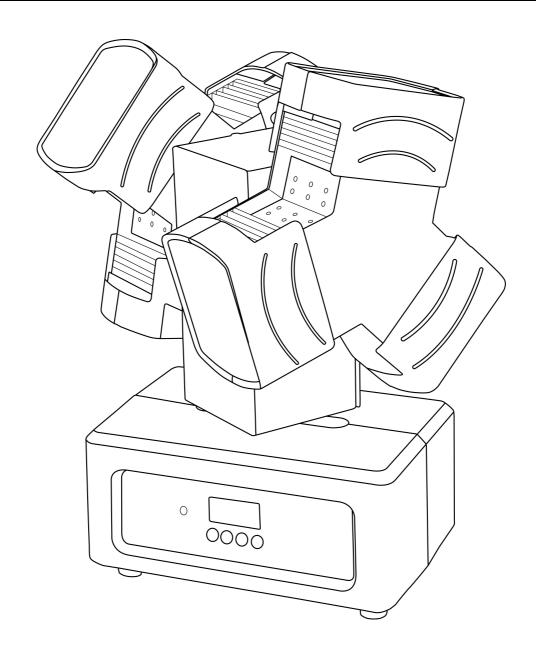


# **WINDMILL**

# LED MOVING HEAD LIGHT EFFECT

Item ref: 150.550UK

User Manual





Please read through this manual thoroughly before use, any damage caused by misuse of the product will not be covered by the warranty.



Please do not open the cover, contains high voltage. This product is not serviceable or repairable by the end user. Please refer to qualified personnel for service and repair.



#### Safety Instructions

- Please keep this manual for future reference.
- 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 bottom of the fixture.
- This product is intended for indoor use only. It must be connected to an earthed mains outlet.
- 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 20cm from adjacent surfaces. Be sure that no ventilation slots are obstructed.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse size and type.
- Maximum ambient temperature is 40°C. Do not operate the fixture at higher temperatures.
- 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 authorised technical assistance centre.
- 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.

The Windmill is part of the next generation of QTX moving lights. It features twin axis heads with continuous 360° rotation in both directions. The Windmill uses 6 LED lenses that project clear, crisp beams of light. Being compact makes it ideal for the mobile DJ or as part of an installation. The Windmill comes with 3 different operating modes; sound-to-light, 8 built-in show modes and DMX which can be used to create your own lighting show.

- Twin axis moving heads each with 3 lenses
- 360° continuous rotation in both vertical and horizontal plains
- Auto, sound-to-light, DMX or master/slave controls
- RGBW colour mixing in DMX mode
- 8 built-in light show programs
- We recommend that this product is used within the guidelines HSG95

#### **Specifications**

Power supply 100-240Vac 50/60Hz

Fuse F2A

LED power 6 x 10W 4-in-1 LED's (RGBW)

Beam angle 5°

Power connection IEC In & Out

Power consumption max. 72W
Max. in daisy chain 8
DMX channels 21 or 28

Dimensions 210 x 189 x 302mm

Weight 3.3kg

LED safety standard BSEN62471:2008



#### Installation

Read the safety information before installing the fixture.

The fixture is designed for indoor use only and must be used in a dry location with adequate ventilation. Ensure that none of the fixture's ventilation slots are blocked.

Fasten the fixture to a secure structure or surface. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed in this user manual using a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

#### Fastening the fixture to a flat surface

The fixture can be fastened to a hard, fixed, flat surface that is oriented at any angle. Ensure that the surface and all fasteners used can support at least 10 times the weight of all fixtures and equipment to be installed on it.

Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed below with a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

#### Mounting the fixture on a truss.

The fixture can be clamped to a truss or similar rigging structure in any orientation. When installing the fixture hanging vertically down, you can use an open-type clamp such as a G-clamp. When installing in any other orientation, you must use a half-coupler clamp that completely encircles the truss chord.

To clamp the fixture to a truss:

- 1. Check that the rigging structure can support at least 10 times the weight of all fixtures and equipment to be installed on it.
- 2. Block access under the work area.
- 3. Fold the legs of the mounting bracket together and bolt a rigging clamp securely to the mounting bracket. The bolt used must be M10, grade 8.8 steel minimum. It must pass through both mounting bracket legs and be fastened with a self-locking nut.
- 4. Working from a stable platform, hang the fixture with its clamp on the truss and fasten the clamp securely.
- 5. Secure the fixture with a safety cable as directed below.

## Securing with a safety cable

Secure the fixture with a safety cable (or other secondary attachment) that is approved for the weight of the fixture so that the safety cable will hold the fixture if a primary attachment fails.

Loop the safety cable through the eyebolt in the back of the fixture and around a secure anchoring point. Do not loop the safety cable around the fixture's mounting bracket only, as this will leave the fixture unsecured if it separates from the bracket.

# DMX Connection DMX OUT







If you are using a suitable DMX controller to operate the Windmill you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain.

#### Building a serial DMX-chain

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

#### DMX-512 connection with DMX terminator

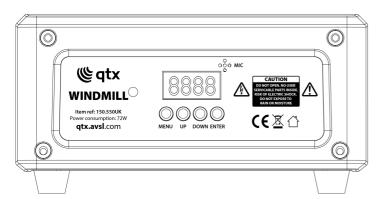
For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a club, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. (177.924UK recommended)

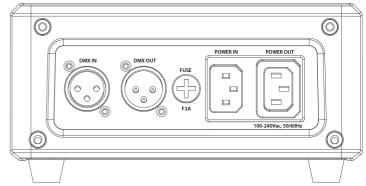


#### Connection with the mains

Connect the device to the mains with the enclosed IEC power supply cable.

#### Control and input panels





#### Operation

The Windmill can operate in three different modes. Auto, sound activation and DMX. This next section will detail the differences in the operating modes.

#### Auto or Stand alone.

In this mode, you can run internal program without a controller.

- 1. Press the MENU button until "PLAY" is displayed, and press ENTER.
- 2. Press the UP or DOWN button so that "Auto" is displayed. The unit will now run the internal programs.

#### Sound Activation Mode

This mode allows a single unit or several units linked together, to run to the beat of the music.

- 1. Press the MENU button until "PLAY" is displayed, and press ENTER.
- 2. Press the UP or DOWN button so that "Soun" is displayed. The unit will now run to the beat of the music.
- 3. The sound sensitivity can be adjusted by pressing the MENU button until "SENE" is displayed, and then press ENTER. Use the UP or DOWN buttons to adjust the sound sensitivity, 005 being the least sensitive, and 255 being the most sensitive.

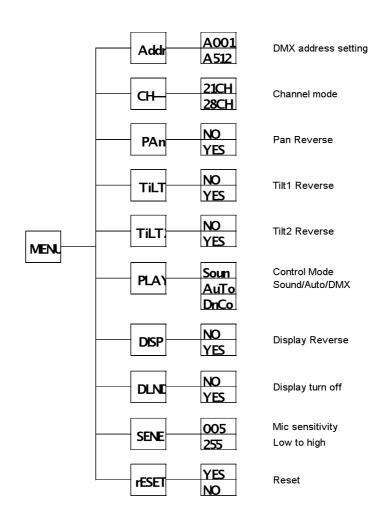
#### Master/Slave Operation

This function will allow you to link up to 8 units together and operate without a controller. In master/slave set up one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a master or as a slave.

- 1. Using approved DMX data cables, daisy chain your units together via the XLR connector on the rear of the units.
- 2. For the Master unit press the MENU button until "PLAY" is displayed, and press ENTER. Set the unit to "Auto" or "Soun" and press ENTER.
- 3. For the slave units press the MENU button until "PLAY" is displayed, and Press ENTER. Set the slave units to "DnCo".
- 4. The slave units will now follow the Master unit.



## Control Menu Map



### **DMX Protocol**

CH1	Pan	0-255: 0-540°
CH2	Pan Fine Adjustment	0-255: Pan
CH3	Tilt1	0-255: 0-360°
CH4	Tilt 1 Fine Adjustment	0-255: Tilt
CH5	Tilt2	0-255: 0-360°
CH6	Tilt2 Fine Adjustment	0-255: Tilt
CH7	Pan Continuous Rotation	0-55: No function 56-127: Counterclockwise rotation 128-199: Clockwise rotation 200-255: No function
CH8	Tilt1 Continuous Rotation	0-55: No function 56-127: Counterclockwise rotation 128-199: Clockwise rotation 200-255: No function
CH9	Tilt2 Continuous Rotation	0-55: No function 56-127: Clockwise rotation 128-199: Counterclockwise rotation 200-255: No function
CH10	Pan Continuous Rotation speed/Pan speed	0-254: From fast to slow 255: No function
CH11	Tilt1 Continuous Rotation speed/ Tilt1 speed	0-254: From fast to slow 255: No function
CH12	Tilt2 Continuous Rotation speed/ Tilt2 speed	0-254: From fast to slow 255: No function



CH13	Colour Macros & Effects	0-10: No function 11-20: RED 21-30: GREEN 31-40: RED+GREEN 41-50: BLUE 51-60: RED+BLUE 61-70: GREEN+BLUE 71-80: RED+GREEN+BLUE 81-123: Single colour change with increasing speed 124-166: Colour mixing with increasing speed 167-209: Colour fade with increasing speed 209-255: Colour change with increasing speed
CH14	Strobe	0-2: Blackout 3-128: Strobe effect with increasing speed 129-255: Random strobe with increasing speed
CH15	Dimmer	0-255: Master dimmer 0-100%
CH16	Red	0-255: Red LED 0-100%
CH17	Green	0-255: Green LED 0-100%
CH18	Blue	0-255: Blue LED 0-100%
CH19	White	0-255: White LED 0-100%
CH20	Internal programs	0-128: No function 129-255: Program run automatically after 3 seconds
CH21	Reset	0-128: No function 129-255: RESET

28 Channels Mode	Function	Function Control
CH1	Pan	0-255: 0-540°
CH2	Pan Fine Adjustment	0-255: Pan
CH3	Tilt1	0-255: 0-360°
CH4	1 Fine Adjustment	0-255: Tilt
CH5	Tilt2	0-255: 0-360°
CH6	Tilt2 Fine	0-255: Tilt
	Pan Continuous Rotation	0-55: No function
CH7		56-127: Counterclockwise rotation
CH/		128-199: Clockwise rotation
		200-255: No function
CH8	Tilt1 Continuous Rotation	0-55: No function
		56-127: Counterclockwise rotation
CHO		128-199: Clockwise rotation
		200-255: No function
	Tilt2 Continuous Rotation	0-55: No function
CH9		56-127: Clockwise rotation
City		128-199: Counterclockwise rotation
		200-255: No function
CH10	Pan Continuous Rotation speed/Pan	0-254: From fast to slow
CITO	speed	255: No function
CH11	Tilt1 Continuous Rotation speed, Tilt1	0-254: From fast to slow
	speed	255: No function
CH12	Tilt2 Continuous Rotation speed/ Tilt2	0-254: From fast to slow
	speed	255: No function



CH13	Colour Macros & Effects(Head 1)	0-10: No function 11-20: RED 21-30: GREEN 31-40: RED+GREEN 41-50: BLUE 51-60: RED+BLUE 61-70: GREEN+BLUE 71-80: RED+GREEN+BLUE 81-123: Single colour change with increasing speed 124-166: 124-166: Colour mixing with increasing speed 167-209: Colour fade with increasing speed 209-255: Colour change with increasing speed
CH14	Strobe(Head 1)	0-2: Blackout 3-128: Strobe effect with increasing speed 129-255: Random strobe with increasing speed
CH15	Dimmer(Head 1)	0-255: 0-100% dimmer
CH16	Red(Head 1)	0-255: 0-100%
CH17	Green(Head 1)	0-255: 0-100%
CH18	Blue(Head 1)	0-255: 0-100%
CH19	White(Head 1)	0-255: 0-100%
CH20	Colour Macros & Effects(Head 2)	0-10: No function 11-20: RED 21-30: GREEN 31-40: RED+GREEN 41-50: BLUE 51-60: RED+BLUE 61-70: GREEN+BLUE 71-80: RED+GREEN+BLUE 81-123: Single colour change with increasing speed 124-166: Colour mixing with increasing speed 167-209: Colour fade with increasing speed 209-255: Colour change with increasing speed
CH21	Strobe(Head 2)	3-128: Strobe effect with increasing speed 129-255: Random strobe with increasing speed
CH22	Dimmer(Head 2)	0-255: Master dimmer 0-100%
CH23	Red(Head 2)	0-255: Red LED 0-100%
CH24	Green(Head 2)	0-255: Green LED 0-100%
CH25	Blue(Head 2)	0-255: Blue LED 0-100%
CH26	White(Head 2)	0-255: White LED 0-100%
CH27	Internal programs	0-128: No function 129-255:Program run automatically after 3 seconds
CH28	Reset	0-128: No function 129-255: RESET



#### **Fixture Cleaning**

To clean the fixture:

- 1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
- 2. Vacuum or gently blow away dust and loose particles from the outside of the fixture with low-pressure compressed air.
- 3. Clean the surfaces by wiping gently with a soft, clean lint-free cloth moistened with a weak detergent solution. Do not rub glass surfaces hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water.
- 4. Check that the fixture is dry before reapplying power.

#### **Fuse Replacement**

This fuse is located in a fuse holder next to the MAINS OUT socket on the connections panel.

To replace a fuse:

- 1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
- 2. Unscrew the cap of the fuse holder and remove the fuse. Replace with a fuse of the same size and rating only.
- 3. Reinstall the fuse holder cap before re-applying power.

#### **Troubleshooting**

Listed below are a few common problems that you may encounter, with solutions.

The fixture does not work, no light

- Check the connection of power and main fuse. Be sure the external fuse has not blown.
- Measure the mains voltage on the main connector.

No response to the sound

- Make sure the fixture does not receive DMX signal.
- Low frequencies (bass) should cause the unit to react to sound. Tapping on a microphone, quiet or high-pitched sounds are not activating the unit. Check the sound sensitivity level. Make sure it is not set to a low sensitivity level.



This product is classed as Electrical or Electronic equipment and should not be disposed with other household or commercial waste at the end of its useful life.

The goods must be disposed of according to your local council guidelines.