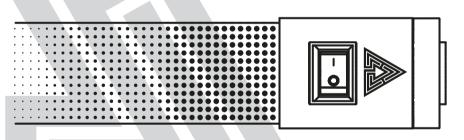
# QUASAR SCIENCE

## Crossfade X

**LED Linear Light** 





Manual

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Original Instructions: English

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Videndum Production Solutions Ltd

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## **Safety Information**

Important information on the safe installation and operation of this product. Read this information before operating the product. For your personal safety, read these instructions. Do not operate the product if you do not understand how to use it safely. Save these instructions for future reference.

#### Warning Symbols Used in these Instructions

Important information on the safe installation and operation of this product. Read this information before operating the product. For your personal safety, read these instructions. Do not operate the product if you do not understand how to use it safely. Save these instructions for future reference.



#### WARNING

Where there is a risk of personal injury or injury to others, comments appear supported by the warning triangle symbol. Where there is a risk of damage to the product, associated equipment, process or surroundings, comments appear supported by the word 'Caution'.



#### **DANGER**

Where there is a risk of electric shock, comments appear supported by the hazardous voltage warning triangle.

#### **Electrical Connection**



#### DANGER

Risk of electric shock. Do not remove cover, no user servicable parts inside the product.



#### **WARNING**

Risk of electric shock. Always check cables for signs of damage. Damaged cables can cause personal injury and/or damage the equipment.



#### **DANGER**

Refer servicing to qualified service personnel.



#### Operation



#### **WARNING**

Special precautions and handling instructions are contained in this user guide and should be strictly adhered to for safe and reliable operation.



#### WARNING

Never use flammable or combustible materials and solvents around lights.



#### CAUTION

The product should not be used outside the operating temperature limits. Refer to the product technical specifi ations for the operating limits for the product.



#### **WARNING**

Protect the product from water, moisture and dust. The presence of electricity near water can be dangerous.



#### CAUTION

Do not directly look into the light, it can cause harm to your eyes.



#### **CAUTION**

Do not look at the LEDs with a magnifying glass or any otheroptical instrument that may concentrate the light output.

#### Maintenance



#### **DANGER**

The fitting of non-approved parts or accessories, or the carrying out of non-approved alterations or servicing can be dangerous and could affect the safety of the product. It may also invalidate the terms and conditions of the product warranty.

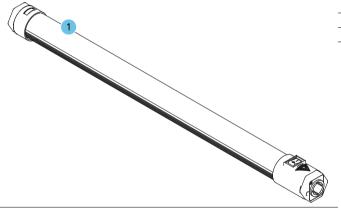


#### **DANGER**

Never attempt to service this light. Refer servicing to qualified service personnel.

## **Overview**

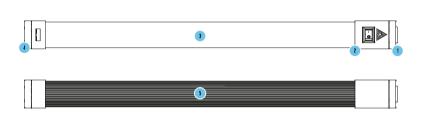
#### WHAT'S IN THE BOX



No.	Description	QTY
1	2', 4' or 8' Crossfade X Light	1
N/A	Q-Boot Shock Absorbers	2
N/A	AC Power Cord	1



#### **CROSSFADE X - OVERVIEW**



1	Power Side
2	Lens Hatch
3	Slim Diffuser
4	Control Side
5	Heat Sink

#### **TECHNICAL SPECIFICATIONS**

- 1. Physical Length, Width Height
  - a. Q15W2060XG, Q25W2060XG, Q50W2060XG, Q75W2060XG, and Q100W2060XG: Width & height = 1.5" 3.81 cm
  - **b.** Q15W2060XG: 1' / 30.5cm pin tip to pin tip
  - $\textbf{c.} \quad \text{Q25W2060XG: 2' / 61cm pin tip to pin tip}$
  - d. Q50W2060XG: 4' / 122cm pin tip to pin tip
  - e. Q75W2060XG: 6' / 183cm pin tip to pin tip
  - f. Q100W2060XG: 8' / 244cm pin tip to pin tip
- 2. Diffusor Length, Width Height
  - **a.** Width = 1.5" 3.81 cm

<sup>\*</sup>Crossfade X - 2' (921-2302) shown as reference

- **b.** Height = 0.75" 1.91 cm
- c. Q15W2060XG length: 9 3/16" / 23.3cm
- d. Q25W2060XG length: 20 5/8" / 52.4cm
- e. Q50W2060XG length: 44 5/8" / 113cm
- f. Q75W2060XG length: 68 5/16' / 174cm
- g. Q100W2060XG length: 92' / 234cm

#### 3. Illuminant technical data

- a. Diode set 1: 2000K, duv = 0.0055 (2/3 to 3/4 Minus Green correction required for neutral CCT)
- **b.** Intermediary CCT: 3000K, duv = -0.007 (1/4 Plus Green correction required for neutral CCT)
- **c.** Diode set 2: 6000K, duv = 0.003

**Crossfade X** 



### **Physical Installation**

Fixture installation configurations and instructions

- 1. The crossfade lamps will fit any typical T12 clips as well as Quasar Science T12-sized Q-Block mounting blocks (QBK).
- 2. Quasar Plates or any other device containing T12 clips or T12 Q-blocks can mount crossfade lamps. 4' or larger lamps may need zip ties to additionally secure them into the blocks.
- 3. To mount T12 lamps in these clips or Q-Blocks, simply insert the lamp into the clips until it is fully secure.

#### **Control**

- CCT control
  - Turn the analog CCT dial to the desired color temperature:



- 1. Color temperatures are shown divided by 100 (2000K/100 = 20, 3000K/100 = 30, etc) for legibility and precision marking on the dial
- 2. Dimming
  - a. The Q-LED crossfade lamps are capable of dimming down while maintaining color temperature.
  - **b.** The Q-LED crossfade lamps are dimmed by an external TRIAC AC source.
  - c. To Dim Q-LED crossfade lamps, plug the installed P1G into:
    - i. AC power wired up to a wall-dimmer switch
    - ii. AC power wired up to a TRIAC dimmer source
- AC power connected to a stand-a-lone TRIAC dimmer plugged into AC-power
- . Dimming Equipment recommendations
  - a. NOTICE The crossfade lamps must be dimmed with TRIAC AC dimming circuits. VARIAC type dimmers will not work.
  - b. Reverse-phase (trailing edge) TRIAC AC dimming circuits will enable lower dim levels with less potential strobing issues.
  - c. CFL/LED TRIAC AC dimming circuits must have a circuit that enables stable low voltage operation.
  - d. The following dimmers work well with crossfade products:
    - i. Lutron CF line of household dimmers
    - ii. ETC Sensor
- · RatPac dimmer products



## Photometric data

Model	Distance (ft)	2000K (FC /Lux)	2800K (FC / Lux)	3000K (FC / Lux)	3200K (FC / Lux)	4400K (FC / Lux)	5600K (FC / Lux)	6000K (FC / Lux)
Q15XG	2 / 0.61	39 / 420	50 / 542	53 / 567	55 / 588	72 / 777	69 / 743	69 / 743
Q15XG	3 / 0.91	17 / 187	22 / 241	23 / 252	24 / 262	32 / 346	31 / 331	31 / 331
Q15XG	4 / 1.22	9.8 / 105	13 / 135	13 / 142	14 / 147	18 / 194	17 / 186	17 / 186
Q15XG	6 / 1.83	4.3 / 47	5.6 / 60	5.9 / 63	6.1 / 65	8 / 86	7.7 / 83	7.7 / 83
Q15XG	8 / 2.44	2.4 / 26	3.1 / 34	3.3 / 35	3.4 / 37	4.5 / 49	4.3 / 46	4.3 / 46
Q15XG	10 / 3.05	1.7 / 19	2.2 / 24	2.3 / 25	2.4 / 26	3.2 / 34	3 / 33	3/33
Q15XG	18 / 5.49	0.51 / 5.5	0.66 / 7.1	0.69 / 7.4	0.71 / 7.7	0.94 / 10	0.9 / 9.7	0.9 / 9.7
Q15XG	25 / 7.62	0.29 / 3.1	0.37 / 4	0.39 / 4.2	0.41 / 4.4	0.54 / 5.8	0.51 / 5.5	0.51 / 5.5
Q25XG	2 / 0.61	85 / 919	110 / 1185	115 / 1240	119 / 1286	158 / 1699	151 / 1626	151 / 1626
Q25XG	3 / 0.91	40 / 432	52 / 557	54 / 583	56 / 605	74 / 799	71 / 765	71 / 765
Q25XG	4 / 1.22	22 / 236	28 / 305	30 / 319	31 / 331	41 / 437	39 / 418	39 / 418
Q25XG	6 / 1.83	9.8 / 105	13 / 136	13 / 142	14 / 147	18 / 194	17 / 186	17 / 186
Q25XG	8 / 2.44	5.6 / 60	7.2 / 78	7.6 / 81	7.9 / 85	10 / 112	9.9 / 107	9.9 / 107
Q25XG	10 / 3.05	3.6 / 39	4.6 / 50	4.9 / 52	5 / 54	6.6 / 72	6.4 / 68	6.4 / 68
Q25XG	18 / 5.49	1.2 / 12	1.5 / 16	1.6 / 17	1.6 / 17	2.1 / 23	2 / 22	2/22
Q25XG	25 / 7.62	0.6 / 6.5	0.77 / 8.3	0.81 / 8.7	0.84 / 9	1.1 / 12	1.1 / 11	1.1 / 11
Q50XG	2 / 0.61	118 / 1273	153 / 1642	160 / 1718	166 / 1782	219 / 2355	209 / 2253	209 / 2253
Q50XG	3 / 0.91	60 / 642	77 / 829	81 / 867	84 / 899	110 / 1188	106 / 1137	106 / 1137
Q50XG	4 / 1.22	37 / 394	47 / 508	49 / 531	51 / 551	68 / 728	65 / 697	65 / 697
Q50XG	6 / 1.83	16 / 175	21 / 226	22 / 237	23 / 245	30 / 324	29 / 310	29 / 310
Q50XG	8 / 2.44	9.8 / 105	13 / 135	13 / 142	14 / 147	18 / 194	17 / 186	17 / 186
Q50XG	10 / 3.05	6.3 / 67	8.1 / 87	8.4 / 91	8.8 / 94	12 / 124	11 / 119	11 / 119
Q50XG	18 / 5.49	1.9 / 21	2.5 / 27	2.6 / 28	2.7 / 29	3.6 / 38	3.4 / 37	3.4 / 37

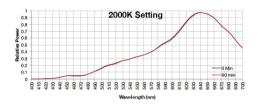
## **Crossfade X**

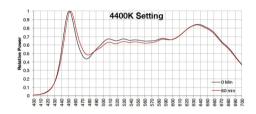
Model	Distance (ft)	2000K (FC /Lux)	2800K (FC / Lux)	3000K (FC / Lux)	3200K (FC / Lux)	4400K (FC / Lux)	5600K (FC / Lux)	6000K (FC / Lux)
Q50XG	25 / 7.62	1.1 / 12	1.4 / 15	1.5 / 16	1.5 / 17	2 / 22	1.9 / 21	1.9 / 21
Q75XG	2 / 0.61	134 / 1444	173 / 1862	181 / 1949	188 / 2021	248 / 2671	237 / 2555	237 / 2555
Q75XG	3 / 0.91	79 / 853	102 / 1100	107 / 1151	111 / 1194	147 / 1577	140 / 1509	140 / 1509
Q75XG	4 / 1.22	51 / 551	66 / 711	69 / 744	72 / 772	95 / 1020	91 / 976	91 / 976
Q75XG	6 / 1.83	27 / 292	35 / 377	37 / 394	38 / 409	50 / 540	48 / 517	48 / 517
Q75XG	8 / 2.44	16 / 171	20 / 220	21 / 230	22 / 239	29 / 316	28 / 302	28 / 302
Q75XG	10 / 3.05	11 / 118	14 / 152	15 / 159	15 / 165	20 / 218	19 / 208	19 / 208
Q75XG	18 / 5.49	3.4 / 36	4.3 / 47	4.6 / 49	4.7 / 51	6.2 / 67	6 / 64	6 / 64
Q75XG	25 / 7.62	1.7 / 18	2.2 / 24	2.3 / 25	2.4 / 26	3.1 / 34	3 / 32	3 / 32
Q100XG	2 / 0.61	134 / 1444	173 / 1862	181 / 1949	188 / 2021	248 / 2671	237 / 2555	237 / 2555
Q100XG	3 / 0.91	87 / 934	112 / 1205	117 / 1261	122 / 1308	161 / 1729	154 / 1654	154 / 1654
Q100XG	4 / 1.22	61 / 656	79 / 846	82 / 886	85 / 919	113 / 1214	108 / 1161	108 / 1161
Q100XG	6 / 1.83	30 / 327	39 / 422	41 / 441	43 / 458	56 / 605	54 / 579	54 / 579
Q100XG	8 / 2.44	20 / 210	25 / 271	26 / 283	27 / 294	36 / 388	35 / 372	35 / 372
Q100XG	10 / 3.05	13 / 143	17 / 184	18 / 193	19 / 200	25 / 264	24 / 253	24 / 253
Q100XG	18 / 5.49	4.1 / 45	5.3 / 58	5.6 / 60	5.8 / 62	7.7 / 82	7.3 / 79	7.3 / 79
Q100XG	25 / 7.62	2.1 / 23	2.7 / 29	2.8 / 31	2.9 / 32	3.9 / 42	3.7 / 40	3.7 / 40

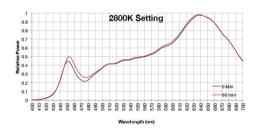


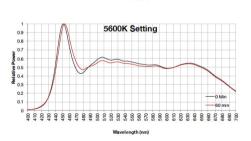
## **Spectral Data & Metrics**

The following illuminant spectral fingerprint data shows the maximum amount of spectral change at steady state temperature vs cold strike temperature.

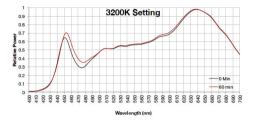


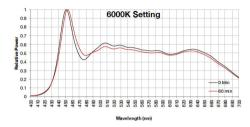






Wavelength (nm)





Crossfade X



## **Troubleshooting T8s and Crossfades**

#### **Light Flickers at Low Levels**

Since Crossfades and T8's are Triac dimmable lights, most Triacs require a certain power draw to function correctly. If you notice your light flickering on dimmers, try grouping them into larger groups of lights, if possible.

Also try using a "ghost load" to increase the power draw on the dimmer. This can be done using a small incandescent light that is connected to the same dimmer as the Crossfade or T8 light. Position the incandescent light away from/above the set.

## Warranty

In order for a product to be covered under Quasar Sciences warranty, the customer must provide proof of purchase. However, please note that this warranty is transferable.

3 Year warranty from date of purchase.

Customer must provide proof of purchase.

This warranty is transferable.

#### Quasar Science will pay for:

The replacement parts, repair and/or labor costs to correct defects in materials and workmanship.

\*Service must be provided by Quasar Science or an Authorized Quasar Science Service Center\*

#### Quasar Science will not pay for:

Damage resulting from accident, misuse or abuse. Acts of God. Any failure that occurs for any other reason than materials and workmanship. Any shipping orhandling costs.

#### Disclaimer of implied warranties / limitations of remedies:

Implied warranties, including the extent applicable warranties of merchantability or fitness for a particular purpose are excluded to the extent legally permissible. Any implied warranties that may be imposed by law are limited to 3 years or the shortest period allowed by law. Some states, provinces or countries do not allow limitations or exclusions on how long an implied warranty of merchantability or fitness lasts, the above limitations or exclusions may not apply to you.

If this product fails to work as warranted, customer's sole and exclusive remedy shall be repair or replacement according to the terms of this limited warranty. Quasar Science does not assume any responsibility for incidental or consequential damages. This warranty gives you specific legal rights and you may also have other rights which vary from state to state, province to province or country to country.



#### **Certificates**

#### **EU DECLARATION OF CONFORMITY**

C€

Videndum Production Solutions Ltd. declares under our sole responsibility, supported by Videndum Production Solutions GmbH - our authorized representative, that the product detailed in this manual conforms with all relevant provisions of the following EU directives:

- · Electromagnetic Compatibility
- Directive 2014/30/EU Low Voltage Directive 2014/35/EU Restriction of Hazardous Substances
- Directive 2011/65/EU

A copy of the declaration is available on request, EU contact: Videndum Production Solutions GmbH, Parkring 29, 85748 Garching, Germany

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## UK

Videndum Production Solutions Ltd. declares under our sole responsibility that the product detailed in this manual conforms with all relevant provisions of the following UK Regulations:

- The Electromagnetic Compatibility Regulations 2016
- . The Electrical Equipment (Safety) Regulations 2016
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

A copy of the declaration is available on request.

UK contact: Videndum Production Solutions Ltd, William Vinten Building, Easlea Road, Bury St. Edmunds, IP32 7BY

#### **FCC COMPLIANCE STATEMENT**



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- . Consult the dealer or an experienced radio/television technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

#### **ENVIRONMENTAL CONSIDERATIONS**



#### European Union Waste of Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC)

This symbol marked on the product or its packaging indicates that this product must not be disposed of with general household waste. In some countries or European Community regions separate collection systems have been set up to handle the recycling of electrical and electronic waste products. By ensuring this product is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health. The recycling of materials helps conserve natural resources. Visit our website for information on how to safely dispose of this product and its packaging.

#### In countries outside the EU:

Dispose of this product at a collection point for the recycling of electrical and electronic equipment according to your local government regulations.

#### Pollution statement

This equipment is designed for operation in Pollution Degree 2 environments.



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