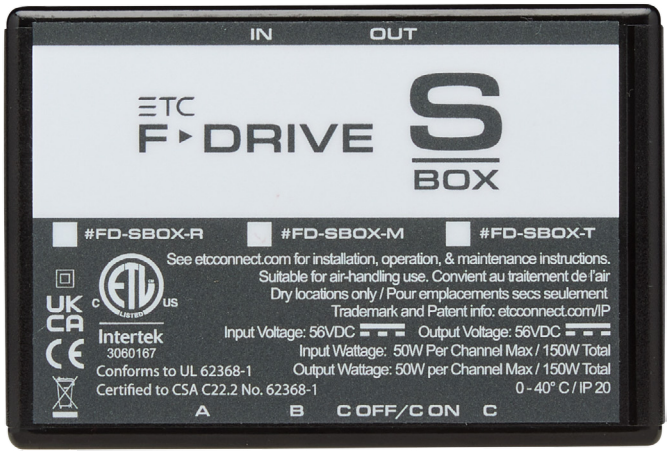
ETC

S-Box

F-Drive Series



Type(s)

Project

Date

Notes

GENERAL INFORMATION

The F-Drive S-Box is an accessory that greatly expands the connection capabilities of the F-Drive LED driver system. With the S-Box, system designers can utliize a single channel of F-Drive output to control up to three Navis 50 luminaires or other constant-current loads. S-Box is available with RJ45 or two-pin terminal outputs.

The S-Box is compatible with constant-current output cards including the F-Drive RX CC 8 Card and FTW 8 Card, F-Drive R12 CC-150 Card, and W1 CC drivers. Installations using third-party luminaires will benefit from the increased compatability options S-Box adds to the centralized F-Drive system. The F-Drive S-Box allows more constant-current luminaires to be utilized on a single output channel, increasing luminaire capacity.

APPLICATIONS

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

FEATURES

- Converts a single channel into connections for up to three constant-current luminaires
- Receives an RJ45 input from an F-Drive constant-current card
- Includes a thru to pass on additional, unused channels from the output card
- Terminal model (FD-SBOX-T) supports constant-current loads requiring 200–700 mA
- RJ45 model (FD-SBOX-R) supports ArcSystem Navis 50 White or Fade to Warm luminaires
- Includes a mounting bracket that provides a location for screws or bolts for secure attachment

ORDERING INFORMATION

S-Box

MODEL	DESCRIPTION
FD-SBOX-T	S-Box with two-pin terminal connectors to support constant current loads requiring 200–700 mA
FD-SBOX-R	S-Box with RJ45 outputs to support ArcSystem Navis 50 White and Fade to Warm luminaires

Accessories

MODEL	DESCRIPTION
FD-ACC-TETHER	Tether 457 mm (18 in)
FD-ACC-BRKT	Mouting plate for S-Box

SPECIFICATION

Electrical

	FD-SBOX-T with Third-Party Luminaires or Loads	FD-SBOX-R with Navis 50 White	FD-SBOX-R with Navis 50 Fade to Warm
Input	RJ45 output from an F-Drive RX CC 8 Card, F-Drive R12 CC-150 Card, or F-Drive W1 CC driver	RJ45 output from an F-Drive RX CC 8 Card	RJ45 output from an F-Drive RX FTW 8 Card.
Output	• Series electrical connection of up to three third-party luminaires or loads • Thru to pass on additional, unused channels from the output card	• Series electrical connection of up to three Navis 50 Fixed White luminaires • Thru to pass on additional, unused channels from the output card	• Series electrical connection of up to three Navis 50 Fade to Warm luminaires • Thru to pass on additional, unused channels from the output card
Maximum cable length from F-Drive to luminaire	100 m (328 ft) total, including cable between F-Drive R12 or F-Drive RX output card or F-Drive W1 CC driver and S-Box and cable between S-Box and luminaire or load		

Thermal

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

Physical

Materials	Plenum rated plastic with aluminum connector plates
Color options	Black
Mounting options	Set freely on feet or screw to structure using optional included mounting bracket. Lanyard also available for installations that require a secondary tether.
IP rating	IP-20 (dry locations only)
Weight	See “S-Box Weights” on page 5

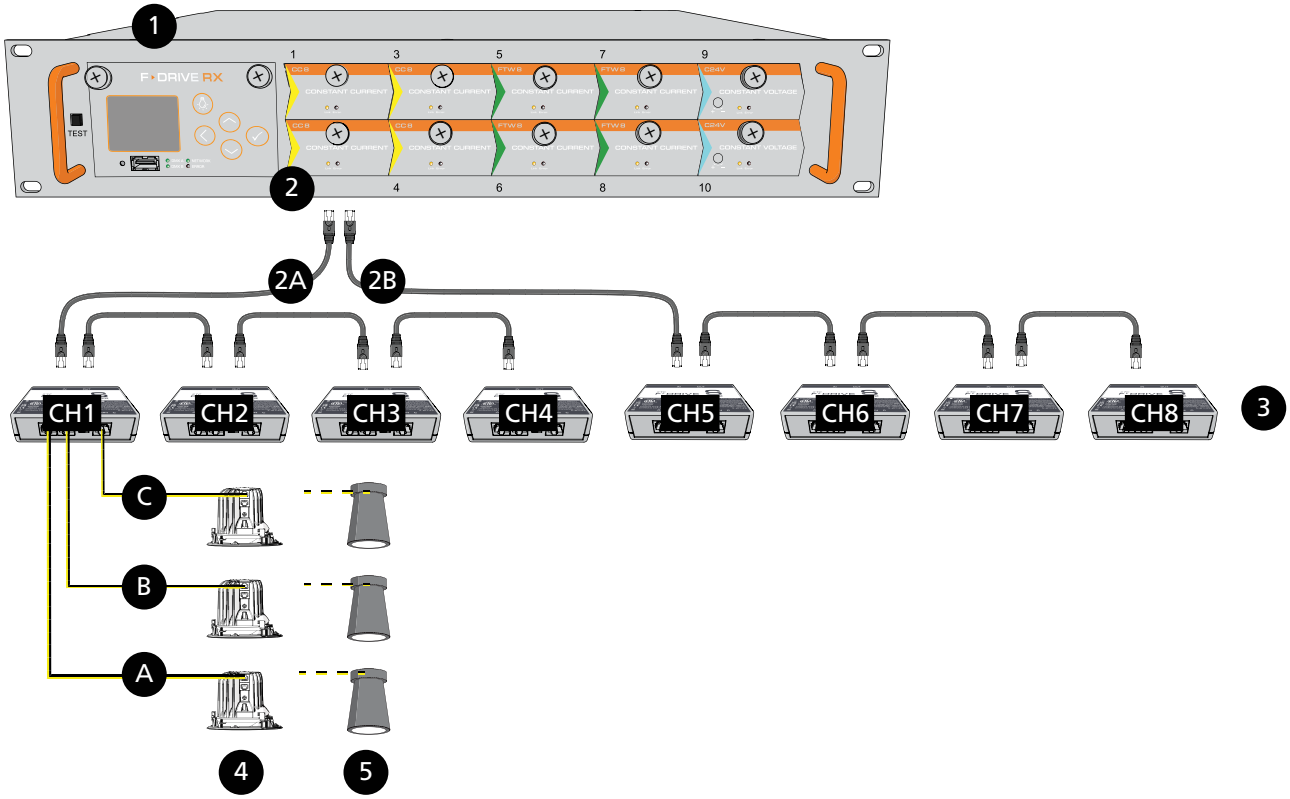
Warranty

Driver	5 years
Website	etcconnect.com/Support/Warranty.aspx

Regulatory and Compliance

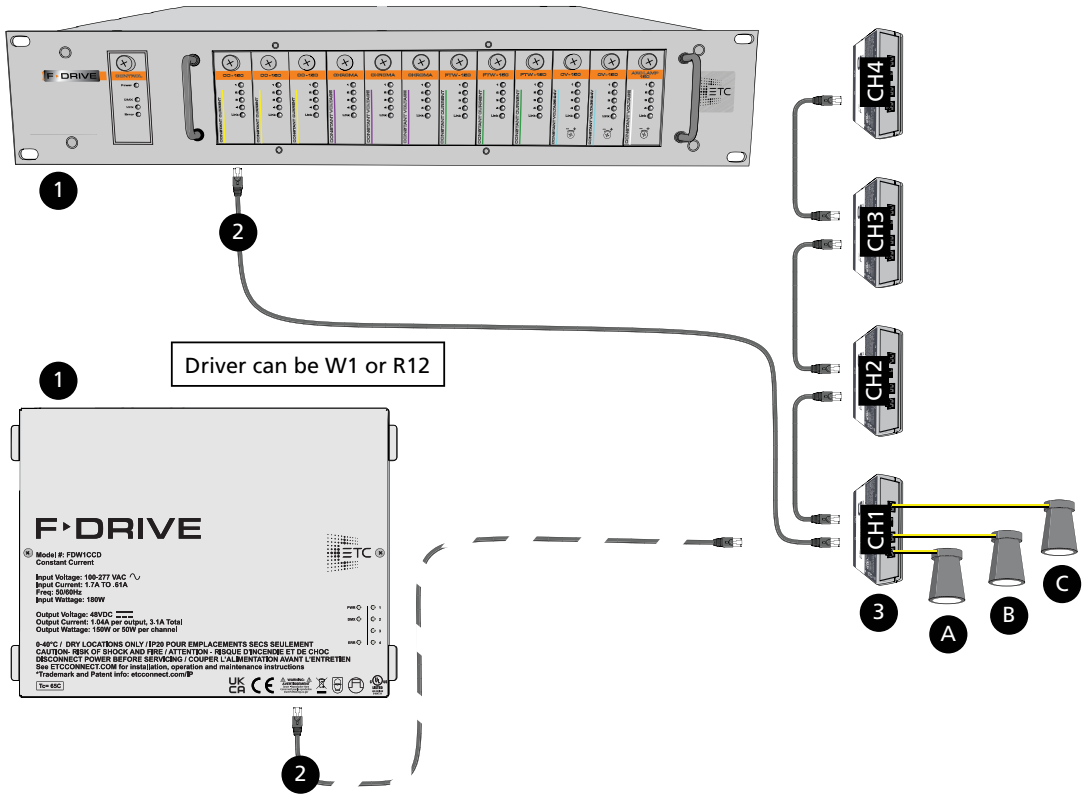
Approved regulatory standards	cULus Listed to UL 62368-1 and CSA C22.2 No. 62368-1 CE and UKCA Compliant to IEC 62368-1 If you install an S-Box within an Emergency Lighting Circuit, follow NEC marking requirements and local juridiction requirements.

S-BOX WITH F-DRIVE RX AND NAVIS 50 OR CONSTANT-CURRENT LUMINAIRES



	DESCRIPTION	NOTES
1	F-Drive RX	In this illustration, the F-Drive RX is shown with four CC 8 Cards in slots 1–4 and four FTW 8 cards in slots 5–8. The two C24V Cards in slots 9–10 are not compatible with S-Box.
2	CC 8 Card in slot 2	Alternative: You can connect Navis 50 Fade to Warm luminaires to an FTW 8 Card with FD-SBOX-R. You must configure the output current of the output card for your load. See the F-Drive RX Installation and Operation Manual for instructions.
2A	Channels 1–4 from the output card in slot 2	These channels are available on RJ45 output "2A" from the back of the F-Drive RX enclosure.
2B	Channels 5–8 from the output card in slot 2	These channels are available on RJ45 output "2B" from the back of the F-Drive RX enclosure.
3	Eight S-Boxes	One daisy chain of four S-Boxes per RJ45 output.
4	Navis 50 luminaires	Choose FD-SBOX-R to connect Navis 50 luminaires. Connect to a CC 8 Card for Navis 50 White luminaires or connect to an FTW 8 Card for Navis 50 Fade to Warm luminaires.
5	Alternative: Constant-current loads	Choose FD-SBOX-T to connect constant-current loads by other manufacturers.
A, B, and C	S-Box outputs "A", "B", and "C"	• Outputs "A", "B", and "C" from the same S-Box respond to the same channel. • Output "C" is optional.* • One category-type cable per FD-SBOX-R output or one Class 2 wire pair per FD-SBOX-T output.
*S-Box has a simple switch that can be field-configured to support either two or three connected loads. **The illustration is not drawn to scale. For clarity, the illustration only shows loads connected to one channel of one output card. F-Drive RX supports up to 10 output cards with up to 8 channels each.**		

S-BOX WITH F-DRIVE R12 OR F-DRIVE W1 CC AND CONSTANT-CURRENT LOADS

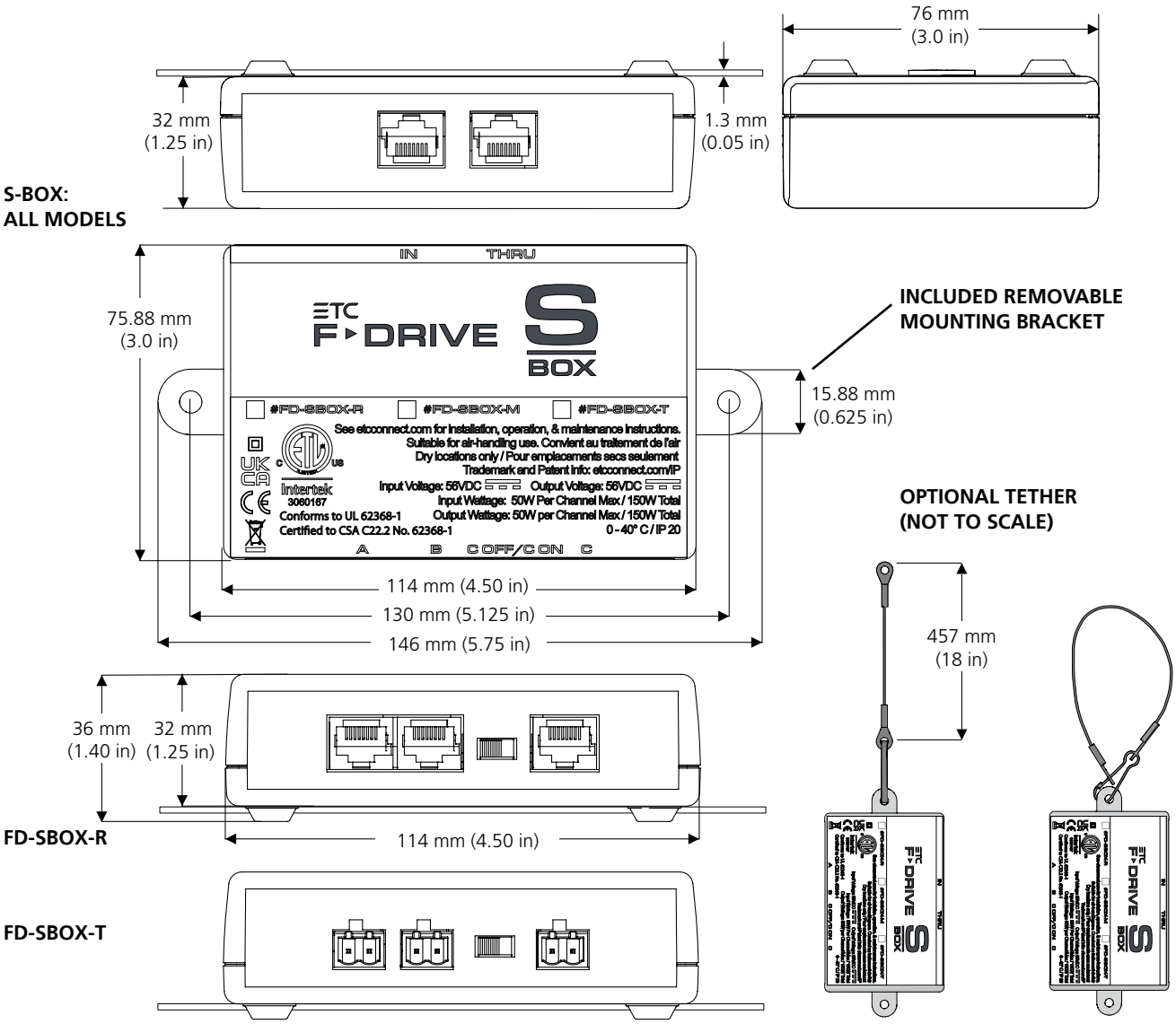


	DESCRIPTION	NOTES
1	F-Drive R12 or F-Drive W1 Driver	• In this illustration, the F-Drive R12 enclosure is shown with two CC-150 Cards in slots A and B. The other output cards shown are not compatible with S-Box. • Alternative: An F-Drive W1 CC Driver or F-Drive W1 CC Emergency Driver. You must configure the output current of the output card or driver for your load. See the manual for your F-Drive Series driver for instructions.
2	• Channels 1–4 from the output card in card slot A • Alternative: Channels 1–4 from a W1 CC Driver	
3	Four FD-SBOX-T	• One daisy chain of four FD-SBOX-T per RJ45 output. • Alternative: One daisy chain of four FD-SBOX-T per W1 CC Driver.
A, B, and C	S-Box outputs “A”, “B”, and “C”	• Outputs “A”, “B”, and “C” from the same FD-SBOX-T respond to the same channel. • Output “C” is optional.* • One Class 2 wire pair per FD-SBOX-T output.
*S-Box has a simple switch that can be field-configured to support either two or three connected loads. **The illustration is not drawn to scale. For clarity, the illustration only shows luminaires connected to one output card. F-Drive R12 supports up to 12 output cards with 4 channels each. F-Drive W1 CC Driver has one four-channel output.**		

PHYSICAL

S-Box Dimensions

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	mm	in	mm	in	mm	in	kg	lb
FD-SBOX	36	1.40	115	4.50	76	3.00	0.16	0.36



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