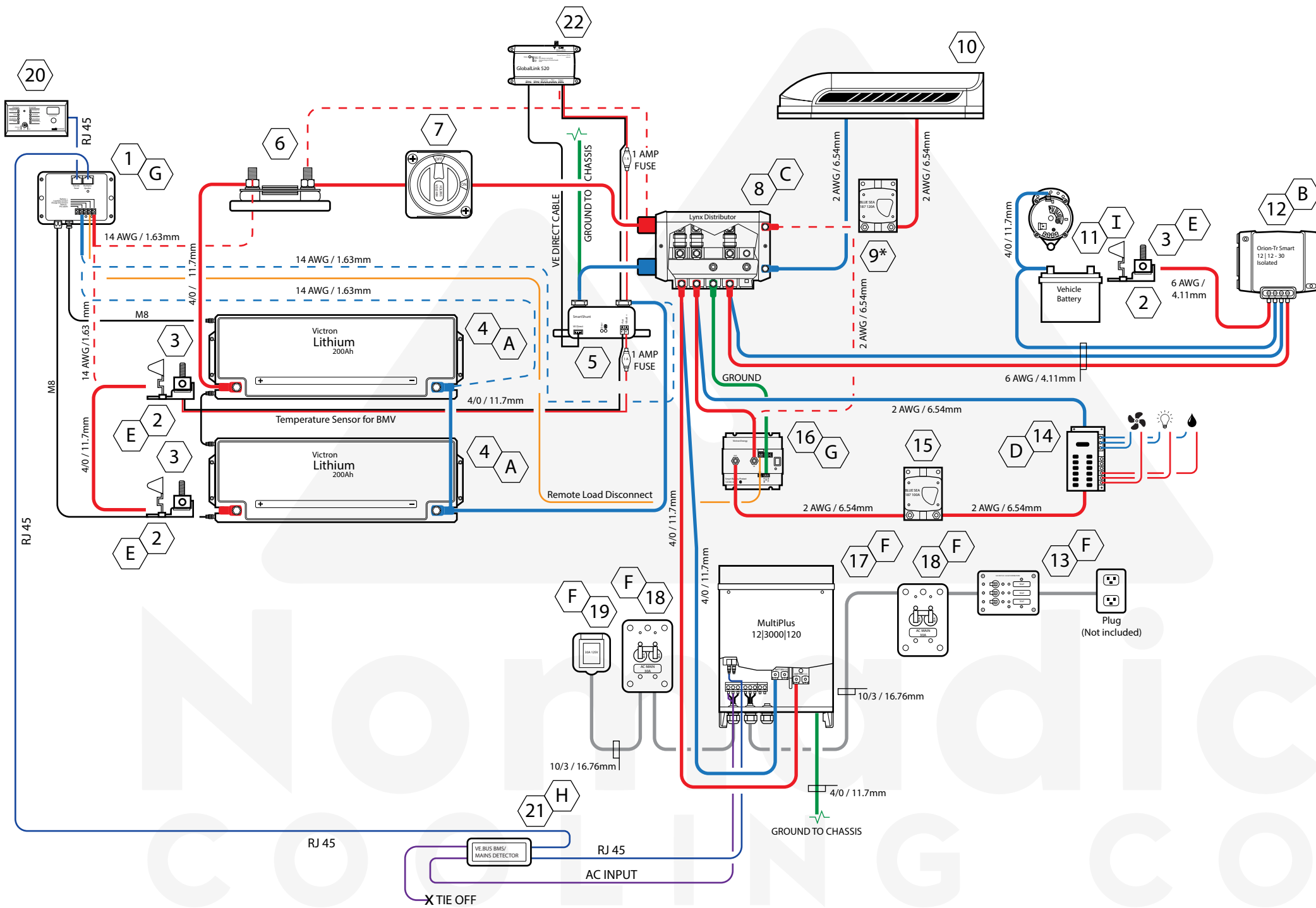


ROAMER 400ah

Electrical Wiring Diagram



WIRING DIAGRAM

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:

Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.

ROAMER 12V 400AH

A1.1

LEGEND

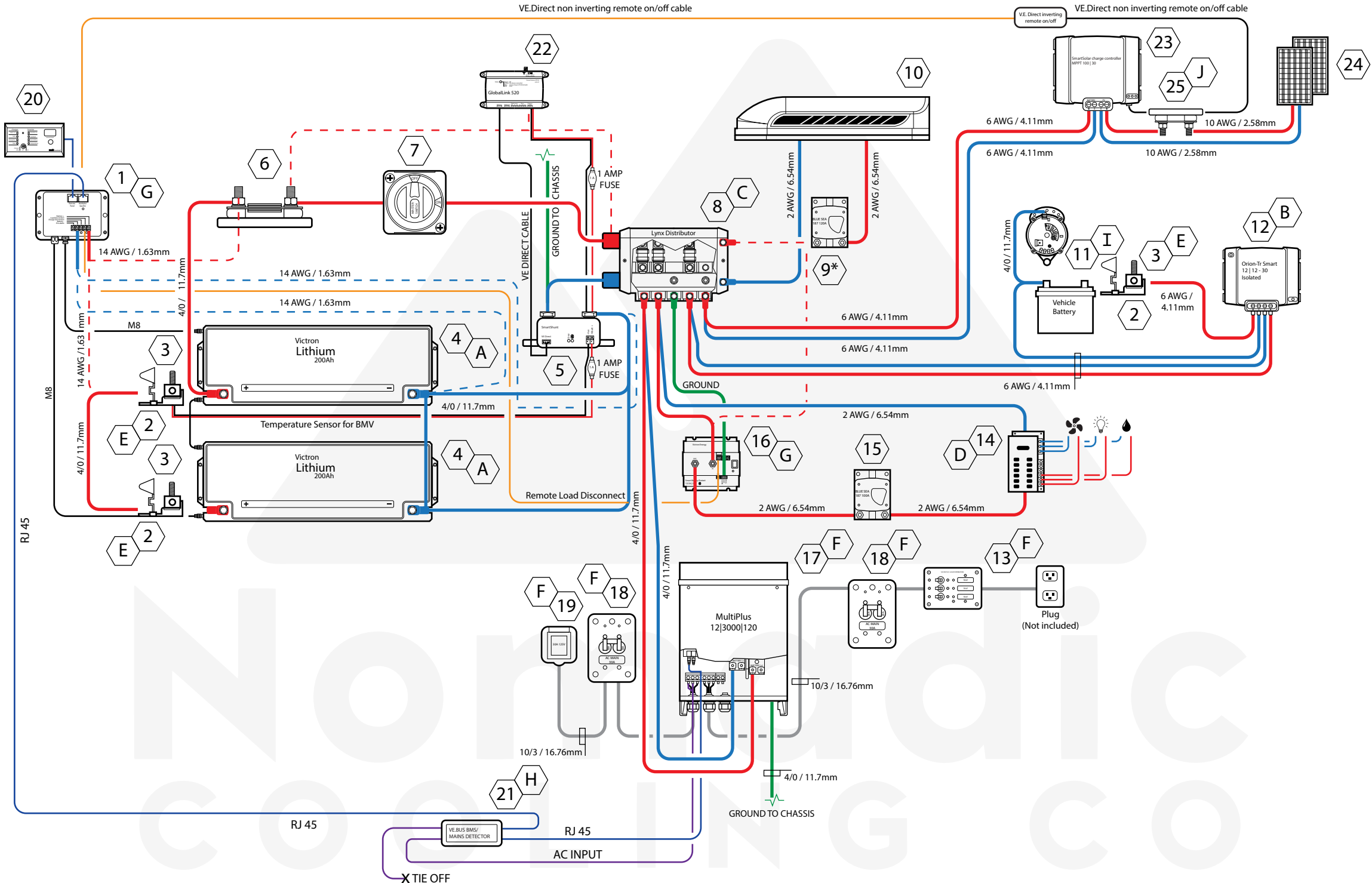
- DIRECT CABLE
- POSITIVE (+)
- NEGATIVE (-)
- GROUND
- RJ 45
- OPTIONAL PATH (+)
- OPTIONAL PATH (-)
- REMOTE LOAD DISCONNECT
- AC INPUT

NOTES X

- A. Keep all positive and negative battery cables the same length and as short as possible.
- B. ORION TR SMART 12|12 - 30 **will become HOT.** Install in ventilated area.
- C. See sheet A3.2 for detailed diagram.
- D. See sheet A4.1 for detailed diagram.
- E. Fuse block sits on positive (+) battery terminal post.
- F. See sheet A5.1 for detailed diagram.
- G. See sheet A6.1 for detailed diagram.
- H. Second wires not needed. Tie and place to side. Wires are for 2nd AC input. Multiplus 12|3000|120 - 50 provides 1 input.
- I. See sheet A7.1 for detailed diagram.

COMPONENTS

- | | | | | |
|-------------------------------|--|---|---------------------------------------|--------------------------------------|
| 1. VE. BUS BMS | 7. MASTER SWITCH | 11. POSITIVE TERMINAL POST STOCK BATTERY / STOCK ALTERNATOR | 15. BLUE SEA 187 100A | 20. DIGITAL MULTICONTROL 200/200A GX |
| 2. TERMINAL FUSE BLOCK | 8. LYNX DISTRIBUTOR | 12. ORION TR SMART 12 12 30 ISOLATED | 16. SMART BATTERY PROTECT 12/24 220 | 21. VE. BUS BMS MAINS DETECTOR |
| 3. MRBF TERMINAL FUSE 250A | 9. *RECOMMENDED FUSE: 80, 120, 150A (NOT INCLUDED) | 13. 3 POSITION PANEL | 17. MULTIPLUS 12 3000 120 | 22. GLOBALINK 520 |
| 4. LITHIUM BATTERY | 10. NOMADIC AC 150 AMP | 14. ST BLADE FUSE BLOCK | 18. 8077 AC MAIN | |
| 5. SMART SHUNT | | | 19. INLET 30A 125V | |
| 6. ANL FUSE BLOCK / FUSE 300A | | | | |



WWW.NOMADICCOOLING.COM

16680 N 51st Ave
Units 4 & 5
Glendale, AZ 85306

(480) 576-2489

Version 1.1

WIRING DIAGRAM

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:
Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.

ROAMER 12V 400AH - SOLAR

A1.2

LEGEND

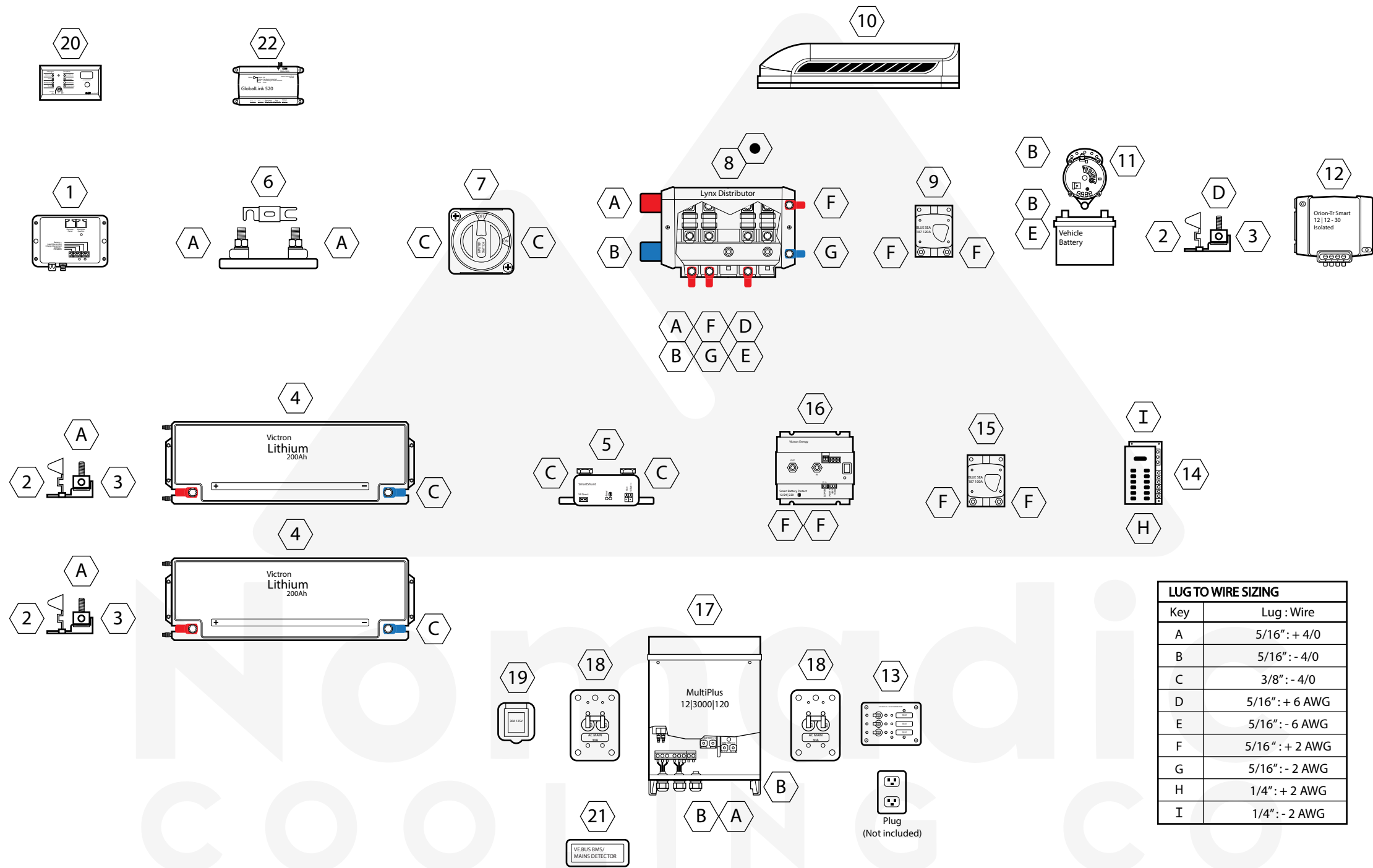
- DIRECT CABLE
- POSITIVE (+)
- NEGATIVE (-)
- GROUND
- RJ 45
- OPTIONAL PATH (+)
- OPTIONAL PATH (-)
- REMOTE LOAD DISCONNECT
- REMOTE ON/OFF
- AC INPUT

NOTES X

- A. Keep all positive and negative battery cables the same length and as short as possible.
- B. ORION TR SMART 12|12 - 30 **will become HOT.** Install in ventilated area.
- C. See sheet A3.2 for detailed diagram.
- D. See sheet A4.1 for detailed diagram.
- E. Fuse block sits on positive (+) battery terminal post.
- F. See sheet A5.1 for detailed diagram.
- G. See sheet A6.1 for detailed diagram.
- H. Second wires not needed. Tie and place to side. Wires are for 2nd AC input. Multiplus 12|3000|120 - 50 provides 1 input.
- I. See sheet A7.1 for detailed diagram.
- J. Use corresponding breaker size for your solar requirements. 50A shown for 2 panels at 12.5A each.

COMPONENTS

- | | | | | |
|---|---|--|--|--|
| <ul style="list-style-type: none"> 1. VE. BUS BMS 2. TERMINAL FUSE BLOCK 3. MRBF TERMINAL FUSE 250A 4. LITHIUM BATTERY 5. SMART SHUNT 6. ANL FUSE BLOCK / FUSE 300A | <ul style="list-style-type: none"> 7. MASTER SWITCH 8. LYNX DISTRIBUTOR 9. *RECOMMENDED FUSE: 80, 120, 150A (NOT INCLUDED) 10. NOMADIC AC 150 AMP | <ul style="list-style-type: none"> 11. POSITIVE TERMINAL POST STOCK BATTERY / STOCK ALTERNATOR 12. ORION TR SMART 12 12 30 ISOLATED 13. 3 POSITION PANEL 14. ST BLADE FUSE BLOCK | <ul style="list-style-type: none"> 15. BLUE SEA 187 100A 16. SMART BATTERY PROTECT 12/24 220 17. MULTIPLUS 12 3000 120 18. 8077 AC MAIN 19. INLET 30A 125V 20. DIGITAL MULTI CONTROL 200/200A GX | <ul style="list-style-type: none"> 21. VE. BUS BMS MAINS DETECTOR 22. GLOBALINK 520 23. SMART SOLAR MPPT 100 30 24. SOLAR ARRAY 25. MODULAR FUSE HOLDER |
|---|---|--|--|--|



LUG TO WIRE SIZING	
Key	Lug : Wire
A	5/16" : + 4/0
B	5/16" : - 4/0
C	3/8" : - 4/0
D	5/16" : + 6 AWG
E	5/16" : - 6 AWG
F	5/16" : + 2 AWG
G	5/16" : - 2 AWG
H	1/4" : + 2 AWG
I	1/4" : - 2 AWG

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:

Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.

LUG PLACEMENT

ROAMER 12V 400AH

A2.1

LEGEND

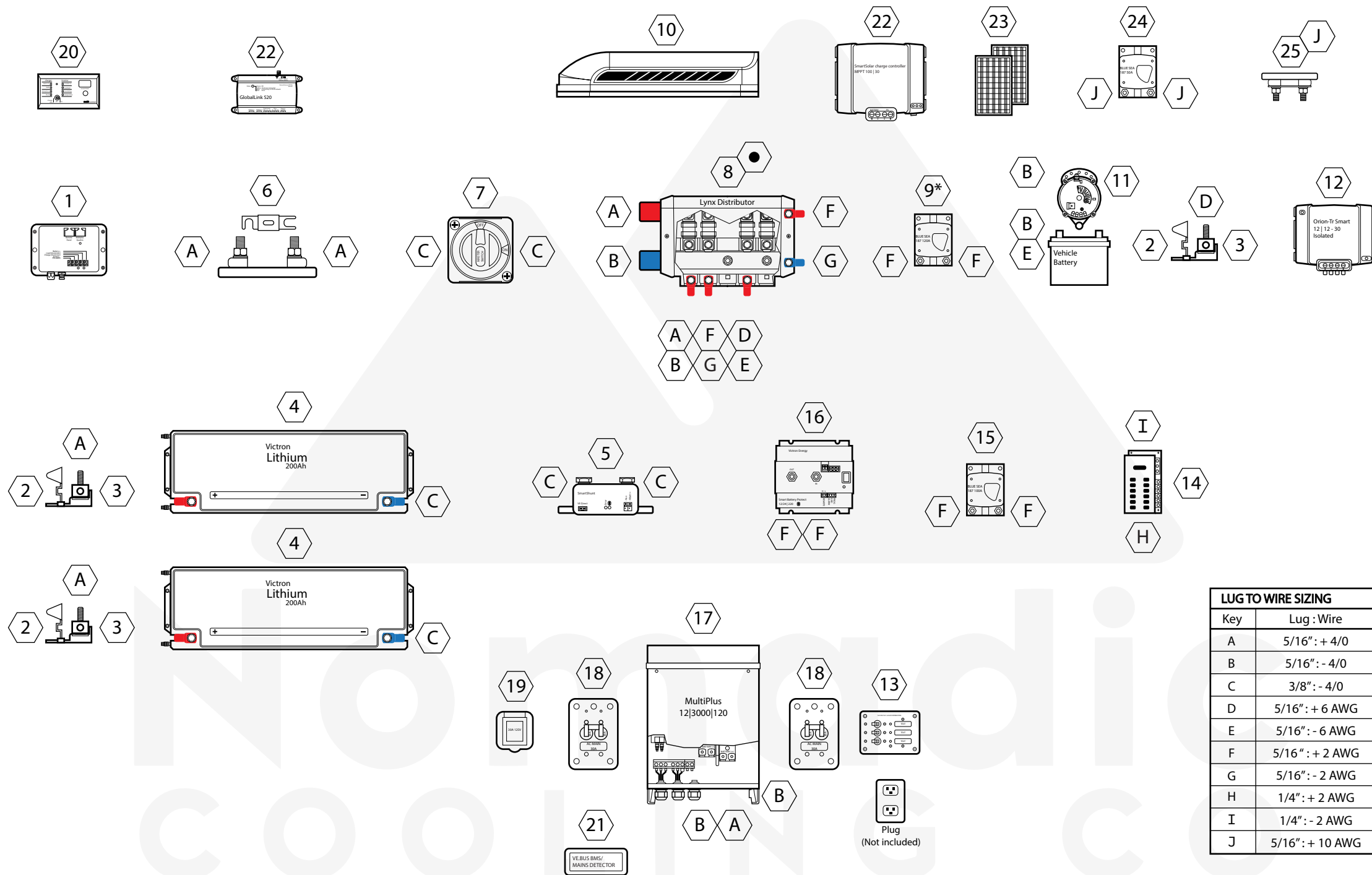
- POSITIVE (+)
- NEGATIVE (-)

NOTES

- See sheet A3.1 for detailed diagram.

COMPONENTS

- | | | | | |
|----------------------------|--|---|---------------------------------------|---------------------------------------|
| 1. VE. BUS BMS | 6. ANL FUSE BLOCK / FUSE 300A | 11. POSITIVE TERMINAL POST STOCK BATTERY / STOCK ALTERNATOR | 15. BLUE SEA 187 100A | 20. DIGITAL MULTI CONTROL 200/200A GX |
| 2. TERMINAL FUSE BLOCK | 7. MASTER SWITCH | 12. ORION TR SMART 12 12 30 ISOLATED | 16. SMART BATTERY PROTECT 12/24 220 | 21. VE. BUS BMS MAINS DETECTOR |
| 3. MRBF TERMINAL FUSE 250A | 8. LYNX DISTRIBUTOR | 13. 3 POSITION PANEL | 17. MULTIPLUS 12 3000 120 | 22. GLOBALINK 520 |
| 4. LITHIUM BATTERY | 9. *RECOMMENDED FUSE: 80, 120, 150A (NOT INCLUDED) | 14. ST BLADE FUSE BLOCK | 18. 8077 AC MAIN | |
| 5. SMART SHUNT | 10. NOMADIC AC 150 AMP | | 19. INLET 30A 125V | |



LUG TO WIRE SIZING	
Key	Lug : Wire
A	5/16" : + 4/0
B	5/16" : - 4/0
C	3/8" : - 4/0
D	5/16" : + 6 AWG
E	5/16" : - 6 AWG
F	5/16" : + 2 AWG
G	5/16" : - 2 AWG
H	1/4" : + 2 AWG
I	1/4" : - 2 AWG
J	5/16" : + 10 AWG

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:

Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.

LUG PLACEMENT

ROAMER 12V 400AH - SOLAR

A2.2

LEGEND

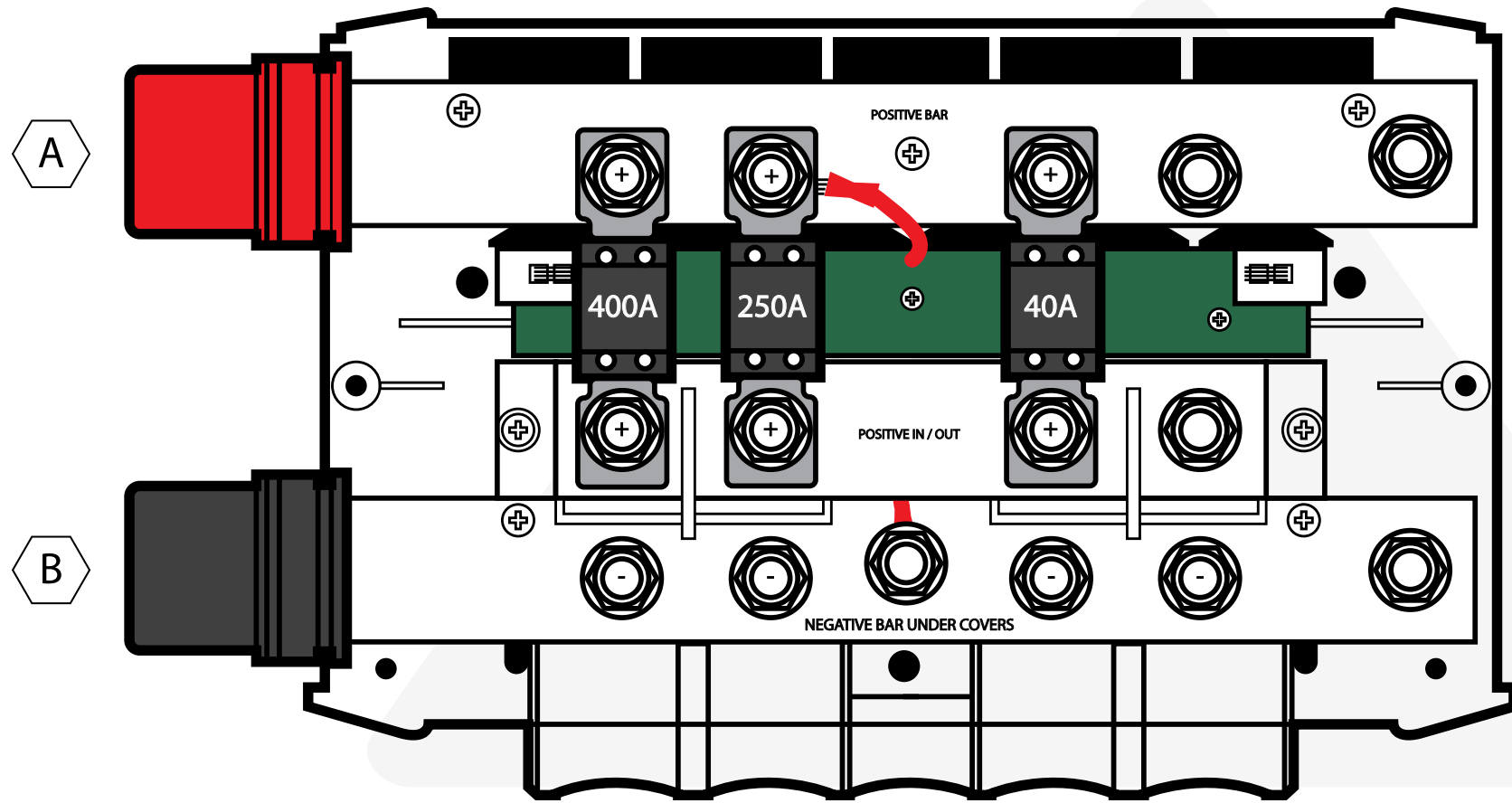
- POSITIVE (+)
- NEGATIVE (-)

NOTES

- See sheet A3.2 for detailed diagram.

COMPONENTS

- | | | | | |
|----------------------------|--|---|---------------------------------------|--------------------------------|
| 1. VE. BUS BMS | 6. ANL FUSE BLOCK / FUSE 300A | 11. POSITIVE TERMINAL POST STOCK BATTERY / STOCK ALTERNATOR | 15. BLUE SEA 187 100A | 21. VE. BUS BMS MAINS DETECTOR |
| 2. TERMINAL FUSE BLOCK | 7. MASTER SWITCH | 12. ORION TR SMART 12 12 30 ISOLATED | 16. SMART BATTERY PROTECT 12/24 220 | 22. GLOBALINK 520 |
| 3. MRBF TERMINAL FUSE 250A | 8. LYNX DISTRIBUTOR | 13. 3 POSITION PANEL | 17. MULTIPLUS 12 3000 120 | 23. SMART SOLAR MPPT 100 30 |
| 4. LITHIUM BATTERY | 9. *RECOMMENDED FUSE: 80, 120, 150A (NOT INCLUDED) | 14. ST BLADE FUSE BLOCK | 18. 8077 AC MAIN | 24. SOLAR ARRAY |
| 5. SMART SHUNT | 10. NOMADIC AC 150 AMP | | 19. INLET 30A 125V | 25. MODULAR FUSE HOLDER |



F TO BREAKER BETWEEN DISTRIBUTOR AND AC (CHOOSE ACCORDING TO AIR CONDITIONER LISTED IN CHART BELOW).

G AIR CONDITIONER -

All cables to Lynx Distributor to be placed POSITIVE ABOVE and NEGATIVE BELOW

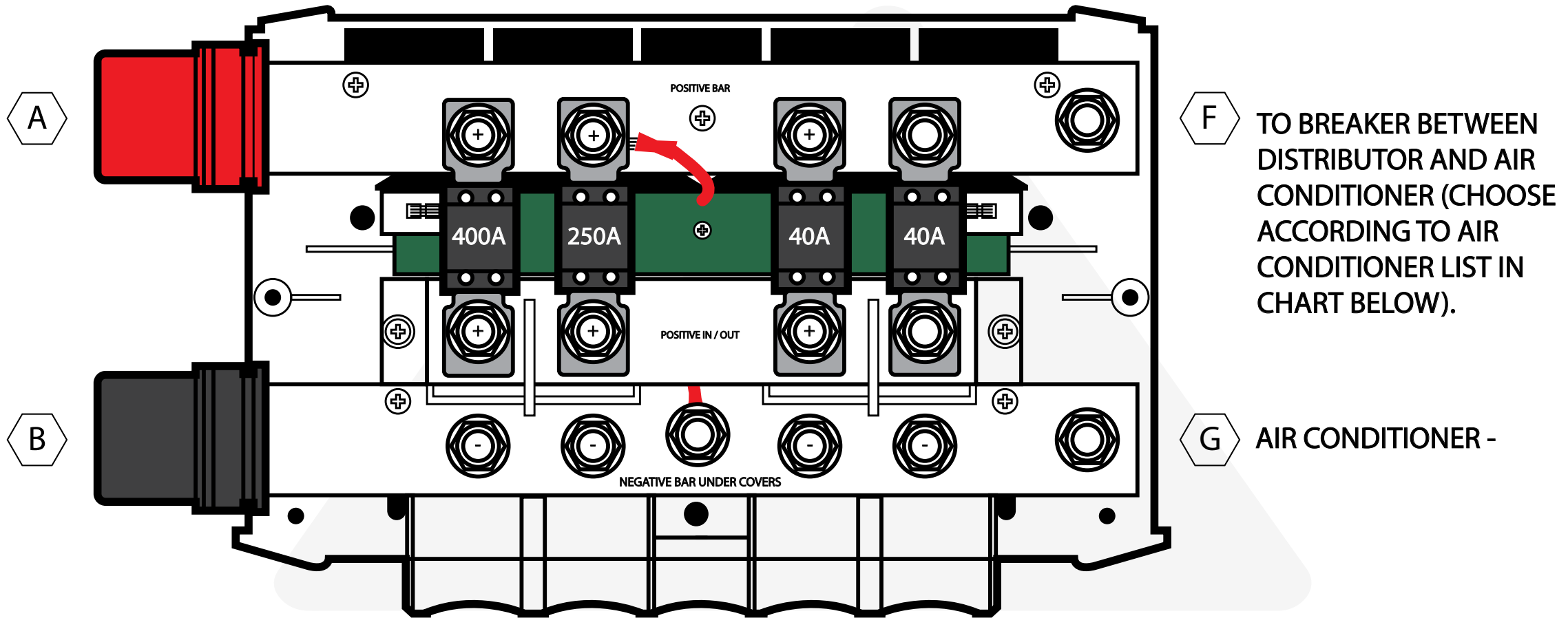
- MULTIPLUS - **A** **B**
- MULTIPLUS + **A** **B**
- SMART BATTERY PROTECT - **F** **G**
- SMART BATTERY PROTECT + **F** **G**
- EMPTY
- EMPTY
- ORION TR SMART - **D** **E**
- ORION TR SMART + **D** **E**

*AIR CONDITIONER FUSE SIZE	
AC Model	Fuse Size
Dometic RTX 1000	80
Dometic RTX 2000	80
Indel B OFF	80
Nomadic X3	125

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

LYNX DISTRIBUTOR

DISCLAIMER:
Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.



F TO BREAKER BETWEEN DISTRIBUTOR AND AIR CONDITIONER (CHOOSE ACCORDING TO AIR CONDITIONER LIST IN CHART BELOW).

G AIR CONDITIONER -

All cables to Lynx Distributor to be placed POSITIVE ABOVE and NEGATIVE BELOW

- MULTIPLUS - **A** **B**
- MULTIPLUS + **A** **B**
- SMART BATTERY PROTECT - **F** **G**
- SMART BATTERY PROTECT + **F** **G**
- SMART SOLAR + **D** **E**
- SMART SOLAR - **D** **E**
- ORION TR SMART - **D** **E**
- ORION TR SMART + **D** **E**

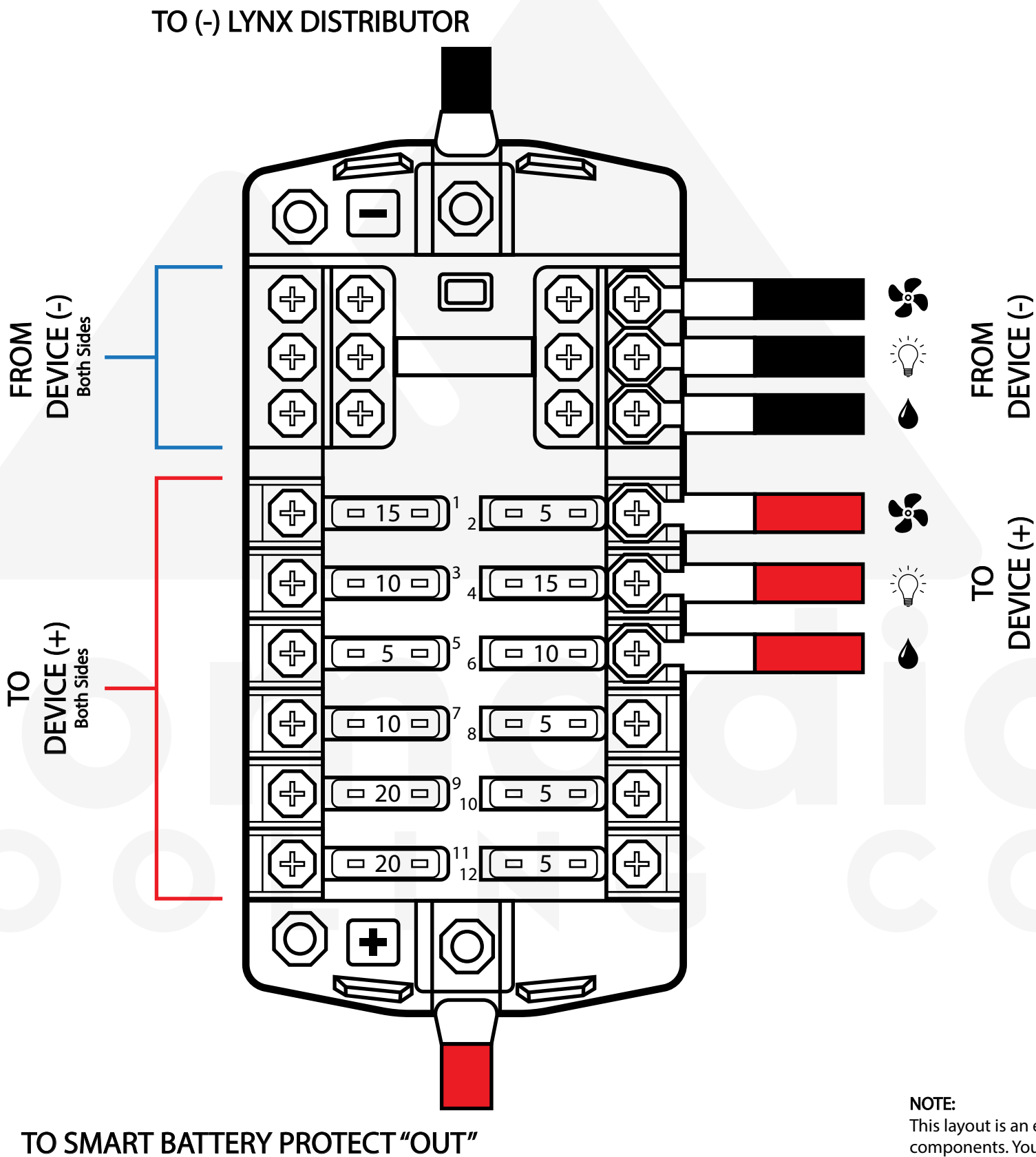
*AIR CONDITIONER FUSE SIZE	
AC Model	Fuse Size
Dometic RTX 1000	80
Dometic RTX 2000	80
Indel B OFF	80
Nomadic X3	125

LYNX DISTRIBUTOR

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:

Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.



NOTE:
This layout is an example of wiring various components. Your configuration may differ.

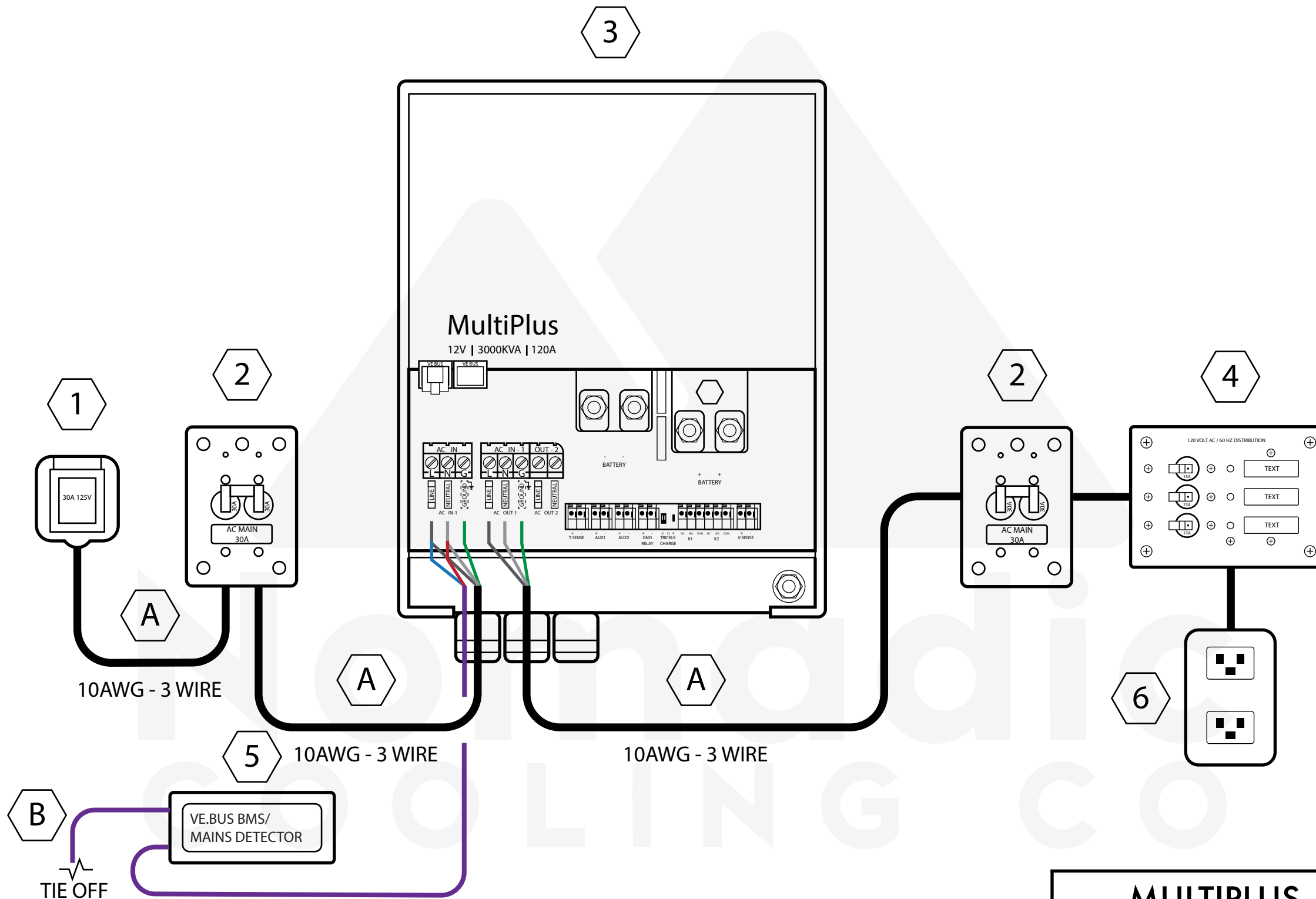
DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:
Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.

BLUE SEA ST BLADE

ROAMER 12V 400AH

A4.1



MULTIPLUS

ROAMER 12V 400AH

A5.1

LEGEND

- 10 AWG 3 WIRE
- LINE
- NEUTRAL
- GROUND
- AC INPUT

NOTES X

- A. Use 10AWG 3-wire braided wire.
Not Romex wire. Use Marine Grade Wire.
- B. Second wires not needed. Tie and place to side. Wires are for 2nd AC input. Multiplus 12|3000|120 - 50 provides 1 input.

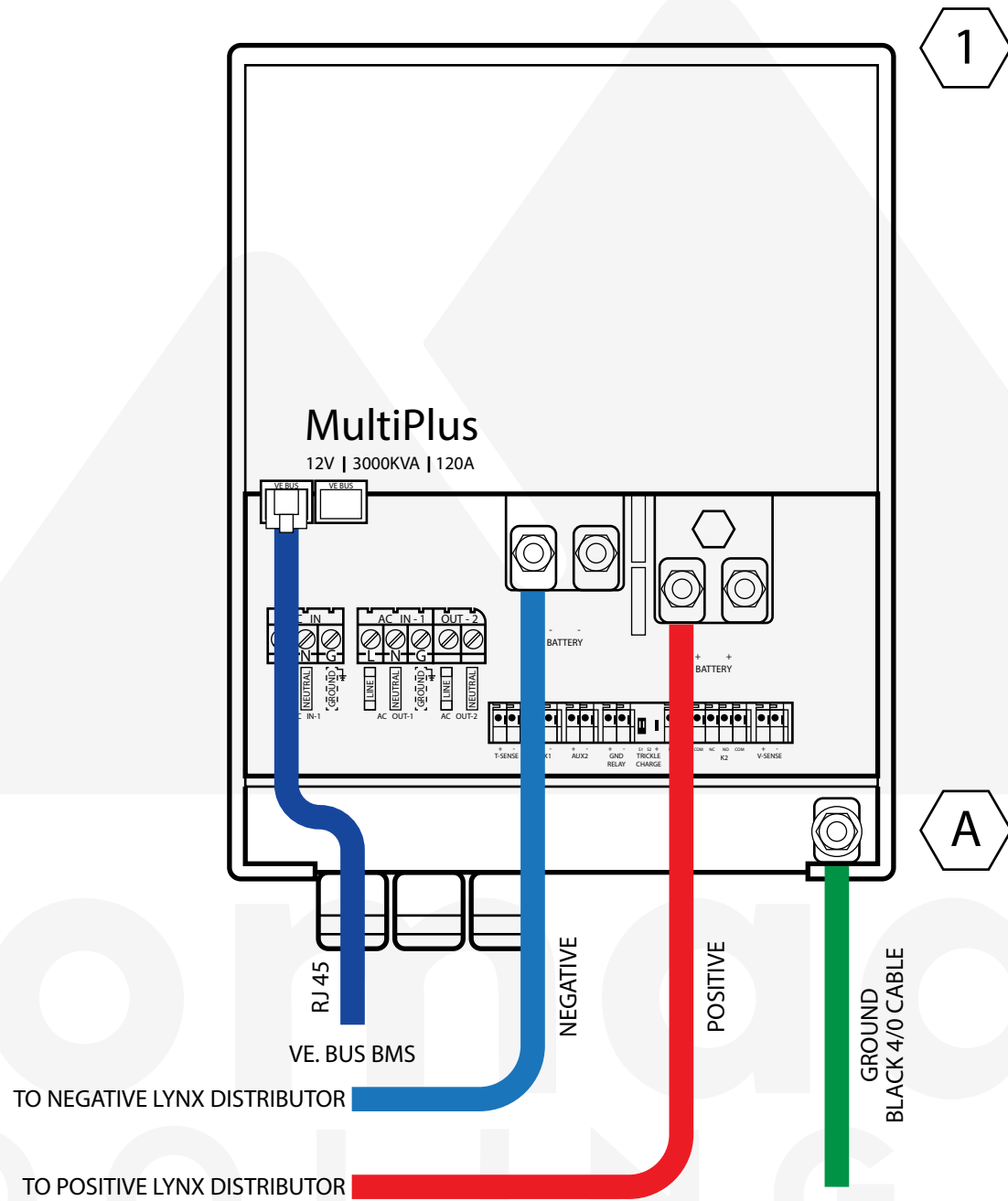
COMPONENTS

- | | |
|------------------------------|--|
| 1. INLET 30A 125V | 5. VE. BUS BMS MAINS DETECTOR |
| 2. 8077 AC MAIN | 6. STANDARD PLUG (NOT INCLUDED IN KIT) |
| 3. MULTIPLUS 12 3000 120 | |
| 4. 120V DISTRIBUTION SWITCH | |

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:

Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.



MULTIPLUS

ROAMER 12V 400AH

A5.2

LEGEND

- POSITIVE
- NEGATIVE
- VE BUS
- GROUND

NOTES X

A. Ground point is in back on bottom of Multiplus.

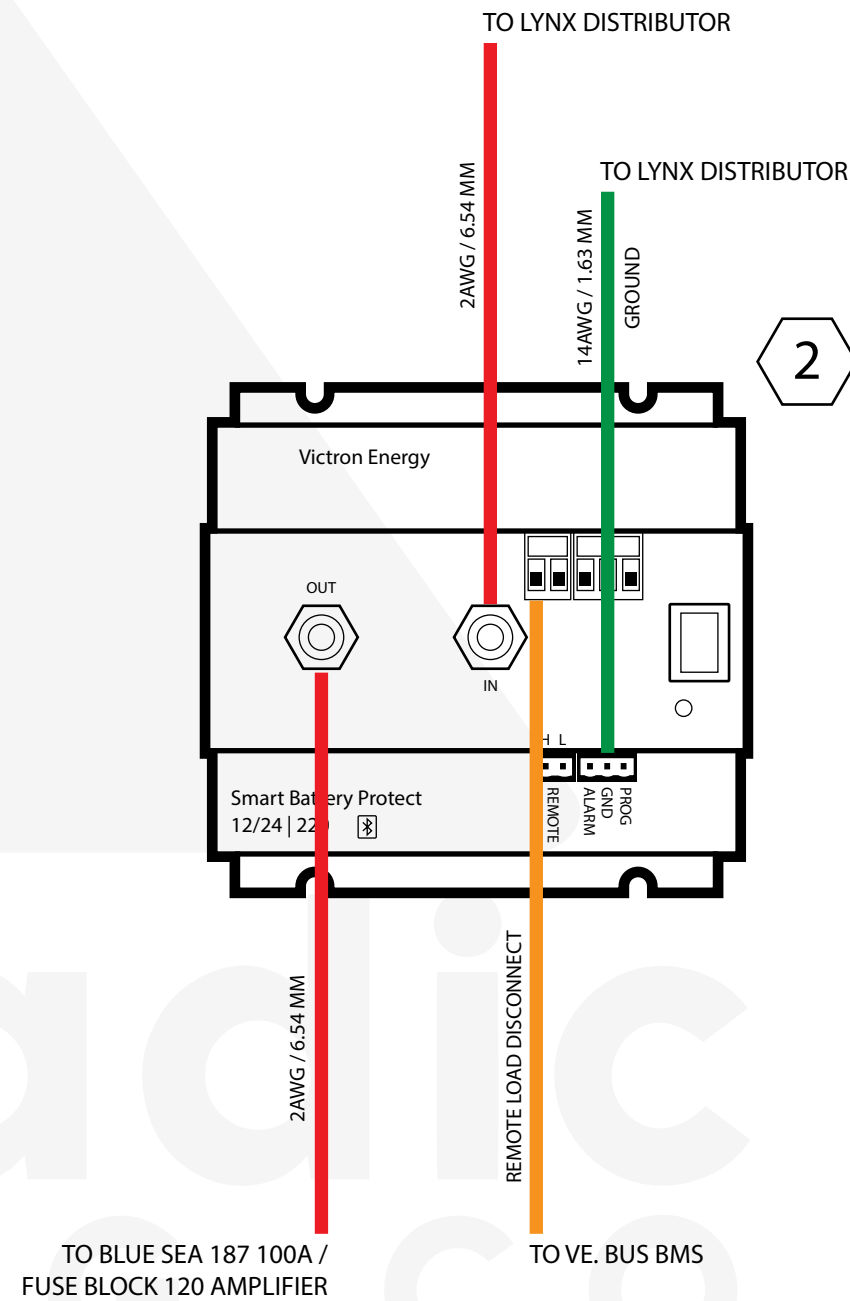
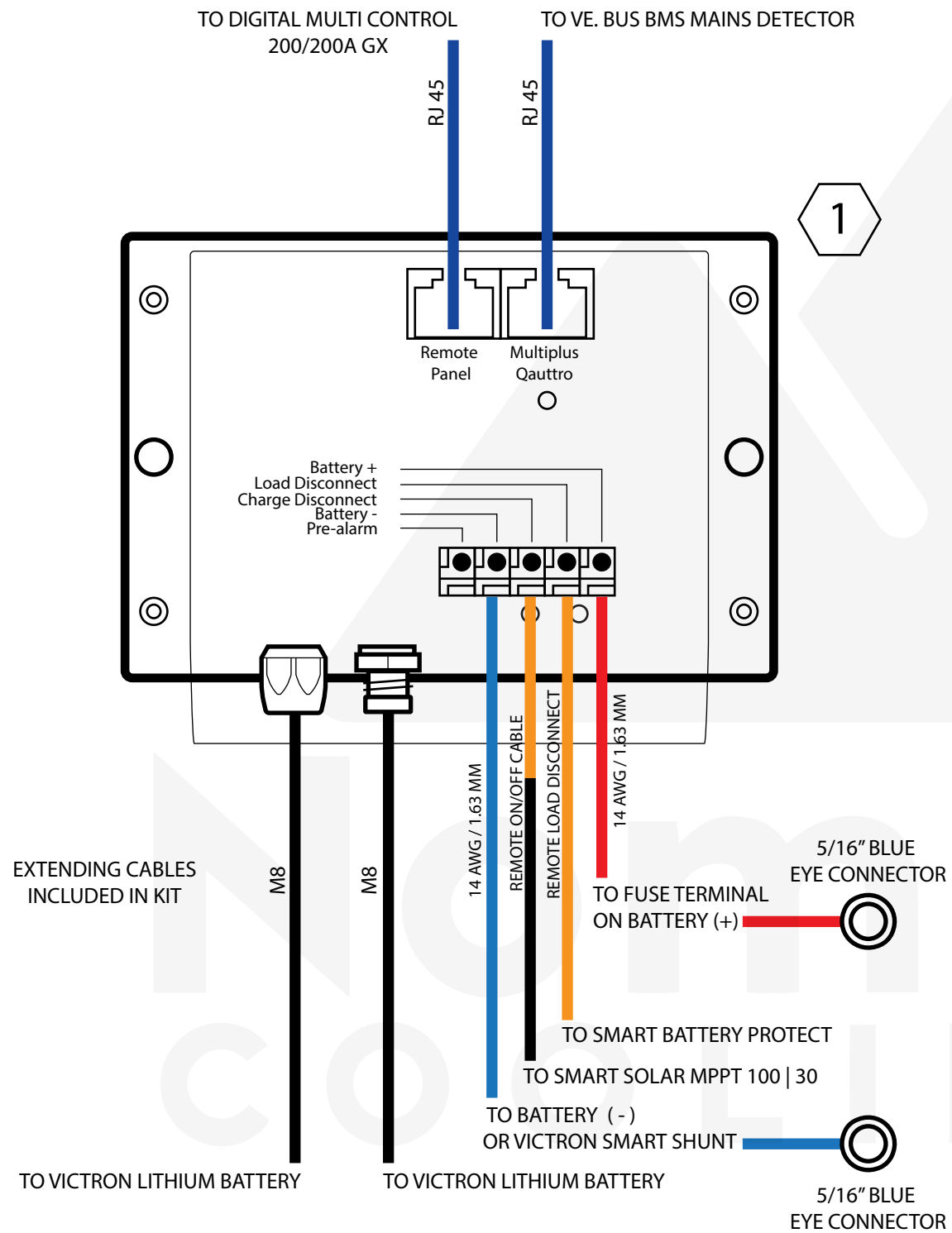
COMPONENTS #

1. MULTIPLUS
12 | 3000 | 120

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:

Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.



**SMART BATTERY PROTECT /
VE. BUS BMS**

ROAMER 12V 400AH

A6.1

LEGEND

- POSITIVE
- NEGATIVE
- RJ 45
- REMOTE LOAD DISCONNECT
- REMOTE ON/OFF
- GROUND

NOTES X

COMPONENTS

1. VE. BUS BMS
2. SMART BATTERY PROTECT 12/24 | 220

DRAWING: NOT TO SCALE
COPYRIGHT ©2023 NOMADIC COOLING CO

DISCLAIMER:

Install at your own risk. This diagram is to be used as a guide. Your configuration may vary. Nomadic Cooling Co does not take responsibility for any errors that may occur during installation. Please consult with a professional for install.

