ENGLISH

BlackBox®

Feed-Through Splice/Splitter Box

Allows For A Breaker

To Be Added By Splitting

Electrical Service Lines

Dimensions:

L: 8” x W: 8” x D: 4”

or

L: 10” x W: 10” x D: 4”

Dimensions:

L: 203mm x W: 203mm x D: 101mm

or

L: 254mm x W: 254mm x D: 101mm

INSTALLATION MANUAL

ELECTRICAL SERVICE SIZE SPLICE KIT

240-208V / 120V, Single Phase 60 - 200 Amp *Depending on Device Model

BREAKER SUPPLIED

240-208V, Single Phase -30, 40, 50, 60 Amp Load *

* Other breaker sizes available upon request

EV CHARGER TO BE CONTROLLED

240-208V or 120/240V Single Phase 25 Amp up to 60 Amp *Breaker for*
240-208V or 120/240V Single Phase 20 Amp up to 48 Amp *Charger*

MODEL NUMBERS BY TYPE

EVSB-8-(Breaker Size)
EVSB-8-(Breaker Size)-3R
EVSB-8-Rough-In
EVSB-8-Rough-In-3R
EVSB-10-(Breaker Size)
EVSB-10-(Breaker Size)-3R
EVSB-10-Rough-In
EVSB-10-Rough-In-3R

READ AND SAVE THESE INSTRUCTIONS

CAUTION: DO NOT STORE THIS MANUAL OR OTHER COMBUSTIBLE MATERIALS INSIDE THE ENCLOSURE OR OTHER ELECTRICAL PANELS

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INTRODUCTION

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IMPORTANT SAFETY INSTRUCTIONS

WARNING – INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK

When using electric products, basic electrical shock and fire prevention precautions should always be followed including, but not limited to, arc-flash protection, pre-energizing electrical resistance checks, availability of fire prevention equipment, and the use of appropriate installation and testing tools. Read all instructions before using this product. Do not use this device if parts are broken, cracked, or defective, instead please contact the manufacturer. Installation and servicing must be carried out by a qualified professional. Use appropriate caution when connecting and disconnecting the device from any power source. Always make sure the device is disconnected from the power source before beginning installation or maintenance service. Installation must be completed to relevant local codes.

PROHIBITING - No access for unauthorized persons

CAUTION - Warning of a danger or a dangerous situation

ELECTRICAL HAZARD - Warning of a potential electrical hazard that could result in injury and/or fire

PRODUCT INFORMATION

Black Box Innovations feed-through or splitter box can be used for splicing electrical lines in an apartment or condo and adding a breaker to the system before running electrical lines to the electrical panel in the unit. This provides an advantage when the main electrical room is in, or near, to the parking lot where EV charging is needed. It prevents the need to install wiring from the suite's electrical panel to the parking area if it is a more difficult installation, than installing wiring from the electrical meter location to the parking area.

SPECIFICATIONS

Splice Bus	335A Rated Wire size: 6 AWG- 250 MCM Copper or Aluminum * Optional Neutral Splice Available
Torque Specs	250 MCM 275 in-lbs 3/0 - 4/0 220 in-lbs 2/0 - 3 AWG 137 in-lbs 6 - 4 AWG 45 in-lbs STUD 5/16 - 18 126 in-lbs Breaker Terminal 30 in-lbs
Operation Ambient Temp.	34°F to 104°F (1°C to 40°C)

BREAKER SPECIFICATIONS

Applicable Standards	UL 489
Rated Current (A)	30 ~ 60
Rated Voltage (V)	120 - 240 Vac
Tripping Characteristics	C(6.4 In ~ 9.6 In)
Tripping Type	Thermal Magnetic
Protection Degree	IP30
Rated Insulation Voltage (VAC)	1000
Rated Impulse Withstand Voltage (kV)	6
Rated Short-Circuit Current (kA)	10
Conducting Wire (mm2)	14~4 (2~25mm2 3.5Nm)

Dimensions*	**Weight***
8"(H) x 8"(W) x 4"(D)	8 lbs
203mm(H) x 203mm(W) x 101mm(D)	(3.64kg)
10"(H) x 10"(W) x 4"(D)	10 lbs
254mm(H) x 254mm(W) x 101mm(D)	(4.55kg)

*Dimensions and weight are approximate figures and are subject to change without notice.

Applicable Model Naming Convention

Device Name-Enclosure Size –Breaker Size or Rough In- Optional Neutral Splice

EVSB-8-(Breaker Size)

EVSB-8-Rough ln(R)

EVSB-10-(Breaker Size)

EVSB-10-Rough ln

Neutral Splice Optional

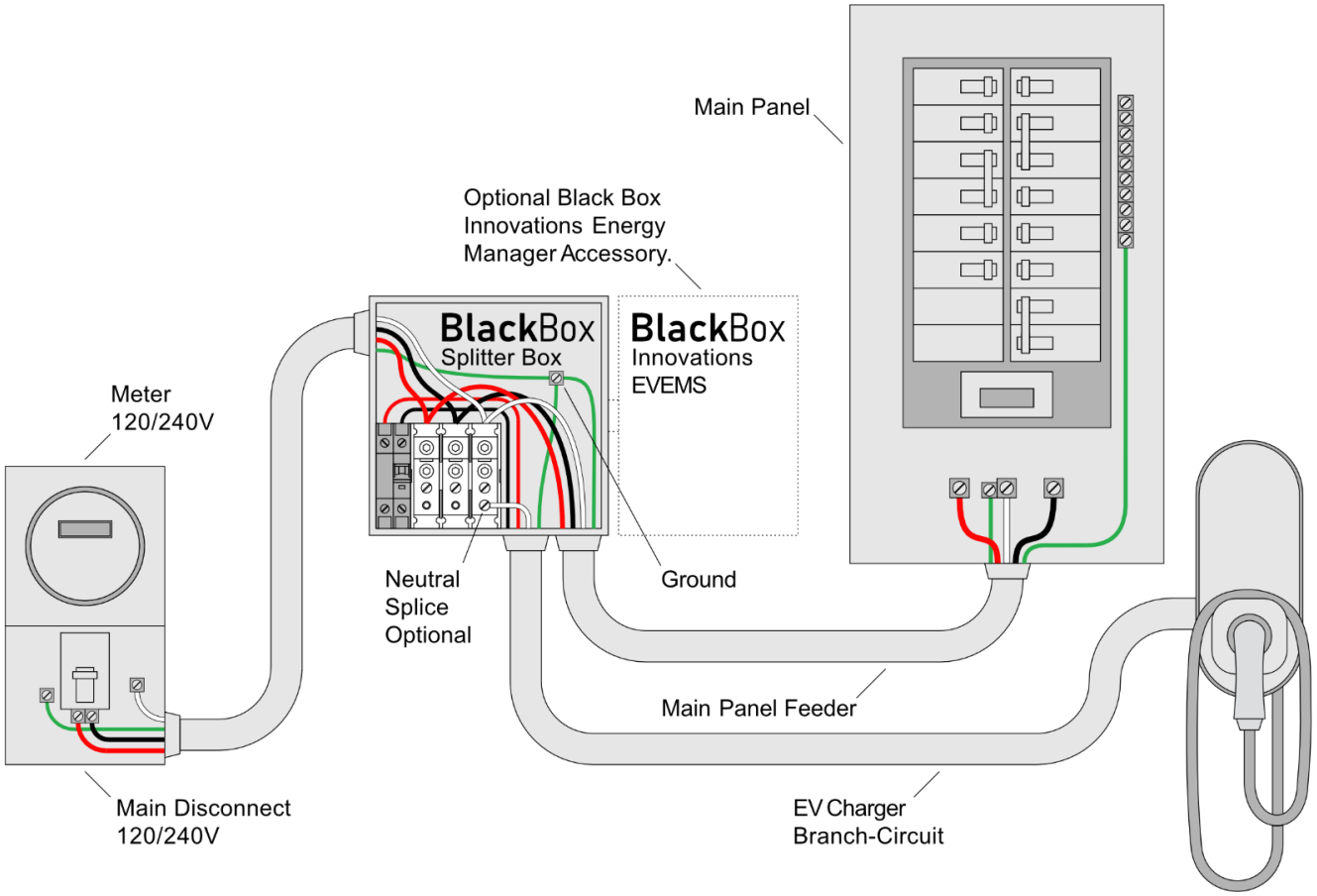
If using a neutral splice an “N” will be found at the end of the model name.

Operation After Power Outage

In the event of a power outage, the device breaker should remain in the on position. If there is no power to the END DEVICE check power at the breaker and operate as needed.

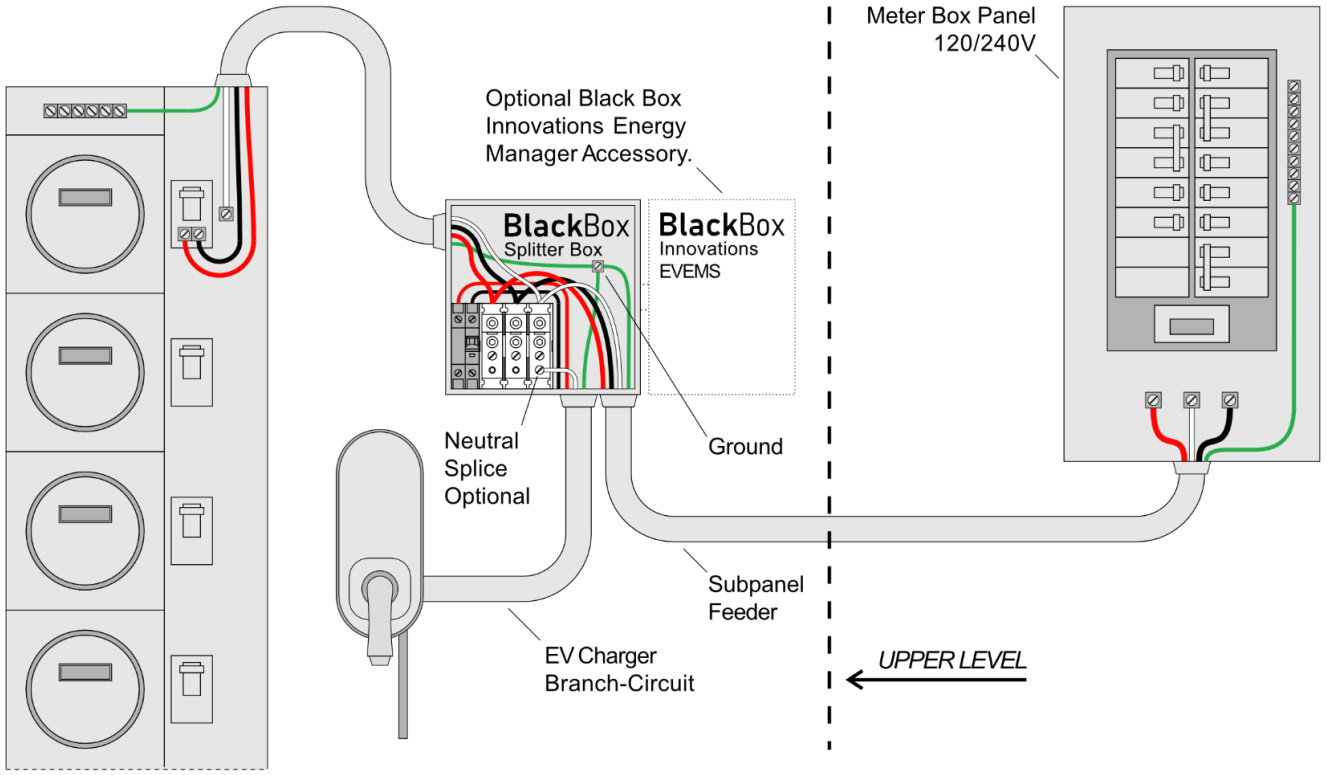
INSTALLATION DIAGRAMS

WITH MAIN DISCONNECT

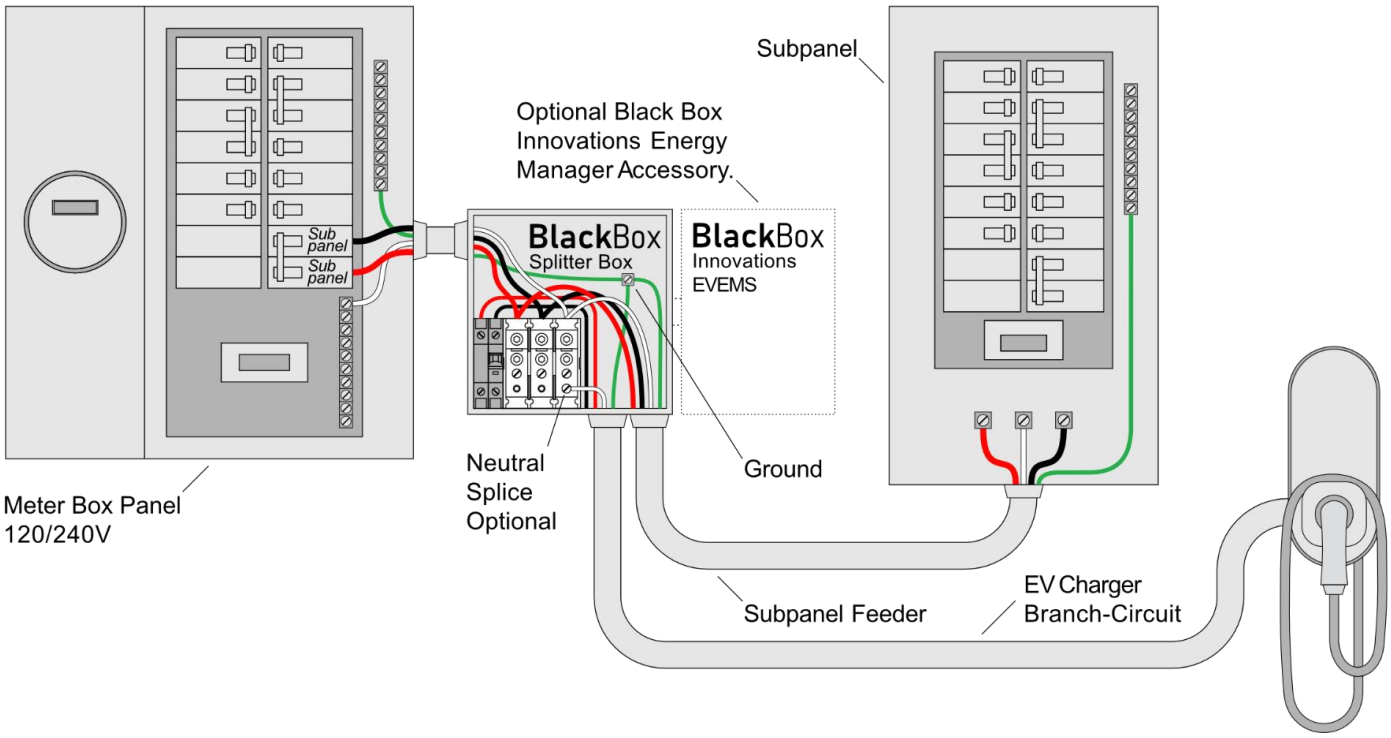


Alternate locations for device installation are acceptable.

WITH METER STACK



WITH SUBPANEL



Alternate locations for device installation are acceptable.

INSTALLATION INSTRUCTIONS 

STEP 1: CHECK THE CONTENTS OF THE PACKAGE

Model#: DEVICE-XX-X-XX-X
1 x Enclosure, 1 x Installation Instructions, 1 x Breaker (if ordered), 1 x Bus Bar, 1 x Neutral Splice (if ordered)

STEP 2: PREPARING FOR THE INSTALLATION

WARNING – INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK

1. Disconnect power to all devices being worked on or within an unsafe distance to the working area.
2. Select the device installation location.
   - The recommended place for the device to be installed is in a location with adequate air circulation. See the installation diagrams for suggested locations.

NOTE: The splitter box must be mounted so that the nameplate remains visible at all times.

DO NOT install the device:

-Outdoors (please see our NEMA 3R-rated enclosures for outdoor installations)
-In a location with a high level of risk as defined by local electrical codes or in a hazardous location.

For example, nearby flammable materials, explosives or fuels, chemical products, and hazardous vapors.

STEP 3: INSTALLATION OF THE DEVICE

1. Loosen the cover screws and remove the enclosure cover.
2. Attach the device securely to the desired location. There are multiple acceptable orientations.
3. Install wires from the main disconnect to the Bus Bars LINE SIDE (you may use either the top or the bottom slot). Ensuring wires are seated correctly and lugs are torqued to proper specifications (see torquing specifications on page 6 of this manual), ground/bond as required.
4. Install wires from the LOAD CENTER to the Bus Bars LOAD SIDE (you may use either the top or the bottom slot). Ensuring wires are seated correctly and lugs are torqued to proper specifications (see torquing specifications on page 6 of this manual), ground/bond as required.
5. Neutral splice is optional and can be wired in the same way as described in steps 3 & 4.

6. Install wires from the END DEVICE to the provided breaker. If using a Rough-In model please disregard this step until the breaker is installed at a later date. Please note, the breaker to feed the end device must be ordered from the manufacturer and installed as per instructions from the manufacturer at the time of its installation. Ensure breaker wire terminals are torqued to the correct specifications (found on page 6 of this manual)

7.If using the optional addition of a Black Box Energy Manager install electrical lines from the supply breaker for the controlled device to the marked LINE SIDE (L1 & L2) of the contactor and bonding/ground attachment. Install electrical wires from the end device to be controlled (i.e. EV charger) to LOAD SIDE (T1 &T2) of contactor and bonding/ground as required by local electrical codes. Ensure contactor wire terminals are torqued to 40-44 in-lb (5 Nm). If the neutral or identified conductor is used for the end device. Attach split current monitoring devices to the main lines inside the enclosure. ***Please refer to the Black Box Innovations EVEMS installation guide for further installation information on our Energy Management System.***

8. When safe energize the LOAD CENTER and check for correct power.

9. When safe turn the breaker on and check for power and correct operation of the END DEVICE.

10. Install the enclosure cover and when safe check that all electrical components are functioning correctly.

MAINTENANCE

WARNING: TESTING, MAINTENANCE, AND TROUBLESHOOTING SHOULD ALWAYS BE CARRIED OUT BY QUALIFIED PERSONNEL. REASONABLE SAFETY PRECAUTIONS SHOULD ALWAYS BE TAKEN AROUND ELECTRICAL DEVICES AND OUTLETS TO PREVENT FIRE, ELECTRIC SHOCK, AND INJURY TO PERSON.

Do not use any cleaning solvents or other combustibles on the devices, as this can cause risk of fire, improper device operation, or risk of electric shock and/or injury.

Electrical connections should be maintained to the standard set by CSA Z463 and inspected, maintained, and re-torqued annually. The interval between maintenance cycles may need to be reduced in areas with high ambient temperature variance or dusty environments.

INFORMATION

This document contains important instructions which must be followed during the installation, and maintenance of this device.

Notes

After installation verify that the device is securely attached to an adequate structure in a well-ventilated location.

It is the installer's responsibility to verify that the electric power source is adequate for the use of the device.

Do not use any solvents to clean this device.

Do not paint or apply exterior finishing to this device.

Do not use this energy management system with end devices that require constant power.

CAUTIONS

The installation of the device must be done to the latest electrical code requirements and with the consultation of, and according to the manufacturer's specification and guidelines of both the Electrical Vehicle (EV) and the Charging Station. This device will shut off and re-energize electricity to both the Electric Vehicle, its Charging Station, or other load-side devices without notice.

WARNING

Read all documentation provided by the device manufacturer before using this product and follow the installation and setup procedures. Always disconnect any and all sources of power before starting work.

Do not modify, repair, or dismantle the device.

Never introduce water or any other liquids to the area around or on this device.

Do not install the device near flammable materials, explosives or fuels, chemical products, and vapors.

Do not install this device in a hazardous or wet environment or location.

Disconnect this device immediately if defective or damaged in any way and contact the manufacturer.

Any improper use of the device could result in serious injuries, death, or damage to property.

Any improper use of the device can cause damage which will void the warranty.

Never use the device above or below the temperature range of 34°F to 104°F (1°C to 40°C). The devices must be always kept free of frost and water vapor.

Feedback

We are always happy to hear your feedback and we look forward to hearing from you. Please email all comments to customerservice@blackboxelectrical.com.

You can also contact us by clicking on the message us button on our website at www.blackboxelectrical.com or by calling us at our toll-free number 1 (833) 325-5269.

Limited warranty

1. Black Box Innovations Inc. warranties this device against any defects for a period of one year from the date of shipping. The warranty is limited to the components and equipment supplied by Black Box Innovations Inc.

2. Black Box Innovations Inc. may undertake repair or replacement, at the site or the manufacturing location, at its option, of the defective material only after an evaluation has been made by its representative.

3. If, in the opinion of Black Box Innovations Inc. installation has been done incorrectly, or the device is used inappropriately, or repairs have been done by unauthorized personnel other than representatives of Black Box Innovations Inc., the warranty will be automatically void.

4. Black Box Innovations Inc. will not be held liable for damages or delays and will not be required to pay the transport cost of the charge controller claimed to be defective.

5. Prior written consent must be made by Black Box Innovations Inc. before repairs, replacement, modifications, or compensation is to be made.

6. Black Box Innovations Inc. shall not be liable for any indirect damages or delays caused by inadequate workmanship, or materials on devices installed. This also applies if the installations are not made in accordance with the manufacturer's instruction, local electrical codes, as well as specifications of devices powered through this device.

7. Black Box Innovations Inc. shall not be liable for any direct or indirect damages or delays for any devices that are connected to this device that can not tolerate having supplied power switched off for any time period specified by the device or when the device is in need of repair or maintenance.

8. Any device or accessory supplied with this device to be installed or connected remotely from the charge controller will be guaranteed by the manufacturer only under the conditions in accordance with the rest of this document.

9. Any repairs made at the Black Box Innovations Inc. factory are warrantied for 30 days from the date of repairs.

10. Any components supplied for repairs are warrantied for the remaining of the warranty on the original product or 90 days whichever is longer.