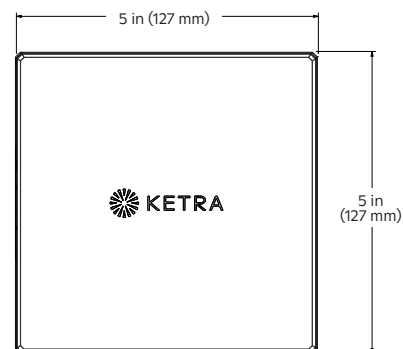# X96 Ketra Controller

PRODUCT DESCRIPTION

The X96 is a beautifully designed Ketra controller used to power and control the Ketra LS0 Lightbar Slim linear. It is a 96 W class 2 driver with wireless capability that allows for easy installation in multiple, convenient locations.

PRODUCT DESCRIPTION

- Used with Ketra's LS0 Lightbar Slim

- 96 W Class 2 power supply

- Clear Connect-Type X wireless communication for easy installation

- Mounts to standard 4 in x 4 in (101 mm x 101 mm) junction box

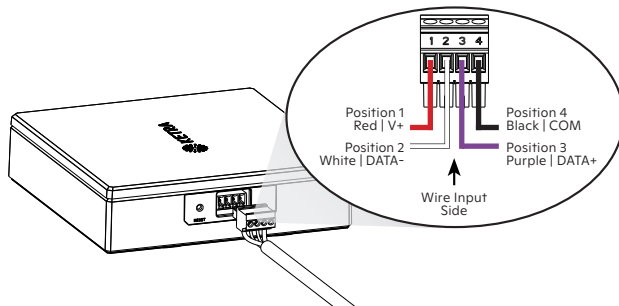- Compatible in HomeWorks 21.6 or greater (HomeWorks QSX) and Athena systems

5 in (127 mm)

5 in (127 mm)

SPECIFICATIONS[1]

Performance

Input Voltage	120/277 V∼ 60 Hz
Input Current	0.92 A @ 120 V∼ 0.40 A @ 277 V∼
Input Power	110 W Max.
Output	17-21 V⎓ 4.6 A, 96 W (max) Class 2
Power Factor	>0.9
Thermal Dissipation	41 BTU/hr with full 96 W load
LS0 Linear	Uniform Lens 250 lm/ft — Max. fixture length 15 ft (4.9 m) Long Run 200 lm/ft — Max. fixture length 24 ft (7.3 m) High Output 350 lm/ft — Max. fixture length 15 ft (4.9 m) Mixed Lens Types[2] — Max. fixture length 15 ft (4.9 m)
Total Run Length	Max. cable length + max. fixture length
Max. number of LS0 linear	8 fixture segments (per X96 power feed regardless of length)
Wireless Communication[1]	Clear Connect-Type X.
Emergency Lighting	These models have been evaluated for use with LVS model LUT-SHUNT-A-TD in an emergency lighting system in accordance with the standards referenced in the test record

Dimensions

Length	5.0 in (127 mm)
Width	5.0 in (127 mm)
Height	1.3 in (33 mm)
Weight	1.0 lb (0.45 kg)

CONNECTIONS

Position 1
Red | V+

Position 2
White | DATA-

Position 4
Black | COM

Position 3
Purple | DATA+

Wire Input Side

Environmental

Operating Temperature	0-40 ˚C (32 to 104 ˚F)
Storage Temperature	-20-80 ˚C (-4 to 176 ˚F)
Humidity	0-95%, Non-condensing
Location	UL Damp Location; not for use outdoors
Certification	UL, cUL, NOM, IFT, FCC Class A 277 V∼, FCC Class B 120 V∼

Accessories

QS 4-conductor cable	QSH-CBLP-M-500, QSH-CBL-M-500 Max. cable length 50 ft (15.24 m) with 16 AWG (1.5 mm²) power conductors
LS0 Wire Adapter Pair	UN-LS0-ADPT-1

QSH-CBL-M-500 CABLE

16 AWG (1.0 mm²) (black)
16 AWG (1.0 mm²)
22 AWG (0.25 mm²)
22 AWG (0.25 mm²)
TWP
22 AWG (0.25 mm²) Drain
0.26 in (6.6 mm)

- Four conductors:
  - Common – 16 AWG (1.5 mm²)
  - Power – 16 AWG (1.5 mm²)
  - MUX Data – 22 AWG (0.50 mm²)
  - $\overline{\text{MUX}}$ Data – 22 AWG (0.50 mm²)
- Total outer jacket diameter: 0.26 in (6.6 mm)
- Another 4 cable conductor with similar specification can be used
- For complete cable specifications, see P/N 369597 at www.lutron.com
- For plenum applications, QSH-CBLP-M-500 can be used (see P/N 369596 at www.lutron.com). Due to decreased wire gauge of the power conductors in this cable, total maximum cable length is 30 ft (9.14 m)

Important Note: The X96 and the N3 satellite are not interchangeable. The N3 satellite cannot be used with an LS0 linear and an X96 cannot be used with G2, L3I or L4R linears.
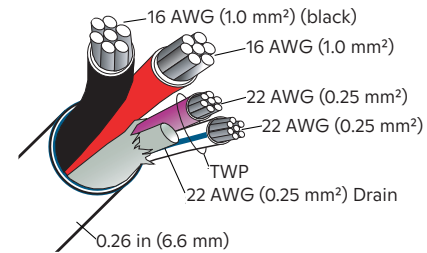
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[1] Product includes on-board wireless radio for communications. Do not enclose in a metallic enclosure as it may impact radio performance.
[2] High Output and Long Run configured segments should not be mixed with Uniform Lens segments on the same run.

ORDERING GUIDE

Please download this PDF to use the interactive drop down features of the ordering guide.

_____	**X96-** _____	**X-** _____	**J2** _____
Product Line	Model	System	Enclosure and Region

Order code: _____

Product Line	Code	System	Code	Enclosure and Region	Code
Commercial (Athena compatible)	**CM-**	Clear Connect-Type X (CCX)	**X-**	Junction Box North American (120/277 V∼ 60 Hz)	**J2**[1]
Residential (HomeWorks compatible)	**HW-**				

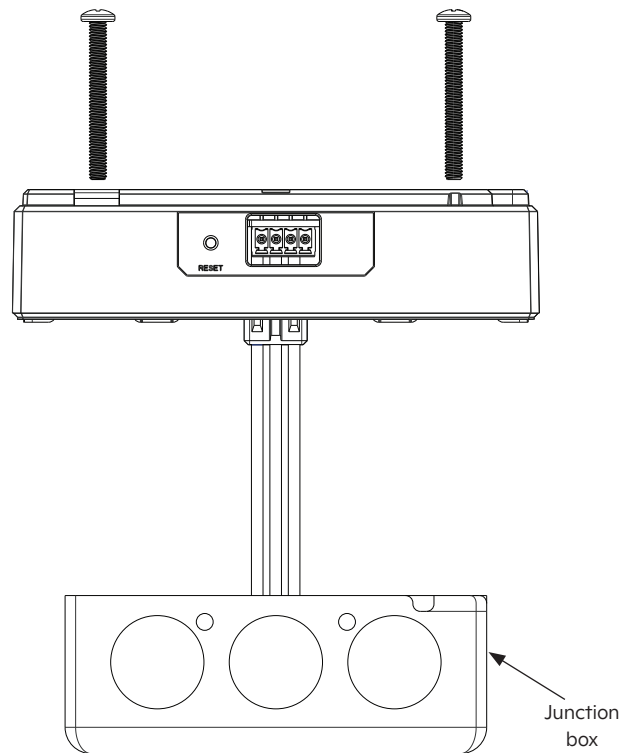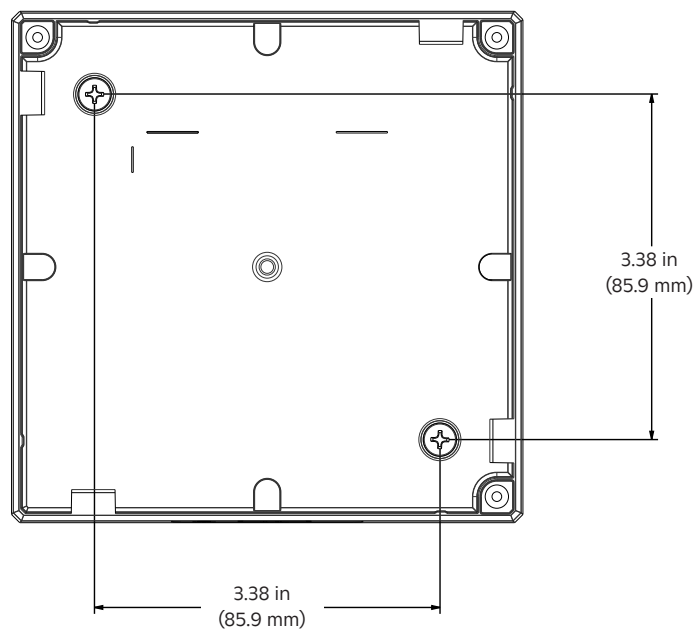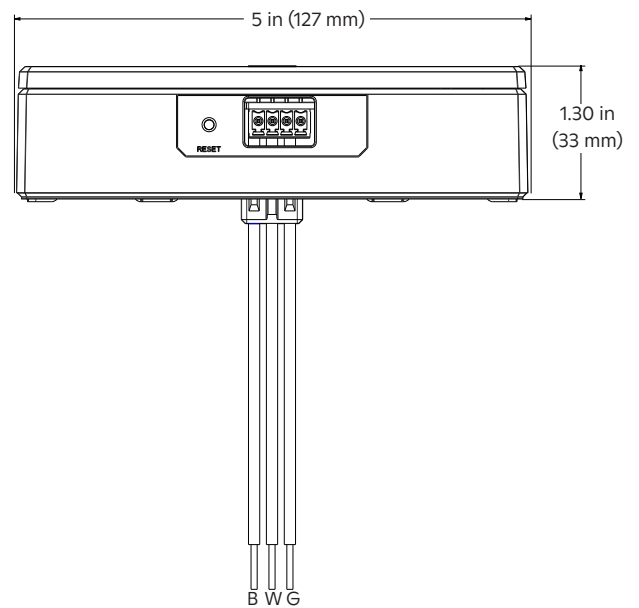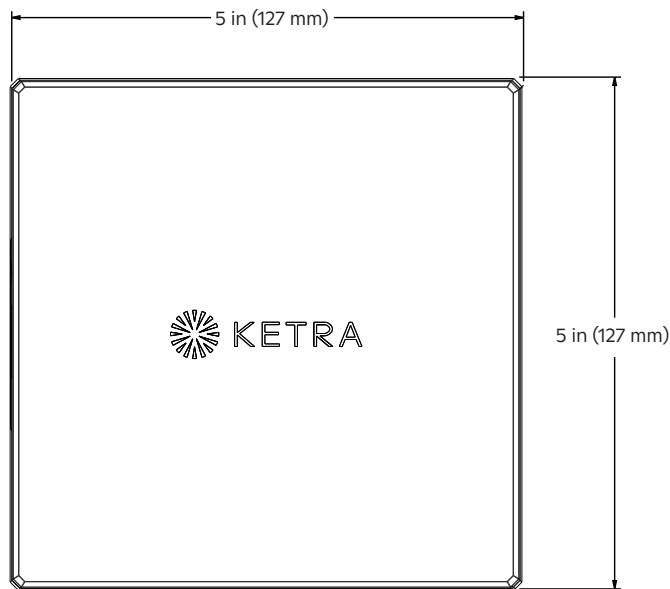| Model	Code
96 W Linear Controller	**X96-**

MOUNTING REQUIREMENTS

- The X96 Ketra controller and a Clear Connect-Type X device must be mounted within 75 ft (22.9 m) of its assigned gateway. The X96 must have at least two Type X devices within 25 ft (7.5 m). Within a subnet, groups or clusters of Type X devices must not be separated by greater than 25 ft (7.5 m). The gateway and the Type X devices assigned to it must be on the same floor.
- Mount a minimum of 3 ft (1.0 m) away from interference sources in the 2.4 GHz band, including but not limited to microwaves, wireless access points, hotspots, baby monitors, thermostats, and voice recognizing control devices.
- Do not install the controller inside a third-party enclosure. Performance of Type X devices can severely degrade if installed inside metal enclosures.
- A minimum of 2 in (51 mm) of free space is required around each side of the controller (see Figure 1), as well as above the faceplate.

Figure 1

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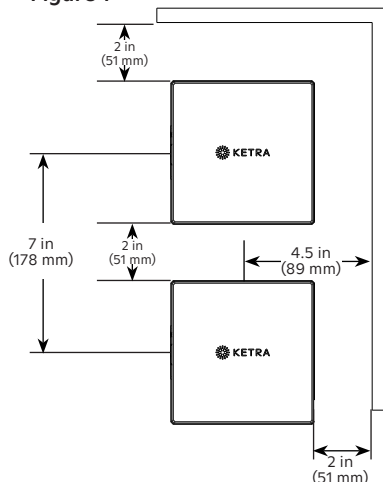
[1] X96-X-J2 is the second generation X96 controller and compatible with all LS0 Lightbar Slim High Output and Long Run configurations, and required for Uniform Lens configurations.

PRODUCT DIMENSIONS

5 in (127 mm)

5 in (127 mm)

KETRA

5 in (127 mm)

1.30 in (33 mm)

RESET

B W G

3.38 in (85.9 mm)

3.38 in (85.9 mm)

RESET

Junction box

Mounts to standard 4 in x 4 in (101 mm x 101 mm)
junction box. Junction box not included.

DIMENSIONS (cont.)

ADAPTER TYPE A

HW-X96-X-J2 ships with an Adapter Type A to connect to the first LS0 luminaire.

0.69 in
(17.47 mm)

0.75 in
(19.05 mm)

0.66 in
(16.76 mm)