EXPOLITE TourLED 36 WP

Snapshot

OK on Dimmer	0
Outdoor OK	/
Sound Activated	0
DMX512	✓
Master/Slave	✓
115V/230V Switch	0
Replaceable Fuse	>
User Serviceable	0
Duty Cycle	0

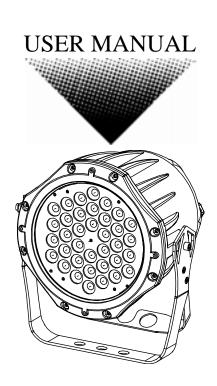


TABLE OF CONTENTS

1.	BEFORE YOU BEGIN	;
	WHAT IS INCLUDED	;
	UNPACKING INSTRUCTIONS	
	AC Power	
	CONTACT US	
	SAFETY INSTRUCTIONS	
2.	INTRODUCTION	
	FEATURES	
	DMX CHANNEL SUMMARY	
	PRODUCT OVERVIEW	
3.	SETUP	
	FUSE REPLACEMENT	
	FIXTURE LINKING	
	Data Cabling	
	DMX Data Cable	
	Cable Connectors	
	SETTING UP A DMX SERIAL DATA LINK	
	MASTER/SLAVE FIXTURE LINKING	
	Mounting	
	Orientation	9
	Rigging	
4.	OPERATING INSTRUCTIONS	10
	NAVIGATING THE CONTROL PANEL	
	MENU MAP	. 1
	MENU FUNCTIONS	
	User Configurations	
	Programming Custom Scenes	
	Activate or Deactivate the password:	۰۰ ۱۰ 1
	Service Functions	
	Reset custom programs to factory defaults	
	OPERATION	. 13
	Stand-Alone Mode (Auto Mode):	1
	Master/Slave Mode (Master Auto):	
	DMX Mode DMX-512 control without "ID" address	14 1
	DMX-512 control without 1D address	
	EXAMPLE CONFIGURATIONSDMX CHANNEL VALUES	
	DMX CHANNEL VALUES	
5.	CONTROLLER	. 19
	Overview	
	SETUP	
	MENU MAP	
	Wash Program	
	Effect Program	
	Custom ProgramPlay Schedule	
	Clock	
	Schedule	
	Settings	
	Activating password mode	
	Control via external DMX	
	GENERAL TROUBLESHOOTING	
_	TECHNICAL SUPPORT	
6.	APPENDIX	
	DMX PRIMER	
	PHOTOMETRICS	
	GENERAL MAINTENANCE	
	RETURNS PROCEDURE	
	TECHNICAL SPECIFICATIONS	

1. BEFORE YOU BEGIN

What is included

- 1 x TourLED 36 WP
- 1 x Power cable with plug
- > 1 x IP65 power extension cable
- > 1 x IP65 signal extension cable
- ➤ 1 x DMX input cable
- > 1 x DMX output cable
- Users Manual

>

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

AC Power

This fixture has an auto-switching power supply that can accommodate a wide range of input voltages. The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This fixture will accommodate between 100V and 240V AC. 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.

Safety Instructions



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

- 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.
- 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.
- Make sure there are no flammable materials close to the unit while operating.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse source.
- Secure fixture to fastening device using a safety chain.
- Maximum ambient temperature (Ta) is 95°F (35°C). Do not operate fixture at temperatures higher than this.
- 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.
- Don't 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.
- Do not daisy chain power to more than 20 units at 120V, or 40 units at 230V.

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 contact your local dealer.

2. Introduction

Features

- 9-channel DMX-512 LED PAR can (with ID addressing)
- Blackout/static/dimmer/strobe/pulse
- · RGB color mixing with or without DMX controller
- Built-in automated programs via master/slave, DMX or COLOR-CON
- Program and recall custom programs via master/slave, DMX or COLOR-CON
- RGB fade delay channel for snapping or fading

Additional Features

- Available in black or silver
- Durable and weather resistant IP65 rated
- Additional power output for daisy chaining units together (max 20 units @ 120V)
- LED display with lock-out feature
- Gel frame holder (4mm max thickness)
- Low power consumption

Optional Controller

• Controller (COLOR-CON)

DMX Channel Summary

STAG

CHANNEL	FUNCTION
1	Master Dimmer
2	Red
3	Green
4	Blue
5	Color Macros
6	Strobe
7	Auto/Custom Programs
8	ID Address
9	Instant/Delayed Color Change

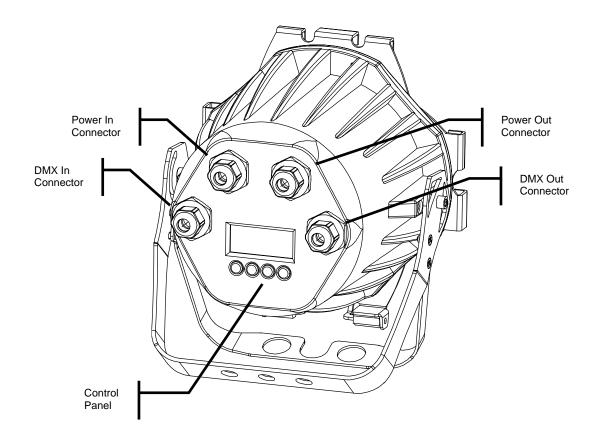
ARC

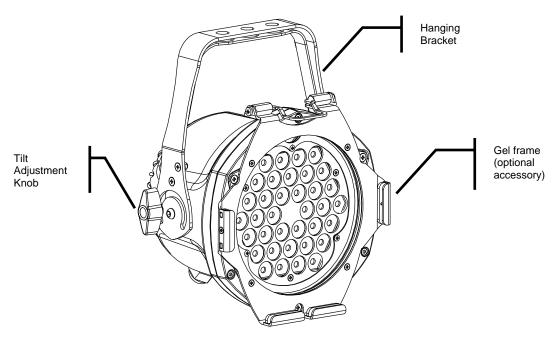
CHANNEL	FUNCTION
1	Red
2	Green
3	Blue

ARCd

CHANNEL	Function
1	Master Dimmer
2	Red
3	Green
4	Blue

Product Overview





3. SETUP



Disconnect the power cord before replacing a fuse and always replace with the same type fuse.



Fuse Replacement

The fuse for this fixture is located inside the chassis. Remove the damaged fuse from its holder and replace with exact same type fuse. Reconnect power.

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a 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.

Important:

Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 32 devices should be connected on one data link. 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.

Maximum recommended serial data link distance: 500 meters (1640 ft.)

Maximum recommended number of fixtures on a serial data link: 32 fixtures

Data Cabling

To link fixtures together you must obtain data cables. You can purchase certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

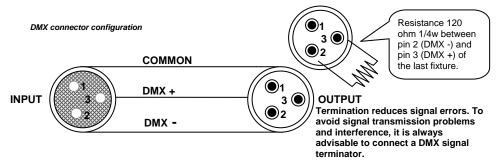
DMX DATA CABLE

Use a Belden© 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable will have the following characteristics:

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

CABLE CONNECTORS

Cabling must have a male XLR connector on one end and a female XLR connector on the other end.



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 TO 5-PIN CONVERSION CHART

Note! If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter.

The chart below details a proper cable conversion:

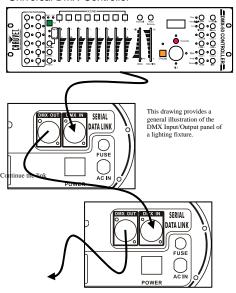
3 PIN TO 5 PIN CONVERSION CHART

Conductor	3 Pin Female (output)	5 Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data (-) signal	Pin 2	Pin 2
Data (+) signal	Pin 3	Pin 3
Do not use		Do not use
Do not use		Do not use

Setting up a DMX Serial Data Link

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

Universal DMX Controller



Master/Slave Fixture Linking

- 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.

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. Secondarily, the fixtures that follow may also require a slave setting. Please consult the "Operating Instructions" section in this manual for complete instructions for this type of setup and configuration.



Mounting

ORIENTATION

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

RIGGING

It is important never to obstruct the fan or vents pathway. Mount the fixture using, a suitable "C" or "O" type clamp. 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 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.

Hanging Clamp



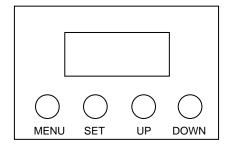
Note! Clamp is sold separately.

4. OPERATING INSTRUCTIONS

Navigating the Control Panel

Access control panel functions using the four panel buttons located directly underneath the LCD Display.

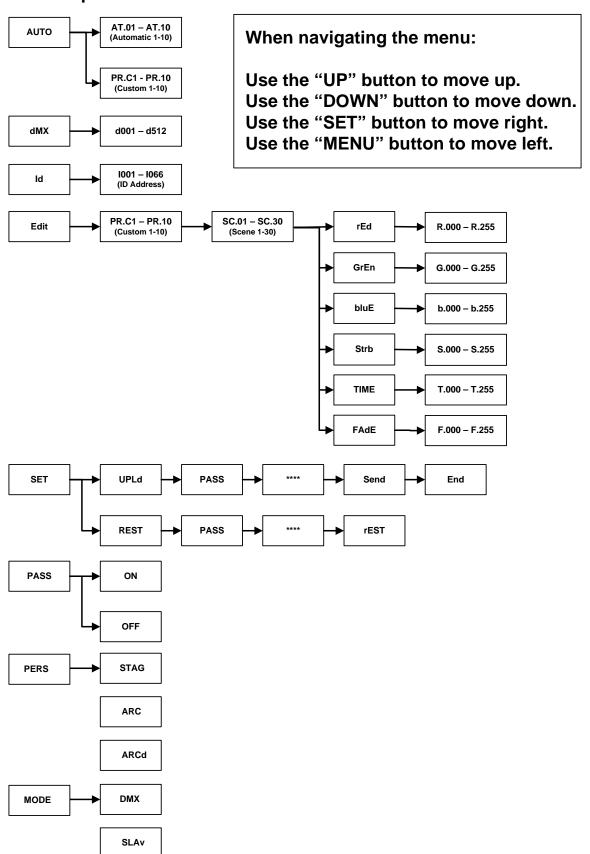
Button	Function
<menu></menu>	Used to access the menu or to return to a previous menu option
<set></set>	Used to select and store the current menu or option within a menu
<up></up>	Scrolls through menu options in ascending order
<down></down>	Scrolls through menu options in descending order



The Control Panel LED Display shows the menu items you select from the menu map on page #. 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 **<SET>**.

Press the **<MENU>** button repeatedly to scroll through the top level menu items. This is the top of the menu map. Use the **<UP>** and **<DOWN>** buttons to navigate the menu map and menu options. Press the **<SET>** button to access 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.

Menu Map



Menu Functions

MENU OPTION	DESCRIPTION	
AUTO	Auto Mode - Master Unit: Sets the fixture to Master status for Master-Slave operation and the built in programs will be triggered by the sound. No data link is required; all fixtures can be set to this mode for Stand-alone operation.	
dMX	DMX Mode: Sets the fixture to run in DMX mode. Also, this mode is used to set a fixture to operate in Slave mode. In Master/Slave mode you must set the first fixture in the data link to "Master" otherwise nothing will happen.	
Id	ID Address: Sets the ID address of the fixture, which allows up to 3,696 (66 per DMX address) TourLED 36 WP fixtures to be independently controlled on one universe.	
Edit	Used to create and edit custom programs. Up to 10 custom programs with up to 30 steps (scenes) each can be programmed.	
SET	Used to upload the custom programs from one fixture to another, and to reset the custom programs to the factory defaults.	
PASS	Turns the password protection on or off. If turned on, you must enter a password to gain access to the control panel.	
PERS	Allows the user to select the DMX personality of the fixture. To determine the personality required for your application please reference the DMX value tables in the pages that follow.	
MODE	Allows user to toggle between DMX and slave modes. Slave mode is also selected when the unit is being controlled by the COLORcon controller system.	

User Configurations

PROGRAMMING CUSTOM SCENES

In order to create a custom program than can be run in any mode, do the following:

- In the menu, select "Edit". Next, scroll through until the desired program number is displayed, and select it.
- 2) Scroll through to the step you wish to program, and select it.

Note: The program runs in sequential order, starting with step 01, and continuing through step 30. To program less than 30 scenes, set the [**Step time**] of the scene **after** your last scene to 0.

- 3) "rEd" will be displayed on the screen. Press **<SET>** to edit the value for red. Scroll through to the red value you wish to program, and select it by pressing **<SET>**. Repeat this for the, "GrEn", "bluE", "Strb", "TimE", and "FAdE" values. Note that "TimE" is the length of time in minutes that the current step will run, and must be a value between 0 and 255. "Fade" is the amount of time, in seconds, that the fixture will take to gradually transition between the previous step and the current step. If the value of "Fade" is 0, the transition will be at the maximum speed possible.
- 4) Repeat steps 2 and 3 until the program is created.
- 5) To end programming, press **<MENU>** twice.

The program can be run in any mode. See the instructions for the desired operating mode in order to run the custom program.

UPLOAD CUSTOM PROGRAMS TO ANOTHER FIXTURE:

- On all fixtures that are going to receive the custom programs from the source unit, set them for DMX operation; address does not matter for the purpose of this operation.
- 2) On the Master unit, press <MENU> until "SET" is displayed, and press <SET>.
- 3) Scroll through until "UPLd" is displayed, and press <SET>.
- "PASS" will now be displayed. Press <SET>, and the display will go blank, except for a single dot.
- 5) Press <UP>, then <DOWN>, then <UP>, then <DOWN>, then <SET>. This is the same password that is used for the main access password.
- 6) "SENd" will now be displayed, and all units will output the color yellow.
- 7) When the upload is complete, the sending fixture will display "ENd", and all fixtures will output the color green to indicate a successful upload. If a unit has an error, it will output the color red.
- 8) Press <MENU> on the source unit to exit the upload mode.

ACTIVATE OR DEACTIVATE THE PASSWORD:

- 1) Press <MENU> until "PASS" is displayed, and press <SET>.
- 2) Select "OFF" or "ON" and press <SET>.

Note: The password is permanently set as **<UP>**, **<DOWN>**, **<UP>**, **<DOWN>**; this cannot be changed.

Service Functions

RESET CUSTOM PROGRAMS TO FACTORY DEFAULTS

- 1) Press <MENU> until "SET" is displayed, and press <SET>.
- 2) Scroll through until "REST" is displayed, and press <SET>.
- "PASS" will now be displayed. Press <SET>, and the display will go blank, except for a single dot.
- 4) Press <UP>, then <DOWN>, then <UP>, then <DOWN>, then <SET>. This is the same password that is used for the main access password.
- 5) "REST" will now be displayed, and will be flickering. After about 30 seconds, the reset sequence will be complete, and "REST" will be displayed without flickering.
- 6) Press <MENU> to exit the reset mode.

Operation

Stand-Alone Mode (Auto Mode):

This mode allows a single unit to auto change in Auto Mode.

- 1) Press <MENU> until "Auto" appears on the display, and press <SET>.
- Press scroll through to the desired program (either Auto 1-10 or Custom 1-10), and press <SET>
 to select it. The unit will now auto change in Auto Mode.

Master/Slave Mode:

This mode will allow you to link up to 32 units together without a controller.

- Use standard DMX cables to daisy chain your units together via the DMX connector on the rear
 of the units. For longer cable runs we suggest a terminator at the last fixture. For more
 information about terminators, see page 8.
- Choose a unit to function as the Master. The unit must be the first unit in line. Press <MENU>
 until "Auto" appears on the display, and press <SET>.
- Press scroll through to the desired program (either Auto 1-10 or Custom 1-10), and press <SET> to select it.
- 4) Then simply chain the units together using DMX cable.
- 5) Nothing needs to be set on the slave units. So long as they are in any top-level menu they should respond to a DMX controller or Master fixture.

DMX Mode

This mode allows the unit to be controlled by any universal DMX controller. If you are unfamiliar with DMX, please read the DMX Primer on page 24.

- 1) Press <MENU> until "dMX" is displayed and press <SET>.
- 2) Scroll through to select the desired address, and press <SET>.

DMX-512 control without "ID" address

The TourLED 36 WP operates on 3-9 channels of DMX. Address each fixture in increments of 3-9 channels. (I.e. 1, 10, 19, 28 etc...) To save time you can use the same DMX address for each fixture. All fixtures will then respond simultaneously to control. You may also group your fixtures and address those groups alike for faster programming and control.

- 1) Press <MENU> until "dMX" is displayed and press <SET>.
- 2) Scroll through to select the desired address, and press <SET>.

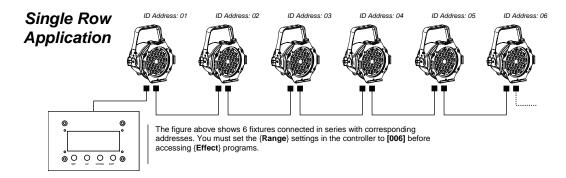
Note: This fixture always has an ID address; it cannot be deactivated. Unintended results may occur if values are present in channel 8. Make sure values on channel 8 are set to "0".

DMX-512 addressing with ID address

- 1) Press <MENU> until "dMX" is displayed and press <SET>.
- 2) Scroll through to select the desired DMX address, and press <SET>.
- Press <MENU> until "Id" is displayed and press <SET>.
- Scroll through to select the desired ID address, and press <SET>. For every DMX512 starting address the user can set 66 separate ID addresses.

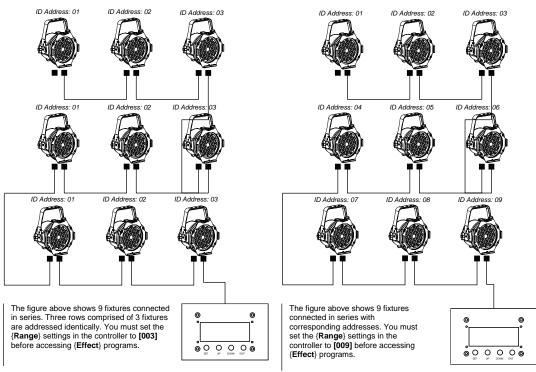
Note: ID addresses are accessible using Channel 8.

Example Configurations



Repeat Row Block Application

Block Application



DMX Channel Values (ARC Mode)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	Red (or step time when PR. 01 – PR. 10 is activated) 0 – 100%
2	000 ⇔ 255	Green (or fade time when PR. 01 – PR. 10 is activated) 0 – 100%
3	000 ⇔ 255	Blue 0 – 100%

DMX Channel Values (ARCd Mode)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	Master Dimmer: 0 – 100%
2	000 ⇔ 255	Red (or step time when PR. 01 – PR. 10 is activated) 0 – 100%
3	000 ⇔ 255	Green (or fade time when PR. 01 – PR. 10 is activated) 0 – 100%
4	000 ⇔ 255	Blue 0 – 100%

DMX Channel Values (STAG Mode)

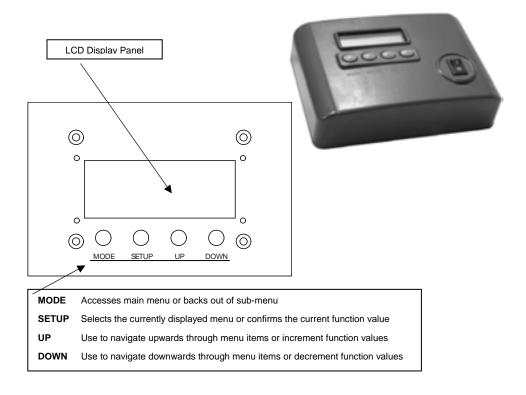
CHANNEL	VALUE	FUNCTION
1	000 😂 255	Master Dimmer: 0 – 100%
2	000 ⇔ 255	Red (or step time when PR. 01 – PR. 10 is activated) 0 – 100%
3	000 ⇔ 255	Green (or fade time when PR. 01 – PR. 10 is activated) 0 – 100%
4	000 ⇔ 255	Blue 0 – 100%
5	000 ⇔ 009 010 ⇔ 029 030 ⇔ 039 040 ⇔ 049 050 ⇔ 069 070 ⇔ 079 080 ⇔ 089 090 ⇔ 109 110 ⇔ 119 120 ⇔ 129 130 ⇔ 149 150 ⇔ 159 170 ⇔ 189 190 ⇔ 199 200 ⇔ 219 220 ⇔ 229 230 ⇔ 239 240 ⇔ 255	Color Macros No function Red Red 85%, Yellow 15% Red 60%, Yellow 40% Yellow 85%, Green 15% Yellow 60%, Green 40% Green Green 85%, Blue 15% Green 60%, Blue 40% Blue Blue 85%, Cyan 15% Blue 60%, Cyan 40% Cyan Cyan 50%, Purple 50% Purple Purple 50%, White 50% White 95%, Yellow 5% White
6	000 ⇔ 009 010 ⇔ 063 064 ⇔ 127	Strobe No function Strobe with pulse effect (slow > fast) Strobe (slow > fast)

		128 ⇔ 191 192 ⇔ 255	Color changing pulse with fadeout (slow > fast) Color changing pulse with fade-in/out (slow > fast)
_	7	000 ⇔ 009 010 ⇔ 019 020 ⇔ 029 030 ⇔ 039 040 ⇔ 049 050 ⇔ 059 060 ⇔ 069 070 ⇔ 079 080 ⇔ 089 100 ⇔ 109 110 ⇔ 119 120 ⇔ 129 130 ⇔ 139 140 ⇔ 149 150 ⇔ 159 160 ⇔ 169 170 ⇔ 179 180 ⇔ 189 190 ⇔ 199 200 ⇔ 255	Programs No function Auto 1 Auto 2 Auto 3 Auto 4 Auto 5 Auto 6 Auto 7 Auto 8 Auto 9 Auto 10 (Cycle Auto 1 – 9 for 5 minutes each) Custom 1 Custom 2 Custom 3 Custom 4 Custom 5 Custom 6 Custom 7 Custom 8 Custom 9 Custom 9 Custom 10
	8	000 \$\times 009\$ 010 \$\times 019\$ 020 \$\times 029\$ 030 \$\times 039\$ 040 \$\times 049\$ 050 \$\times 059\$ 060 \$\times 069\$ 070 \$\times 079\$ 080 \$\times 089\$ 090 \$\times 099\$ 110 \$\times 119\$ 120 \$\times 129\$ 130 \$\times 139\$ 140 \$\times 149\$ 150 \$\times 159\$ 160 \$\times 169\$ 170 \$\times 179\$ 180 \$\times 189\$ 190 \$\times 209\$ 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231	D Address

	i	
	232	ID 43
	233	ID 44
	234	ID 45
	235	ID 46
	236	ID 47
	237	ID 48
	238	ID 49
	239	ID 50
	240	ID 51
	241	ID 52
	242	ID 53
	243	ID 54
	244	ID 55
	245	ID 56
	246	ID 57
	247	ID 58
	248	ID 59
	249	ID 60
	250	ID 61
	251	ID 62
	252	ID 63
	253	ID 64
	254	ID 65
	255	ID 66
		RGB Fader Response
9	000 ⇔ 250	Instant (snap)
-	251 ⇔ 255	5 second fade

5.CONTROLLER

Overview



Setup

Connect from the OUT on the controller to the DMX Input side of the TourLED 36 WP using a DMX XLR cable. It is recommended that you power up all TourLED units connected prior to turning on the controller. This ensures that the controller will auto-detect DMX addresses.

Alternatively you can use {**Detect device**} from the {**Settings**} menu.

Set ID addresses on the Tour LED 36 WP's in ascending order.

Set the {Range} in the {Settings} menu.

Note There is no need to set ID and Range for {Wash} programs.

Menu Map

MAIN FUNCTION	SELECTION	SELECTION	SELECTION	SELECTION
Wash program	Wash [1] ⇔ Wash [8]	Edit	Step time [001] ⇔ [255] Fade time [001] ⇔ [255]	
Effect program	Effect [1] Effect [8]	Edit	Speed [001] ⇔ [100]	
Custom program	Custom [1] ⇔ Custom [8]	Edit	Scene [1] ⇔ Scene [100]	ID address [000*] ⇔ [100]
Play schedule	Schedule			
Clock	Time now	I.e. 12/31/2006 13:50:24 I.e. 12/31/2006		
	Edit time	13:50:24		
Schedule	Wash [1] ⇔ Wash [8] Effect [1] ⇔ Effect [8] Custom [1] ⇔ Custom [8]	Start>>>End 00:00>>00:00		
	DMX address	[001] 😂 [255]		
Settings	Range Allow edit Detect device Reset to Factory settings	[001] ⇔ [066] [YES] ⇔ [NO] >>> [YES] ⇔ [NO]		
Password	Password ON/OFF Set password	[ON] ⇔ [OFF]		

Wash Program

- 1) Select from the eight existing [Wash] programs and it will instantly play.
- 2) Set the [Step time] and the [Fade time] in the [Edit] function if desired.
- 3) The unit of time is 5 seconds and it can be adjusted between 1 and 255.

Effect Program

- 1) Select from the eight existing [Effect] programs and it will instantly play.
- 2) Vary the [Speed] of the effect between 1 and 255.

Note: effect programs were designed primarily for the TourLED 108. They will work with the TourLED 36 WP, but they may react differently from time to time.

Custom Program

- Select from the eight existing [Custom] programs and it will instantly play.
- Enter the [Edit] section to create or edit program.
- You can create or edit up to 100 scenes. To program less than 100 scenes, set the [Step time]
 of the scene after your last scene to 0.
- Select the ID address of the target unit. Setting ID address to 0 selects all units in the serial link. Color/Effects combination for different IDs is allowed.
- 5) Specify the [Module] or modules to run active.

Note: this option is intended for use with the TourLED 108; for the TourLED 36 WP, it will function as if [**Module**] is set to one.

```
0 = 1,2,3
1 = 1
2 = 2
3 = 3
4 = 1,2
5 = 2,3
6 = 1,3
```

- 6) RGB mix using the [Red], [Green] and [Blue] functions and adjusting the range between 0 and
- 7) Select a [Strobe] speed from 0-20Hz if desired.
- 8) Select the [**Step time**] for the current scene.

```
Step time unit values
Range 0-10=
Range 11-255=
0.1sec per unit
1 sec per unit
```

Set a [Fade time] for the current scene in one second increments from 0 to 255.

Play Schedule

Simply activate this menu [Play schedule] to run.

Clock

```
[Clock] → [Time now]: To view the current time on the controller. [Clock] → [Edit now]: Edit the time and date.
```

Schedule

There are 24 **Wash**, **Effect** and **Custom** programs that can be set with Start and End times. Start times take priority over End times. Programs will not overlap. Programs with the most recent Start time will always override the existing previously executed program.

Settings

[DMX address]

This function sets the DMX address for the controller. It is addressable from 1 to 250.

[Range]

Enter the number of fixtures connected in series.

[Allow edit]

This function either enables or disables editing in Wash, Effect and Custom programs.

[Detect device]

This is the manual method of detecting and connecting the controller to all new units in series. It is generally used when you add more units to an existing system. Turning off and then on the controller has the same effect.

[Reset to factory settings]

This function will reset all the settings to the factory defaults except for [Custom] programs.

Factory Default Settings			
Setting Default			
[Schedule]	All times in schedule are reset to [00:00]		
[Wash program]	Step times and fade times are reset to [001]		
[Effect program]	Speeds are reset to [001]		
[DMX address]	DMX address is reset to [001]		
[Range]	Range is reset to [066]		
[Allow edit]	Reset to [Yes]		
[Password ON/OFF]	Password is reset to [OFF]		
[Set password] Password is reset to [00000000] Down=0, Up=			

Activating password mode

- Set [Password] function to [ON]. This will prompt the user for a password every time the controller is powered on.
- 2) Toggle to [Set password] function in order to change the password.
- 3) Input an 8 digit password using the [UP] & [DOWN] keys. Press the [SET] button to confirm.

Note In the event that the user forgets the password use the following factory password override:

 $[\mathsf{UP}] \Rightarrow [\mathsf{DOWN}] \Rightarrow [\mathsf{UP}] \Rightarrow [\mathsf{DOWN}] \Rightarrow [\mathsf{UP}] \Rightarrow [\mathsf{DOWN}] \Rightarrow [\mathsf{DOWN}]$

Control via external DMX

Programs in the controller can be accessed via an external DMX controller. It will be necessary to have the DMX address set on the Controller. The controller operates on 4 channels of control.

DMX Channel Values

CHANNEL	VALUE	Function
	000 🗢 010	Blackout
	011 <code-block> 030</code-block>	Wash [1]
	031 🗢 040	Blackout
	041 🗢 060	Wash [2]
	061 ⇔ 070	Blackout
	071 \Leftrightarrow 090	Wash [3]
	091 😂 100	Blackout
1	101 🖨 120	Wash [4]
	121 ⇔ 130 131 ⇔ 150	Blackout
	151 ⇔ 160	Wash [5] Blackout
	161 ⇔ 180	Wash [6]
	181 ⇔ 190	Blackout
	191 🖨 210	Wash [7]
	211 🖘 220	Blackout
	221 🖘 255	Wash [8]
	000 010	Blackout
	011 🗢 030	Effect [1]
	031 🗢 040	Blackout
	041 🗢 060	Effect [2]
	061 070	Blackout
_	071 ⇔ 090	Effect [3]
2	091 🖨 100	Blackout
	101 🖨 120	Effect [4]
	121 🖨 130	Blackout
	131 😂 150	Effect [5]
	151 🖨 160	Blackout
	161 ⇔ 180	Effect [6]
	181 ⇔ 190	Blackout

	191 🖨 210	Effect [7]	
	211 <code-block> 220</code-block>	Blackout	
	221 🗢 255	Effect [8]	
	000 🗢 010	Blackout	
	011 🗢 030	Custom [1]	
	031 🗢 040	Blackout	
	041 🗢 060	Custom [2]	
	061 🗢 070	Blackout	
	071 🗢 090	Custom [3]	
	091 🗢 100	Blackout	
3	101 ⇔ 120	Custom [4]	
3	121 🖨 130	Blackout	
	131 🗢 150	Custom [5]	
	151 🗢 160	Blackout	
	161 ⇔ 180	Custom [6]	
	181 🖨 190	Blackout	
	191 ⇔ 210	Custom [7]	
	211 🕸 220	Blackout	
	221 <code-block> 255</code-block>	Custom [8]	
4	000 🖨 127	OFF	
4	128 ⇔ 255	ON	

General Troubleshooting

		Applies to			
Symptom	Solution(s)	Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Auto shut off	Check fan thermal switch reset	√			
Beam is very dim or not bright	Clean optical system or check dimmer value	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓	✓	√	✓
Fixture is not responding	Check DMX menu settings for correct addressing Check DMX cables Check polarity switch settings on controller	✓			
Fixture is on but there is no movement to the audio	Make sure you have the correct audio mode on the control switches. If audio provided via ¼" jack, make sure a live audio signal exists Adjust sound sensitivity knob	✓		√	✓
Lamps cut off sporadically	Possible bad lamp or fixture is overheating. Check DMX and power cable connections	✓			
Light will not come on after power failure	Check fuse Check for power on Mains	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	√	✓
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Check correct DMX values	√			
No laser output	Bounce mirror motor may have shifted during shipping, readjust	✓			
No light output	Check slip ring & brushes for contact Check correct DMX values or mode settings Call service technician	✓			
Relay will not work	Check reset switch Check cable connections				√
Remote does not work	Make sure connector is firmly connected to device	✓	✓		
Stand alone mode	Check user manual for proper stand alone mode settings	✓			

If you still have a problem after trying the above solutions, please contact your local dealer.

6. APPENDIX

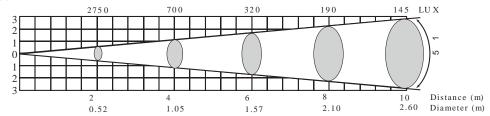
DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

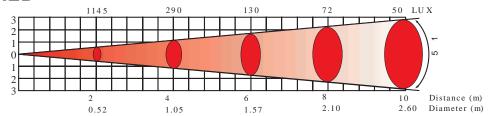
DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+).

Photometrics

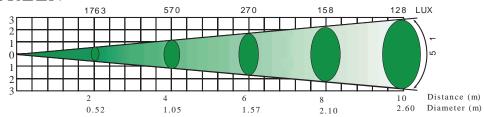
WHITE



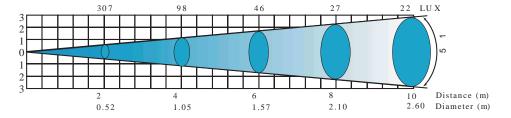
RED



GREEN



BLUE



General Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of internal and external optical lenses and/or mirrors 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 unit'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. Clean the internal optics at least every 30/60 days.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RA #). Products returned without an RA # will be refused. Call and request RA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility.EXPOLITE reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RA #, please include the following information on a piece of paper inside the box:

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) The RA #
- 5) A brief description of the symptoms

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

Technical Specifications

WEIGHT & DIMENSIONS Length	
POWER Operating Voltage Fuse Power Consumption Inrush Power Power Factor Power Output (daisy chain)	
LIGHT SOURCE LEDRefresh rate	
PHOTO OPTIC Illuminance at 1m (with included 15 degree lenses) Illuminance at 1m (with optional 15 degree lenses) Beam Angle (with included 15 degree lenses) Field Angle (with included 15 degree lenses) Beam Angle (with optional 30 degree lenses) Field Angle (with optional 30 degree lenses)	
THERMAL Maximum ambient temperature	104°F (40°C)
INGRESS PROTECTION Rating	IP66
FUSE Internal PCB	20mm Glass 2A 250V Fast Blow
CONTROL & PROGRAMMING Data input Data output Data pin configuration Protocols DMX Channels	locking 3-pin XLR female socket pin 1 shield, pin 2 (-), pin 3 (+)