EXPOLITE

USER MANUAL

Expolite TourLED VC 60

led27100



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Every fixture is fully tested by the manufacturer and properly packed. Before installation and use, make sure that packaging and fixture are in perfect condition. In case of transport damage, contact your dealer and do not operate the fixture.

As part of continuous product development, technical data is subject to change without notice.

01 OVERVIEW

1.1 Introduction

Thank you for purchasing the Expolite TourLED VC 60. Read these instructions carefully before use and operate the fixture strictly according to this manual to avoid damage and accidents caused by improper use.

1.2 Product description

The TourLED VC 60 uses high-power 6-in-1 LEDs: each single LED combines the six colours red, green, blue, amber, lime and cyan (R, G, B, A, L, C). Each colour can be dimmed independently. The built-in programs include dimming, strobe, colour change and cross-fading. The fixture offers a long life span, low power consumption, good colour mixing and high brightness. Control is via the international standard DMX 512 signal.

02 SAFETY INSTRUCTIONS

2.1 Safety instructions

1. Have all repairs carried out by qualified personnel only.
2. Always disconnect the fixture from the power source before setting up, servicing and moving it.
3. Avoid direct eye exposure to the light source while the fixture is on.

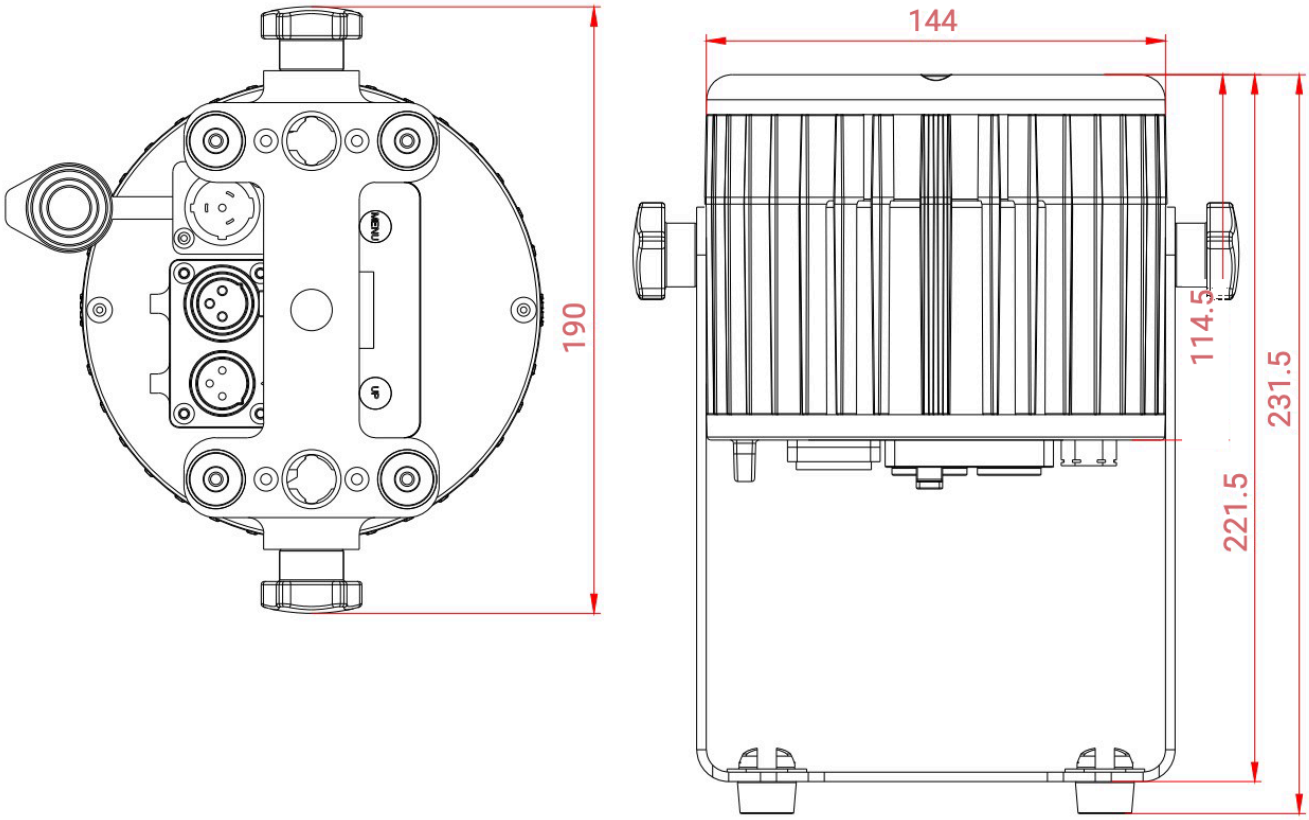
CAUTION

The mounting bracket is intended for hanging the fixture only. Do not use it as a carrying handle. For safety reasons, when hanging the fixture always pass a safety cable rated for 10 times the weight of the fixture through the safety eyelet.

Note: Fixture failures caused by improper handling are excluded from the warranty.

03 DIMENSIONS

3.1 Dimensional drawing



All dimensions in mm.

04 TECHNICAL DATA

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4.1 Technical data

Power supply	
Input voltage	AC 100–240 V, 50/60 Hz
Power consumption	50 W
Light source	
LED type	3 × 20 W 6-in-1 LED — R, G, B, A (amber), L (lime), C (cyan)
Life span	50,000 – 100,000 h
PWM frequency	1,200 / 2,400 / 4,000 / 12,000 / 16,000 / 20,000 Hz
Optics	
Beam angle	15°
Control	
Control signal	DMX512 / RDM
Control modes	Stand-alone, master/slave, DMX, Vision Control app (Bluetooth)
Channel modes	12 CH / 8 CH / 6 CH
Function effects	Dimmer, strobe, gradual change, rainbow, self-programmed running
Protection and cooling	
Temperature control	Built-in — LED output power is reduced automatically on overheating; current output power and temperature can be viewed in the menu
Cooling	Natural convection (fanless)
Ingress protection	IP65
Withstand voltage	1.5 kV
Insulation resistance	> 2 MΩ
Mechanics	
Dimensions	Ø 190 × 144 mm (height incl. mounting bracket: 231.5 mm)
Net weight	2 kg

5.1 DMX channels — channel overview and strobe

6CH	8CH	12CH	Value	Function
–	CH1	CH1	0–255	Master intensity
CH1	CH2	CH2	0–255	Red
CH2	CH3	CH3	0–255	Green
CH3	CH4	CH4	0–255	Blue
CH4	CH5	CH5	0–255	Amber
CH5	CH6	CH6	0–255	Lime
CH6	CH7	CH7	0–255	Cyan
–	CH8	CH8	0–5	No strobe
			6–20	Non-synchronous strobe (slow to fast)
			21–60	Synchronous strobe (slow to fast)
			61–100	Electronic sinewave (slow to fast)
			101–140	Random strobe (slow to fast)
			141–180	Opening pulse (slow to fast)
			181–220	Closing pulse (slow to fast)
			221–255	Electronic squarewave (slow to fast)

Note: Channels 9–12 are only available in 12-channel mode (see following pages).

5.1 DMX channels — channel 9 (12-channel mode only)

12CH	Value	Function
CH9	0–5	No effect
	6–10	Color 1 (calls the custom colour stored in the menu)
	11–15	Color 2
	16–20	Color 3
	21–25	Color 4
	26–30	Color 5
	31–35	Color 6
	36–40	Color 7
	41–45	Color 8
	46–50	Color 9
	51–55	Color 10
	56–60	Auto 1 (jump: R, G, B, RG, RB, GB)
	61–65	Auto 2 (fade in-out: R, G, B, A, L, C)
	66–70	Auto 3 (fade in-out: RG, RB, GB)
	71–75	Auto 4 (fade in-out: RGBL)
	76–80	Auto 5 (cross fade: B, GB, G, GR, R, RB)
	81–110	Reserved
	111–115	Red
	116–120	Green
	121–125	Blue
	126–130	Amber
	131–135	Lime
	136–140	Cyan
	141–145	Yellow
	146–150	Pink
	151–155	Royal Blue
	156–160	Orange
	161–165	Violet
	166–170	Golden
	171–175	2700K

5.1 DMX channels — channel 9 (continued) and channel 10

12CH	Value	Function
CH9	176–180	3200K
	181–185	4000K
	186–190	5500K
	191–195	6500K
	196–200	RGBL
	201–220	Reserved
	221–225	CHASE1
	226–230	CHASE2
	231–235	CHASE3
	236–255	Reserved
CH10	0–255	Auto speed, slow to fast (1–255 BPM)

5.1 DMX channels — channel 11 and channel 12

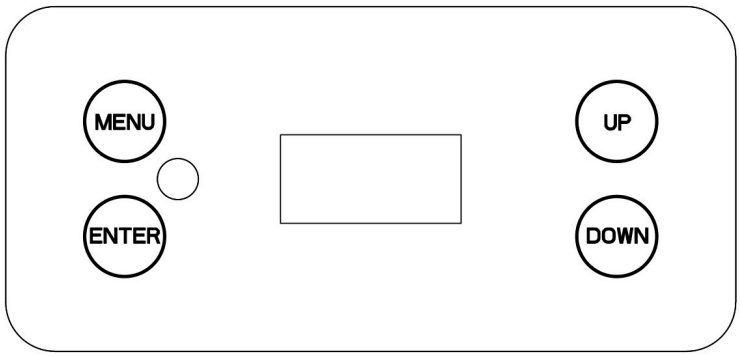
12CH	Value	Function
CH11	0–10	No effect
	11	Blue — blue = full, red + green = 0 (step)
	12–50	Red = 0, green up, blue = full (proportional)
	51	Light blue — red = 0, green = full, blue = full (step)
	52–90	Red = 0, green = full, blue down (proportional)
	91	Green — red = 0, green = full, blue = 0 (step)
	92–130	Red up, green = full, blue = 0 (proportional)
	131	Yellow — red = full, green = full, blue = 0 (step)
	132–170	Red = full, green down, blue = 0 (proportional)
	171	Red — red = full, green = 0, blue = 0 (step)
	172–210	Red = full, green = 0, blue up (proportional)
	211	Magenta — red = full, green = 0, blue = full (step)
	212–250	Red down, green = 0, blue = full (proportional)
	251–255	Blue — red = 0, green = 0, blue = full (step)
CH12	0–10	Uses the dimmer mode set in the menu
	11–20	Linear curve
	21–30	Square law curve
	31–40	Inverse square law curve
	41–50	S-curve
	51–60	Linear curve and smooth
	61–70	Square law curve and smooth
	71–80	Inverse square law curve and smooth
	81–90	S-curve and smooth
	91–255	Uses the dimmer mode set in the menu

06 DISPLAY OPERATION

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6.1 Control panel

Button	Function
MENU	Access the menu or return to the previous menu level
ENTER	Select and confirm the current menu option
UP	Menu selection or parameter increment
DOWN	Menu selection or parameter decrement



Note: When the display stops blinking, a signal is received.

6.2 Menu tree

Menu	Submenu	Values
Address	–	001–512
Static	Red / Green / Blue / Amber / Lime / Cyan / Strobe	0–255
	Presets	None, Red, Green, Blue, Amber, Lime, Cyan, Yellow, Pink, Royal Blue, Orange, Violet, Golden, 2700K, 3200K, 4000K, 5500K, 6500K, RGBL
Set	Input Source	Vision / DMX512 / Automatic
	Vision APP	Unlink / Visibility / Vision info
	Calibrate	Red / Green / Blue / Amber / Lime / Cyan: 0–255 · Use: Yes / No
	Ch.Mode	12CH / 8CH / 6CH
	Curves	Linear / Square / Inv.Sq / S-Curve / Linear(S) / Square(S) / Inv.Sq.(S) / S-Curve(S)
	PWM	1200HZ / 2400HZ / 4000HZ / 12000HZ / 16000HZ / 20000HZ
	Display	On (permanently on) / Off (off after 2 minutes)
	Lock	YES / NO — unlock: UP → DOWN → UP → DOWN → ENTER (keys lock after 2 minutes)
	Rotate / Intensity	Normal / Rotate 180° · Intensity: 0–255
Custom	Color 1 … Color 10	Red / Green / Blue / Amber / Lime / Cyan each: 0–255
Auto	Auto 1 … Auto 5 / Chase 1 … Chase 3	Run
	Auto speed	0–255 (s)
Program	Chase 1 … Chase 3 → Scene 1 … Scene 25	Red / Green / Blue / Amber / Lime / Cyan / Strobe: 0–255 · Auto: None, Auto 1 – Auto 5 · Auto Speed: 0–255 (s) · Time: 0–255 (s) · Wait: 0–25.5 (s) · Use: Yes / No
Info	Software / Power / Temp. / RDM UID / Serial Number / Device Hours / Source hours / Power Cycles	Version · power in % · temperature in °C · RDM identifier (shown on the display) · serial number (shown on the display) · operating hours · LED source hours · power-on cycles
Reset	Settings / Programs / Send	Yes / No

Note: “Vision” refers to wireless control via the Vision Control app. Menu items are always displayed as listed here and are not translated.

6.3 DMX address setting

Press ENTER in the “Address” menu. Select a value from 1–512 with UP/DOWN, then press ENTER to save and exit.

6.4 Static colour setting

Press ENTER in the “Static” menu. Select Red, Green, Blue, Amber, Lime, Cyan or Strobe with UP/DOWN, set a value from 0–255 with UP/DOWN, then press ENTER to save and exit.

6.5 Colour calibration

Press ENTER in the “Calibrate” menu. Select Red, Green, Blue, Amber, Lime or Cyan with UP/DOWN and set a value from 0–255. On the “Use” screen, select Yes (calibration active) or No (calibration inactive), then press ENTER to save and exit.

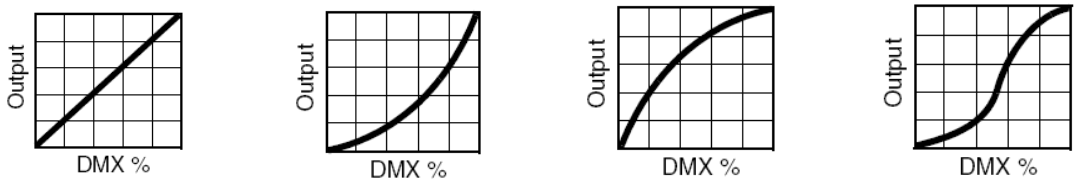
Note: With “Use: Yes”, the actual output value of each colour is scaled proportionally by the calibration value divided by 255.

6.6 Channel mode setting

Press ENTER in the “Ch.Mode” menu. Select 12CH, 8CH or 6CH with UP/DOWN, then press ENTER to save and exit.

6.7 Dimming mode setting

Press ENTER in the “Curves” menu. Select Linear, Square, Inv.Sq, S-Curve, Linear(S), Square(S), Inv.Sq.(S) or S-Curve(S) with UP/DOWN, then press ENTER to save and exit. The “(S)” variants add a slight delay for smooth dimming.



6.8 Auto key lock

Press ENTER in the “Lock” menu. Select Yes or No with UP/DOWN, then press ENTER to save and exit. With “Yes”, the panel locks automatically after 2 minutes to prevent accidental input. To unlock, press UP → DOWN → UP → DOWN → ENTER in sequence.

6.9 Custom colours

Press ENTER in the “Custom” menu. Select a memory slot Color 1 to Color 10 with UP/DOWN, select the parameter Red to Cyan, set the value with UP/DOWN, then press ENTER to save and exit. The memory slots can be called via channel 9 (DMX value 6–55).

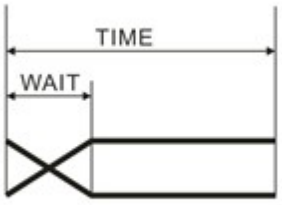
6.10 Running auto and chase programs

Press ENTER in the “Auto” menu. Select Auto 1 to Auto 5, Auto Speed or Chase 1 to Chase 3 with UP/DOWN, then press ENTER to start.

6.11 Editing self-programs

Press ENTER in the “Program” menu. Select Chase 1 to Chase 3 with UP/DOWN and confirm with ENTER. Select Scene 1 to Scene 25 and confirm with ENTER. Then set the parameters Red to Strobe, Auto, Auto Speed, Time, Wait and Use, and press ENTER to save and exit.

Note: If “Use” is set to No or “Time” is 0, the scene is not executed. “Wait” is the FADE time as shown in the following chart.



6.12 Checking fixture information

Press ENTER in the “Info” menu. Available information: “Software” (software version), “Power” (current power reduction in %), “Temp.” (current LED temperature), “RDM UID” (RDM identifier), “Serial Number” (serial number for the Vision Control app), “Device Hours” (fixture operating hours), “Source hours” (LED operating hours), “Power Cycles” (number of power-on cycles).

6.13 Resetting fixture settings

Press ENTER under “Settings” in the “Reset” menu. Select Yes with UP/DOWN and confirm with ENTER.

Note: “Address”, “Custom” and “Program” are not reset; all other settings are reset to their factory values.

6.14 Resetting self-programs

Press ENTER under “Programs” in the “Reset” menu. Select Yes with UP/DOWN and confirm with ENTER.

6.15 Transferring fixture parameters via DMX cable

Press ENTER under “Send” in the “Reset” menu. Select Yes with UP/DOWN and confirm the transfer with ENTER.

Note: Disconnect the fixture from the DMX console before sending parameters. The “Address” setting cannot be transferred. Receiving fixtures restart automatically after receiving the parameters correctly.

07 MASTER/SLAVE OPERATION

7.1 Master/slave operation

In master mode, the fixture sends its control signal to the connected slave fixtures, which run synchronously with the master. To avoid interference between the master signal and the DMX512 signal, disconnect the DMX512 signal from the controller.

Note: If the signal line is longer than 60 m (more than 20 fixtures), use a signal amplifier.

08 XLR CABLING

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8.1 XLR cable

The fixture is equipped with 5-pin XLR connectors (DMX in/out). On a standard XLR cable, one end connects to the male plug and the other to the female plug. Pin configuration: pin 1 = ground, pin 2 = negative signal (DMX−), pin 3 = positive signal (DMX+), pins 4 and 5 = not used.

Note: To avoid signal errors and interference, terminate the DMX line at the last fixture with a 120 Ω (1/4 W) resistor between pin 2 (DMX−) and pin 3 (DMX+).

09 TROUBLESHOOTING

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9.1 Troubleshooting

Problem	Reason and action
The fixture cannot be started normally	– Check that the power connection is correct. – Check the supply voltage. – The power supply is damaged or incorrectly connected — have it repaired by qualified personnel. – The control board is not connected correctly — have it repaired by qualified personnel.
Out of console's control	– Check that the DMX connector and the power connection are connected correctly. A blinking decimal point in the lower right corner of the display (outside the screen saver) indicates that a signal is present. – Check that the DMX address of the fixture is set correctly. – Check the channel mode setting ("Ch.Mode"). – Check whether the DMX line runs close to high-voltage cables — this can damage or interfere with the DMX circuit.
The beam appears dim, brightness declines obviously	– Check under "Power" in the "Info" menu whether the fixture is in over-temperature protection. If so, provide adequate ventilation.

QUESTIONS OR FEEDBACK?

Scan the QR code to get in touch — we’re happy to help!

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