# XD Series Flex L Single/Double/Triple

## Bi-Stable Lithium Battery Relays & VSR/ACRs

**Designed for Lithium-ion, Lithium Polymer, and Lithium Iron Phosphate Battery Systems Where Required Charge / Discharge Voltage Settings Require Higher Available Settings**

**500 Amp Continuous Capability Per Relay / Extremely Compact Footprint**

**Available With or Without Intuitive Front Facing Manual Override Knobs with Ability to Lock Relays ON or OFF for Servicing**

**Flexible Functionality via Dip Switches, utilize each as a Relay/Battery Disconnect, Voltage Sensing Relay, or Low Voltage Disconnect**

**Remote ON/OFF/Auto Inputs to Force Each Relay Closed, Open, or Allowing Automatic Operation Based on Voltage Sensing**

**Local and Remote LED Indicators Per Relay**

**Mechanical-Only Battery Switch Option for One or Multiple Relay Positions**

PATENT PENDING

**Ultra-Low Power Draw:** Lowest off-state current draw in industry (1.3 mA) combined.

**Simple & Robust Installation:** Sealed Deutsch/Amphenol DTM/ATM or DT/AT connectors available. Flying wire harnesses also available.

**Flexible Application Options:** Install as a Remote Battery Disconnect Switch, Voltage Sensing Relay, or Low Voltage Disconnect. On/Off trigger via external signal and/or alternator voltage sense.

**Diagnostic Feedback** via optional external LEDs control lines and on-board LEDs for each relay

**Bullet-proof Construction:** Sealed unit, high temperature materials allow mounting anywhere on vehicle. Integrated thermal overload protection

**Optional Manual Override** provides power loss backup operation and ability to lock OFF switched loads in order to service downstream circuits.

**Meets Stringent OEM Standards** for electrical transient self-protection

**4 Year Industry Leading Warranty**

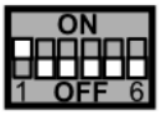
*Rev 2 - March 1, 2024*

## Install Guidelines & Dip Switch Settings

*(1) DISCONNECT BATTERY FROM ELECTRICAL SYSTEM BEFORE INSTALLING*

*(2) INSTALL A 7.5 - 10.0 A FUSE ON THE BLACK GROUND RETURN WIRE*

*(3) DIP SWITCHES ARE SET FOR EACH INDIVIDUAL RELAY POSITION WITHIN AN XD RELAY WITH TWO OR MORE RELAY POSITIONS*




| VSR "ON" 2 3 Voltage | VSR "OFF" 4 5 6 Voltage |
|---|---|
| 13.3 / 27.0 | 12.8/25.6 |
| 13.7 / 27.4 | 12.9/25.8 |
| 14.0 / 28.0 | 13.0/26.0 |
| 14.3 / 28.6 | 13.1/26.2 |
| | 13.2/26.4 |
| | 13.3/26.6 |
| | 13.4/26.8 |
| | 13.5/27.0 |

1 VSR or Relay

VSR

Relay

= Default

**DS1:** Determines device function. If DS1 = OFF, relay will act as a simple Battery Disconnect Switch Remote Relay. If DS1 = ON, relay will operate as a Voltage Sensing Relay (VSR) and will utilize DS2-DS6 to determine VSR response per individual application requirements

**DS2-DS3:** Determines 30 sec ON Trigger Voltage, 10 sec ON Voltage is 0.6 (1.2) Vdc higher. Above this voltage, time delay to turning the relay ON is counting until ON event. If voltage is less than this setting, time delay is re-set to 0.

**DS4-DS6:** Determines OFF Trigger Voltage. See Operational Modes for device response to voltages below this setting. Setting below the batteries stated resting 100% State of Charge Voltage allows accessory loads partial use of start battery energy.

* ON Voltage should beat least 0.2 V above OFF Voltage, otherwise abnormal behavior may result.

## General Specifications (Each Relay)

| | | |
|---|---|---|
| Input Voltage Range (Vdc) | 8.0 - 36.0 Auto-Ranging | |
| Nominal Voltage (Vdc) | 12 | 24 |
| Over Voltage Protection (Vdc) (5 sec) | 17.0 | 34.0 |
| State Change Current (20 msec) | 5.0 A | 3.0 A |
| Standby Current (mA) | 1.3 | 1.3 |
| Live Current Switching -50,000 cycles | 12V/300A | 24V/300A |
| Mechanical Switching Life | 1,000,000 cycles | |
| 2/0 AWG - 30sec/5min/Continuous | 1000 / 400 / 225 Amps | |
| 4/0 AWG - 30sec/5min/Continuous | 1100 / 400 / 300 Amps | |
| 2x 4/0 AWG - 30sec/5min/Cont. | 1600 / 700 / 500 Amps | |
| Hardware Material | Stainless Steel Self-Locking | |
| Terminal Stud Torque | 120 in-lbs | |
| LED/Aux Output Max Drive Current | 400 milli-Amps | |
| Typ Source Current for All Ctrl Lines | 10 micro-Amps | |
| Operating Temperature Range | -40 to 105 C | |
| Ignition Protection | SAE J1171 / ISO 8846 | |

| LED Indicators | Local LED | Rem LED |
|---|---|---|
| Relay OFF - Normal | Off | Off |
| Relay ON - Normal | On | On |
| Relay On - Pending Off | On w/3x Off Flashes | On |
| Relay Off - Pending On | Off w/3x On Flashes | Off |
| Relay Off - Start Isolation Mode | Off w/4x On Flashes | Off |
| Relay Off - Over-Voltage Mode | Off w/5x On Flashes | Off |
| Manual Override Engaged | Off w/2x On Flashes | Off w/2x On Flashes |
| Relay Off - Power Hibernation Mode | Off w/1x On Flash | Off |
| Power Up / Manual Mode Exited and Pending On or Off Event | Continuous Flashing | Off |

## Detailed Operational Modes & Responses

Relay Mode - Relay Closes (Turns ON) Immediately if:
1) Voltage on Either Input to Relay > 9 Vdc (minimum operating Voltage) and either any of the following two conditions exist:
2) Rem On/Off Ctrl (Red) wire is connected to +Vdc (maintain if desire is for device to stay Closed) or
3) Momentary ON Signal Wire (Brown) is Connected to +Vdc Until Device Closes, 2-3 Seconds (+Vdc may then remain or be removed while device remains Closed either way)
4) DS1 = Off, Setting Device as an Simple Relay

Relay Mode - Relay Open (Turns OFF) Immediately if:
1) Voltage on Either Input to Relay > 9 Vdc (minimum operating Voltage) and either any of the following three conditions exist:
2) Rem On/Off Ctrl (Red) wire changes from +Vdc to Floating or
3) Rem On/Off Ctrl (Red) wire is connected to Ground (may be momentarily or permanently connected for device to stay Closed) or
4) Momentary OFF Signal Wire (Green) is Connected to +Vdc Until Device Opens, 1-2 Seconds (+Vdc may then remain or be removed while device will remain Open either way)
5) Rem Ctrl (Red) wire and Momentary ON Signal Wire (Brown) must not have +Vdc applied, they will override Off Signal from Green Wire
6) DS1 = Off, Setting Device as an Simple Relay

VSR Mode - Relay Closes (Turns ON) after 30 sec if:
**1) Voltage on Either Input > V_On as determined by DS2-DS3 and**
2) Rem Ctrl (Red) wire is not connected to +Vdc or Gnd and
3) Start Isolation Input Wires SI#1 (Brown) and SI#2 (Green) Not Connected to +Vdc
4) DS1 = On, Setting Device as an Voltage Sensing Relay (VSR)

VSR Mode - Relay Closes (Turns ON) after 10 sec if:
**1) Voltage on Either Input to Relay > V_on + 0.6 V (1.2V if on 24V System) as determined by DS4-DS6 and**
2) Rem Ctrl (Red) wire is not connected to +Vdc or Gnd
3) Start Isolation Input Wires SI#1 (Brown) and SI#2 (Green) Not Connected to +Vdc
4) DS1 = On, Setting Device as an Voltage Sensing Relay (VSR)

VSR Mode - Relay Automatically Opens (Turns OFF) if:
**1) Voltage on Either Input < V_Off as determined by DS4-DS6 and**
2) Rem Ctrl (Red) wire is not connected to +Vdc or Gnd and
3) Start Isolation Input Wires SI#1 (Brown) and SI#2 (Green) are Not Connected to +Vdc and
4) DS1 = On, Setting Device as an Voltage Sensing Relay and
5) At least 120 sec has passed since the device was either forced Closed by the Red input wire or the device automatically Closed and
6) The advanced charge management algorithm has determined that any electrical charging, if operating, is not equal to or great than the electrical loads discharging the connected batteries.

VSR Mode - Relay Opens (Turns OFF) after 15 sec if:
**1) Voltage on Either Input to Relay > Over-voltage set point for 15 continuous seconds and**
2) Rem Ctrl (Red) wire is not connected to +Vdc or Gnd

VSR Mode - Relay Immediately Closes (Turns ON) Immediately if:
**1) Voltage on Either Input > 9 Vdc (minimum operating Vdc) and**
2) Rem Ctrl (Red) wire is connected to +Vdc

VSR Mode - Relay Immediately Opens (Turns OFF) immediately if:
1) Voltage on Either Input to Relay > 9 Vdc (minimum operating Voltage) and either any of the following three conditions exist:
2) Rem Ctrl (Red) wire is connected to Gnd
3) Start Isolation Input Wire SI#1 (Brown) is Connected to +Vdc
4) Start Isolation Input Wire SI#2 (Green) is Connected to +Vdc

VSR Mode - Start Isolation Prevents Voltage Based Automatic Closing:
**1) For as long as one or more of the two Start Isolation Lines SI#1 and/or SI#2 have +Vdc applied on the wires**
2) For 3 minutes after +Vdc is no longer applied to both **Start Isolation Lines SI#1 and/or SI#2 have +Vdc applied on the wires**

Manual Override Prevents Remote or Voltage Based Open or Closing:
**1) For as long as the manual knob (if equipped) is not positioned in the "Auto/Rem" orientation**

Upon Startup or Returning Device from Manual to Auto/Rem Mode:
**1) The remote LED will remain OFF regardless of the physical status of the VSR until the VSR is remotely forced ON/OFF or automatically attempts to turn itself ON/OFF.**
**2) The local LED will rapid flash if the device has an input voltage that would dictate a pending ON or OFF is necessary.**

EGIS MOBILE ELECTRIC

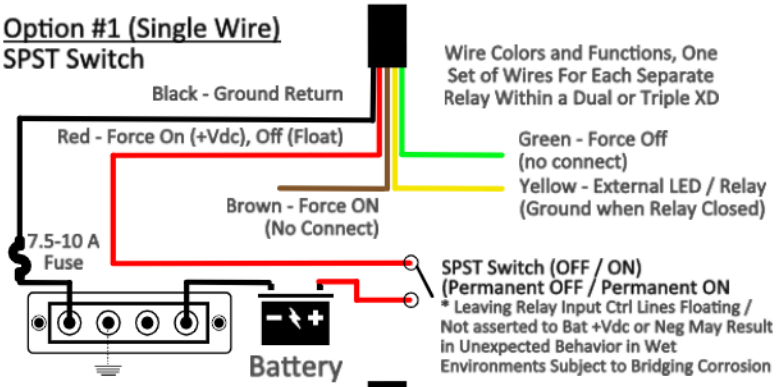
www.egismobile.com
360.768.1211
Bellingham, WA U.S.A

AMERICA DESIGNED • ASSEMBLED • TESTED

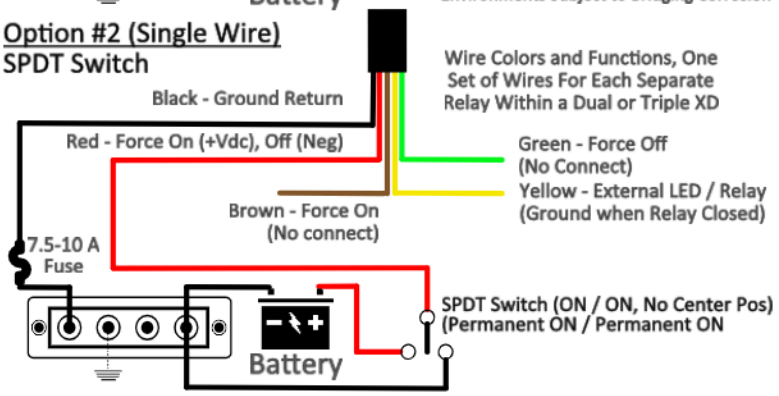
VETERAN OWNED BUSINESS

## Fig 1 - Relay Mode - Control Wiring Options

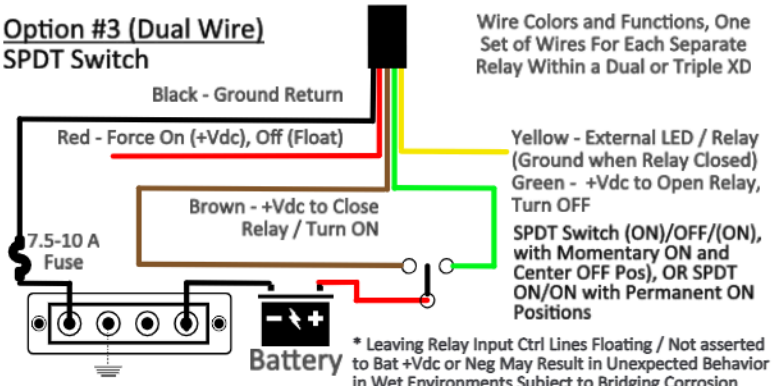
**Option #1 (Single Wire)**
**SPST Switch**




**Option #2 (Single Wire)**
**SPDT Switch**




**Option #3 (Dual Wire)**
**SPDT Switch**

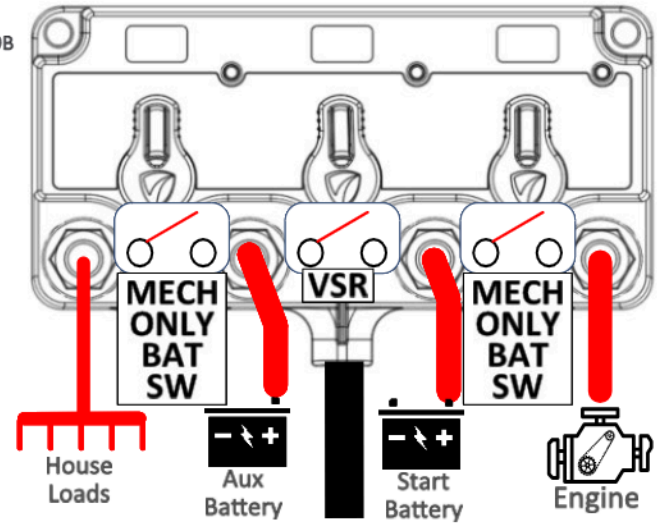



* Leaving Relay Input Ctrl Lines Floating / Not asserted to Bat +Vdc or Neg May Result in Unexpected Behavior in Wet Environments Subject to Bridging Corrosion

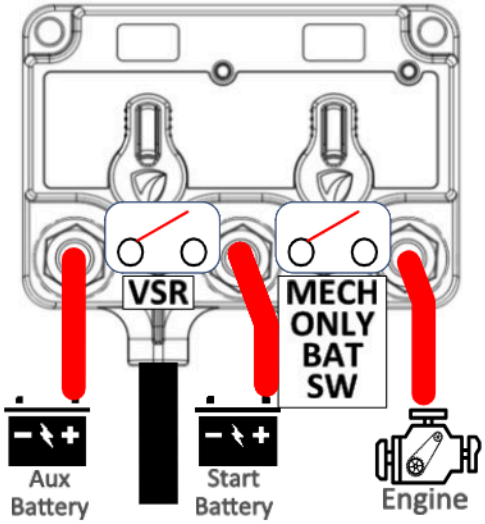
## Fig 2 - Mechanical Only Contactor Option

XD Series Single, Dual, and Triple XD Relays are available with one or more positions constructed as a mechanical only battery switch / mechanical contactor. This offers the option for certain application a more cost effective solution to variations with all relay positions that are remote relays. See examples below

Example:
8730-1939B




Example:
8720-1930B

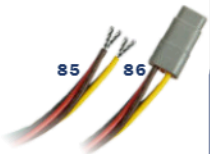



## Fig 3 - XD Series Part Number Guide

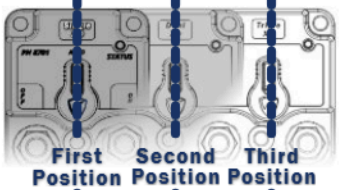
8530 - 1535B

**1 = Single Circuit XD Relay**
**2 = Dual Circuit XD Relay**
**3 = Triple Circuit XD Relay**

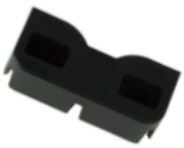
**1 = Standard Configuration**
**2-9 = Special DT Connector Solution**




**85 = XD Series Flex L (Lithium) w/Tinned Control Wires**
**86 = XD Series Flex L (Lithium) w/Deutsch Control Connector**




**0 = Not Applicable (no relay in position)**
**3 = Flex L Set as ACR w/Knob**
**4 = Flex L Set as ACR No Knob**
**5 = Flex L Set as Battery Switch w/Knob**
**6 = Flex L Set as Battery Switch No Knob**
**9 = Mechanical Only Switch w/Knob**



**Protective Terminal Cover Included!**

**B = Bulk Packed**
**(Blank) = Retail Shelf Pack**

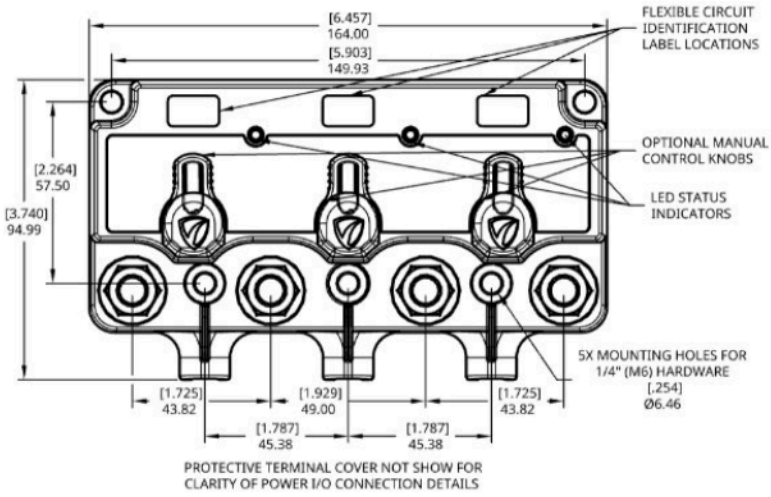
* Custom product configurations available including control harness wires, time delays, voltage settings, dip switch functionality, and control input functionality. Contact support@egismobile.com

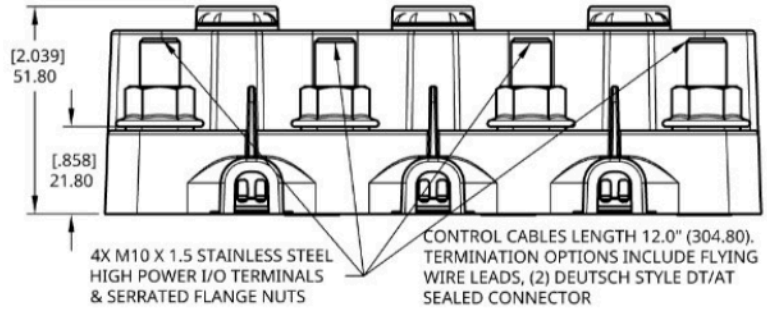

EGIS MOBILE ELECTRIC

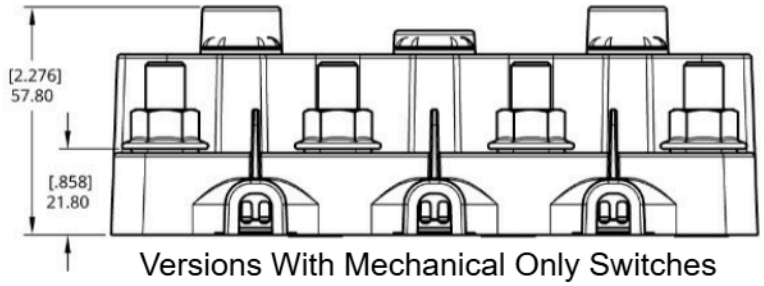
www.egismobile.com
360.768.1211
Bellingham, WA U.S.A

VETERAN OWNED BUSINESS

## Fig 4 - Triple XD Series - Dimensions

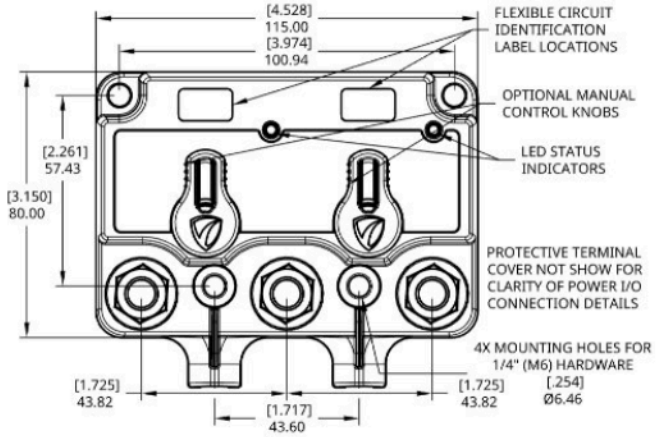


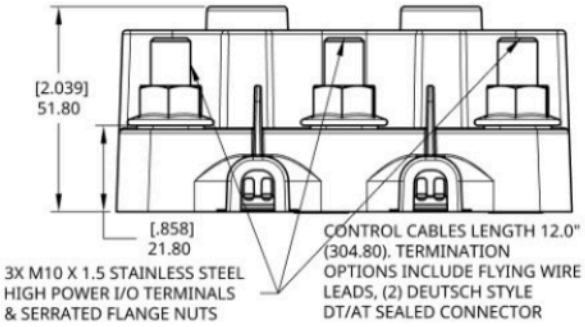



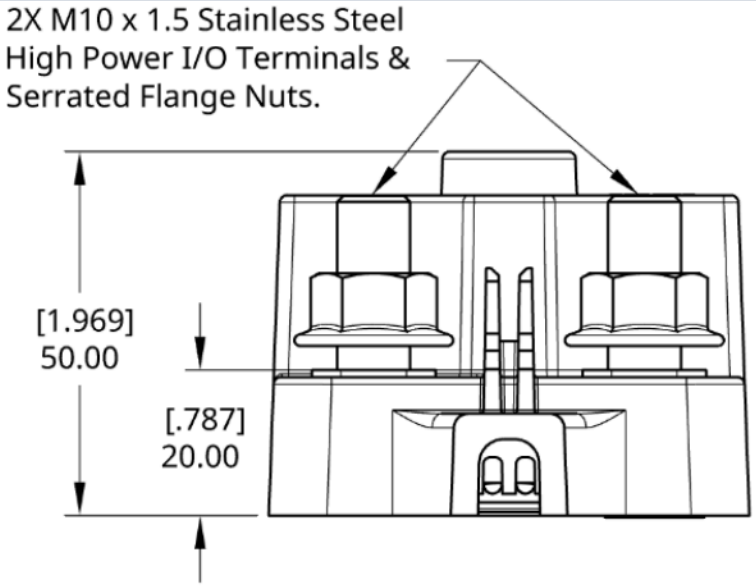

Versions With Mechanical Only Switches

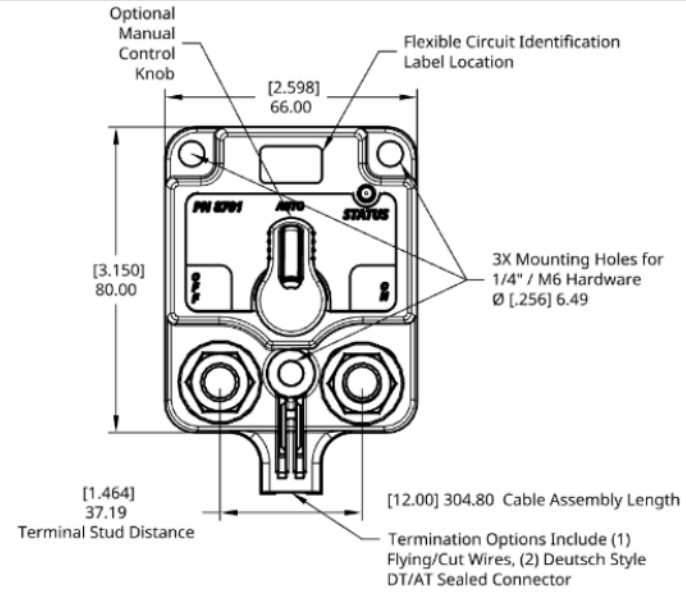
## Fig 5 - Dual XD Series - Dimensions



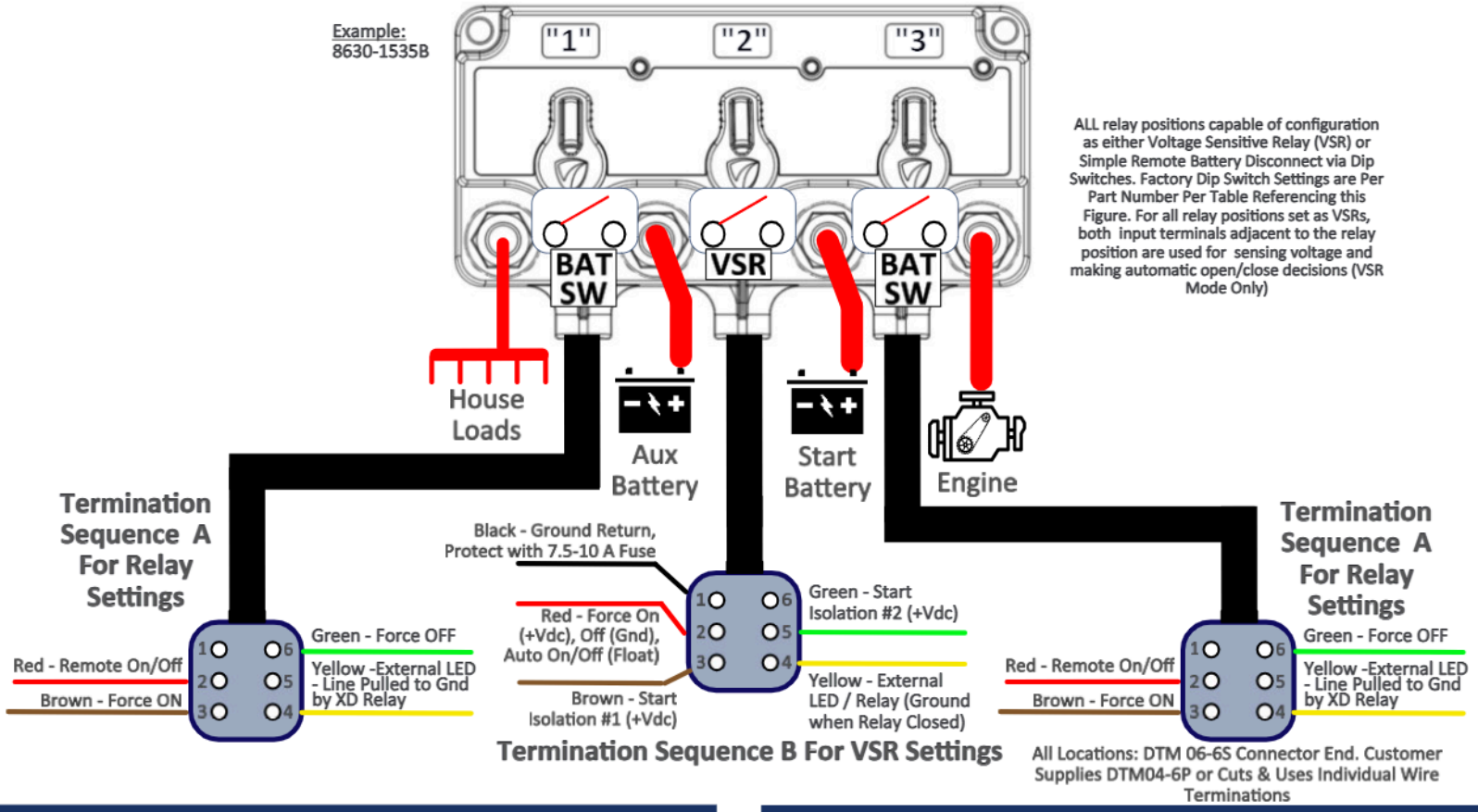

## Fig 6 - Single XD Series - Dimensions



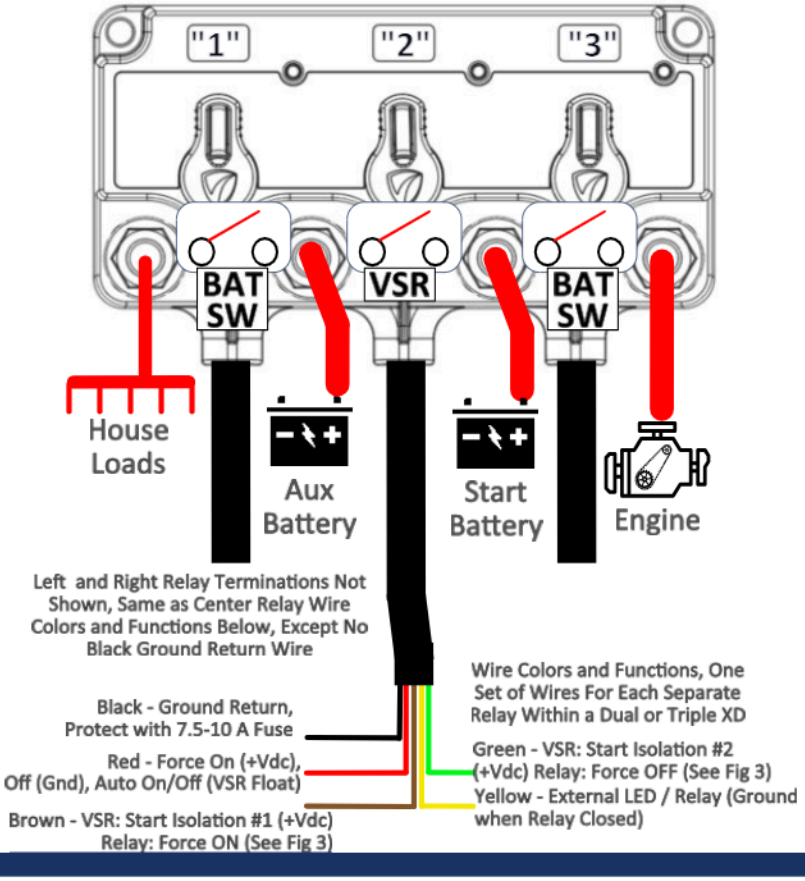




EGIS MOBILE ELECTRIC
www.egismobile.com
360.768.1211
Bellingham, WA U.S.A
AMERICA DESIGNED ASSEMBLED TESTED
VETERAN OWNED BUSINESS

## Fig 7 - Triple XD - 86 Series (DTM Connectors) Diagram (Matches Legacy Remote Relay Solutions)




## Fig 8 - Triple XD - 85 Series (Connection Diagram)




### Triple XD Relay Part Numbers and Dip Switch Settings (Fig 7)

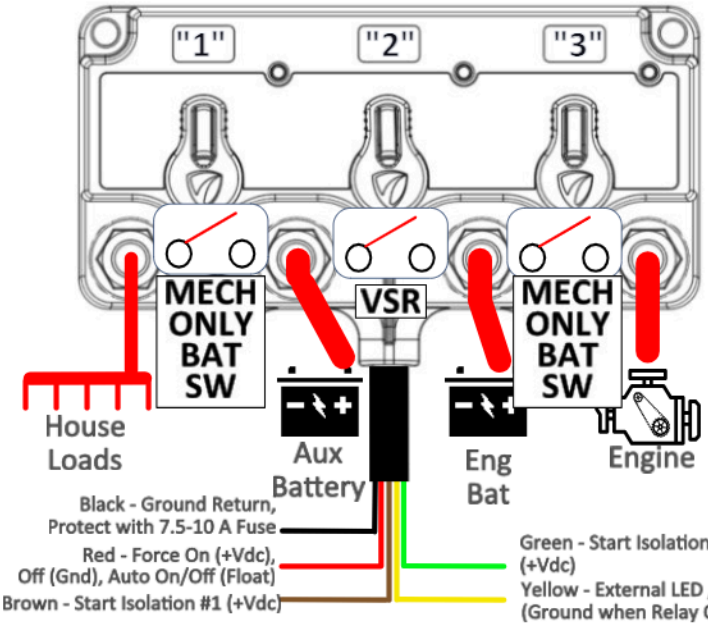
| Left Relay | | Center Relay | | Right Relay | | |
|---|---|---|---|---|---|---|
| Knob | Setting | Knob | Setting | Knob | Setting | Bulk PNs |
| Yes | VSR | Yes | VSR | Yes | VSR | 8630-1333B |
| No | VSR | No | VSR | No | VSR | 8630-1444B |
| Yes | Relay | Yes | VSR | Yes | Relay | 8630-1535B |
| Yes | Relay | No | VSR | Yes | Relay | 8630-1545B |
| Yes | Relay | Yes | Relay | Yes | Relay | 8630-1555B |
| No | Relay | Yes | VSR | No | Relay | 8630-1636B |
| No | Relay | No | VSR | No | Relay | 8630-1646B |
| No | Relay | No | Relay | No | Relay | 8630-1666B |

### Triple XD Relay Part Numbers and Dip Switch Settings (Fig 8)

| Left Relay | | Center Relay | | Right Relay | | |
|---|---|---|---|---|---|---|
| Knob | Setting | Knob | Setting | Knob | Setting | Bulk PNs |
| Yes | VSR | Yes | VSR | Yes | VSR | 8530-1333B |
| No | VSR | No | VSR | No | VSR | 8530-1444B |
| Yes | Relay | Yes | VSR | Yes | Relay | 8530-1535B |
| Yes | Relay | No | VSR | Yes | Relay | 8530-1545B |
| Yes | Relay | Yes | Relay | Yes | Relay | 8530-1555B |
| No | Relay | Yes | VSR | No | Relay | 8530-1636B |
| No | Relay | No | VSR | No | Relay | 8530-1646B |
| No | Relay | No | Relay | No | Relay | 8530-1666B |

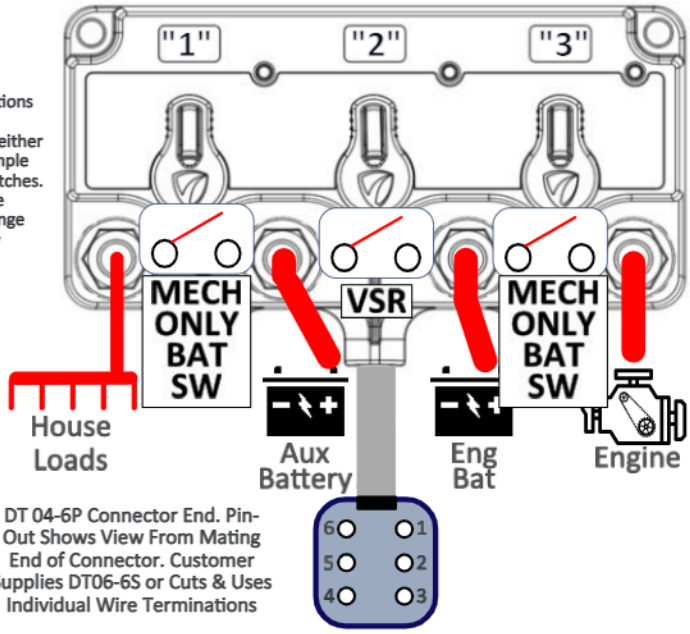

EGIS MOBILE ELECTRIC
www.egismobile.com
360.768.1211
Bellingham, WA U.S.A
AMERICA DESIGNED • ASSEMBLED • TESTED
VETERAN OWNED BUSINESS

## Fig 9 - Triple XD - 85 Series (Mech Only Bat Sw)




ALL switch positions capable of configuration as either VSR/ACR or Simple Relay via Dip Switches. Control wire responses change accordingly

## Fig 10 - Triple XD - 86 Series (Mech Only Versions)



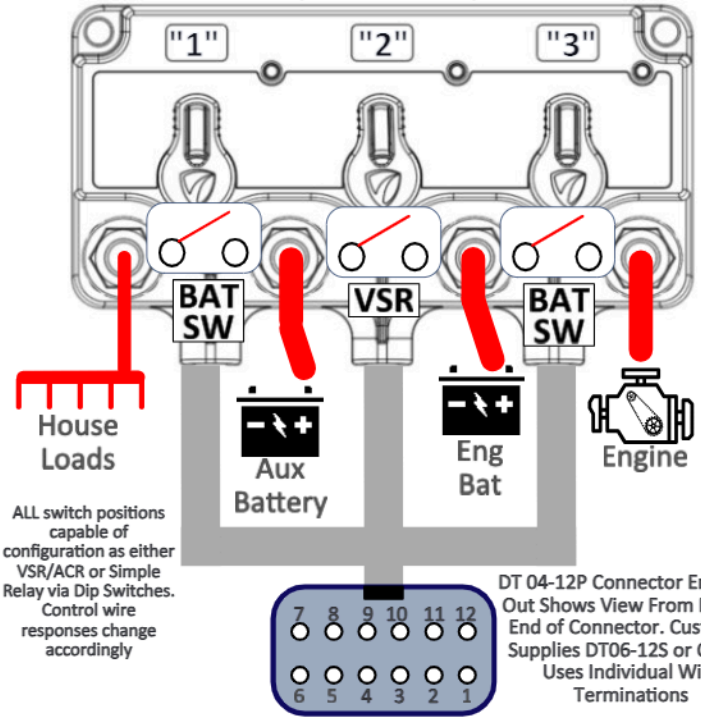

DT 04-6P Connector End. Pin-Out Shows View From Mating End of Connector. Customer Supplies DT06-6S or Cuts & Uses Individual Wire Terminations




| 6 Pin DT Connector Functions (Fig 10) | Pin # | Wire Color |
|---|---|---|
| Ground (Required), Protect w/ 7.5 - 10.0 A Fuse | 1 | Black |
| Relay 2 Rem Ctrl Signal (Optional / Recommended) | 2 | Red |
| Relay 2 Start Isolation #1 / Relay Mode OFF (+Vdc) | 3 | Brown |
| Relay 2 Rem Indicator (Active Low), (Optional) | 4 | Yellow |
| Relay 2 Start Isolation #2 / Relay Mode ON (+Vdc) | 5 | Green |

## Fig 11 - Triple XD - 86 Series (Single DT Conn)

Ex: 8630-2535B, 8630-2545B, 8630-2636B




ALL switch positions capable of configuration as either VSR/ACR or Simple Relay via Dip Switches. Control wire responses change accordingly

DT 04-12P Connector End. Pin-Out Shows View From Mating End of Connector. Customer Supplies DT06-12S or Cuts & Uses Individual Wire Terminations

| 12 Pin Connector Functions (Fig 11) | Pin # | Wire Color |
|---|---|---|
| Ground (Required), Protect w/ 7.5 - 10.0 A Fuse | 1 | Black |
| Relay 1 Rem Ctrl Signal (Optional / Recommended) | 2 | Red |
| Relay 1 Rem Indicator (Active Low), (Optional) | 3 | Yellow |
| Relay 2 Rem Ctrl Signal (+Vdc/Float/Gnd) | 4 | Red |
| Relay 2 Rem Indicator (Optional / Recommended) | 5 | Yellow |
| Relay 2 Start Isolation #1 Input (Optional) | 6 | Brown |
| Relay 2 Start Isolation #2 Input (Optional) | 7 | Green |
| Relay 3 Rem Ctrl Signal (Optional / Recommended) | 8 | Red |
| Relay 3 Rem Indicator (Active Low), (Optional) | 9 | Yellow |

## Triple XD Relay Part Numbers and Dip Switch Settings (Fig 9 & 10)

| Left Relay | | Center Relay | | Right Relay | | |
|---|---|---|---|---|---|---|
| Knob | Setting | Knob | Setting | Knob | Setting | Bulk PNs |
| Yes | None (1) | Yes | VSR | Yes | None (1) | 8530-1939B |
| Yes | None (1) | No | VSR | Yes | None (1) | 8530-1949B |
| Yes | None (1) | Yes | VSR | Yes | None (1) | 8630-1939B |
| Yes | None (1) | No | VSR | Yes | None (1) | 8630-1949B |

## Triple XD Relay Part Numbers and Dip Switch Settings (Fig 10)

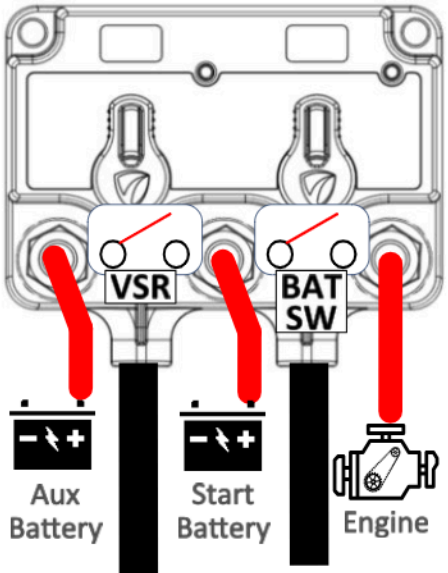
| Left Relay | | Center Relay | | Right Relay | | |
|---|---|---|---|---|---|---|
| Knob | Setting | Knob | Setting | Knob | Setting | Bulk PNs |
| Yes | Relay | Yes | VSR | Yes | Relay | 8630-2535B |
| Yes | Relay | No | VSR | Yes | Relay | 8630-2545B |
| Yes | Relay | Yes | Relay | Yes | Relay | 8630-2555B |
| No | Relay | Yes | VSR | No | Relay | 8630-2636B |
| No | Relay | No | VSR | No | Relay | 8630-2646B |
| No | Relay | No | Relay | No | Relay | 8630-2666B |

EGIS MOBILE ELECTRIC
www.egismobile.com
360.768.1211
Bellingham, WA U.S.A
VETERAN OWNED BUSINESS

## Fig 12 - Dual XD - 85 Series (Flying Wires)

Example:
8520-1530B

ALL switch positions capable of configuration as either VSR/ACR or Simple Relay via Dip Switches. Control wire responses change accordingly




Wire Colors and Functions, One Set of Wires For Each Separate Relay Within a Dual or Triple XD, Only One Black Ground Wire Per Device

Right Relay Terminations Not Shown, Same as Center Relay Wire Colors and Functions Below (Except for "9" Mechanical Only Positions, Where No Control Wires Exit Device). Only One Black Ground Wire Per Device

Black - Ground Return, Protect with 7.5-10 A Fuse

Red - Force On (+Vdc), Off (Gnd), Auto On/Off (Float)

Green - (VSR Mode) Start Isolation #2 (+Vdc); (Relay Mode) Turn OFF (+Vdc)

Brown - (VSR Mode) Start Isolation #1 (+Vdc) (Relay Mode) Turn ON (+Vdc)

Yellow - External LED / Relay (Ground when Relay Closed)

## Dual XD Relay Part Numbers and Dip Switch Settings (Fig 12)

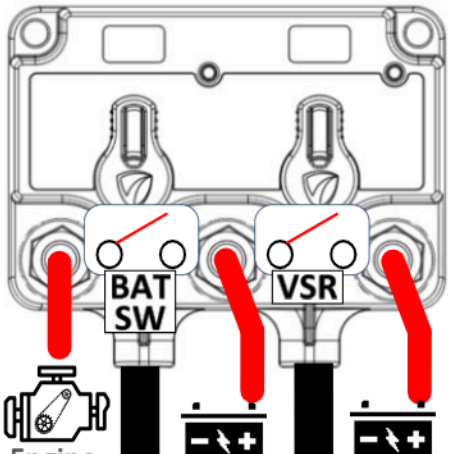
| Left Relay | | Right Relay | | |
|---|---|---|---|---|
| Knob | Setting | Knob | Setting | Bulk PNs |
| Yes | VSR | Yes | VSR | 8520-1330B |
| No | VSR | No | VSR | 8520-1440B |
| Yes | VSR | No | Relay | 8520-1350B |
| Yes | Relay | Yes | VSR | 8520-1530B |
| No | VSR | Yes | Relay | 8520-1450B |
| Yes | Relay | No | VSR | 8520-1540B |
| Yes | Relay | Yes | Relay | 8520-1550B |
| No | Relay | No | Relay | 8520-1660B |
| Yes | VSR | Yes | Mech Only | 8520-1390B |
| No | VSR | Yes | Mech Only | 8520-1490B |
| Yes | Relay | Yes | Mech Only | 8520-1590B |

- Mechanical Only (Mech Only) locations do not have an active remotely controllable relay or an automatic operation relay but instead offer only an "on-device" mechanical disconnect for that specific location

## Fig 13 - Dual XD - 86 Series (DTM Connectors) (Matches Legacy Remote Relay Solutions)

Example:
8620-1530B

ALL relay positions capable of configuration as either Voltage Sensitive Relay (VSR) or Simple Remote Battery Disconnect via Dip Switches. Factory Dip Switch Settings are Per Part Number. For all relay positions set as VSRs, both input terminals adjacent to the relay position are used for sensing voltage and making automatic open/close decisions (VSR Mode Only)




**Termination Sequence A For Relays**

Black - Ground Return, Protect with 7.5-10 A Fuse

Red - Remote On/Off

Brown - Force ON

Green - Force OFF

Yellow -External LED - Line Pulled to Gnd by XD Relay

DTM 06-6S Connector End. Customer Supplies DTM04-6P or Cuts & Uses Individual Wire Terminations

**Termination Sequence B For ACRs/VSRs**

Red - Force On (+Vdc), Off (Gnd), Auto On/Off (Float)

Brown - Start Isolation #1 (+Vdc)

Green - Start Isolation #2 (+Vdc)

Yellow - External LED / Relay (Ground when Relay Closed)

DTM 06-6S Connector End. Customer Supplies DTM04-6P or Cuts & Uses Individual Wire Terminations

## Dual XD Relay Part Numbers and Dip Switch Settings (Fig 13)

| Left Relay | | | Right Relay | | | |
|---|---|---|---|---|---|---|
| Knob | Setting | Term Seq | Knob | Setting | Term Seq | Bulk PNs |
| Yes | VSR | B | Yes | VSR | B | 8620-1330B |
| No | VSR | B | No | VSR | B | 8620-1440B |
| Yes | VSR | B | No | Relay | A | 8620-1350B |
| Yes | Relay | A | Yes | VSR | B | 8620-1530B |
| No | VSR | B | Yes | Relay | A | 8620-1450B |
| Yes | Relay | A | No | VSR | B | 8620-1540B |
| Yes | Relay | A | Yes | Relay | A | 8620-1550B |
| No | Relay | A | No | Relay | A | 8620-1660B |
| Yes | VSR | B | Yes | Mech Only | - | 8620-1390B |
| No | VSR | B | No | Mech Only | - | 8620-1490B |
| Yes | Relay | B | Yes | Mech Only | - | 8620-1590B |

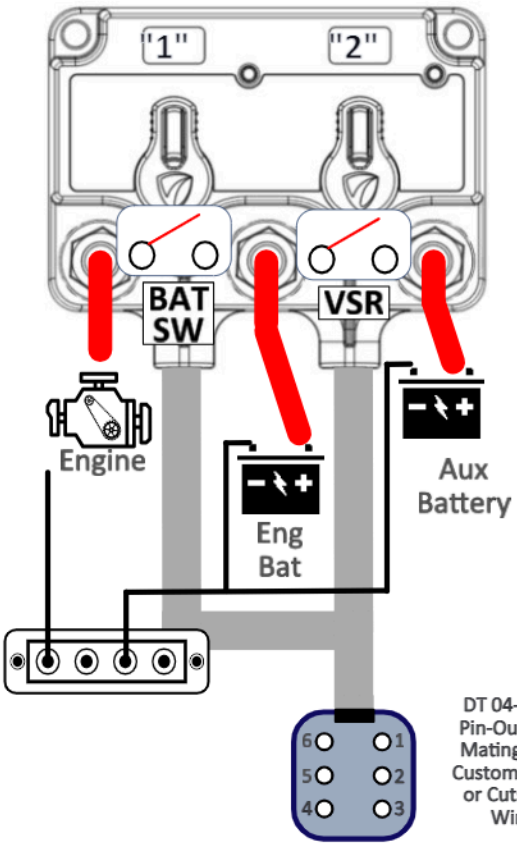
- Mechanical Only (Mech Only) locations do not have an active remotely controllable relay or an automatic operation relay but instead offer only an "on-device" mechanical disconnect for that specific location


EGIS MOBILE ELECTRIC

www.egismobile.com
360.768.1211
Bellingham, WA U.S.A

VETERAN OWNED BUSINESS

## Fig 14 - Dual XD - 86 Series (Mounts Left of Triple)




Depicted with manual override knobs in all locations. Availability of manual override knob for either relay position determined by the part number. See part number guide for further details.

Relay locations set to either VSR or Battery Switch functionality per designations on this diagram. Builders, installers, and end users can change via dip switches on back of device.

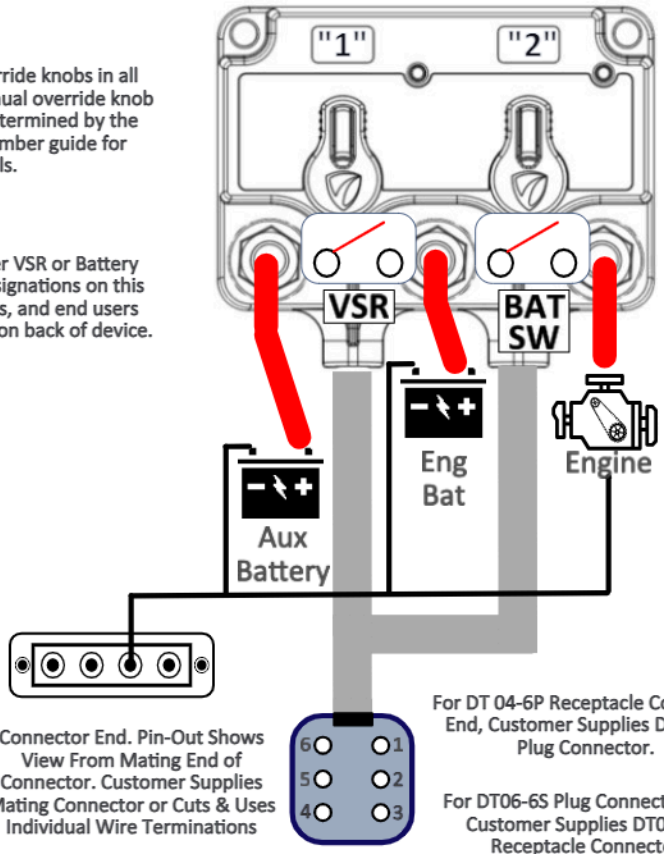
DT 04-6P Connector End. Pin-Out Shows View From Mating End of Connector. Customer Supplies DT06-6S or Cuts & Uses Individual Wire Terminations

| 6 Pin Connector Functions (Fig 14) | Pin # | Wire Color |
|---|---|---|
| Ground (Required), Protect w/ 7.5 - 10.0 A Fuse | 1 | Black |
| Relay 1 Rem Ctrl Signal (Optional / Recommended) | 2 | Red |
| Relay 1 Rem Indicator (Active Low), (Optional) | 3 | Yellow |
| Relay 2 Rem Ctrl Signal (+Vdc/Float/Gnd) | 4 | Red |
| Relay 2 Rem Indicator (Optional / Recommended) | 5 | Yellow |
| Relay 2 Start Isolation #1 Input (Optional) | 6 | Brown |

### Dual XD Part Numbers Dip Switch Settings (Fig 14)

| Left Relay | | Right Relay | | |
|---|---|---|---|---|
| Knob | Setting | Knob | Setting | Bulk PNs |
| Yes | Relay | Yes | VSR | 8620-6530B |
| Yes | Relay | No | VSR | 8620-6540B |
| No | Relay | Yes | VSR | 8620-6630B |
| No | Relay | No | VSR | 8620-6640B |
| Yes | Relay | Yes | Relay | 8620-6550B |

## Fig 15 - Dual XD - 86 Series (Mounts Right of Triple)




Connector End. Pin-Out Shows View From Mating End of Connector. Customer Supplies Mating Connector or Cuts & Uses Individual Wire Terminations

For DT 04-6P Receptacle Connector End, Customer Supplies DT06-6S Plug Connector.

For DT06-6S Plug Connector End, Customer Supplies DT04-6P Receptacle Connector

| 6 Pin Connector Functions (Fig 15) | Pin # | Wire Color |
|---|---|---|
| Ground (Required), Protect w/ 7.5 - 10.0 A Fuse | 1 | Black |
| Relay 1 Rem Ctrl Signal (Optional / Recommended) | 2 | Red |
| Relay 1 Rem Indicator (Active Low), (Optional) | 3 | Yellow |
| Relay 2 Rem Ctrl Signal (+Vdc/Float/Gnd) | 4 | Red |
| Relay 2 Rem Indicator (Optional / Recommended) | 5 | Yellow |
| Relay 1 Start Isolation #1 Input (Optional) | 6 | Brown |

### Dual XD Part Numbers Dip Switch Settings (Fig 15)

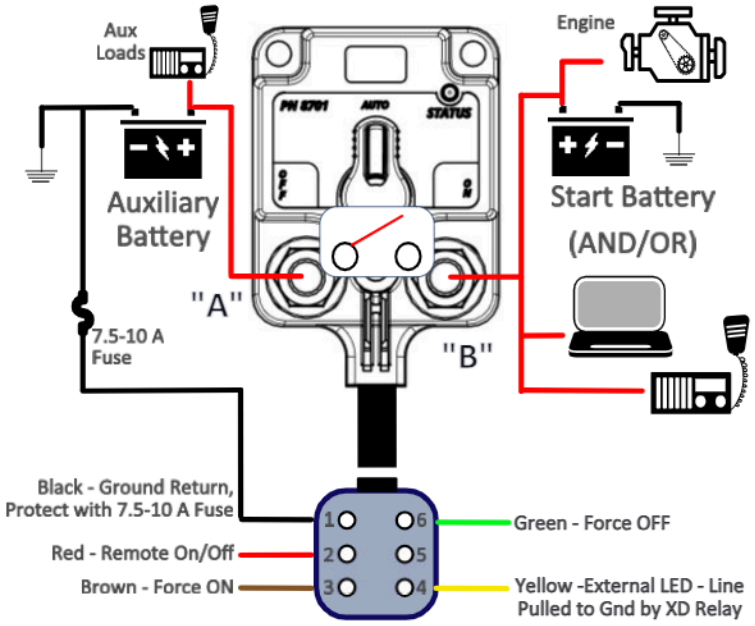
| Left Relay | | Right Relay | | | Housing Connector | |
|---|---|---|---|---|---|---|
| Knob | Setting | Knob | Setting | Bulk PNs | Color | Gender |
| Yes | VSR | Yes | Relay | 8620-6350B | Gray | Receptacle |
| No | VSR | Yes | Relay | 8620-6450B | Gray | Receptacle |
| Yes | VSR | No | Relay | 8620-6360B | Gray | Receptacle |
| No | VSR | No | Relay | 8620-6460B | Gray | Receptacle |
| Yes | VSR | Yes | Relay | 8625-6350B | Black | Plug |

EGIS MOBILE ELECTRIC

www.egismobile.com
360.768.1211
Bellingham, WA U.S.A

VETERAN OWNED BUSINESS

## Fig 16 - Single XD - 85/86 Remote Relay/Battery Switch (Connector Matches Legacy Blue Sea Systems Relays)



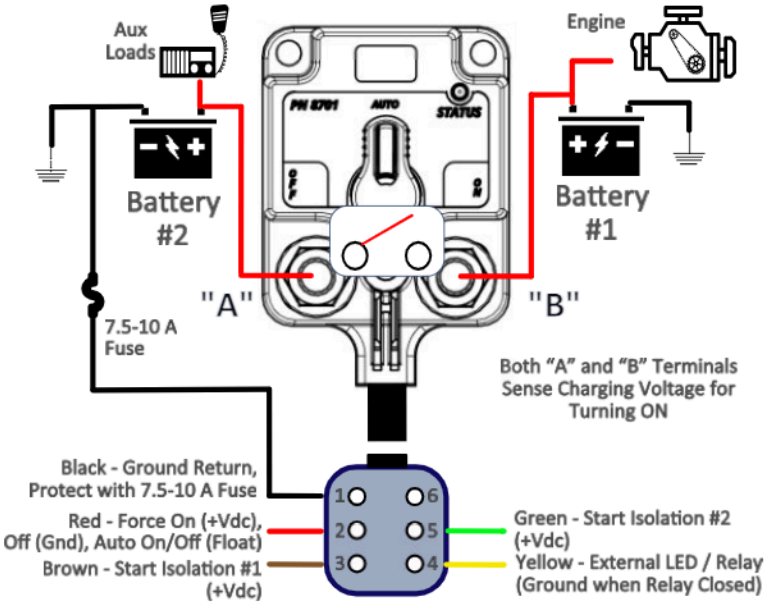

A) 86xx-xxxx Part Numbers Use a DTM 06-6S Connector End. Customer Supplies DTM04-6P or Cuts & Uses Individual Wire Terminations.
B) 85xx-xxxx Part Numbers Provide Flying Wires With Colors Matching the Same Functions Outlined on the Connector End Diagram, But Without the Connector.

| 6 Pin DTM Connector Functions | Pin # | Wire Color |
|---|---|---|
| Ground (Required), Protect w/ 7.5 - 10.0 A Fuse | 1 | Black |
| Single Wire Close/Open (See Pg 3, Relay Mode) | 2 | Red |
| Relay Close (See Pg 3 it Relay Mode, If Changed to VSR then Start Isolation #1 Function) | 3 | Brown |
| Remote Indicator | 4 | Yellow |
| Relay Open (See Pg 3 it Relay Mode, If Changed to VSR then Start Isolation #2 Function) | 6 | Green |

| Single XD Part Numbers Dip Switch Settings For Above | | | |
|---|---|---|---|
| Knob | Default Setting | Termination | Bulk PNs |
| Yes | Relay | Flying Wires | 8510-1500B |
| Yes | Relay | DTM Connector | 8610-1500B |
| No | Relay | Flying Wires | 8510-1600B |
| No | Relay | DTM Connector | 8610-1600B |
| Yes | Mechanical Only | None | 8510-1900B |

- Mechanical Only (Mech Only) locations do not have an active remotely controllable relay or an automatic operation relay but instead offer only an "on-device" mechanical disconnect for that specific location. No control wire terminations are present

## Fig 17 - Single XD - 85/86 Voltage Sensitive Relay (VSR/ ACR) (Connector Matches Legacy Blue Sea System ACRs )




A) 86xx-xxxx Part Numbers Use a DTM 06-6S Connector End. Customer Supplies DTM04-6P or Cuts & Uses Individual Wire Terminations.
B) 85xx-xxxx Part Numbers Provide Flying Wires With Colors Matching the Same Functions Outlined on the Connector End Diagram, But Without the Connector.

| 6 Pin DTM Connector Functions | Pin # | Wire Color |
|---|---|---|
| Ground (Required), Protect w/ 7.5 - 10.0 A Fuse | 1 | Black |
| VSR ON/Auto/Off (If Changed to Relay Mode then Single Wire Close/Open (See Pg 3) | 2 | Red |
| Start Isolation #1 Function (If Changed to Relay then Relay Close (See Pg 3) | 3 | Brown |
| Remote Indicator | 4 | Yellow |
| Start Isolation #2 Function (If Changed to Relay then Relay Open (See Pg 3) | 5 | Green |

| Single XD Part Numbers Dip Switch Settings For Above | | | |
|---|---|---|---|
| Knob | Default Setting | Termination | Bulk PNs |
| Yes | VSR | Flying Wires | 8510-1300B |
| Yes | VSR | DTM Connector | 8610-1300B |
| No | VSR | Flying Wires | 8510-1400B |
| No | VSR | DTM Connector | 8610-1400B |


EGIS MOBILE ELECTRIC
www.egismobile.com
360.768.1211
Bellingham, WA U.S.A
VETERAN OWNED BUSINESS