

Ultimax White LED Backdrop Starcloth 6x3m

USER'S MANUAL

www.ultimax.uk


Please read this manual carefully before operating the fixture. If you sell, rent, or transfer the unit to another user, ensure this manual is included.

WARNING

Safety Instructions

This manual contains essential information for the safe installation, operation, and maintenance of the device. Read all instructions carefully and retain this manual for future reference.

After unpacking the unit, check for any signs of damage caused during transport. If any damage is found, do not use the device, contact your dealer immediately.

This device is designed for indoor use in dry environments only. Keep it away from rain, moisture, excessive heat, humidity, and dust. Do not expose it to water or other liquids. Do not mount the unit directly onto flammable surfaces. 

This device must only be installed, operated, and maintained by qualified personnel.

Do not attempt to dismantle or modify the device under any circumstances.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of the power supply match the device's specifications.

It is essential that the device is properly earthed and that the electrical installation complies with all relevant standards.

Do not connect this device to any type of dimmer equipment.

Ensure the power cord is not pinched or damaged by sharp edges. Do not allow the power cord to come into contact with other cables. Always handle the power cord by the plug. Never unplug the device by pulling on the cable.

There are no user-serviceable parts inside the device. Do not open the housing or operate the device with the covers removed.

If the product is used in any way not described in this manual, it may become damaged, and the warranty will be void.

Please ensure that the controller is always connected to the earth properly.

IMPORTANT

The manufacturer accepts no liability for any damage resulting from failure to follow this manual or from any unauthorised modifications to the product.

Rigging

Concerning rigging, trussing, and all other safety matters related to this product, all UK and national regulations must be followed.

Only qualified technicians are permitted to install this product.

This product must never be installed in a manner that allows it to swing freely. When rigging, de-rigging, or servicing the unit, always ensure the surrounding area is clear of people and obstacles.

IMPORTANT

Improper installation may result in serious injury or damage to property.

If the product is not supplied with a plug and has an open power cable, ensure that each wire is connected correctly when attaching a mains power plug. Refer to the table below for guidance on proper wiring.

International	EU Cable	The U.K. Cable	US Cable	Pin
L	Brown	Red	Yellow/ Copper	Fase
N	Blue	Black	Silver	Nul
⊥	Yellow/Green	Green	Green	Earth

PRODUCT OVERVIEW

Description

This Ultimax starcloth features 144 5mm super bright white LEDs randomly embedded across a 6 x 4 m fire-retardant cloth to create a realistic starry sky effect, ideal for stage backdrops, theatres, TV studios, clubs, hotels and banqueting halls.

The Ultimax Star Control serves as the central interface for operating the entire system. It includes a two-row LCD display that allows for easy configuration. Three languages are available in the control menu: English (default), French, and German. Users can select their preferred language via the LCD control panel.

The controller supports multiple operating modes: universal DMX512, Master/Slave mode, Auto Run mode, and Sound Activation mode. The system can be programmed to perform various effects using any standard DMX controller. Two DMX modes are available: a 7-channel mode for simple operation and a 28-channel mode for advanced control. The LEDs are divided into 8 groups within the starcloth. In 28-channel mode, each group can be controlled independently.

This LED starcloth is designed for indoor use only.

Items included in the package

- 1) Ultimax 6x3m White LED Starcloth
- 2). Ultimax Starcloth DMX controller
- 3). driver box (embedded into the starcloth)
- 4). Power cable (1.5m long)
- 5). 6m long 4-pin data cable (**Not for DMX signal transmission**)
- 6). This manual

Star Control

This controller provides simple and effective control of the LED starcloth. It features a built-in switch-mode power supply and integrated DMX functionality.

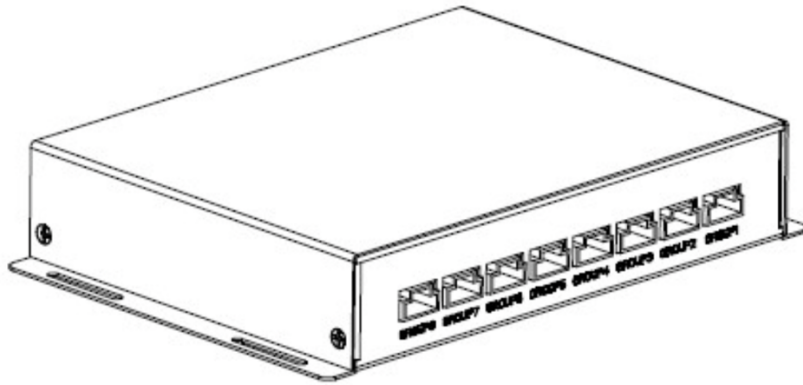
The controller includes a single data output port and a 4-pin data cable (included in the package) used to connect the controller to the driver box within the drape.



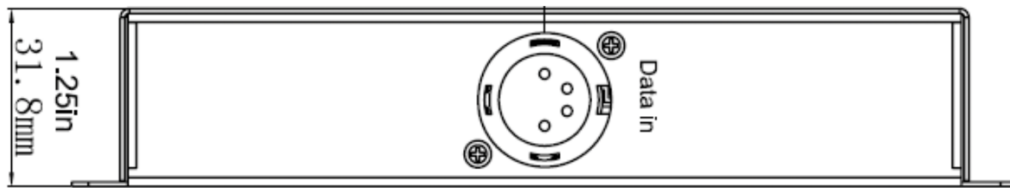
WARNING: The 4-pin female port is the data output that sends signal to the starcloth. Users should use a standard 3-pin or 5-pin cable to connect the controller to the starcloth. **Do not connect this port to a DMX desk.**

Driver Box

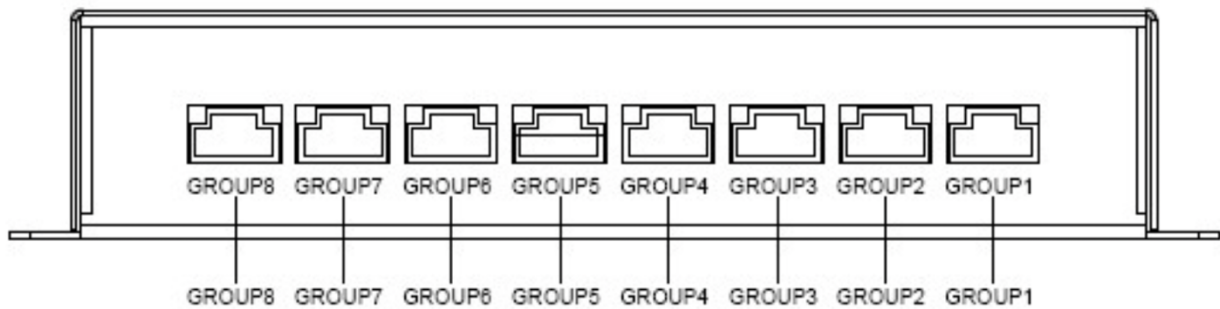
The control system includes a driver box, which acts as an interface between the controller and the starcloth. It receives power and data from the controller and distributes both to 144 LEDs within the starcloth.



Driver Box



Data/power input



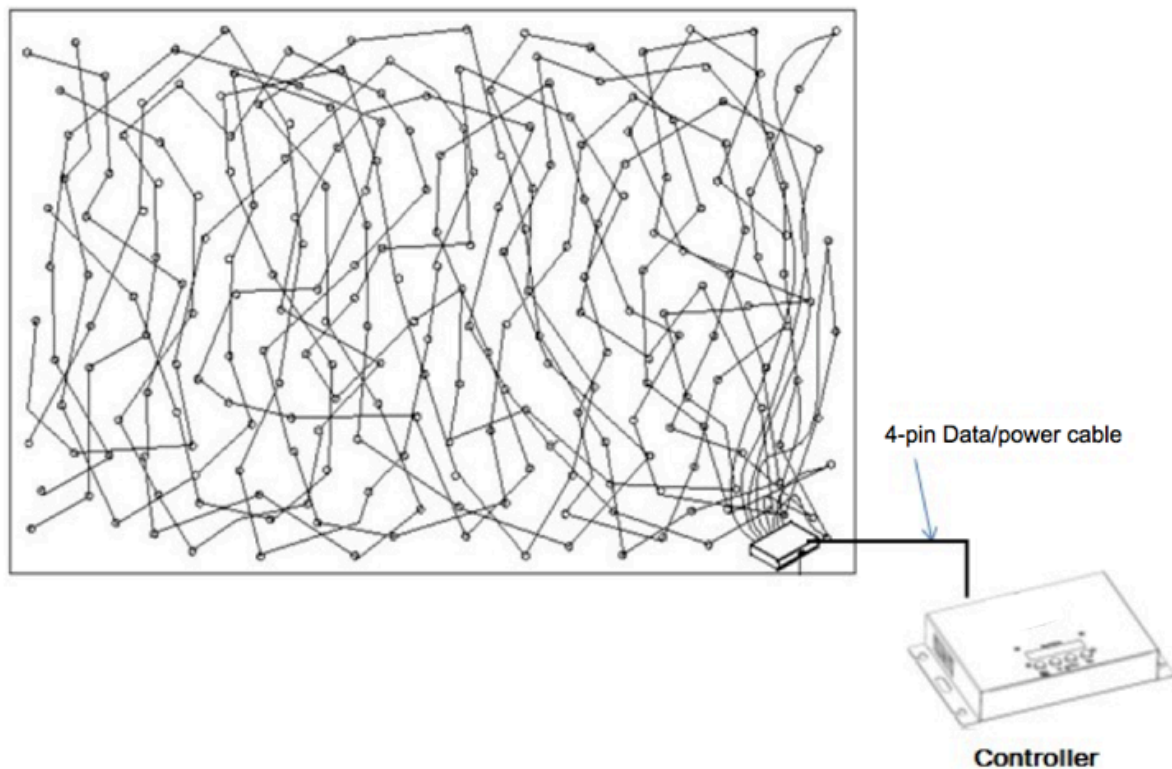
8 Data/power Outputs to LED

The driver box is pre-installed within the starcloth. Use the enclosed 4-pin data cable to connect the controller to the driver box. The driver box is located in the lower right-hand corner of the starcloth.



Driver Box Position in the starcloth

Whole System Connection Diagram



CONTROLLER SETUP

Power Supply

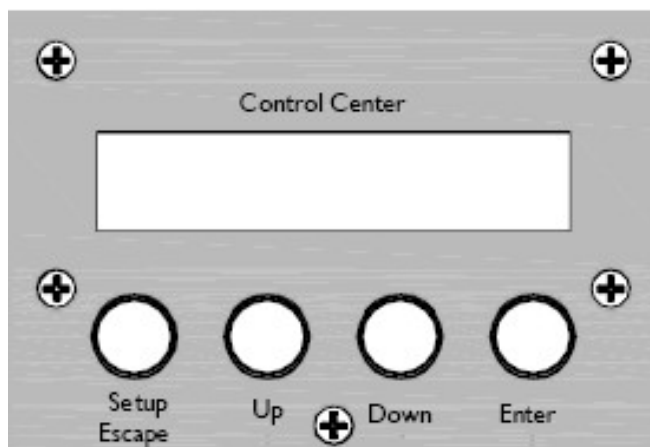
This fixture uses a switched-mode power supply and is compatible with all global voltages automatically.

Control Centre Setup

The starcloth controller features an LCD display that automatically turns off after 30 seconds of inactivity by default. The display can be reactivated by pressing any button. In DMX mode, the LCD will also reactivate when it detects a change in the DMX signal.

The LCD display includes a lock function, which is disabled by default. Users can enable this feature to prevent unauthorized changes to the settings. To unlock the LCD, press the following buttons in sequence: 1 (Setup), 3 (Up), 2 (Down), and 4 (Enter).

There are 4 press buttons under the LCD display: 【Set/Escape】 , 【 Up 】 , 【Down】 and 【Enter】 .



【Set/Esc】 Menu selection or return to previous menu

【 Up 】 Scroll "UP" through the menu list to increase the value of the current function

【Down】 Scroll "DOWN" through the menu list to decrease the value of the current function

【Enter】 Enter the current menu or confirm the current function value

Menu Navigation

Turn on the starcloth controller, after controller reset, press 【Set/Escape】 button for menu navigation.

```
DN↓↑UP
Set menu←SET← DMX mode →ENT→DMX menu
DN↓↑UP
Set menu←SET← Scene →ENT→dimming menu
DN↓↑UP
Set menu←SET← Programme01 →ENT→programme menu
DN↓↑UP
Set menu←SET← Programme02 →ENT→programme menu
DN↓↑UP
.....
DN↓↑UP
```

Setmenu←SET← Program17 →ENT→programme menu
 DN↓↑UP
 Setmenu←SET← Macro →ENT→Macro menu
 DN↓↑UP

Setup Menu

Turn on the starcloth controller, after controller reset, press **【Set/Esc】** button till 1
Set Menu appears, users now can start to set up the controller.

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL	FUNCTION	DESCRIPTION
Set Menu	1-1 Language	1-1-1 English	/	English	English
		1-1-2- French (if available)	/	French	French
		1-1-3 German (if available)	/	German	German
	1-2 R e l o a d Default	1-2-1 [On] Off	/	ON	To reload default to fixture
		1-2-2 On [Off]	/	OFF	
	1-3 Master & Alone	1-3-1 Master Mode	/	MASTER	To select fixture to run as a master unit or not
		1-3-2 Alone Mode	/	Stand Alone	
	1-4 A u t o & Sound	1-4-1 Auto Mode	/	AUTO RUN	To set up to Auto run or Sound activation mode
		1-4-2 Sound Mode	/	S O U N D ACTIVATION	
	1-5 C l e a r Display	1-5-1 Always On	/	LCD back light ON	Turn off LCD back light or not in 30 seconds
		1-5-2 Delay Off	/	LCD back light OFF	
	1-6 Key Lock	1-6-1 KeyLock: On	/	Lockup	To lock up control panel buttons or not
		1-6-2 KeyLock: Off	/	Not lockup	
	1-7 Information	1-7-01 starcloth LED	/	/	Model
		1-7-02 www.ultimax.uk	/	/	Manufacturer's website
		1-7-03 Soft version 1.0	/	/	Software version
		1-7-04 Timer	/	/	Production time

	1-8 M a c h i n e T i m e r	1-8-1 This Time:000M	/	Fixture running period of this time	Fixture working time record
		1-8-2 TotalTime:000H	/	Total running time	
		1-8-3 Clear Total (Pwd: 88)	1-8-3-1 ClearTotal: OK	OK	To clear all record or not
			1-8-3-2 ClearTotal: NO	NO	

DMX Menu Setup

Addr. 001
No Signal

Turn on the Starcloth controller, after controller reset, press **【Set/Esc】** button till **Addr. 001 No Signal** appears, press **【Enter】** to **DMX Menu** setup.

1st LEVEL	2nd LEVEL	3rd LEVEL	Function
2 DMX Menu	2-1 DMX Address	2-1-001	DMX address can be set up from 001 to 485
	2-2 DMX Break	2-2-1 Stop Run	When DMX signal breaks, the starcloth will blackout.
		2-2-2 Hold Run	When DMX signal breaks, starcloth will hold on running current effect.
		2-2-3 Auto Run	When DMX signal breaks, starcloth will switch to auto run mode automatically.
		2-2-4 Sound Run	When DMX signal breaks, starcloth will switch to sound activation mode automatically.

Dimmer Menu

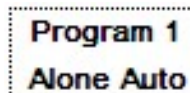
Scene
Alone

Turn on the controller, after controller reset, press **【Set/Esc】** button till **Scene Alone** appears, press **【Enter】** to **Dimmer Menu** setup.

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL	5th LEVEL	Function
3 D i m m e r M e n u	3-1 Dimmer	3-1-000 Dimmer 000	/	/	All LEDs dimmer from 000 to 255.
	3-2 Strobe	3-2-000 Strobe 000	/	/	All LEDs strobe from 000 to 255.
	3-3 Group 1	3-3-000 Group 1 000	/	/	Group 1 dimming from 000 to 255.
	3-4 Group 2	3-4-000 Group 2 000	/	/	Group 2 dimming from 000 to 255.

	3-10 Group 8	3-10 000 Group 8 000	/	/	Group 8 dimming from 000 to 255.
--	-----------------	-------------------------	---	---	-------------------------------------

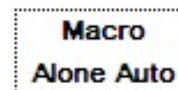
Programme Menu



Turn on the controller, after controller reset, press **【Set/Esc】** button till **Program 1** **Alone Auto** appears, press **【Enter】** to **Program Menu** setup.

1st LEVEL	2nd LEVEL	3rd LEVEL	Function
4 Programme Menu	4-1 Dimmer	4-1-000 Dimmer 000	Dimmer can be set up from 000 to 255.
	4-2 Strobe	4-2-01 Strobe 000	Strobe can be set up from 000 to 255.
	4-3 Speed	4-3-01 Speed 000	Speed can be set up from 000 to 255.

Macro Menu



Turn on the controller, after controller reset, press **【Set/Esc】** button till **Macro** **Alone Auto** appears, press **【Enter】** to **Macro Menu** setup.

1st LEVEL	2nd LEVEL	3rd LEVEL	Function
5	5-01 Macro steps	5-01-01 Macro steps 01	Macro steps can be set up from 01 to 62.
	5-02 Macro steps 01	5-02-01 Programme 1	Programme 1
		5-02-02 Programme 2	Programme 2
	
		5-02-18 Programme 17	Programme 17
	5-03	5-03-01 Programme 1	Programme 1
		5-03-02 Programme 2	Programme 2

Macro Menu	Macro steps 02
		5-03-18 Programme 17	Programme 17

	5-18 Macro steps 10	5-18-01 Programme 1	Programme 1
		5-18-02 Programme 2	Programme 2
	
		5-18-18 Programme 17	Programme 17

DMX Address Setup

Each fixture must be assigned a DMX address to ensure it responds to the correct control signals. The DMX address represents the channel number at which the device begins to receive digital control data from the controller.

Connect all starcloth controllers in series using standard DMX512 data cables. For detailed instructions, please refer to the "**DMX Menu Setup**" section in the "**LCD Display Setup**" chapter.

DMX Cable Requirements

This starcloth system is compatible with the standard DMX-512 protocol and has 12 DMX channels. Use standard 3-pin or 5-pin XLR connectors for both data input and output.

If you are using your own cables, ensure they are standard two-conductor shielded cables, with a male XLR connector at one end and a female XLR connector at the other. Please note that DMX cables must be connected in a daisy-chain configuration and should never be split.

To ensure reliable DMX data transmission when using multiple fixtures, use the shortest possible cable route. The order in which fixtures are connected in the DMX chain does not affect their addressing. For example, a fixture assigned DMX address 1 can be placed anywhere in the chain, at the beginning, end, or in the middle. The DMX controller will send data for address 1 to that fixture regardless of its position in the chain.

DMX Terminator

In DMX Controller mode, the DMX output of the last controller in the chain must be connected to a DMX terminator. This prevents electrical noise from interfering with and corrupting the DMX control signals.

A DMX terminator is an XLR connector with a 90–120 Ω , 1/4-watt resistor wired between pins 2 and 3 (DATA+ and DATA-) of a male XLR plug. The terminator is plugged into the output socket of the final fixture in the daisy chain to properly terminate the line. Using a terminator reduces the likelihood of erratic behaviour.

OPERATING MODES

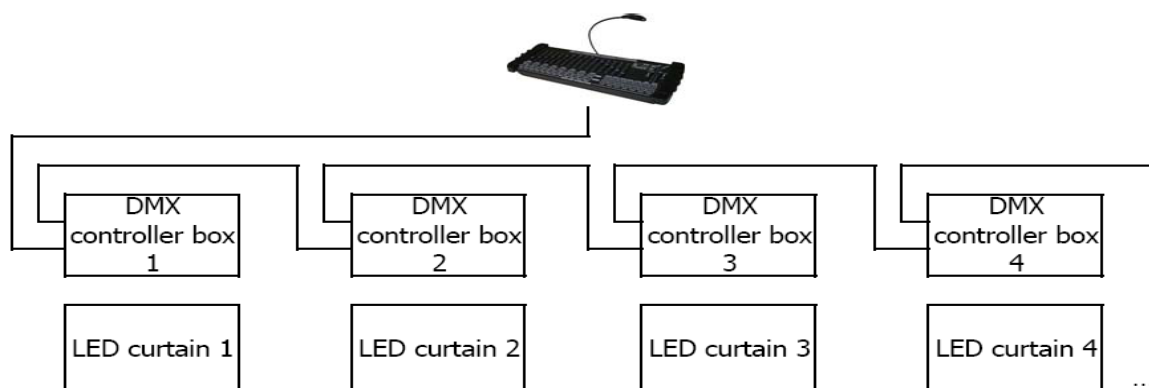
The fixture can work in the following operating modes:

- DMX control mode: this function will allow you to control individual starcloth system with a standard DMX 512 console.
- Master/Slave mode: One controller will work as the Master fixture; other controllers in the chain will work in synchronization with the Master fixture.
- Auto run mode.
- Sound-activated mode.

DMX Control Mode

Operating through a DMX console gives the user the freedom to create their own programmes tailored to their own individual needs.

This function allows you to control each individual starcloth system with a standard DMX 512 console. This device has 12 DMX channels. Please refer to following sections for DMX channel details. Users can configure the fixture, in case DMX signal breaks, to stop running or hold on running current programmes or to auto run mode or go automatically to music control. Please refer to "**DMX menu setup**". To run the starcloth system in DMX mode, plug in the controller box via the XLR connector to any standard DMX console. To set up DMX address, please refer to the instructions in "**LCD Display Setup**".



DMX Protocol

This starcloth system has 12 DMX channels.

D M X channel	Function	D M X Value	Description
1	Master dimming	000-255	Dimming from dark to light
2	Strobe	000-009	Void
		010-255	Strobe 0-25Hz
3	Dimming	000-255	Group 1 dimming
4	Dimming	000-255	Group 2 dimming
5	Dimming	000-255	Group 3 dimming
6	Dimming	000-255	Group 4 dimming
7	Dimming	000-255	Group 5 dimming
8	Dimming	000-255	Group 6 dimming
9	Dimming	000-255	Group 7 dimming
10	Dimming	000-255	Group 8 dimming
11	P r e - s e t programmemememememememememememememememememes	000-049	Void
		050-059	Scene
		060-069	Programme 1
		070-079	Programme 2
		080-089	Programme 3
		090-099	Programme 4
		100-109	Programme 5
		110-119	Programme 6
		120-129	Programme 7
		130-139	Programme 8
		140-149	Programme 9
		150-159	Programme 10
		160-169	Programme 11
		170-179	Programme 12
		180-189	Programme 13
		190-199	Programme 14
		200-209	Programme 15
		210-219	Programme 16
220-229	Programme 17		

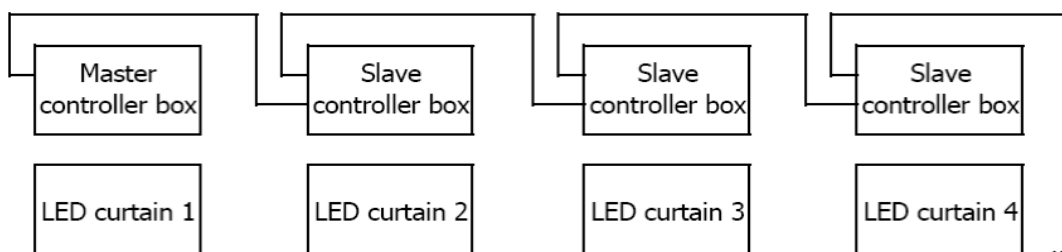
	Macros	230-239	Colour macros
		240-249	Music control
		250-255	void
12	Speed adjustable	000-004	Normal speed
		005-255	Speed from slow to fast (005-009 stop)

Master/Slave Mode

This function allows users to link multiple starcloth control systems together to run preset programmes without the need for a DMX console. In Master/Slave mode, one controller operates as the Master unit, while the others follow its built-in programmes. Starcloths connected to both the Master and Slave controllers will operate in synchronisation.

Any controller box can be configured as either a Master or a Slave; however, only one unit should be assigned as the Master in the system.

Master/Slave Mode



Auto Run Mode

The starcloth can operate in Auto Run mode to play the built-in programmes. Please refer to the "**Setup Menu**" for configuration. Users can select from 17 pre-set programmes using the control panel, each of which can run independently. The running speed of each programme is adjustable via the control panel. For instructions on selecting programmes and adjusting speeds, refer to "**Menu Navigation**".

Sound Activated Mode

The starcloth control system can operate in sound-activated mode using the built-in microphone in the controller box. For mode setup instructions, please refer to the "**Setup Menu**".

MAINTENANCE

The operator must ensure that all safety-related and technical installations are inspected annually by a qualified expert as part of a formal acceptance test.

The operator must also ensure that these installations are checked by a competent person once a year.

The following points must be considered during the inspection:

1. The electric power supply cables must not show any damages or material fatigue.
2. Make sure connections are clean and totally dry before linking equipment or supplying electric power.
3. All screws used for installing the device or parts of the device must be tightly connected and must not be corroded.

Although the LED starcloth system requires minimal maintenance, regular care, particularly cleaning, is essential to ensure optimal performance.

The system includes external optical lenses, which should be cleaned periodically to maintain maximum light output. The cleaning frequency depends on the environment in which the starcloth is installed. Damp, smoky, or dusty conditions may lead to faster accumulation of dirt on both the cloth and the lenses. Even in clean environments, it is recommended to clean the external optics and fabric at least once a month.

Use a soft cloth with a standard glass cleaning solution to clean the lenses and fabric.

The following points must be considered during the maintenance:

1. Unplug the system from main power.
2. Use a vacuum or dry compressed air and a soft brush to remove dust on the cloth.
3. Clean all external optics with a mild solution of glass cleaner or isopropyl alcohol, and a soft, lint free cotton cloth or a lens cleaning tissue.
4. Gently polish the external glass surfaces until they are free of haze and lint.
- 5.

TROUBLE SHOOTING

This troubleshooting guide is intended to help you resolve simple issues. If the problem cannot be resolved using the suggestions below, do not open the unit, as this may cause damage and void the warranty. Instead, contact your dealer or return the unit to them for inspection.

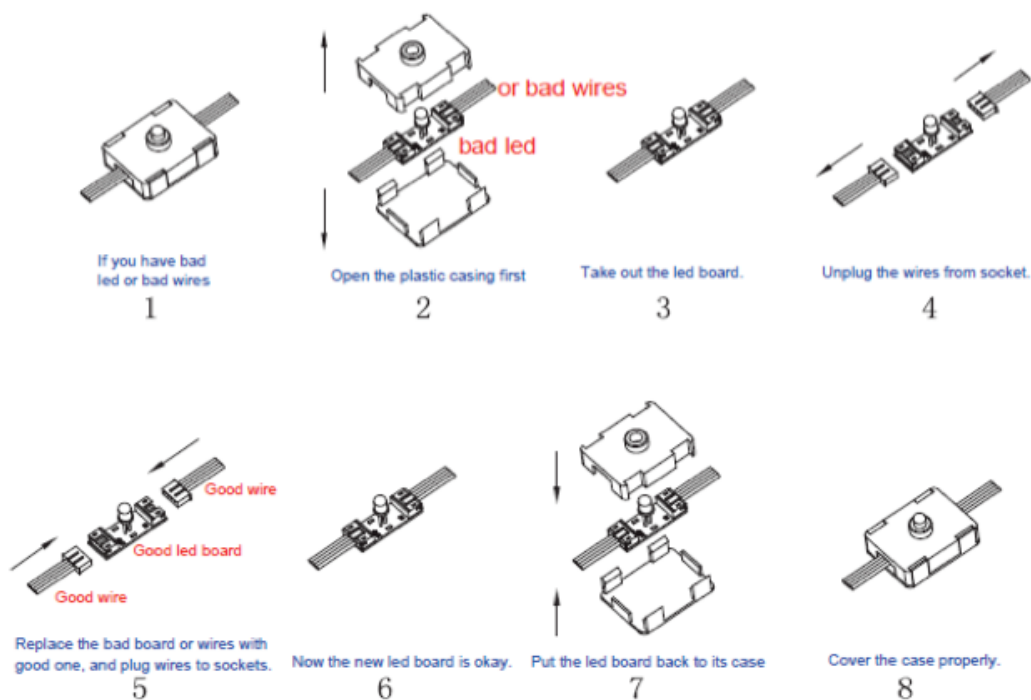
Possible issues and their possible solutions are listed below:

Problem	Solution
General low light output	Check if LED lenses are dirty; Clean the external optics using a soft cloth using normal glass cleaning fluid.
Starcloth system does not respond to DMX control	Check if the DMX cables are connected properly, and if the DMX cables are wired correctly. Also check if the DMX controller box is addressed properly.
One LED in an LED group not ON	Check if LED lamp is broken or becomes loose from its PC board. Replace the LED lamp or install a new LED lamp kit. Return the system to the dealer.
All LEDs in a LED group not ON	Check if data cable is faulty, repair or change the cable if necessary. Check if the LED drive board is faulty, repair or change the drive board.

All LEDs on a starcloth not ON

Check if the power cable and data cable are properly connected; Check if the controller box functions well; If using Master/Slave mode, check if the Master fixture is properly set up.

Please refer to below to change faulty LEDs or wires:



SPECIFICATIONS

Electrical

Input voltage
85~132VAC,
176~264VAC,
47~63Hz

85~132VAC, 176~264VAC, 47~63Hz

Power supply
Meanwell 150W
7.5V

Meanwell 150W 7.5V

Power consumption
25W max.

25W max.

Power fuse 2A

2A

Drive current 10A
max.

10A max.

Photometric

Light source

144 5mm super bright white LEDs

LED lifetime

50,000 hours

Effects

0-100% dimming
Fast strobe (speed adjustable), sound-activated
17 pre-set programmemes, built-in colour macros
Auto run programmemes with speed adjustable
8 groups of LED controllable individually for various effects

Control

Control mode DMX512; Auto run mode; Master/Slave mode; Sound activation mode
Control panel LCD display, control panel lockable
DMX channel 12 DMX channels
DMX connector 3-pin and 5-pin XLR input/output ports
 3-pin and 5-pin XLR input/output

Physical & Construction

Starcloth material Fire retardant cloth
Starcloth size 6.0 x 3.0m
Starcloth net weight 10.0 kg
Starcloth colour Black

Controller material Metal
Controller box size 248L x 148W x 43.2H mm
Net weight 1.2 kg
Controller colour Black

NOTE: Due to improvement, the product specifications and this manual are subject to change without prior notice

© Copyright reserved
Manual version: 20231218
Ultimax Manual Version: UTX026