LEDJ

Spectra QX40 Pixel MKII
Exterior Fixture

User Manual

Order code: LEDJ296A

WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- Please note that damages caused by user modifications to this equipment are not subject to warranty.

CAUTION!
TAKE CARE USING
THIS EQUIPMENT!
HIGH VOLTAGE-RISK
OF ELECTRIC SHOCK!!

IMPORTANT:
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power cable come into contact with other cables. Handle the power cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the equipment and do not modify the unit.
- Do not connect this equipment to a dimmer pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available mains supply voltage is between 100~240V AC, 50/60Hz.
- Make sure that the power cable is never crimped or damaged. Check the equipment and the power cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately and have a qualified engineer inspect the equipment before operating again.

- If your product fails to function correctly, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Pro Light dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- This lighting fixture is for professional use only - it is not designed for or suitable for household use. The product must be installed by a qualified technician in accordance with local territory regulations. The safety of the installation is the responsibility of the installer. The fixture presents risks of severe injury or death due to fire hazards, electric shock and falls.
- Warning! Risk Group 2 LED product according to EN 62471. Do not view the light output with optical instruments or any device that may concentrate the beam.
- WARRANTY: One year from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void. Incorrect operation may lead to danger e.g: short-circuit, burns and electric shocks etc.

Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.
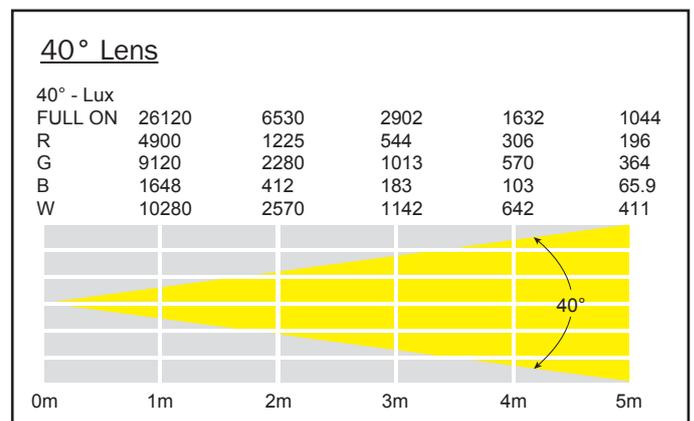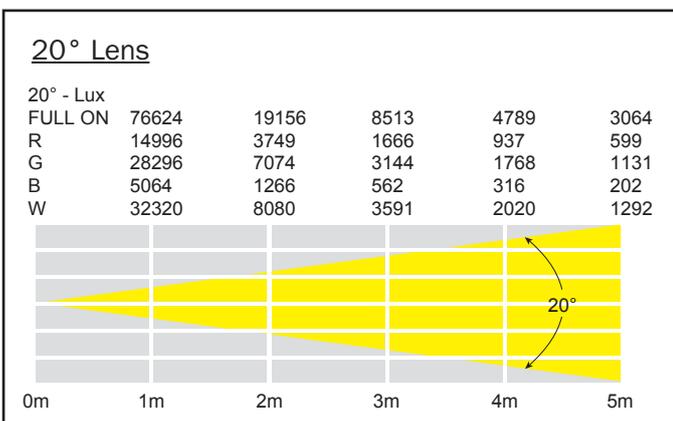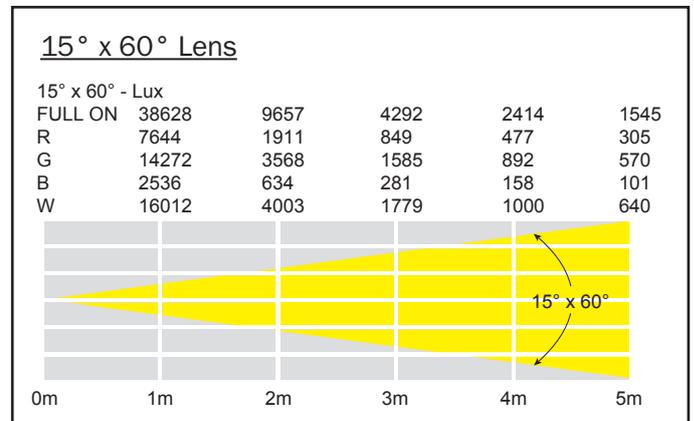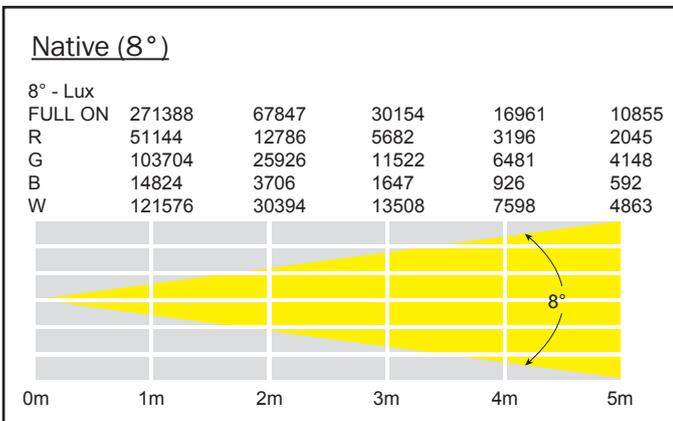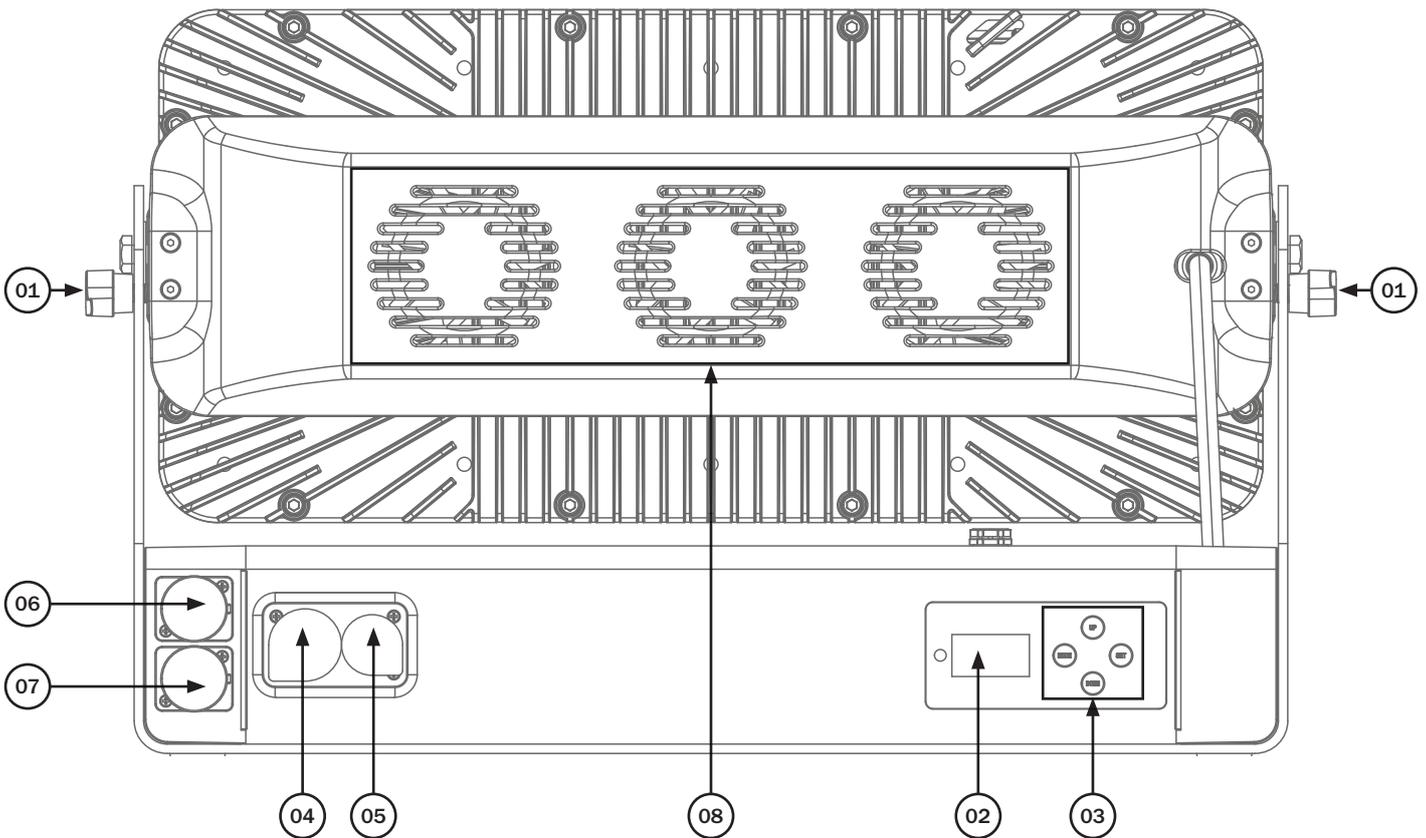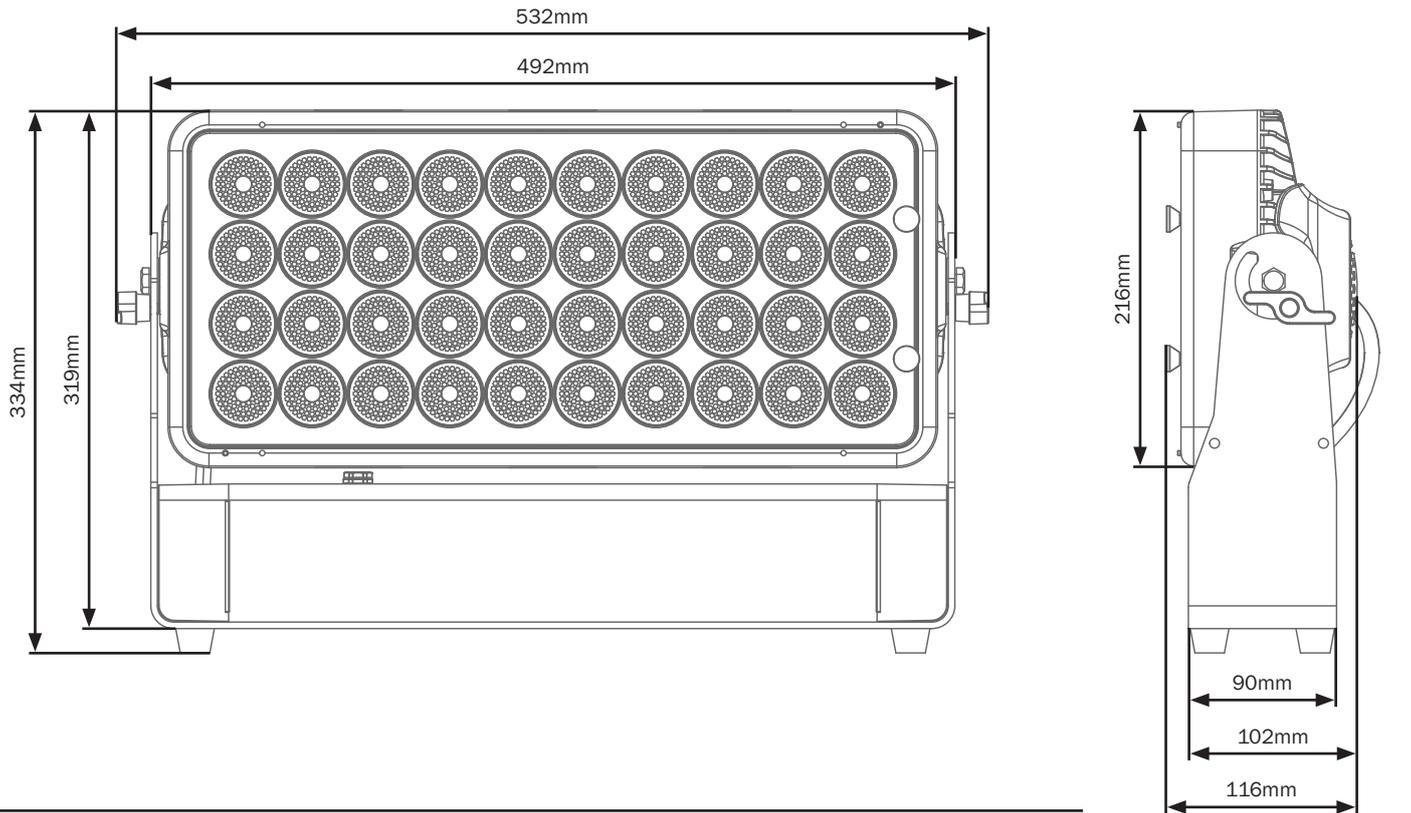
Spectra QX40 Pixel MKII

IP65

Equipped with 40 x 15W RGBW LEDs, the QX40 is suitable for illuminating event spaces, stages or facades, while the zone control allows lighting designers to create stunning effects. The unit utilises quad-colour LED technology to produce a wide colour spectrum from rich, primary colours through to subtle pastel hues. Designed for rental and events, the QX40 features quick release omega brackets, powerCON TRUE1 connectors for power input/output and also features both wired and wireless DMX by W-DMX Sweden. The slim profile of the fixture is ideally suited for loading into road trunks holding multiple units. A range of optional accessories including beam shaping lenses, snoots and barndoors further widen its applications.

- 40 x 15W quad-colour LEDs (RGBW)
- Beam angle: 8°
- 3kHz refresh rate
- Pixel zone mapping
- Wireless DMX control by W-DMX Sweden
- DMX channels: 1/3/4/6/9/20 or 25 selectable
- Static colour, colour change and colour fade modes
- Master/slave mode when cabled

- 0 - 100% dimming and variable strobe
- 4 dimming curves: Linear, square law, inverse square law and S-curve
- Supplied with installation bracket and quick release omega clamps
- 4 button menu with OLED display
- PowerCON TRUE1 input/output
- IP rated 5-Pin XLR input/output trailing connections
- Fan cooled

Specifications	Spectra QX40 Pixel MKII
Power consumption	373W
Power supply	100~240V, 50/60Hz
Dimensions	334 x 532 x 138mm
Weight	11.9kg
Order code	LEDJ296A

Native (8°)

8° - Lux					
FULL ON	271388	67847	30154	16961	10855
R	51144	12786	5682	3196	2045
G	103704	25926	11522	6481	4148
B	14824	3706	1647	926	592
W	121576	30394	13508	7598	4863

0m 1m 2m 3m 4m 5m — 8°

15° x 60° Lens

15° x 60° - Lux					
FULL ON	38628	9657	4292	2414	1545
R	7644	1911	849	477	305
G	14272	3568	1585	892	570
B	2536	634	281	158	101
W	16012	4003	1779	1000	640

0m 1m 2m 3m 4m 5m — 15° x 60°

20° Lens

20° - Lux					
FULL ON	76624	19156	8513	4789	3064
R	14996	3749	1666	937	599
G	28296	7074	3144	1768	1131
B	5064	1266	562	316	202
W	32320	8080	3591	2020	1292

0m 1m 2m 3m 4m 5m — 20°

40° Lens

40° - Lux					
FULL ON	26120	6530	2902	1632	1044
R	4900	1225	544	306	196
G	9120	2280	1013	570	364
B	1648	412	183	103	65.9
W	10280	2570	1142	642	411

0m 1m 2m 3m 4m 5m — 40°

![LEDJ logo]

532mm
492mm
334mm
319mm

216mm

90mm
102mm
116mm
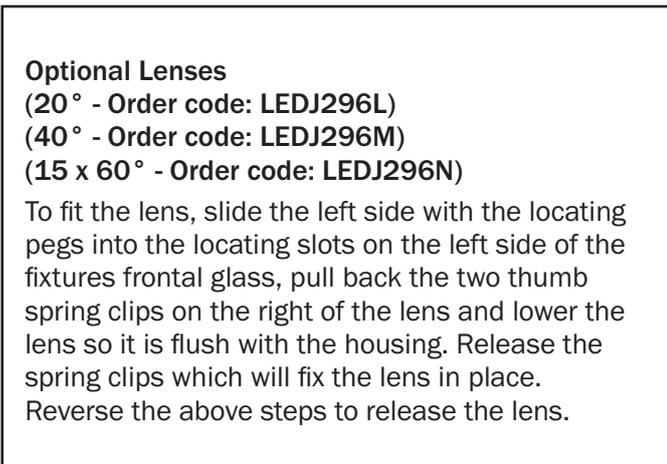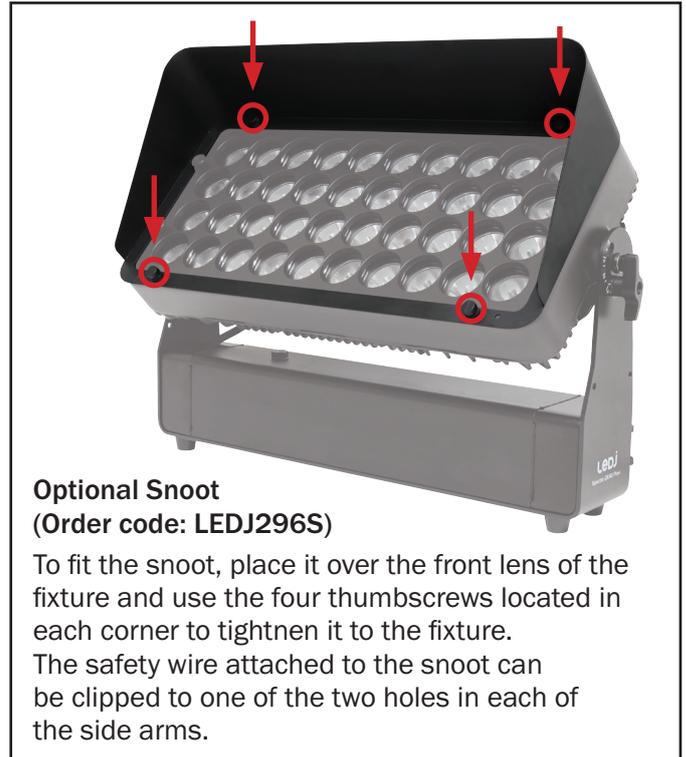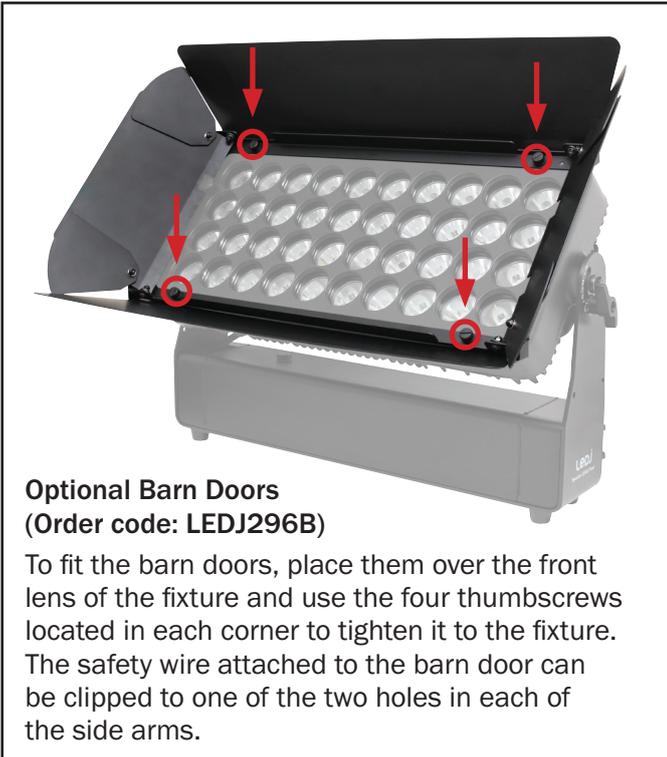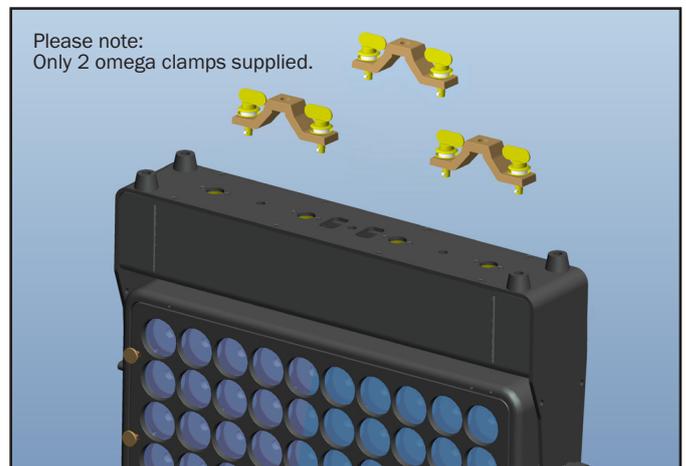
01 - Bracket tightening knobs
02 - OLED display
03 - Function buttons
04 - PowerCON TRUE1 input

05 - PowerCON TRUE1 output
06 - IP rated 5-Pin XLR input
07 - IP rated 5-Pin XLR output
08 - Fans

In the box: **1 x fixture,
2 x omega clamps,
1 x power cable &
1 x user manual**

![LEDJ logo]

**Optional Barn Doors
(Order code: LEDJ296B)**

To fit the barn doors, place them over the front lens of the fixture and use the four thumbscrews located in each corner to tighten it to the fixture. The safety wire attached to the barn door can be clipped to one of the two holes in each of the side arms.

**Optional Snoot
(Order code: LEDJ296S)**

To fit the snoot, place it over the front lens of the fixture and use the four thumbscrews located in each corner to tightnen it to the fixture. The safety wire attached to the snoot can be clipped to one of the two holes in each of the side arms.

**Optional Lenses
(20° - Order code: LEDJ296L)
(40° - Order code: LEDJ296M)
(15 x 60° - Order code: LEDJ296N)**

To fit the lens, slide the left side with the locating pegs into the locating slots on the left side of the fixtures frontal glass, pull back the two thumb spring clips on the right of the lens and lower the lens so it is flush with the housing. Release the spring clips which will fix the lens in place. Reverse the above steps to release the lens.

Underside mounting points:

Please note:
Only 2 omega clamps supplied.

IMPORTANT! PLEASE NOTE: The OLED display for this fixture has a menu locking function where after 30 seconds of inactivity it will lock. To unlock the menu hold the "**MODE**" and "**SET**" buttons for 3 seconds.

Main Menu	Sub Menu	Options/Values		Description
1: Auto		**Yes**		Auto Mode
		No		
2: Program	1) Mode	**01**-15		Built-in Programs
	2) Speed	001-100 (**81**)		
	3) Strobe	**00**-99		
3: DMX	1) Address	**001**-512		DMX Address Setting
	2) Channels	01 (1 channel mode)		DMX Channel Modes
		03 (3 channel mode)		
		04 (4 channel mode)		
		06 (6 channel mode)		
		09 (9 channel mode)		
		20 (20 channel mode)		
		25 (25 channel mode)		
	3) Signal	DMX		Wired/Wireless DMX Setting
		W-DMX		
	4) W-DMX Pair	Yes		W-DMX Pair Setting
		No		
4: Slave		**Yes**		Slave Mode
		No		
5: Dimmer	1) Static Mode	Colour Preset	00-38 (**01**)	Static Colour Mode
	2) All Dimmer	1) All Red	000-**255**	Manual Dimming Mode
		2) All Green	000-**255**	
		3) All Blue	000-**255**	
		4) All White	000-**255**	
	3) Part Dimmer	1) Red 1	000-**255**	Zone Manual Dimming Mode
		2) Green 1	000-**255**	
		3) Blue 1	000-**255**	
		4) White 1	000-**255**	
		5) Red 2	000-**255**	
		6) Green 2	000-**255**	
		7) Blue 2	000-**255**	
		8) White 2	000-**255**	
		9) Red 3	000-**255**	
		10) Green 3	000-**255**	
		11) Blue 3	000-**255**	

Main Menu	Sub Menu	Options/Values		Description
5: Dimmer	3) Part Dimmer	17) White 3	000-**255**	Zone Manual Dimming Mode
		18) Red 4	000-**255**	
		19) Green 4	000-**255**	
		20) Blue 4	000-**255**	
		16) White 4	000-**255**	
		17) Red 5	000-**255**	
		19) Green 5	000-**255**	
		19) Blue 5	000-**255**	
		20) White 5	000-**255**	
6: Setting	1) Curves Select	1) **Linear**		Dimming Curve Setting
		2) Square Law		
		3) Inv Square Law		
		S-Type		
	2) Dimmer Speed	**Fast**		Dimming Speed Setting
		Smooth		
	3) Fan Speed	1) **Auto**		Fan Speed Setting
		2) High		
		3) Slow		
	4) DMX Fail	1) **Blackout**		DMX Fail Setting
		2) Hold		
		3) Auto		
		4) Program		
	5) Dmx Sync	**On**		DMX Synchronisation Setting
		Off		
	6) Lock	**On**		Display Lock Setting
		Off		
	7) Factory	Yes		Reset Factory Defaults
		No		
7: Information		Versions: Temperature: Signal: UID:		Fixture Information

PLEASE NOTE: The DMX Synchronisation setting should be set to on when using the built-in presets via DMX to ensure the fixtures stay synchronised.

Static colour macros:

0	Blackout	10	Lime Green	20	Steel Blue	30	Surprise Pink
1	Red	11	JAS Green	21	Half CT Blue	31	Fuchsia Pink
2	Flame Red	12	Fern Green	22	Full CT Blue	32	Follies Pink
3	Deep Golden Amber	13	Moss Green	23	State Blue	33	Special Rose Pink
4	Millennium Gold	14	Primary Green	24	Double CT Blue	34	Pink
5	Gold Amber	15	Dark Green	25	Medium Blue	35	Moroccan Pink
6	Orange	16	Green	26	Just Blue	36	Warm White
7	Chrome Orange	17	Medium Blue/Green	27	Deep Blue	37	Cold White
8	Deep Amber	18	Light Blue	28	Blue	38	White
9	Spring Yellow	19	Lighter Blue	29	Congo Blue		

W-DMX settings:

To enable W-DMX, press the "**MODE**" button and use the "**UP**" and "**DOWN**" buttons to select "**DMX**.
Press the "**UP**" and "**DOWN**" button and use the "**UP**" and "**DOWN**" buttons to select "**Signal**".
Press the "**SET**" button and use the "**UP**" and "**DOWN**" buttons to select "**W-DMX**".

Press the "**SET**" button to confirm the setting and use the "**DOWN**" button to select "**W-DMX Pair**".
Press the "**SET**" button and use the "**UP**" and "**DOWN**" buttons to select "**Yes**". Press the "**SET**" button to pair the unit with your transmitter. Alternatively you can pair the fixture by holding down the "**MODE**" button until the display shows "**W-DMX Pair**".
The green LED to the left of the display will flash indicating it is searching for a signal.

The green LED will become static once successfully paired.

To disable W-DMX, press the "**MODE**" button and use the "**UP**" and "**DOWN**" buttons to select "**DMX**.
Press the "**UP**" and "**DOWN**" button and use the "**UP**" and "**DOWN**" buttons to select "**Signal**".
Press the "**SET**" button and use the "**UP**" and "**DOWN**" buttons to select "**W-DMX**".

Press the "**SET**" button to confirm the setting and use the "**DOWN**" button to select "**W-DMX Pair**".
Press the "**SET**" button and use the "**UP**" and "**DOWN**" buttons to select "**No**". Press the "**SET**" button to confirm the setting.
The green LED will go off to confirm W-DMX has been disabled.

To exit out of any of the above options, press the "**MENU**" button.

1 channel mode:

Channel	Value	Function
1	000-010	Blackout
	011-016	Red
	017-022	Flame Red
	023-028	Deep Golden Amber
	029-034	Millennium Gold
	035-040	Gold Amber
	041-046	Orange
	047-052	Chrome Orange
	053-058	Deep Amber
	059-064	Spring Yellow
	065-070	Lime Green
	071-076	JAS Green
	077-082	Fern Green
	083-088	Moss Green
	089-094	Primary Green
	095-100	Dark Green
	101-106	Green
	107-112	Medium Blue/Green
	113-118	Light Blue
	119-124	Lighter Blue
	125-130	Steel Blue
	131-136	Half CT Blue
	137-142	Full CT Blue
	143-148	State Blue
	149-154	Double CT Blue
	155-160	Medium Blue
	161-166	Just Blue
	167-172	Deep Blue
	173-178	Blue
	179-184	Congo Blue
	185-190	Surprise Pink
	191-196	Fuchsuia Pink
	197-202	Follies Pink
	203-208	Special Rose Pink
	209-214	Pink
	215-220	Moroccan Pink
	221-226	Warm White
	227-232	Cold White
	233-255	White

3 channel mode:

Channel	Value	Function
1	000-255	Red (0-100%)
2	000-255	Green (0-100%)
3	000-255	Blue (0-100%)

4 channel mode:

Channel	Value	Function
1	000-255	Red (0-100%)
2	000-255	Green (0-100%)
3	000-255	Blue (0-100%)
4	000-255	White (0-100%)

6 channel mode:

Channel	Value	Function
1	000-255	Master dimmer (0-100%)
2	000-255	Red (0-100%)
3	000-255	Green (0-100%)
4	000-255	Blue (0-100%)
5	000-255	White (0-100%)
6	000-010	No function
	011-255	Strobe (slow-fast)

9 channel mode:

Channel	Value	Function
1	000-255	Master dimmer (0-100%)
2	000-255	Red (0-100%)
3	000-255	Green (0-100%)
4	000-255	Blue (0-100%)
5	000-255	White (0-100%)
6	000-010	Blackout
	011-016	Red
	017-022	Flame Red
	023-028	Deep Golden Amber
	029-034	Millennium Gold
	035-040	Gold Amber
	041-046	Orange
	047-052	Chrome Orange
	053-058	Deep Amber
	059-064	Spring Yellow
	065-070	Lime Green
	071-076	JAS Green
	077-082	Fern Green
	083-088	Moss Green
	089-094	Primary Green
	095-100	Dark Green
	101-106	Green
	107-112	Medium Blue/Green
	113-118	Light Blue
	119-124	Lighter Blue
	125-130	Steel Blue
	131-136	Half CT Blue
	137-142	Full CT Blue
	143-148	State Blue
	149-154	Double CT Blue
	155-160	Medium Blue
	161-166	Just Blue
	167-172	Deep Blue
	173-178	Blue
	179-184	Congo Blue
	185-190	Surprise Pink
	191-196	Fuchsia Pink
	197-202	Follies Pink
	203-208	Special Rose Pink

9 channel mode (cont.):

Channel	Value	Function
6 (cont.)	209-214	Pink
	215-220	Moroccan Pink
	221-226	Warm White
	227-232	Cold White
	233-255	White
7	000-015	No function
	016-031	Program 1
	032-047	Program 2
	048-063	Program 3
	064-079	Program 4
	080-095	Program 5
	096-111	Program 6
	112-127	Program 7
	128-143	Program 8
	144-159	Program 9
	160-175	Program 10
	176-191	Program 11
	192-207	Program 12
	208-223	Program 13
	224-239	Program 14
	240-255	Program 15
8	000-255	Program Speed (slow-fast)
9	000-010	No function
	011-255	Strobe (slow-fast)

20 channel mode:

Channel	Value	Function
1	000-255	Red 1 (0-100%)
2	000-255	Green 1 (0-100%)
3	000-255	Blue 1 (0-100%)
4	000-255	White 1 (0-100%)
5	000-255	Red 2 (0-100%)
6	000-255	Green 2 (0-100%)
7	000-255	Blue 2 (0-100%)
8	000-255	White 2 (0-100%)
9	000-255	Red 3 (0-100%)
10	000-255	Green 3 (0-100%)
11	000-255	Blue 3 (0-100%)
12	000-255	White 3 (0-100%)
13	000-255	Red 4 (0-100%)
14	000-255	Green 4 (0-100%)
15	000-255	Blue 4 (0-100%)
16	000-255	White 4 (0-100%)
17	000-255	Red 5 (0-100%)
18	000-255	Green 5 (0-100%)
19	000-255	Blue 5 (0-100%)
20	000-255	White 5 (0-100%)

25 channel mode:

Channel	Value	Function
1	000-255	Master dimmer (0-100%)
2	000-255	Red 1 (0-100%)
3	000-255	Green 1 (0-100%)
4	000-255	Blue 1 (0-100%)
5	000-255	White 1 (0-100%)
6	000-255	Red 2 (0-100%)
7	000-255	Green 2 (0-100%)
8	000-255	Blue 2 (0-100%)
9	000-255	White 2 (0-100%)
10	000-255	Red 3 (0-100%)
11	000-255	Green 3 (0-100%)
12	000-255	Blue 3 (0-100%)
13	000-255	White 3 (0-100%)
14	000-255	Red 4 (0-100%)
15	000-255	Green 4 (0-100%)
16	000-255	Blue 4 (0-100%)
17	000-255	White 4 (0-100%)
18	000-255	Red 5 (0-100%)
19	000-255	Green 5 (0-100%)
20	000-255	Blue 5 (0-100%)
21	000-255	White 5 (0-100%)
22	000-010	Blackout
	011-016	Red
	017-022	Flame Red
	023-028	Deep Golden Amber
	029-034	Millennium Gold
	035-040	Gold Amber
	041-046	Orange
	047-052	Chrome Orange
	053-058	Deep Amber
	059-064	Spring Yellow
	065-070	Lime Green
	071-076	JAS Green
	077-082	Fern Green
	083-088	Moss Green
	089-094	Primary Green
	095-100	Dark Green
	101-106	Green
	107-112	Medium Blue/Green
	113-118	Light Blue

25 channel mode (cont.):

Channel	Value	Function
6 (cont.)	119-124	Lighter Blue
	125-130	Steel Blue
	131-136	Half CT Blue
	137-142	Full CT Blue
	143-148	State Blue
	149-154	Double CT Blue
	155-160	Medium Blue
	161-166	Just Blue
	167-172	Deep Blue
	173-178	Blue
	179-184	Congo Blue
	185-190	Surprise Pink
	191-196	Fuchsuia Pink
	197-202	Follies Pink
	203-208	Special Rose Pink
	209-214	Pink
	215-220	Moroccan Pink
	221-226	Warm White
	227-232	Cold White
	233-255	White
23	000-015	No function
	016-031	Program 1
	032-047	Program 2
	048-063	Program 3
	064-079	Program 4
	080-095	Program 5
	096-111	Program 6
	112-127	Program 7
	128-143	Program 8
	144-159	Program 9
	160-175	Program 10
	176-191	Program 11
	192-207	Program 12
	208-223	Program 13
	224-239	Program 14
	240-255	Program 15
24	000-255	Program Speed (slow-fast)
25	000-010	No function
	011-255	Strobe (slow-fast)

Setting the DMX address:

The DMX mode enables the use of a universal DMX controller. Each fixture requires a "start address" from 1- 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, 105 and 106. Choose a start address so that the channels used do not overlap. E.g. the next unit in the chain starts at 107.

DMX 512:

DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions form the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a data "out" terminal).

DMX linking:

DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

DATA cable (DMX cable) requirements (for DMX operation):

This fixture can be controlled via DMX-512 protocol. The DMX address is set on the back of the unit. Your unit requires either a standard 3-pin or 5-pin XLR connector for data input/output, see images below.

| Further DMX cables can be purchased from all good sound and lighting suppliers or Prolight Concepts dealers.			
Please quote:	3-Pin:	**CABL10 – 2m** **CABL11 – 5m** **CABL12 – 10m**	
	5-Pin:	**CABL185 – 2m** **CABL187 – 5m** **CABL188 – 10m**	

Also remember that DMX cable must be daisy chained and cannot be split.

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Notice:

Be sure to follow the diagrams below when making your own cables. Do not connect the cables shield conductor to the ground lug or allow the shield conductor to come in contact with the XLRs outer casing. Grounding the shield could cause a short circuit and erratic behaviour.

Pin Configuration	
3-Pin	**5-Pin**
Pin 1 - Ground	
Pin 2 - Negative	
Pin 3 - Positive	
–	Pin 4 - N/C
–	Pin 5 - N/C
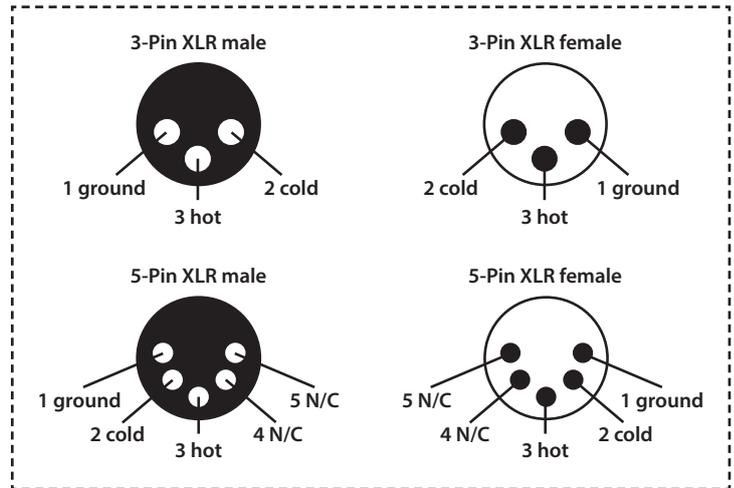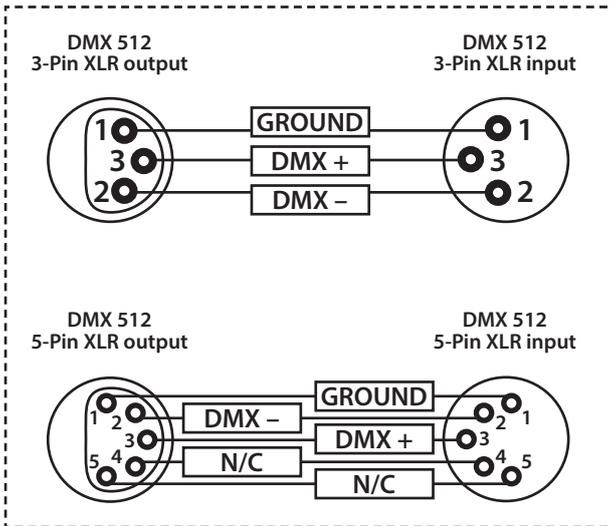
Line termination:

When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.

Using a cable terminator will decrease the possibilities of erratic behaviour. (3-pin - Order ref: CABL90, 5-pin - Order ref: CABL89)

Termination reduces signal transmission problems and interference. It is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.
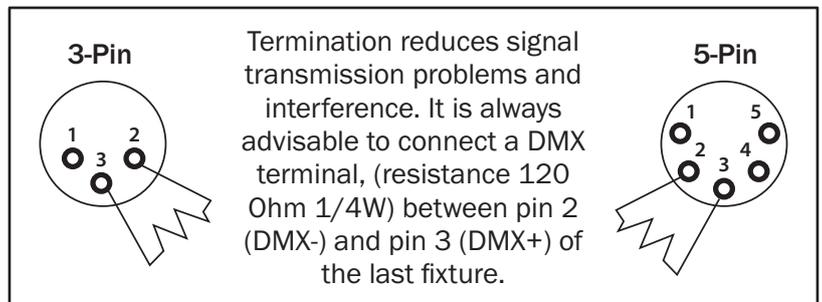

5-pin XLR DMX connectors:

Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The diagram below details the correct cable conversion.
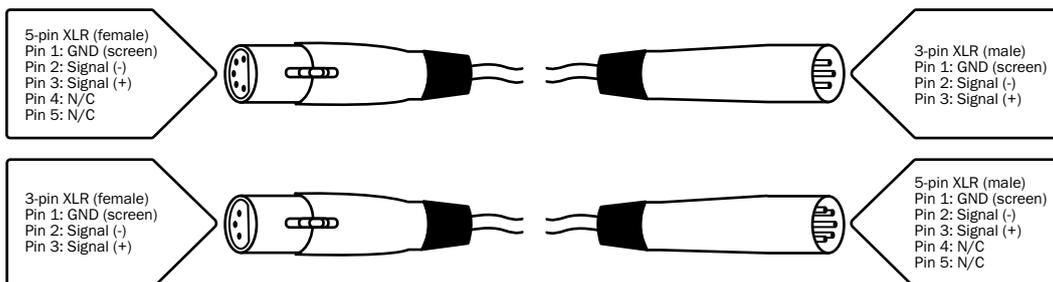
<u>Power linking:</u>

This fixture provides power linking via the power output on the rear allowing multiple units to be connected together. The maximum number of fixtures that can be connected is 6 fixtures @ 240V or 3 fixtures @ 120V (including the first fixture). After the maximum number of fixtures are connected a new power run will need to be started.

Please note: Caution should be used when power linking other fixtures to the Spectra QX40 Pixel MKII as the power consumption of other fixtures will vary. Fixtures fitted with lamps often require 2/3 times more current on startup, these may require their own power source.
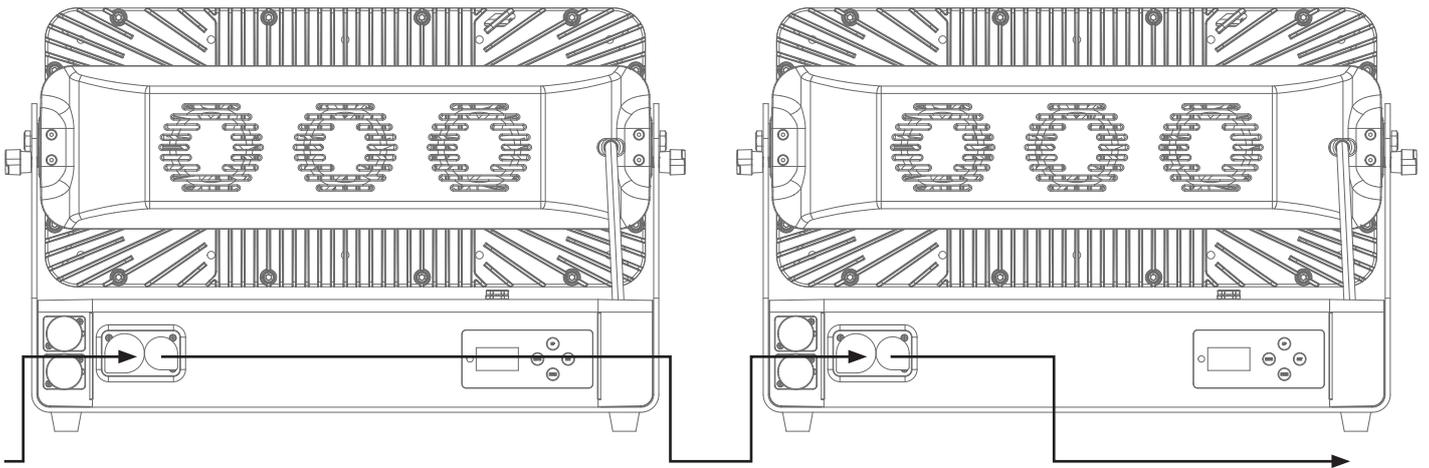
Correct Disposal of this Product
(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.