

SNOWWAVE X6



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1. GETTING STARTED

What's In The Box?

- 1 x Shoqwave™ X6 Fixture
- An Ever-So-Handy Power Cord
- A Sweet Mounting Bracket
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on purchasing the Shoqwave™ X6, the infinitely rotating, infinitely cool multi-beam fixture! Now that you've got your Shoqwave™ X6, you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials. If a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Powering Up!

All fixtures must be powered directly off a switched circuit and **cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.**

AC Voltage Switch - Not all fixtures have a voltage select switch, so please verify that the fixture you receive is suitable for your local power supply. See the label on the fixture or refer to the fixture's specifications chart for more information. A fixture's listed current rating is its average current draw under normal conditions. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Warning! Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Ground (Earthing).

Getting A Hold Of Us

If something happens goes wrong, please visit www.blizzardpro.com/support and open a support ticket. We'll be happy to help, honest.

Disclaimer: The information and specifications contained in this document are subject to change without notice. Blizzard Lighting™ assumes no responsibility or liability for any errors or omissions that may appear in this user manual. Blizzard Lighting™ reserves the right to update the existing document or to create a new document to correct any errors or omissions at any time. You can download the latest version of this document from www.blizzardpro.com.

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SAFETY INSTRUCTIONS



Please read these instructions carefully. They include important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future use. If you sell the unit to someone else, be sure that they also receive this User Guide.
- ALWAYS make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only.
- To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- ALWAYS disconnect from the power source before servicing or replacing fuse and be sure to replace with same fuse size and type.
- ALWAYS secure fixture using a safety chain. NEVER carry the fixture by its head. Use its carrying handles.
- DO NOT operate at ambient temperatures higher than 104°F (40°C).
- In the event of a serious operating problem, stop using the unit immediately. 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. Always use the same type spare parts.
- NEVER connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please open a support ticket at www.blizzardpro.com/support.

2. MEET THE SHOQWAVE™ X6

MAIN FEATURES

- 6* 10W RGBW 4-in-1 LED moving heads
- High output 5.7° beams (x6)
- Individual LED and tilt control for each moving head
- Infinite pan rotation + 120° head tilt
- 1-25Hz strobe effects
- Flicker-free LEDs
- 3-pin DMX input/output
- IEC power cord
- Steel-bolted hanging bracket

CONTROL:

- Protocol: USITT DMX-512
- DMX channels: 17/38-channel modes
- Easy-to-use 4-button control panel with LED display
- Operating modes: DMX512, master/slave, auto, sound active

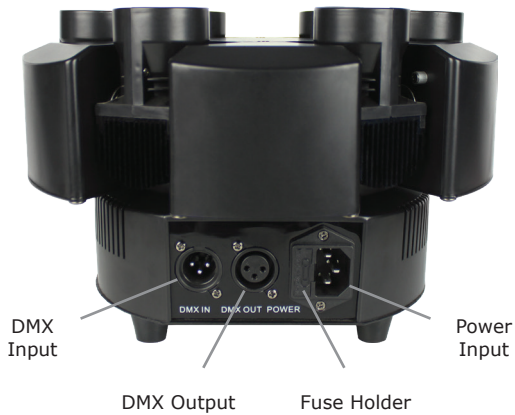
DMX Quick Reference (17/38-Channel Modes)

17CH	38CH	What It Does
1	1	Spin Motor
--	2	Continuous Spin Motor
2	3	Tilt Motor 1
3	4	Tilt Motor 2
4	5	Tilt Motor 3
5	6	Tilt Motor 4
6	7	Tilt Motor 5
7	8	Tilt Motor 6
--	9	Tilt Motor Macros
8	10	Dimmer
9	11	Strobe
10	--	Red Intensity (0% <--> 100%)
11	--	Green Intensity (0% <--> 100%)
12	--	Blue Intensity (0% <--> 100%)
13	--	White Intensity (0% <--> 100%)
14	12	Color Effect Macros
15	13	Effect Macro Speed
16	--	Pan/Tilt Motor Macros
--	14-17	R/G/B/W #1 Dimmer Channels
--	18-21	R/G/B/W #2 Dimmer Channels
--	22-25	R/G/B/W #3 Dimmer Channels
--	26-29	R/G/B/W #4 Dimmer Channels
--	30-33	R/G/B/W #5 Dimmer Channels
--	34-37	R/G/B/W #6 Dimmer Channels
17	38	Reset

Figure 1: The Shoqwave™ X6 Pin-Up Picture



Figure 2: The Rear Connections



3. SETUP



Before replacing the fuse, disconnect the power cord.
ALWAYS replace it with the same type and rating.

Fuse Replacement

Remove the fuse holder from of its housing. Then take out the damaged fuse from its holder and replace with exact same type of fuse. Reattach the fuse holder, and then reconnect power.

Connecting A Bunch of Shoqwave™ X6 Fixtures

You will need a serial data link to run light shows using a DMX-512 controller or to run shows on two or more fixtures set to sync in master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. Also, connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal. The maximum recommended cable-run distance is 500 meters (1640 ft). The maximum recommended number of fixtures on a serial data link is 32 fixtures.

Data/DMX Cabling

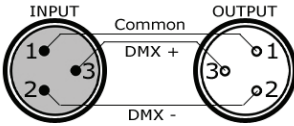
To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

For instance, Belden© 9841 meets the specifications for EIA RS-485 applications. Standard microphone cables will "probably" be OK, but note that they cannot transmit DMX data as reliably over long distances. In any event, the cable should have the following characteristics:

*2-conductor twisted pair plus a shield
Maximum capacitance between conductors – 30 pF/ft.
Maximum capacitance between conductor & shield – 55 pF/ft.
Maximum resistance of 20 ohms / 1000 ft.
Nominal impedance 100 – 140 ohms*

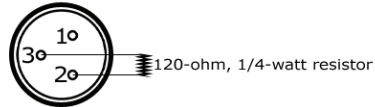
Cable Connectors

Cables must have a male XLR connector on one end and a female XLR connector on the other end. (Duh!)



A Word on Termination: DMX is a resilient communication protocol, however errors still occasionally occur. Termination reduces signal errors, and therefore best practices include use of a terminator in all circumstances. If you are experiencing problems with erratic fixture behavior, especially over long signal cable runs, a terminator may help improve performance.

To build your own DMX Terminator:
Obtain a 120-ohm, 1/4-watt resistor, and wire it between pins 2 & 3 of the last fixture. They are also readily available from specialty retailers.



CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin??? 5-Pin??? Huh?!?

If you use a controller with a 5-pin DMX output connector, it's no problem! You can simply use the installed 5-pin DMX input and/or output connections found on the back of your fixture(s).

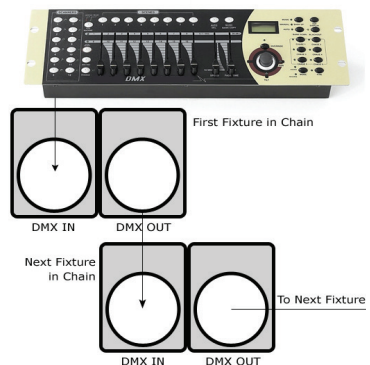
Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data 1- (Primary Data Link)	Pin 2	Pin 2
Data 1+ (Primary Data Link)	Pin 3	Pin 3
Data 2- (Optional Secondary Data Link)	Pin 4	Pin 4
Data 2+ (Optional Secondary Data Link)	Pin 5	Pin 5

Take It To The Next Level: Setting Up DMX Control

Step 1: Connect the male connector of the DMX cable to the female connector (output) on the controller.

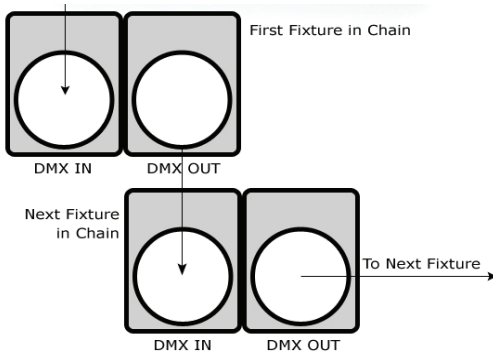
Step 2: Connect the female connector of the DMX cable to the first fixture's male connector (input). *Note:* It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

Step 3: Connect other fixtures in the chain from output to input as above. Place a DMX terminator on the output of the final fixture to ensure best communication.



Fixture Linking (Master/Slave Mode)

1. Connect the (male) 3-pin connector side of the DMX cable to the output (female) 3-pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3-pin connector to the input connector of the next fixture consisting of a (male) 3-pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



A quick note: Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondly, the fixtures that follow may also require a slave setting.

Check the **“Operating Adjustments”** section in this manual for complete instructions for this type of setup and configuration.

Mounting & Rigging

This fixture may be mounted in any SAFE position provided there is enough room for ventilation.

It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable “C” or “O” type clamp. The clamp should be rated to hold at least 10x the fixture’s weight to ensure structural stability. Do not mount to surfaces with unknown strength, and ensure properly “rated” rigging is used when mounting fixtures overhead.

Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration lamp replacement access (if applicable) and routine maintenance.
- Safety cables **MUST ALWAYS** be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

4. OPERATING ADJUSTMENTS

The Control Panel

All the features and different modes possible with the Shoqwave™ X6 are accessed by using the LED control panel. There are 4 control buttons below the display which allow you to navigate through the various control panel menus.

<MENU>

Is used to navigate to the previous higher-level menu item.

<UP>

Scrolls through menu items and numbers in ascending order.

<DOWN>

Scrolls through menu items and numbers in descending order.

<ENTER>

Is used to select and confirm/store the current selection.



MENU UP DOWN ENTER

The control panel LED display shows the menu items you select from the menu map on page #11. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<ENTER>**.

Use the **<UP>** and **<DOWN>** buttons to navigate the menu options. Press the **<ENTER>** button to select the menu function currently displayed, or to enable a menu option. To return to the previous option or menu without changing the value, press the **<MENU>** button.

Control Panel Menu Structure

Addr	001-512	Set the starting address from 001-512
Chnd	17Ch	17-channel DMX mode
	38Ch	38-channel DMX mode
SLnd	Mast	Master mode
	Slav	Slave mode
Shnd	Soun	Sound active mode
	Auto	Auto mode
Sens	000-100	Mic sensitivity level
Led	On/Off	Turns display on/off when inactive
Disp	Yes/No	Reverse display
Pan	Yes/No	Pan reverse
Tilt	Yes/No	Tilt reverse
Test	<ENTER>	Auto test
Ver	<ENTER>	Software version
Reld	<ENTER>	Reset to factory default settings

DMX Mode

Allows the unit to be controlled by any universal DMX controller.

Select the Starting DMX Address

- 1.) Navigate the main menu to reach **Addr**, press <ENTER>.
- 2.) Use the <UP/DOWN> buttons to choose a starting DMX address ranging from 001-512, press <ENTER> to confirm, or <MENU> to exit.

Select the Channel Mode

- 1.) Navigate the main menu to reach **Chnd**, press <ENTER>.
- 2.) Use the <UP/DOWN> buttons to highlight **17Ch** or **38Ch**, press <ENTER>.

Master/Slave Mode Settings

- 1.) Navigate to highlight **SLnd**, press <ENTER>.
- 2.) Use the <UP/DOWN> buttons to choose **Mast** (master) or **Slav** (slave), and press <ENTER>.

Auto and Sound Active Modes:

Allows a single or Master/Slaved units to run factory installed programs.

Auto Mode

- 1.) Navigate the main menu to reach **Shnd**, press <ENTER>.
- 2.) Use the <UP/DOWN> buttons to highlight **Auto**, press <ENTER>.

Sound Active Mode

- 1.) Navigate the main menu to reach **Shnd**, press <ENTER>.
- 2.) Use the <UP/DOWN> buttons to highlight **Soun**.
- 3.) Press the <ENTER> to confirm, or <MENU> to exit.
- 4.) For mic sensitivity, navigate the main menu to **Sens**, and press <ENTER>.
- 5.) Highlight a level ranging from 0% to 100%, and press <ENTER>.

DMX Values In-Depth (17/38-Channel Modes)

17CH	38CH	Value	What It Does
1	--	000 <--> 127 128 <--> 191 192 <--> 255	Spin Motor Index 0-360 Degrees Counter Clockwise (fast <--> slow) Clockwise (slow <--> fast)
--	1	000 <--> 255	Spin Motor Control 0-360 degrees
--	2	000 <--> 009 010 <--> 127 128 <--> 255	Continuous Spin No Function Counter Clockwise (fast <--> slow) Clockwise (slow <--> fast)
2	3	000 <--> 255	Tilt Motor 1
3	4	000 <--> 255	Tilt Motor 2
4	5	000 <--> 255	Tilt Motor 3
5	6	000 <--> 255	Tilt Motor 4
6	7	000 <--> 255	Tilt Motor 5
7	8	000 <--> 255	Tilt Motor 6
--	9	000 <-> 007 008 <-> 017 018 <-> 027 028 <-> 037 038 <-> 047 048 <-> 057 058 <-> 067 068 <-> 077 078 <-> 087 088 <-> 097 098 <-> 107 108 <-> 117 118 <-> 127	Tilt Motor Macros No Function Effect 1 Effect 2 Effect 3 Effect 4 Effect 5 Effect 6 Effect 7 Effect 8 Effect 9 Effect 10 Effect 11 Effect 12
8	10	000 <--> 255	Dimmer
9	11	000 <-> 010 011 <-> 255	Strobe Open Strobe (slow <-> fast)
10	--	000 <--> 255	Red Intensity (0% <--> 100%)
11	--	000 <--> 255	Green Intensity (0% <--> 100%)
12	--	000 <--> 255	Blue Intensity (0% <--> 100%)
13	--	000 <--> 255	White Intensity (0% <--> 100%)
14	12	000 <-> 007 008 <-> 017 018 <-> 027 028 <-> 037 038 <-> 047 048 <-> 057 058 <-> 067 068 <-> 077 078 <-> 087 088 <-> 097 098 <-> 107 108 <-> 117 118 <-> 127	Color Effect Macros 000 <-> 007 008 <-> 017 018 <-> 027 028 <-> 037 038 <-> 047 048 <-> 057 058 <-> 067 068 <-> 078 079 <-> 087 088 <-> 097 108 <-> 107 108 <-> 117 118 <-> 127
			128 <-> 136 137 <-> 146 147 <-> 156 157 <-> 166 167 <-> 176 177 <-> 186 187 <-> 196 197 <-> 206 207 <-> 216 217 <-> 226 227 <-> 236 237 <-> 246 247 <-> 255
			Effect 13 Effect 14 Effect 15 Effect 16 Effect 17 Effect 18 Effect 19 Effect 20 Effect 21 Effect 22 Effect 23 Effect 24 Effect 25

DMX Values In-Depth (17/38-Channel Modes)

17CH	38CH	Value	What It Does
15	13	000 <--> 255	Effect Macro Speed (fast <-> slow)
16	--	000 <--> 015 016 <--> 127 128 <--> 255	Pan/Tilt Motor Macros No Function Auto (fast <-> slow) Sound Active (fast <-> slow)
--	14	000 <--> 255	Red #1 Dimmer
--	15	000 <--> 255	Green #1 Dimmer
--	16	000 <--> 255	Blue #1 Dimmer
--	17	000 <--> 255	White #1 Dimmer
--	18	000 <--> 255	Red #2 Dimmer
--	19	000 <--> 255	Green #2 Dimmer
--	20	000 <--> 255	Blue #2 Dimmer
--	21	000 <--> 255	White #2 Dimmer
--	22	000 <--> 255	Red #3 Dimmer
--	23	000 <--> 255	Green #3 Dimmer
--	24	000 <--> 255	Blue #3 Dimmer
--	25	000 <--> 255	White #3 Dimmer
--	26	000 <--> 255	Red #4 Dimmer
--	27	000 <--> 255	Green #4 Dimmer
--	28	000 <--> 255	Blue #4 Dimmer
--	29	000 <--> 255	White #4 Dimmer
--	30	000 <--> 255	Red #5 Dimmer
--	31	000 <--> 255	Green #5 Dimmer
--	32	000 <--> 255	Blue #5 Dimmer
--	33	000 <--> 255	White #5 Dimmer
--	34	000 <--> 255	Red #6 Dimmer
--	35	000 <--> 255	Green #6 Dimmer
--	36	000 <--> 255	Blue #6 Dimmer
--	37	000 <--> 255	White #6 Dimmer
17	38	000 <-> 249 250 <-> 255	Reset No Function Fixture reset after 5 seconds

Troubleshooting

Symptom	Solution
Beam is Dim	Check optical system and clean excess dust/grime.
No Light Output	Check to ensure fixture is operating under correct mode.
No Power	Check fuse, AC cord and circuit for malfunction.
Blown Fuse	Check AC cord and circuit for damage, verify that moving parts are not restricted and that unit's ventilation is not obstructed
No Response Audio	Verify that "Sound" mode is active, and adjust the mic level.
Fixture Not Responding / Responding Erratically	Make sure all connectors are seated properly and securely. Use Only DMX Cables and/or check cables for defects Install a Terminator. Reset fixture(s).

If problems persists, visit www.blizzardpro.com/support.

5. APPENDIX

Keeping Your Shoqwave™ X6 As Good As New

The fixture you've received is a rugged, tough piece of pro lighting equipment, and as long as you take care of it, it will take care of you. That said, like anything, you'll need to take care of it if you want it to operate as designed. You should absolutely keep the fixture clean, especially if you are using it in an environment with a lot of dust, fog, haze, wild animals, wild teenagers or spilled drinks.

Cleaning the optics routinely with a suitable glass cleaner will greatly improve the quality of light output. Keeping the fans free of dust and debris will keep the fixture running cool and prevent damage from overheating.

In transit, keep the fixtures in cases. You wouldn't throw a prized guitar, drum-set, or other piece of expensive gear into a gear trailer without a case, and similarly, you shouldn't even think about doing it with your shiny new light fixtures.

Common sense and taking care of your fixtures will be the single biggest thing you can do to keep them running at peak performance and let you worry about designing a great light show, putting on a great concert, or maximizing your client's satisfaction and "wow factor." That's what it's all about, after all!

Returns (Gasp!)

We've taken a lot of precautions to make sure you never even have to worry about sending a defective unit back, or sending a unit in for service. But, like any complex piece of equipment designed and built by humans, once in a while, something doesn't go as planned. If you find yourself with a fixture that isn't behaving like a good little fixture should, you'll need to obtain a Return Authorization (RA).

Don't worry, this is easy. Just visit www.blizzardpro.com/support and open a support ticket, and we'll issue you an RA. Then, you'll need to send the unit to us using a trackable, pre-paid freight method. We suggest using USPS Priority or UPS. Make sure you carefully pack the fixture for transit, and whenever possible, use the original box & packing for shipping.

When returning your fixture for service, be sure to include the following:

- 1.) Your contact information (Name, Address, Phone Number, Email address).
- 2.) The RA# issued to you
- 3.) A brief description of the problem/symptoms.

We will, at our discretion, repair or replace the fixture. Please remember that any shipping damage which occurs in transit to us is the customer's responsibility, so pack it well!

Shipping Issues

Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

Tech Specs!

Weight & Dimensions	
Width	10.6 inches (270 mm)
Depth	10.6 inches (270 mm)
Height	7.1 inches (180 mm)
Weight	8.4 lbs (3.8 kg)
Power	
Operating Voltage	100-240VAC, 50-60Hz
Power Consumption	96W
Fuse	2A/250V
Light Source	
LED	6* 10W RGBW 4-in-1 LED
Optical	
Luminous Intensity	Red: 2,044 Lux @ 2.5M, 574 Lux @ 5M Green: 2,470 Lux @ 2.5M, 602 Lux @ 5M Blue: 680 Lux @ 2.5M, 164 Lux @ 5M White: 4,972 Lux @ 2.5M, 1,099 Lux @ 5M
Beam Angle	5.7° beam angle
Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient
Control	
Protocol	USITT DMX-512
DMX Channels	17/38-channel DMX
Input	3-pin XLR Male
Output	3-pin XLR Female
Other Operating Modes	DMX-512, Master/Slave, Standalone, Sound Active
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.

DISCLAIMER:

The power connector fitted to the fixture and fixture cord are designed for compatibility with products manufactured by Neutrik AG, Neutrik USA and their related entities, however they are not manufactured by, affiliated with or endorsed by Neutrik AG, Neutrik USA, or any related entity. Neutrik® and powerCON® are registered trademarks of Neutrik AG.



**Enjoy your product!
Our sincerest thanks for your purchase!
--The team @ Blizzard Lighting**