48V Parallel Battery System NeverDie-PSS-SOC

STEP-BY-STEP WIRING DIAGRAM

ALL POWER CABLES 2/0 AWG UNLESS MARKED OTHERWISE

Discharge and Charge Connection Point

12V

48V NeverDie Box

BATTERY (+48V) LOAD (+48V)

48V SOC Sender Box

BATTERY (+48V) LOAD (+48V)

AUX. RESET SWITCH

HVC OUT

HVC IN

GENERATOR START/STOP SWITCH

GEN. START SIGNAL (20AWG)

GEN. RUN SIGNAL (16AWG) (INPUT 12-24V)
**STEP 1:** Connect the cell loop from each 12V battery module in series to the NeverDie box as shown.
STEP 2: Connect the 12V Battery modules in series to create two 48V battery systems as shown below.
STEP 3: Connect the 12V Battery modules shown in parallel. This is to promote a better balanced system which will increase the performance and life span of the battery system over time.

ALL POWER CABLES 2/0 AWG UNLESS MARKED OTHERWISE
STEP 4: Connect the most positive terminal of each 48V system to the NeverDie box terminal labeled Battery.

ALL POWER CABLES 2/0 AWG UNLESS MARKED OTHERWISE
STEP 5: Using a 4/0AWG cable connect the Load terminal of the NeverDie Box to the Battery Terminal of the SOC Sender box.
**STEP #**: Connect the HVC OUT cable from the NeverDie box to the HVC IN cable of the SOC Sender box.
STEP 6: Connect the most negative terminal of the closest proximity 48V system to the NeverDie & SOC boxes negative reference wire.

[Diagram showing cell loops and connections for 12V and 48V systems, including series and parallel connections, battery and load connections, and wiring details.]

48V Discharge and Charge Connection Point

ALL POWER CABLES 2/0 AWG UNLESS MARKED OTHERWISE
STEP 7: Connect the most negative terminal of each 48V system to the negative discharge & charge bus bar.
STEP 8: Connect the SOC Terminal labeled LOAD to the +48V discharge & charge bus bar.
ALL POWER CABLES 2/0 AWG UNLESS MARKED OTHERWISE

Lithionics Battery

48V Parallel Battery System PSS-SOC

Cell loop
Cell loop
Cell loop
Cell loop
Cell loop
Cell loop

12V
12V
12V
12V
12V
12V

Series Connection
Series Connection
Series Connection
Series Connection
Series Connection
Series Connection

Parallel Connection
Parallel Connection
Parallel Connection
Parallel Connection
Parallel Connection
Parallel Connection

12V
12V
12V
12V
12V
12V

BMS REF. -48V 16AWG
SOC REF. -48V 16AWG
BMS +48V

AUX. RESET SWITCH
HVC OUT
HVC IN

BATTERY (+48V) LOAD (+48V)
48V NeverDie Box

4/0 AWG (OR 2x 2/0AWG)

48V SOC Sender Box

BATTERY (+48V) LOAD (+48V)

4/0 AWG (OR 2x 2/0AWG)

48V Discharge and Charge Connection Point

GENERATOR
START/STOP SWITCH
GEN. START SIGNAL (20AWG)
GEN. RUN SIGNAL (16AWG) (INPUT 12-24V)