# **OneTrack Backbone**

## **Track Lighting Series**



### GENERAL INFORMATION

OneTrack installations provide flexible power and data distribution to small luminaires for gallery, museum, and retail displays. ETC's OneTrack Backbone expands the range of fixtures that can be used in track applications to include larger fixtures, such as a Source Four LED, for projects with high ceilings or large displays. Backbone also Increases the allowable distance between structural attachment points without reducing load capacity.

Track fixtures mount directly into the OneTrack channel; larger theatrical-style fixtures mount to the top of the Backbone and connect to power and data via a OneTrack plug-in adapter. OneTrack Backbone is compatible with standard strut-channel mounting hardware, for a flexible, robust, and clean installation.

### APPLICATIONS

- Museums
- Retail
- Restaurants
- Lobbies
- Ballrooms

### FEATURES

- Aluminum extrusion can be supported on up to 10 ft (305 cm) centers with a distributed load capacity of 250 lb (90 kg)
- Maximum distributed load capacity of 800 lb (360 kg) when properly supported
- 100 lb (45 kg) maximum point load
- Available standard in black, white or silver powder coat paint; custom painted colors also available
- 120 V and 240 V plug-in adapters available to provide power and data connection for fixtures
- Three-year warranty



### SPECIFICATIONS

#### ELECTRICAL

- Supports use with 120 V and 277 V two-circuit surface-mount OneTrack
- Supports use with 120 V and 240 V luminaires using plug-in adapters available from ETC
- Supports all OneTrack feed and coupler accessories
- Supports conduit feed with appropriate accessories
- · Grounding connection provided through the aluminum track profile
- OneTrack by ETC supports up to 32 DMX devices per data run; supports up to 20 RDM devices per data run

#### MECHANICAL

- Backbone constructed from 6061 T6 aluminum finished in black, white, or silver powder coat paint
  - Backbone weighs 1.4 lb/ft (2.1 kg/m)
- Coupler accessories constructed from steel and finished in black, white, or silver powder coat paint
- OneTrack Backbone and Backbone accessories are compatible with all standard surface-mount OneTrack lengths, feeds and couplers
- Mounts to building structure using standard (1 5/8 in [41 mm]) strut-channel hardware (by others)
- Supports mounting of luminaires with OneTrack track adapters and non-track luminaires using Fixture Hangers
- Maximum distributed load capacity of 800 lb (360 kg)
- Maximum point load capacity of 100 lb (45 kg)

#### **REGULATORY AND COMPLAINCE**

- cULus Listed to UL 1574 and CSA C22.2 No. 9
- CE Compliant

Unsupported Span	Maximum Distributed Load	Maximum Point Load (on 18 in/46 cm centers)	Maximum Deflection at Center		
24 in / 610 mm	800 lb / 360 kg	100 lb / 45 kg*	<0.05 in / 1 mm		
36 in / 915 mm	685 lb / 310 kg	100 lb / 45 kg*	<0.05 in / 1 mm		
48 in / 1220 mm	590 lb / 265 kg	100 lb / 45 kg*	0.075 in / 2 mm		
60 in / 1525 mm	510 lb / 230 kg	100 lb / 45 kg*	0.125 in / 3 mm		
72 in / 1830 mm	435 lb / 195 kg	100 lb / 45 kg*	0.15 in / 4 mm		
84 in / 2135 mm	375 lb / 170 kg	75 lb / 34 kg	0.175 in / 4 mm		
96 in / 2440 mm	325 lb / 145 kg	50 lb / 23 kg	0.2 in / 5 mm		
108 in / 2745 mm	280 lb / 125 kg	40 lb / 18 kg	0.225 in / 6 mm		
120 in / 3050 mm	250 lb / 90 kg	35 lb / 16 kg	0.25in / 6 mm		
> 120 in / 3050 mm	NOT RECOMMENDED				

## LOAD CAPACITY

\*Weight limited by hanging clamp capacity.

Distributed load calculations are based on a distance between fixture centers of 18 in (460 mm). OneTrack within Backbone will support 35 lb/ft (52 kg/m); fixtures must be installed on minimum 12 in (305 mm) centers.

OneTrack Backbone is mounted to the building structure using standard strut-channel hardware.

The use of fixture hangers and plug-in adapters for use with non-track luminaires requires that the top channel of Backbone is clear of obstructions with at least 3 in (76 mm) clearance between the top of the Backbone and the building structure. Surface mounting is not supported for this application.

For detailed information on installation and layout of OneTrack systems, including track and accessory dimensions, data bus routing for complex configurations, basic troubleshooting and more, please refer to the OneTrack System Planning and Installation Guide available to download at: etcconnect.com/OneTrack

### ONETRACK BACKBONE PART NUMBERS

Description	P/N (Black)	P/N (White)	P/N (Silver)	Model*
OneTrack Backbone (OneTrack sections must be ordered separately)				
Backbone section, 4 ft (1.2 m)	7076A1204	7076A1204-1	7076A1204-5	OTB-4
Backbone section, 8 ft (2.4 m)	7076A1208	7076A1208-1	7076A1208-5	OTB-8
Backbone section, 12 ft (3.6 m)	7076A1212	7076A1212-1	7076A1212-5	OTB-12
OneTrack Backbone Accessories (OneTrack accessories must be orde	red separately)		·	
Fixture Hanger	7076A1201	7076A1201-1	7076A1201-5	OTB-FH
Fixture Hanger (Emergency)	7076A1202	7076A1202-1	7076A1202-5	OTB-FHEM
120 V Plug-in Adapter w/ powerCON and 5-pin XLR connectors	7076A1203	7076A1203-1	n/a	OTB-PTP
120 V Plug-in Adapter w/ TRUE1 TOP and 5-pin XLR connectors	7076A1213	7076A1213-1	n/a	OTB-PTT
120 V Plug-in Adapter w/ TRUE1 TOP connector only (for use with wireless DMX luminaires)	7076A1214	7076A1214-1	n/a	OTB-PTPWR
†240 V Plug-in Adapter w/ powerCON and 5-pin XLR connectors	7077A1215	7077A1215-1	n/a	OTB-PTP-240
240 V Plug-in Adapter w/ TRUE1 TOP and 5-pin XLR connectors	7077A1216	7077A1216-1	n/a	OTB-PTT-240
240 V Plug-in Adapter w/ TRUE1 TOP connector only (for use with wireless DMX luminaires)	7077A1217	7077A1217-1	n/a	OTB-PTPWR-240
End Feed Housing	7076A2001	7076A2001-1	7076A2001-5	OTB-EF
I-coupler Housing w/ Pull Box	7076A2002	7076A2002-1	7076A2002-5	OTB-IF
T-coupler Housing w/ Pull Box	7076A2003	7076A2003-1	7076A2003-5	OTB-TF
T-coupler Housing	7076A2004	7076A2004-1	7076A2004-5	OTB-T
X-coupler Housing w/ Pull Box	7076A2005	7076A2005-1	7076A2005-5	OTB-XF
X-coupler Housing	7076A2006	7076A2006-1	7076A2006-5	OTB-X
L-coupler Housing w/ Pull Box	7076A2007	7076A2007-1	7076A2007-5	OTB-LF
L-coupler Housing	7076A2008	7076A2008-1	7076A2008-5	OTB-L
Straight Locking Joint	7076A2013	n/a	n/a	OTB-LJ
End Cap	7076A2017	7076A2017-1	n/a	OTB-EC

\*Add -1 for white or -5 for silver. Example: 7076A1204-1 = OTB-4-1, 7076A1204-5 = OTB-4-5.

†240 V plug-in adapters are to be used with OneTrack 277 V track, feeds, and couplers.

Custom color options are available; contact ETC for more information.

### SAMPLE CONFIGURATION - 4'(1.2 M) STRAIGHT SECTION WITH END FEED

OneTrack and OneTrack Backbone parts must be purchased separately.



### ONETRACK INSTALLATION

OneTrack slides into OneTrack Backbone. OneTrack Backbone ships with set screws to secure the track in place once installed.



### FIXTURE HANGERS

Fixture Hangers mount to the top channel of OneTrack Backbone and provide a bolt for mounting fixture yokes when using nontrack luminaires with OneTrack. At least 3 in (76 mm) clearance between the top of the Backbone and the building structure is required for fixture hanger use.



## STRUT-CHANNEL MOUNTING

OneTrack Backbone can be suspension mounted using standard strutchannel mounting hardware and accessories.



### PLUG-IN ADAPTERS

Plug-in adapters provide power and DMX connections on 22 in (550 mm) cables for luminaires mounted to Fixture Hangers.



### COUPLER HOUSINGS

Coupler housings provide robust support for L-, T-, and X-coupler junctions in a OneTrack system. When bringing power or data into a OneTrack coupler, Backbone coupler housings with pull boxes are available to make conduit connections easier while also providing additional space for service loops.



### SAMPLE CONFIGURATION - SIMPLE GRID

OneTrack and OneTrack Backbone parts must be purchased separately.





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