

PROJECT \_\_\_\_\_ FIRM \_\_\_\_\_ ORDER # \_\_\_\_\_ TYPE \_\_\_\_\_ QTY \_\_\_\_\_



Shown with optional glare shield

**Linear XTR H1™** fixtures are precision engineered to deliver long runs of all-weather high-output linear illumination. When powered by standard mains (100 to 277VAC) they can achieve daisy-chained runs of up to 100 feet (30m). However, when supplied by an optional XTR Driver, the maximum length of a single daisy-chained run can be raised to 180 feet (55m).

Available in both 1' and 4' lengths, there are numerous emitter color and power options together with an extensive range of lens choices. Optional glare shields and louvers allow the light output to be further refined to suit the scene.

Control is achieved using the industry standard DMX-512A format, with RDM for configuration. DALI and 0-10V control inputs can also be used when XTR Drivers or optional converters are employed (see page 9).

## At a glance

### Optics

- 10° x 10°
- 10° x 35°
- 10° x 60°
- 25° x 25°
- 30° x 10°
- 30° x 60°
- 40° x 40°
- 60° x 60°
- 60° x 10°
- 60° x 30°
- 90° x 10°
- 60° x 60° 20° tilt

### Emitters

**Fixed White**  
(2700K, 3000K, 3500K or 4000K)

**Dynamic White (DW)**  
(2400K to 5500K)

**RGBW**  
(W=3000K, 4000K or 6000K)

**RGBA**

### Power

100 to 277VAC  
50/60Hz

380VDC  
via XTR Driver

### Temperature

-40° F to 131° F  
-40° C to 55° C

### Protection

Ingress: **IP66**  
Impact: **IK10**  
Vibration: **3G**

### Output

Up to **1,606 lumens**  
per linear foot

### Core technologies

**XTRLink** technology

**SpectrumFour** technology

## Configure your product

**XTH-2 1- N**

Example final code: **XTH-241-DHEN**

**Finish:**  
**1** = Black\* (RAL 9005)  
**2** = White\* (RAL 9003)  
**4** = Aluminum  
**7** = Custom\* (RAL #)

**Length:**  
**A** = 1' (305mm)  
**D** = 4' (1220mm)

**Optics:**  
**C** = 10° x 10°  
**F** = 25° x 25°  
**H** = 40° x 40°  
**I** = 30° x 10°  
**J** = 60° x 10°  
**K** = 60° x 60°  
**L** = 100° x 100°  
**U** = 10° x 35°  
**R** = 10° x 60°  
**Q** = 30° x 60°  
**Y** = 60° x 30°  
**Z** = 90° x 10°  
**T** = 60° x 60° + 20° tilt left  
**X** = 60° x 60° + 20° tilt right

**Emitters:**  
**D** = 2700K\*  
**E** = 3000K  
**F** = 3500K\*  
**G** = 4000K  
**X** = DW (2400K - 5500K)\*  
**Q** = QS (RGBW, W=3000K)  
**R** = QW4 (RGBW, W=4000K)  
**S** = QW6 (RGBW, W=6000K)  
**U** = RGBW, W=3000K  
**V** = RGBW, W=4000K  
**W** = RGBW, W=6000K\*  
**T** = RGBA\*

\* indicates special order items, which may require longer lead times

SCAN FOR PRODUCT PAGE

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## Specifications

<b>Emitters</b>	2700K, 3000K, 3500K, 4000K, DW (2400K-5500K), RGBW (W=3000K, 4000K or 6000K), Quad-color (Spectrum 4) RGBW (W=3000K, 4000K or 6000K) or RGBA
<b>Optics</b>	10° x 10°, 25° x 25°, 40° x 40°, 30° x 10°, 60° x 10°, 60° x 60°, 100° x 100°, 10° x 35°, 10° x 60°, 30° x 60°, 60° x 30°, 90° x 10° or Asymmetric wall wash (60° x 60°, 20° tilt)
<b>Output</b>	Up to 1,606 l/ft (white)
<b>Lumen maintenance</b>	L <sub>70</sub> 150,000 hours (@ 25° C)
<b>Control</b>	0-100% dimming via wired DMX (with RDM configuration). 0-10V and DALI via XTR Driver <i>Single color models will default to 100% (on/off) output if the control input is absent (see page 11).</i>
<b>Maximum fixtures in series</b>	Up to 180' (55m) via XTR Driver 4000 /8000 (See page 11)
<b>Housing lengths</b>	1' (305mm) or 4' (1220mm)
<b>Operating voltage</b>	100-277VAC, 50/60Hz direct or 380VDC via XTR Driver 4000/8000 (200-300VAC input to XTR Driver)
<b>Power consumption</b>	1': 22W 4': 88W
<b>Connection</b>	Composite IP68-rated input and output connectors. All cables are NEC compliant
<b>Mounting</b>	Two built-in ratcheted (tool-free) swivel mount brackets
<b>Material</b>	Aluminum body with PMMA top lens
<b>Finish</b>	Finished aluminum, black (RAL 9005), white (RAL 9003) or custom colors (provide RAL #) Optional marine coating available
<b>Ambient temperature range</b>	-40° F to 131° F (-40° C to 55° C)
<b>Ingress protection</b>	IP66, wet location
<b>Impact protection</b>	IK10, protection against 20 joule impact (40cm distance)
<b>Vibration protection</b>	ANSI C136.31, 3G-rated for high vibration and bridge applications
<b>Warranty</b>	5 years, limited
<b>Weight</b>	1': 2.82 lbs (1.28 kg) 4': 10.2 lbs (4.63 kg)
<b>Dimensions</b>	LxWxH: 12 or 48" x 2.28" x 3.27" (305 or 1220 x 58 x 83mm) - see page 6
<b>Certifications</b>	    

## Photometrics

For all available IES files, please visit [acclaimlighting.com/linear-xtr-h1](http://acclaimlighting.com/linear-xtr-h1)

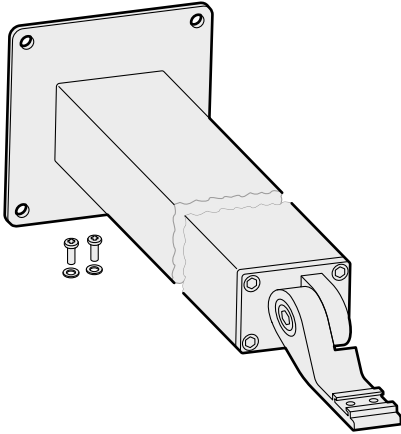
Color or color temperature	Lumens (/ft)	Max Candela	Efficacy (lm/W)	CRI (Ra)	TM30
3000K (1ft, 10° x 60°)	1,430	4,018	65	84.2	85.1
4000K (1ft, 10° x 60°)	1,606	4,528	73	81.6	83.7
RGBW (1ft, 10° x 60°)	704	2,264	32	80.5	83.2
DW (1ft, 10° x 60°)	990	4,056	45	75	77

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## Related components

### Optional mounting accessories

#### Extender bars

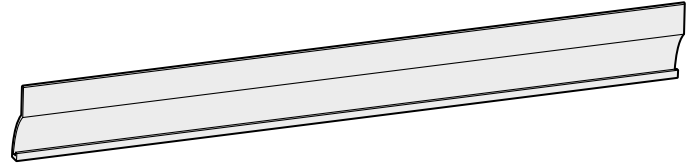


- 6" XTHEB05
- 1' XTHEB1
- 2' XTHEB2
- 3' XTHEB3

Note: 4' models require two extender bars.

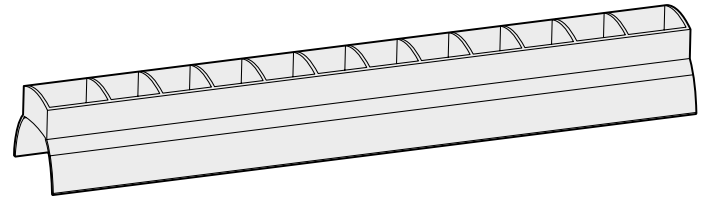
### Optional beam accessories

#### Single-sided glare shields



- 1' XTRH1GS1
- 4' XTRH1GS4

#### Full louvers



- 1' XTRH1LV1
- 4' XTRH1LV4



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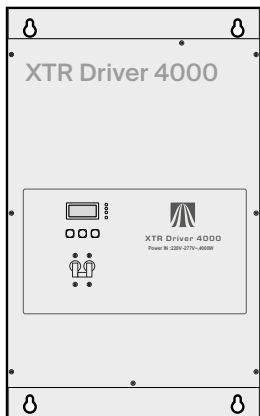
## Related components

### XTR Drivers (optional for extended run lengths)

- Power input: 200 to 300VAC
- Control input: DMX/RDM, 0-10V sink or DALI

#### XTR Driver 4000

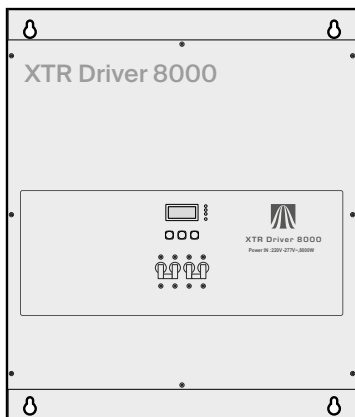
- Up to 4000W power consumption
- Maximum of 1x 180' Linear XTR H1 run\*



Part # **XTR Driver 4000**

#### XTR Driver 8000

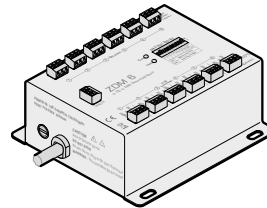
- Up to 8000W power consumption
- Maximum of 2x 180' Linear XTR H1 runs\*



Part # **XTR Driver 8000**

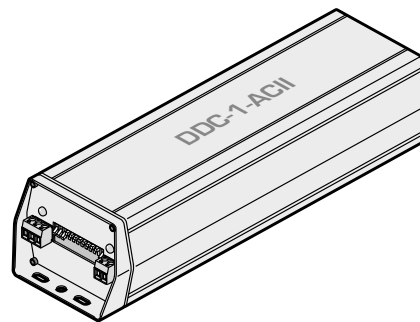
\*All fixtures controlled within a single DMX universe

### Signal protocol converters (see page 9)



0-10V multiple channel converter

**ZDM 6**



DALI multiple channel converter

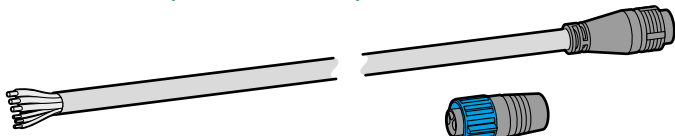
**DDC 1AC**



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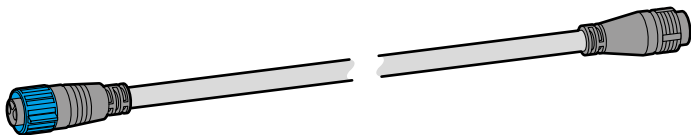
## Related components

### Feed cables (inc terminator)



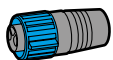
- 10' (3m) **XTRFC10**
- 50' (15m) **XTRFC50**
- 100' (30m) **XTRFC100**

### Link cables



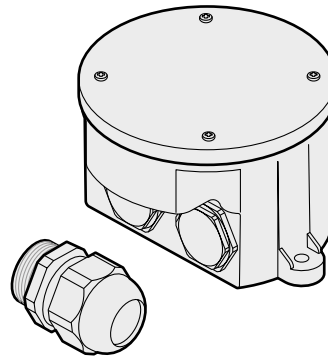
- 6" (15cm) **XTRLC0.5**
- 1' (30cm) **XTRLC1**
- 5' (1.5m) **XTRLC5**
- 10' (3m) **XTRLC10**
- 50' (15m) **XTRLC50**
- 100' (30m) **XTRLC100**

### Terminator (end cap)



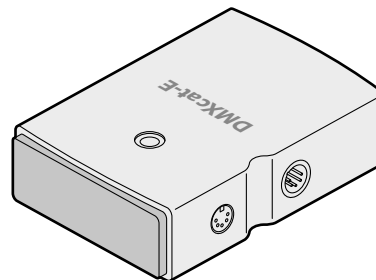
Terminator **XTRECT**

### IP66 junction box (plus outlet cable gland)



Part # **AJBOX1**  
 IP66 NEC compliant high+low voltage junction box  
 1/2" conduit inputs for AC + DMX, 3/4" conduit for XTRFC#  
 Built-in AC surge protection up to 10kV & 10kA  
 Suitable for 120-277VAC runs. Not certified for use with XTR Drivers

### Test and configuration tool kit



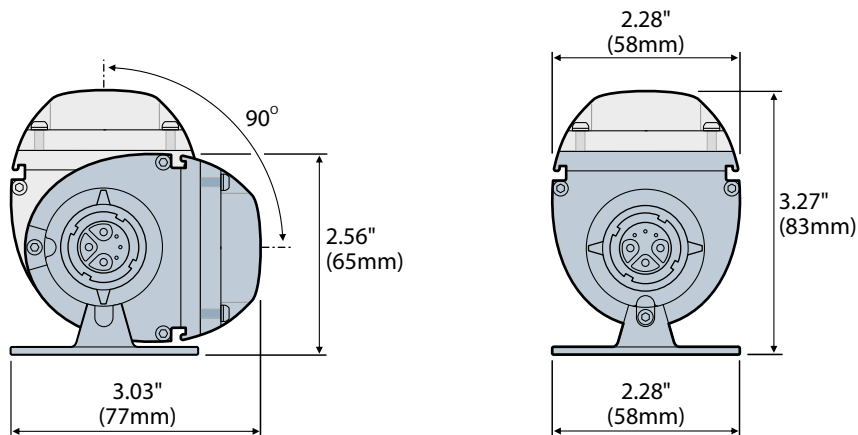
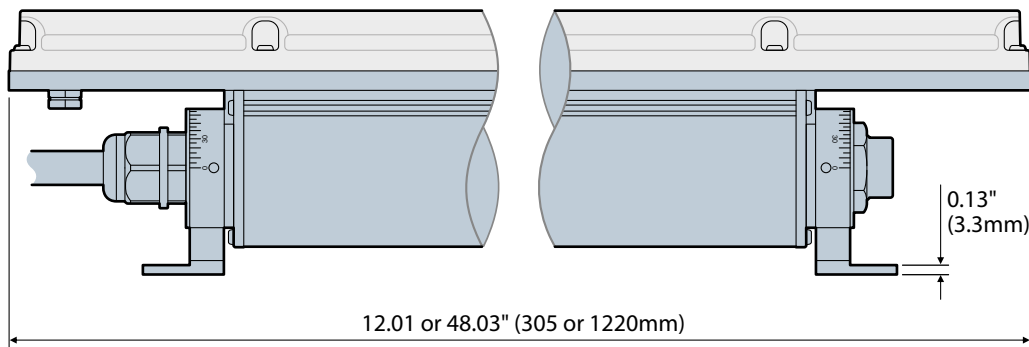
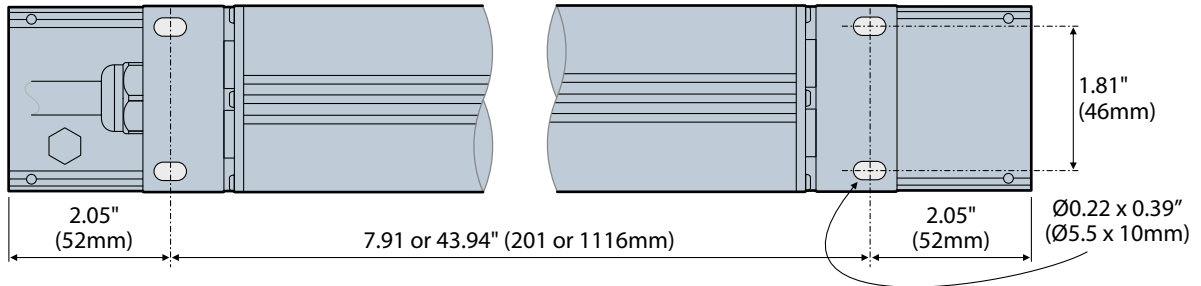
DMX/RDM, ArtNet, sACN, SMPTE LTC and Midi test/configuration tool

**DMXcat-E**

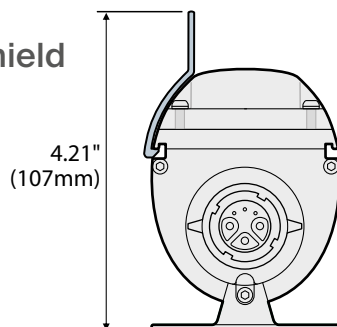


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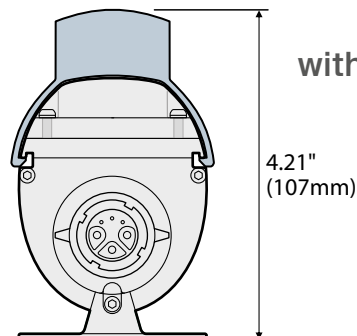
## Dimensions



with optional glare shield



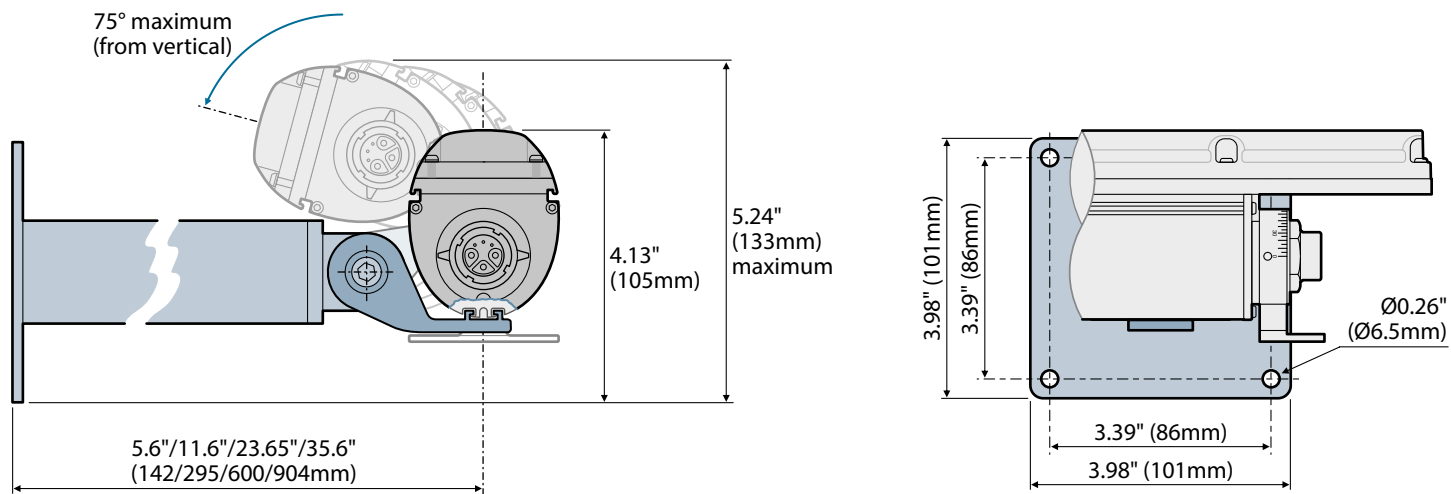
with optional louver



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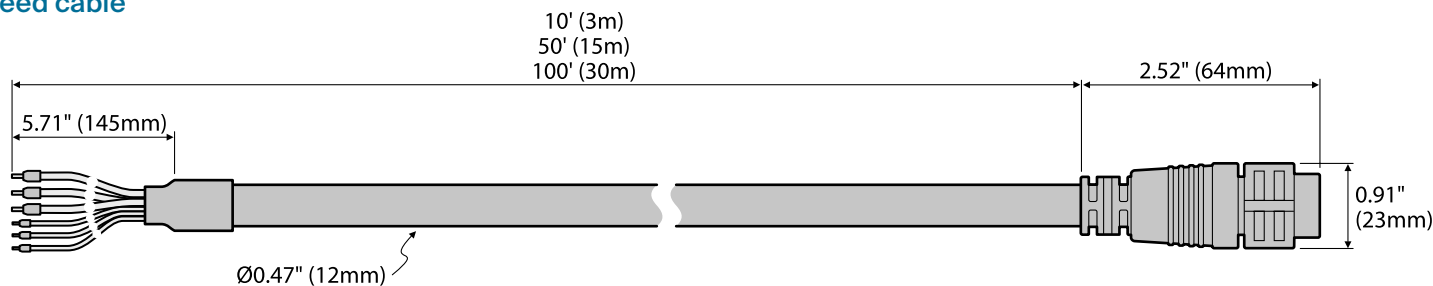
## Dimensions

### Optional extender bars

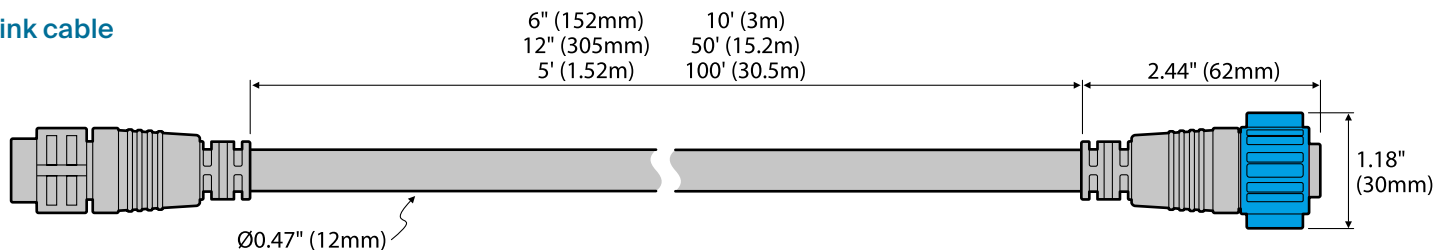


## Cables

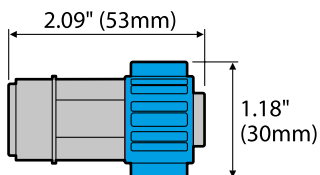
### Feed cable



### Link cable



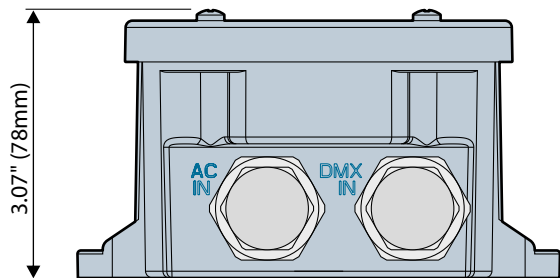
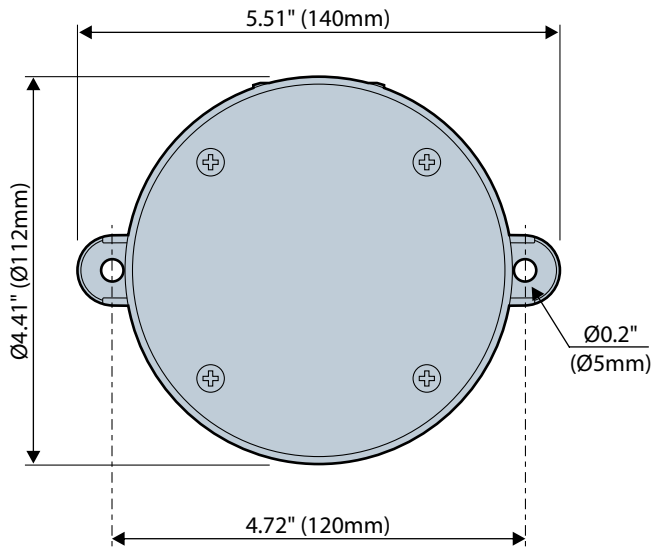
### Terminator (end cap)



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## Dimensions

### AJBOX1



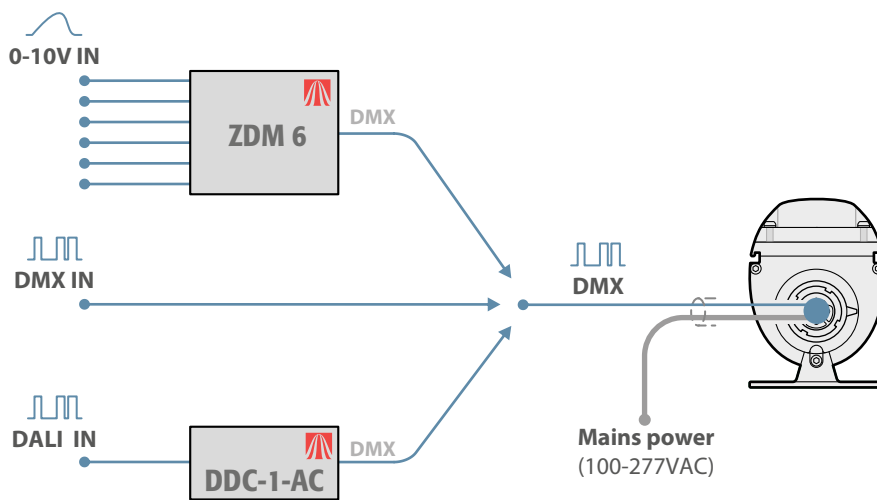
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## Alternative control inputs

Linear XTR H1 fixtures use DMX as their native control method, however, it is possible to use other common control protocols when required, such as 0-10V (source or sink) or DALI.

### Control inputs via converters

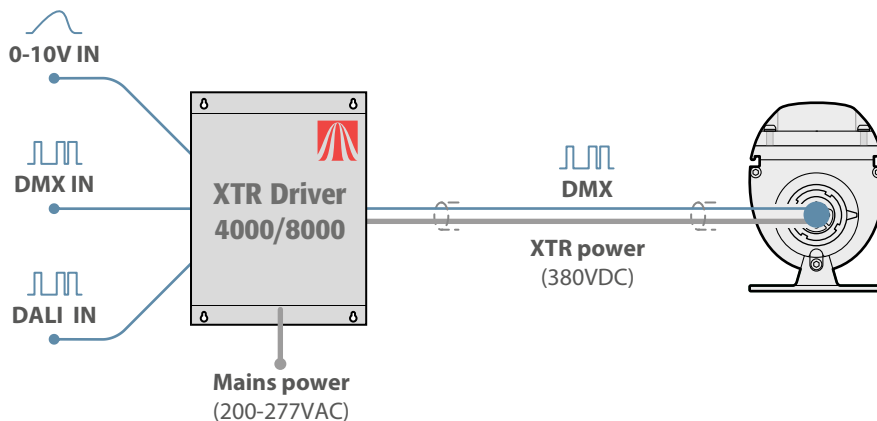
- DMX - connect a DMX input directly to the feed cable.
- 0-10V - use an Acclaim Lighting ZDM 6 to convert one or more analog control feeds into a combined DMX feed.
- DALI - use an Acclaim Lighting DDC-1-AC to convert one or more DALI channels into a combined DMX feed.



When using Acclaim Lighting ZDM 6 or DDC-1-AC modules it is possible to convert multiple inputs into separate DMX channels within a consolidated feed - thus allowing multiple Linear XTR H1 fixtures to be uniquely addressed. The ZDM 6 can convert up to six 0-10V inputs into DMX channels, whereas the DDC-1-AC can convert a maximum of 64 DALI channels (although large numbers of channels are not recommended due to the timing limitations of the DALI standard).

### Control inputs via an XTR Driver

The XTR Driver 4000 and 8000 units can accept DMX, 0-10V or DALI control inputs directly. The latter two methods are converted within the driver before being transmitted as DMX within the consolidated output, together with the high voltage XTR power.



When using an XTR Driver, the internal conversion supports either a single 0-10V feed or a single 'broadcast' DALI channel - meaning that all Linear XTR H1 fixtures will use the same single control address. To benefit from multiple channels, use a ZDM 6 or DDC-1-AC to externally convert signals (see above).



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## Unique addressing under DMX control

### 1' (305mm) Linear XTR H1

Emitter options	DMX channels used	Total channels per fixture	Maximum unique fixtures
	▶ <b>Cell 1</b>		
W	1	<b>1</b>	<b>512</b>
DW	2	<b>2</b>	<b>256</b>
RGBW/A	4	<b>4</b>	<b>128</b>

The maximum number of fixtures that can be uniquely addressed in a run is determined by the length, emitter type and operation mode of each linear fixture, as summarized in the tables shown here.

### 4' (1220mm) Linear XTR H1 (operating in '1 Group' mode)

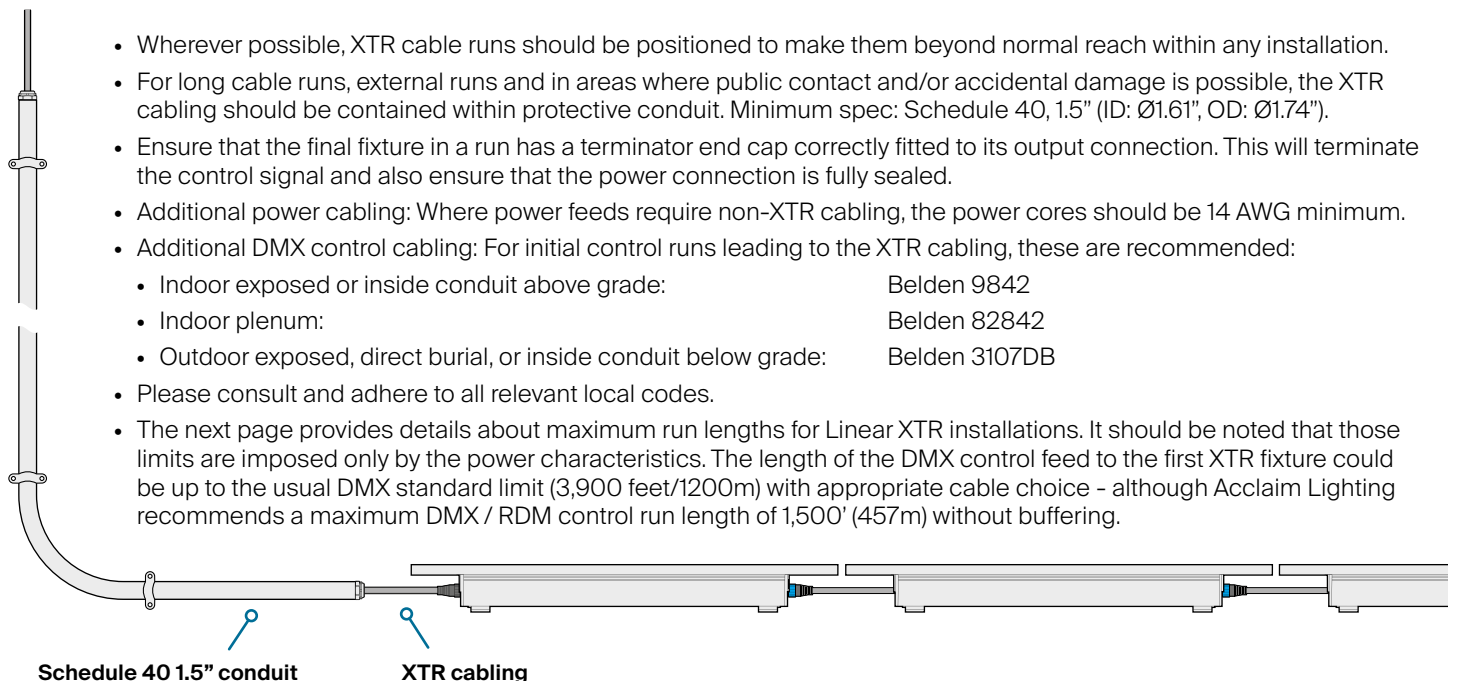
Emitter options	DMX channels used	Total channels per fixture	Maximum unique fixtures
	▶ <b>All cells combined</b>		
W	1	<b>1</b>	<b>512</b>
DW	2	<b>2</b>	<b>256</b>
RGBW/A	4	<b>4</b>	<b>128</b>

Additionally, any number of fixtures in a run can be configured to use duplicate control addresses, as required.

### 4' (1220mm) Linear XTR H1 (operating in '4 Group' mode)

Emitter options	DMX channels used				Total channels per fixture	Maximum unique fixtures
	▶ <b>Cell 1</b>	<b>Cell 2</b>	<b>Cell 3</b>	<b>Cell 4</b>		
W	1	1	1	1	<b>4</b>	<b>128</b>
DW	2	2	2	2	<b>8</b>	<b>64</b>
RGBW/A	4	4	4	4	<b>16</b>	<b>32</b>

## Important cabling considerations



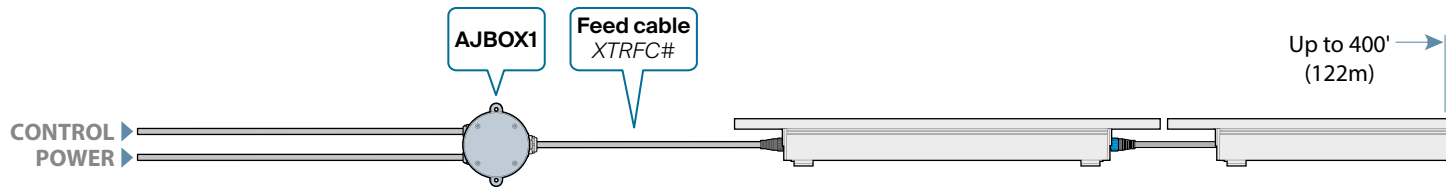
- Wherever possible, XTR cable runs should be positioned to make them beyond normal reach within any installation.
- For long cable runs, external runs and in areas where public contact and/or accidental damage is possible, the XTR cabling should be contained within protective conduit. Minimum spec: Schedule 40, 1.5" (ID: Ø1.61", OD: Ø1.74").
- Ensure that the final fixture in a run has a terminator end cap correctly fitted to its output connection. This will terminate the control signal and also ensure that the power connection is fully sealed.
- Additional power cabling: Where power feeds require non-XTR cabling, the power cores should be 14 AWG minimum.
- Additional DMX control cabling: For initial control runs leading to the XTR cabling, these are recommended:
  - Indoor exposed or inside conduit above grade: Belden 9842
  - Indoor plenum: Belden 82842
  - Outdoor exposed, direct burial, or inside conduit below grade: Belden 3107DB
- Please consult and adhere to all relevant local codes.
- The next page provides details about maximum run lengths for Linear XTR installations. It should be noted that those limits are imposed only by the power characteristics. The length of the DMX control feed to the first XTR fixture could be up to the usual DMX standard limit (3,900 feet/1200m) with appropriate cable choice - although Acclaim Lighting recommends a maximum DMX / RDM control run length of 1,500' (457m) without buffering.

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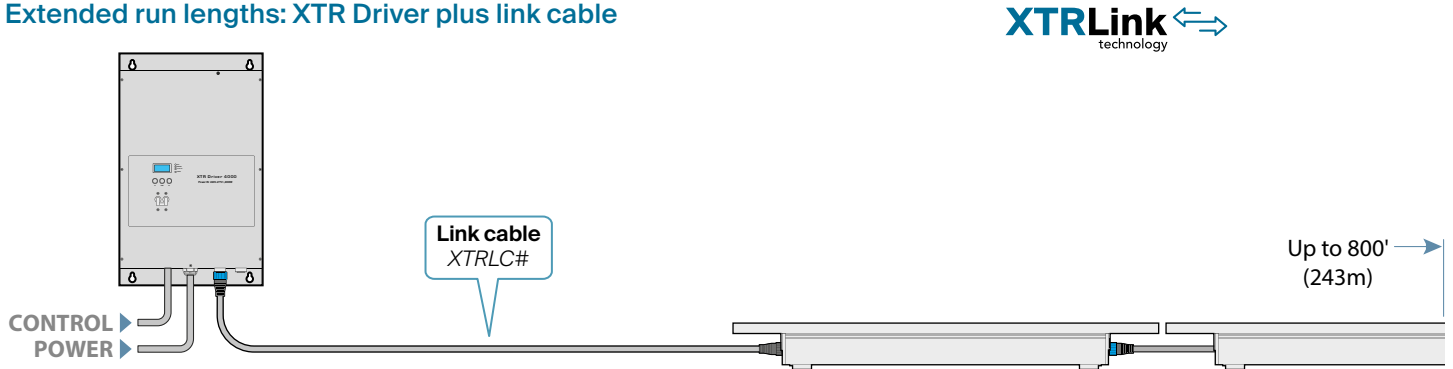
## Run lengths

Linear XTR H1 fixtures can be fed directly from a suitably protected mains supply (100 to 277VAC 50/60Hz) to provide standard run lengths up to 400' (122m). Alternatively, an Acclaim Lighting XTR Driver can create an increased supply voltage to allow continuous runs up to 700' (213m). *Note: Linear XTR H1 fixtures can use either power method without any reconfiguration; voltage levels are automatically detected.*

### Standard run lengths: Mains input plus AJBOX1 and feed cable



### Extended run lengths: XTR Driver plus link cable



### Maximum length of fixtures in a single run

*(all fixtures controlled within a single DMX universe)*

Power draw	100/120VAC supply	230/277VAC supply	XTR Driver 4000	XTR Driver 8000
22W per foot	50' (15m)	100' (30m)	180' (55m)	2x 180' (55m)

### Maximum overall length of a single run (fixtures + all cabling)

*(all fixtures controlled within a single DMX universe)*

100/120VAC supply	230/277VAC supply	XTR Driver 4000	XTR Driver 8000
200' (61m)	400' (122m)	800' (243m)	2x 800' (243m)

## Behaviors if the control signal is lost or not applied

If the DMX control signal is not present while power is applied, the fixtures will respond in the following ways:

- Single color versions - when DMX is lost (or not used), each fixture will go to full output until the control signal is restored. If power is cycled while the control signal is absent, each fixture will remain at full until the signal is restored. If 100% output is required at all times during normal operation, this feature allows the fixtures to be fed with power only, without need for a control input.
- Dynamic white, RGBW and RGBA versions - when DMX is lost, each fixture will hold the last received values until the control signal is restored. If power is cycled while the control signal is absent, each fixture will retain the last received values until the signal is restored.

For full installation details, please refer to the **user guide**, available for free download here: