



Type(s)  
Project  
Date  
Notes

**GENERAL INFORMATION**

The F-Drive B-Box is an accessory that greatly expands the connection capabilities of the F-Drive LED driver system. With the B-Box, system designers can convert a Cat6 cable run with an RJ45 into four different single-channel outputs, for Molex, two-pin terminal, or even single-channel RJ45 cable runs. The B-Box is compatible with all CC and FTW output models in the F-Drive R12 and W1 product line. Installations using third-party luminaires will benefit from the increased compatibility options B-Box adds to the centralized F-Drive system.

**APPLICATIONS**

- Schools
- Houses of worship
- Conference centers
- Themed environments
- Retail and hospitality spaces
- Entertainment spaces
- Cruise ships

**FEATURES**

- Receives RJ45 via Cat6 cable from an F-Drive CC or FTW output card
- Provides four outputs, one for each channel, via Molex, two-pin terminal, or RJ45 connector depending on model
- RJ45 model supports ArcSystem Navis White or Fade to Warm
- Molex model supports ArcSystem Pro One-Cell, Pro One-Cell Small, and Pro One-Cell Micro White or Fade to Warm luminaires
- Terminal model supports constant current loads requiring 200–700 mA

**ORDERING INFORMATION**

**B-Box**

MODEL	DESCRIPTION
FD-BBOX-4T	B-Box with four, two-pin terminal connectors to support constant current loads requiring 200–700 mA
FD-BBOX-4R	B-Box with four RJ45 outputs to support a single ArcSystem Navis White or Fade to Warm luminaire per output
FD-BBOX-4M	B-Box with four Molex outputs to support ArcSystem Pro One-Cell, Pro One-Cell Small, and Pro One-Cell Micro luminaires

**Accessories**

MODEL	DESCRIPTION
FD-ACC-TETHER	Tether, 457 mm (18 in), and mounting plate for B-Box
FD-ACC-BRKT	Mounting plate for B-Box



**SPECIFICATION**

**Electrical**

Input	Four (4) channels via RJ45 from F-Drive R12 or W1. Works with: FDROCC150, FDROCFTW150, FDW1CCD, or FDW1FTWD.
Output	Each output connection represents a single channel of luminaire control and power.
Maximum cable length from F-Drive R12 to luminaire	100 m (328 ft) total, from F-Drive R12 output card or F-Drive W1 Driver to final luminaire. B-Box neither extends, nor counts against this distance.

**Thermal**

Ambient operating temp	0°C–40°C (32°F–104°F)
Humidity	5%–95% non-condensing

**Physical**

Materials	Plenum rated plastic with aluminum connector plates
Color	Black
Mounting options	Set freely on feet or screw to structure using optional mounting bracket. Lanyard also available for installations that require a secondary tether
IP rating	IP-20 (dry locations only)
Weight	See table on the last page

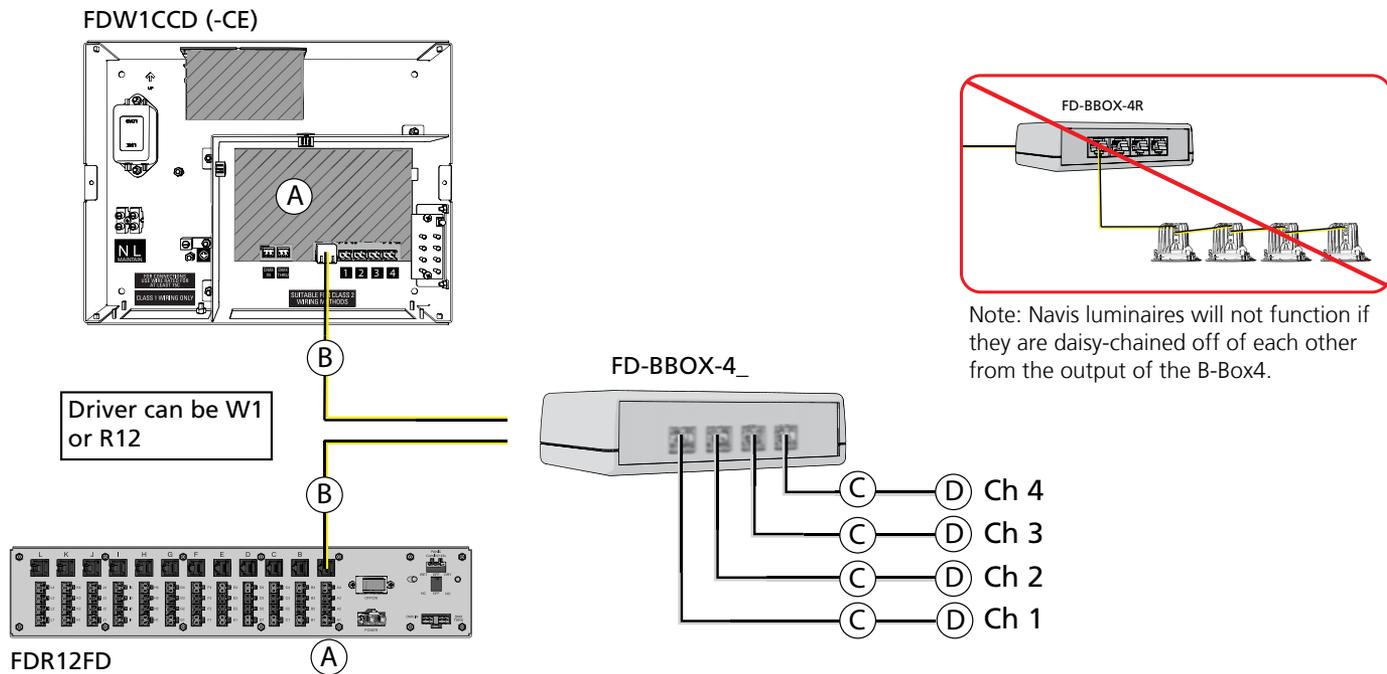
**Warranty**

Device	5 years
Website	<a href="http://etcconnect.com/Support/Warranty.aspx">etcconnect.com/Support/Warranty.aspx</a>

**Regulatory and Compliance**

Approved regulatory standards	<p>cETLus listed to UL 62368-1 and Certified to CSA 22.2 no 62368-1                  CE Compliant                  UKCA Compliant</p> <p>Suitable for use in air handling systems by NEC 300.22(C)(3)</p> <p>Note: If used with an Emergency lighting Circuit, follow NEC Marking requirements or local jurisdiction requirements.</p>
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B-BOX WIRING DIAGRAM



	DESCRIPTION	NOTES
A	F-Drive output card installed in one slot of an FDR12	CC-150 output card for Navis 100 White luminaires, ArcSystem Pro One-Cell luminaires, or third-party loads FTW-150 output card for Navis 100 Fade to Warm
	W1 Driver	W1 CC Driver for Navis 100 White luminaires, ArcSystem Pro One-Cell luminaires, or third-party loads W1 Fade to Warm Driver for Navis 100 Fade to Warm
B	Category-type cable*	The cables from the RJ45 output of the driver to the input of the FD-BBOX
C	Output cables	For Navis luminaires: one Category-type cable** per output
		For ArcSystem Pro One-Cell luminaires: use attached Molex cable‡, one per luminaire
		For third-party luminaires: one 0.2–1.5 mm² (26–14 AWG) Class 2 wire pair per output
D	Load	With CC-150 output card or W1 CC Driver: Navis 100 White luminaire or ArcSystem Pro One-Cell White or Fade to Warm luminaire (ARCP1, ARCP1S, or ARCP1M),§ or third-party load§
		With FTW-150 output card or W1 Fade to Warm Driver: Navis 100 Fade to Warm luminaire

\*You must use 0.25 mm² or larger conductors in Category-type cable. Not all Cat5 or Cat6 cables meet this requirement.

†Maximum supported wire length between Navis luminaires and F-Drive Series driver is 100 m (328 ft) for each luminaire. This is the limit for the total length of Category-type cable between each Navis luminaire and the F-Drive series driver, including the cable between the R12 or W1 Driver and the B-Box and the cable between the B-Box and the Navis luminaire.

‡Maximum supported wire length between ArcSystem Pro One-Cell luminaires and F-Drive Series driver is 100 m (328 ft) for each luminaire. This includes the cable between the F-Drive Series driver and the B-Box and the luminaire cable.

§You must configure the CC-150 output card or W1 CC Driver to provide the correct current for your luminaires or loads. See the F-Drive Series R12 Installation Manual or F-Drive Series W1 Installation Manual at [etconnect.com/Products/Power-Controls/LED-Drivers/FDrive/Documentation.aspx](http://etconnect.com/Products/Power-Controls/LED-Drivers/FDrive/Documentation.aspx).

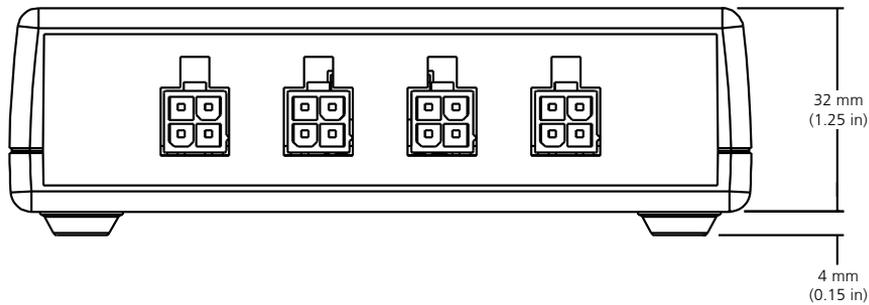
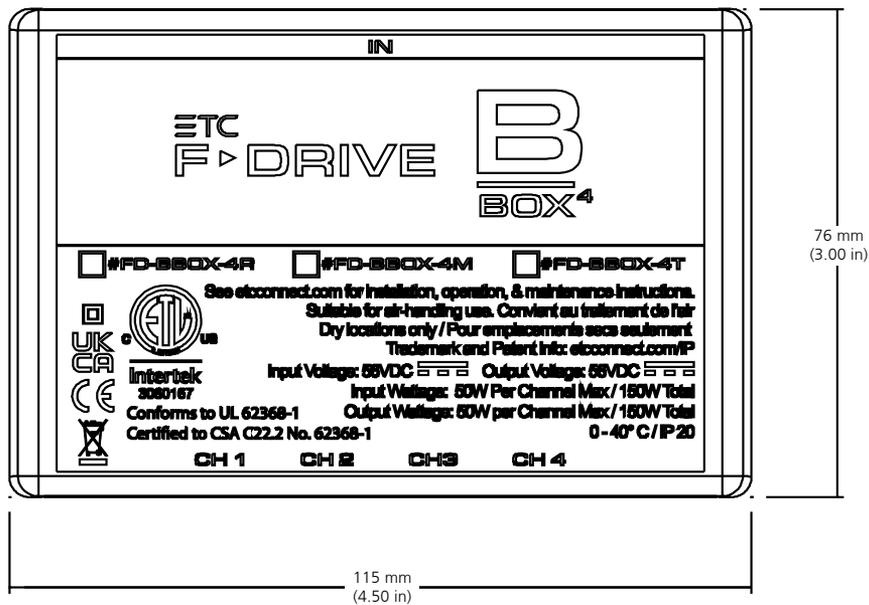
**Note: The illustration is not drawn to scale.**

PHYSICAL

B-Box Dimensions

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	in	mm	in	mm	in	mm	lb	kg
FD-BBOX-4	1.40	36	4.50	115	3.00	76	0.36	0.16
FD-BBOX-4 Shipping Dimensions	6.375	162	4.375	111	3.50	89	0.52	0.24

B-Box



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 \*Trademark and patent info: [etconnect.com/IP](http://etconnect.com/IP)