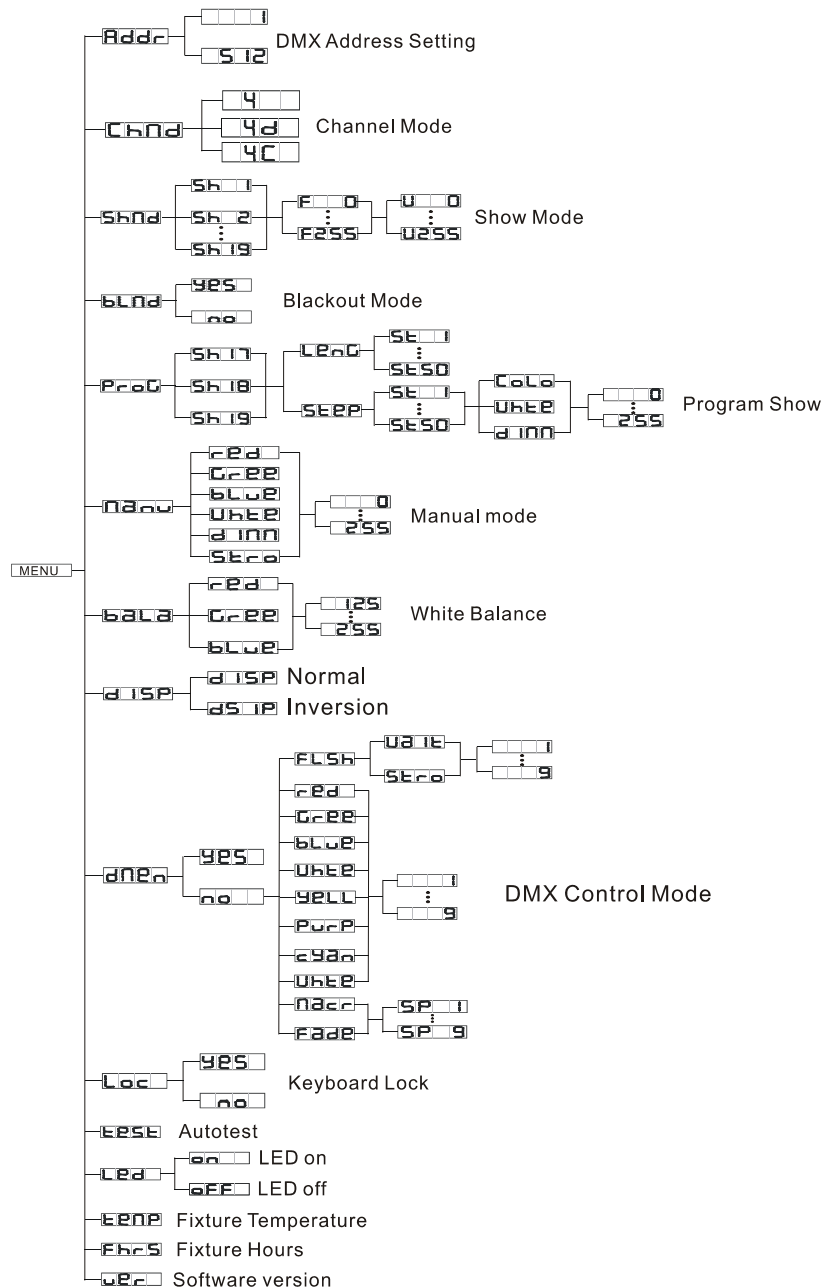


3.2 Main Functions

To select any functions, press the **MENU** button until the required one is shown on the display.

Select the function by the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press the **ENTER** button to setup or it will automatically return to the main functions without any change after idling one minute. Back to the functions without any change press the **MENU** button. The main functions are shown below:

Once you set to , after running in show mode for 5 minutes without any change or restarting the unit, the key board become locked. Press the **ENTER** button to enable the menu, the display will show , press the **UP** and **DOWN** button until it shows , then press the **ENTER** to unlock.



EENP Temperature Test

Press the **MENU** button up to when the **EENP** is blinking on the display. Press the **ENTER** button and the display will show the temperature of the unit. To go back to the functions press the **MENU** button again.

EhES Fixture Hours

Press the **MENU** button up to when the **EhES** is blinking on the display. Press the **ENTER** button and the display will show the number of working hours of the unit. To go back to the functions press the **MENU** button.

UER Software version

Press the **MENU** button up to when the **UER** is blinking on the display. Press the **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button again.

4. How To Control The Unit

You can operate the unit by DMX controller:

No need to turn the unit off when you change the DMX address, as new DMX address setting will be affected at once. Every time you turn the unit on, it will show **6903** on the display After that the unit will be ready to receive DMX signal or run the built in programs.

4.1 DMX Controller

Use universal DMX controller to control the units, you have to set DMX address from 1 to 512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the **Addr** is showing on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep **ENTER** button pressed up to when the display stops blinking or storing automatically 8 seconds later. To go back to the functions without any change

the previous functions without any change press the **MENU** button.

2. If **Flash** (flash mode) is selected, press the **ENTER** button to confirm, then use the **DOWN** and **UP** button to adjust the type of the rotation(1.....9). Once select, press the **ENTER** button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the **MENU** button.
3. If **Fade** (fade) is selected, press the **ENTER** button to confirm, then use the **DOWN** and **UP** button to adjust rotation time(1.....9). Once select, press the **ENTER** button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the **MENU** button.

Loc Key Board Lock

Press the **MENU** button up to when the **Loc** is showing on the display. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **Lock** (lock the key board) or **Normal** (normal), Once select, press the **ENTER** button to setup or automatically return to the main functions without any change after one minute. Back to the previous functions press the **MENU** button.

Test Auto Test

Press the **MENU** button up to when the, **Test** is blinking on the display. Press the **ENTER** button and the unit will run self-test by built-in program. To go back to the functions press the **MENU** button again.

LED LED

Press the **MENU** button up to when the **LED** is shown on the display. Press the **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select **On** (display on) or **Off** (display off 20 seconds after exit menu) mode. Once select, press **ENTER** button to setup or exit menu mode without any change after one minute. Back to the functions without any change press **MENU** button again.

Addr DMX 512 Address Setting

Select the **Addr**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to change the DMX 512 address. Once the address has been selected, press the **ENTER** button to setup or automatically exit menu mode without any change after one minute. Back to the previous functions without any change press the **MENU** button.

Chan Channel mode

Select the **Chan**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **4** (4 Channels), **5** (5 Channels) or **7** (7 Channels) Mode. Once select, press the **ENTER** button to setup or automatically exit menu mode without any change after one minute. To go back to the functions without any change press the **MENU** button.

Show Show mode

Select the **Show**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **1** (show 1).... **19** (show 19). Once select, press the **ENTER** button to setup. press the **ENTER** button, **F** will blinking on the display, use **DOWN** and **UP** button adjust the fade time (0~255), press the **ENTER** button to store and **W** will blinking on the display, use the **DOWN** and **UP** button adjust the white time (0~255), press the **ENTER** button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the **MENU** button.

BLND Blackout mode

Select the **BLND**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **Lock** (blackout) or **Normal** (normal). Once selected, press the **ENTER** button to setup or automatically exit menu mode without any change after one minute. To go back to the functions without any change press the **MENU** button.

Prog Program Shows

Press the **MENU** button up to when the **Prog** is shown on the display. Press the **ENTER** button and select the **Prog** mode, Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **SH17** (Show 17) ,**SH18** (Show 18) or **SH19** (Show 19) . Once the show has been selected, press the **ENTER** button to enter program setting.

Use the **DOWN** and **UP** button to select **LENG**(length, the steps, you choose from the total amount of steps, you want to run, for example, if the total amount of steps you set is 50, you can choose only first 1-10 steps to run). **STEP** (step), select **STEP** to set **Colo** (color) and **WHIT** (white) and **dim** (dimmer) for every step. Automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the **MENU** button.

Manu Manual Mode

Press the **MENU** button up to when the **Manu** is shown on the display. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **RED** (Red) ,**GREEN** (Green) ,**BLUE** (Blue) ,**WHITE** (White) , **dim** (Dimmer) or **STRO** (Strobe) .

Once selected, press the **ENTER** button to setup, then use the **DOWN** and **UP** button to adjust the value (0~255) or automatically exit menu mode without any change after one minute. To go back to the functions without any change press the **MENU** button.

balb White Balance

Press the **MENU** button up to when the **balb** is showing on the display. Pressing the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **RED** (Red), **GREEN** (Green), or **BLUE** (Blue) mode. Once the mode has been selected, press the **ENTER** button to setup or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the **MENU** button.

disp Display Inversion

Press the **MENU** button up to when the **disp** is showing on the display. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **DISP** (normal) or **DISP** (inversion), Once the mode has been selected, press the **ENTER** button to setup or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the **MENU** button.

dmca DMX Control Mode

Press the **MENU** button up to when the **dmca** is shown on the display. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **DMX** (DMX control) or **MANU** (manual control), Once select, press the **ENTER** button to setup. If **MANU** is selected, use the **DOWN** and **UP** button to select **FLASH**(Flash mode), **RED** (Red), **GREEN** (Green), **BLUE** (Blue), **WHITE** (White), **YELLOW** (Yellow), **PURP** (Purple), **CYAN** (Cyan), **WHITE** (White), **MACRO** (Macro) or **FADE** (fade), press the **ENTER** button to confirm, then use the **DOWN** and **UP** button to adjust the dimmer(1...9).

Notice:

If **FLASH**(flash mode) is selected, press the **ENTER** button to confirm, then use the **DOWN** and **UP** button to select the **WAIT**(wait time) or **STRO** (shutter), Once select, press the **ENTER** button to confirm. then use the **DOWN** and **UP** button to adjust the the wait time or shutter speed(solw ,midum, fast)(1.....9). Once select, press the **ENTER** button to store or automatically return to the main functions without any change after one minute. To go back to the previous functions without any change press the **MENU** button.

1. If **FLASH**(flash mode) is selected, press the **ENTER** button to confirm, then use the **DOWN** and **UP** button to select the **WAIT**(wait time) or **STRO** (strobe), Once select, press the **ENTER** button to confirm. then use the **DOWN** and **UP** button to adjust the the wait time or strobe speed (solw ,middle, fast) (1.....9). Once select, press the **ENTER** button to store or automatically return to the main functions without any change after one minute. To go back to