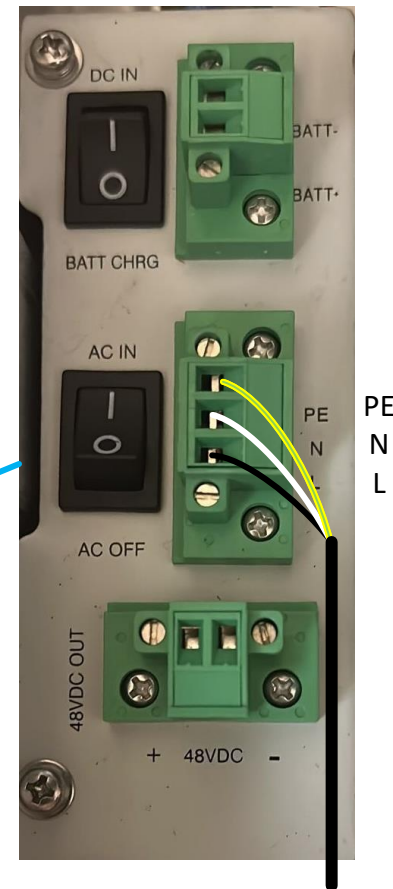


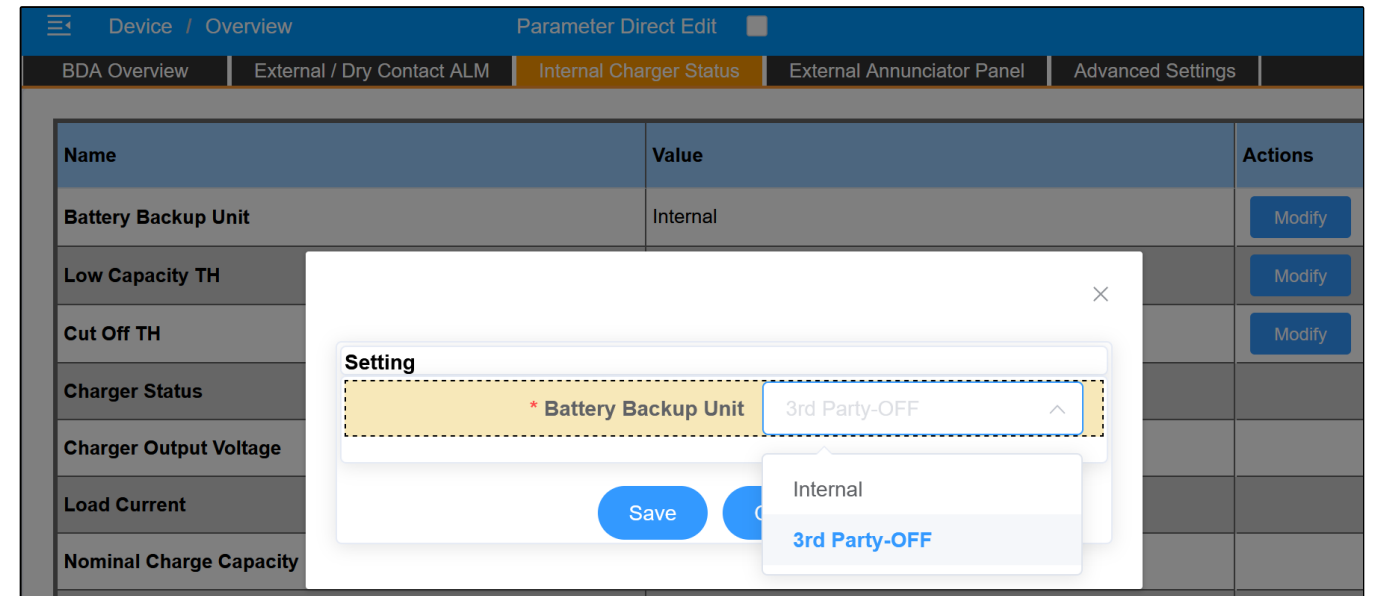
Comba BDA V3 Wiring Diagram

(AC ONLY)

Comba BDA V3

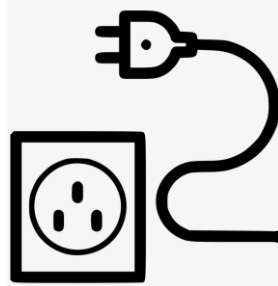


PE
N
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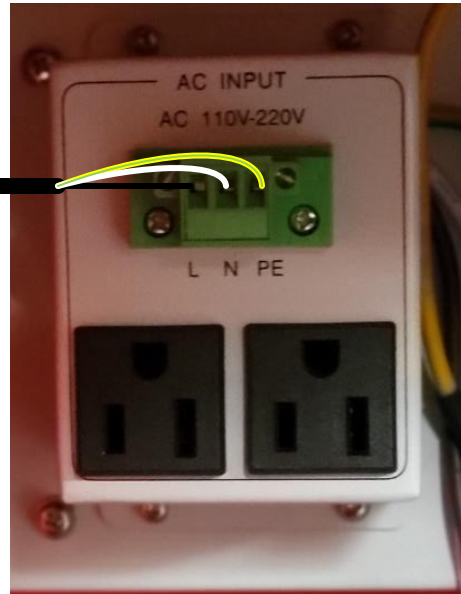
Please change under Device/Overview/Internal Charger Status the Battery Backup Unit settings to "3rd Party-OFF" when operating in AC mode only!

AC POWER

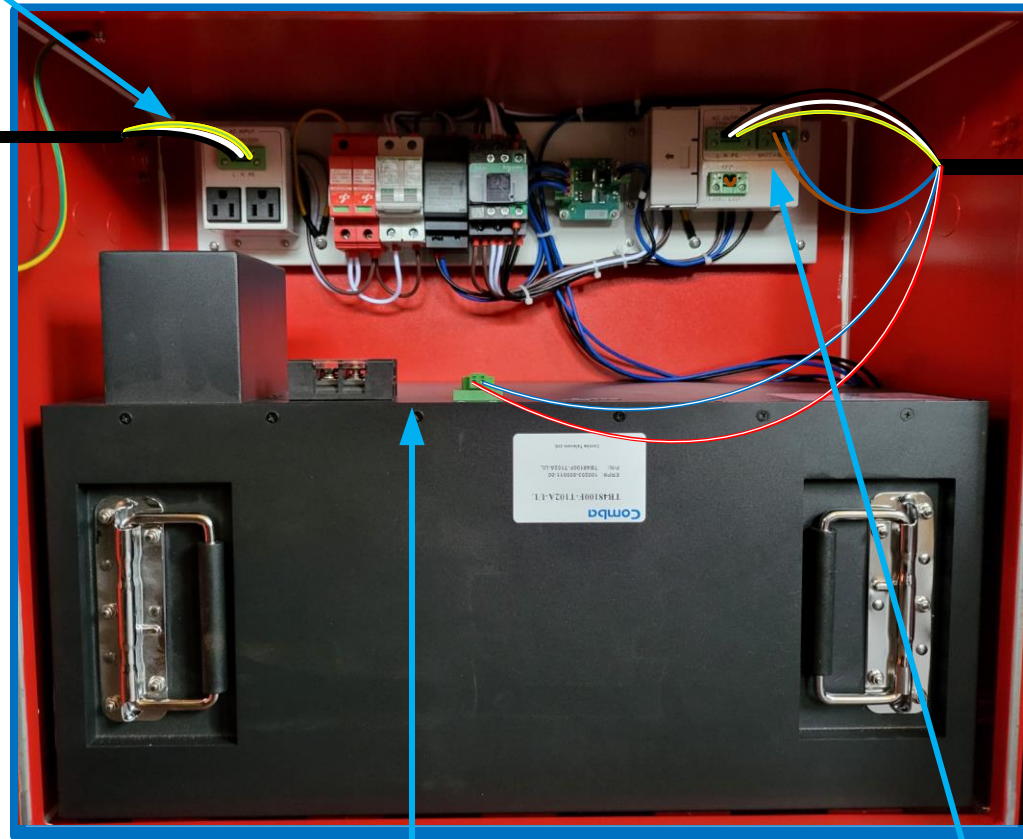


Comba BBU V3 to BDA V3 Wiring Diagram

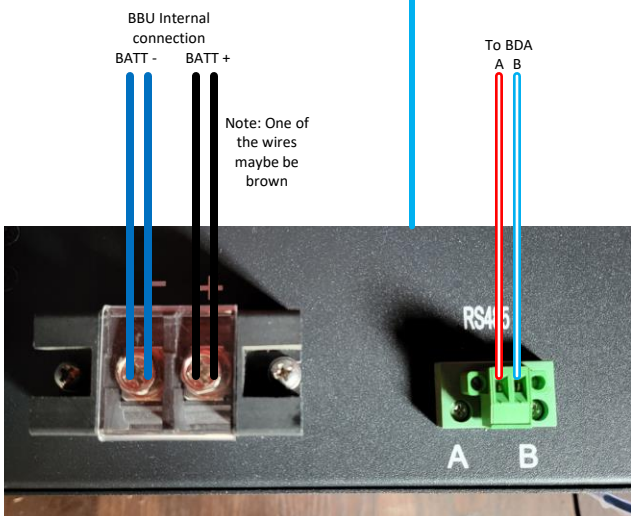
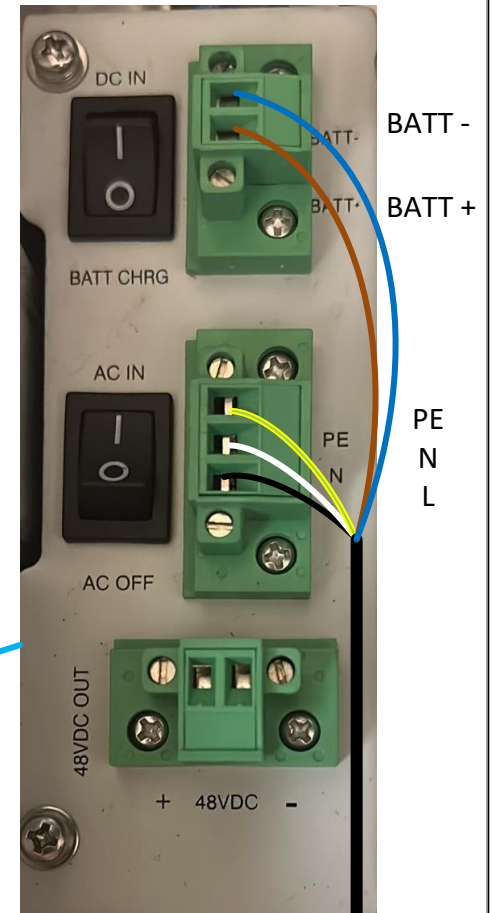
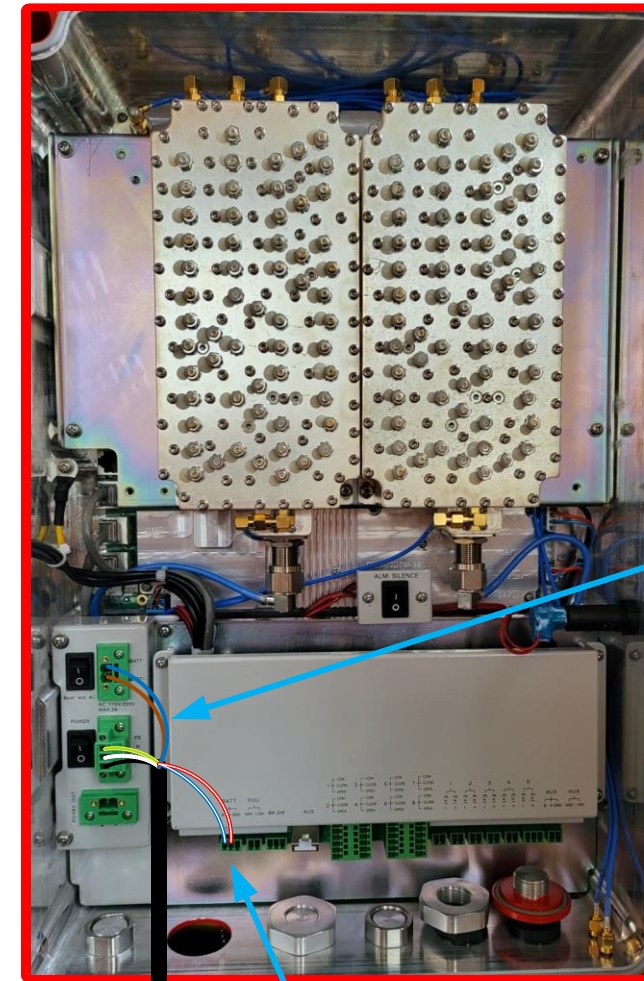
(BDA-BBU V3)



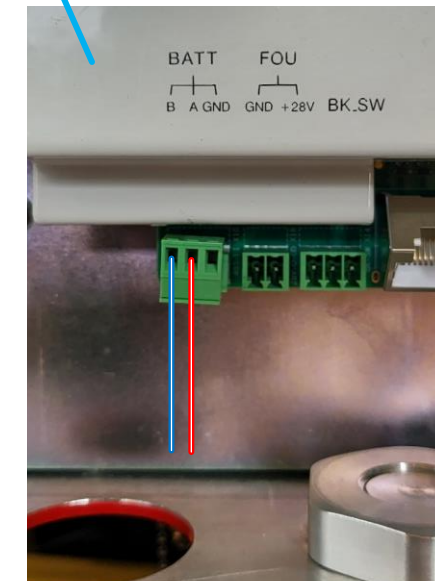
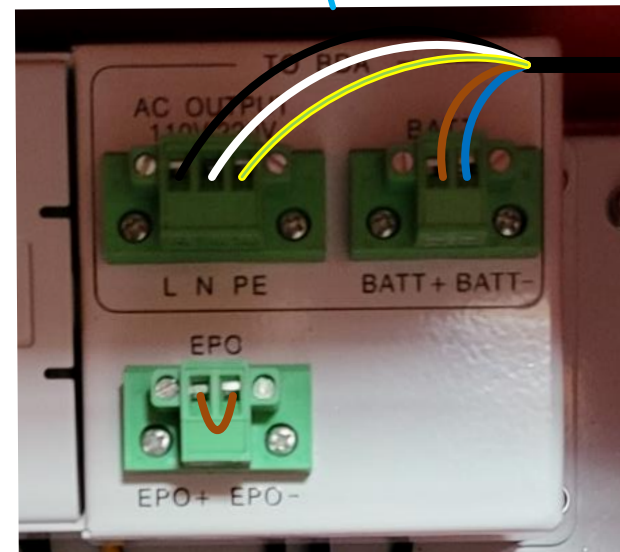
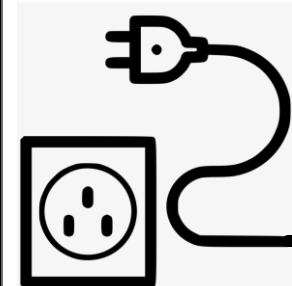
Comba BBU V3



Comba BDA V3



AC POWER

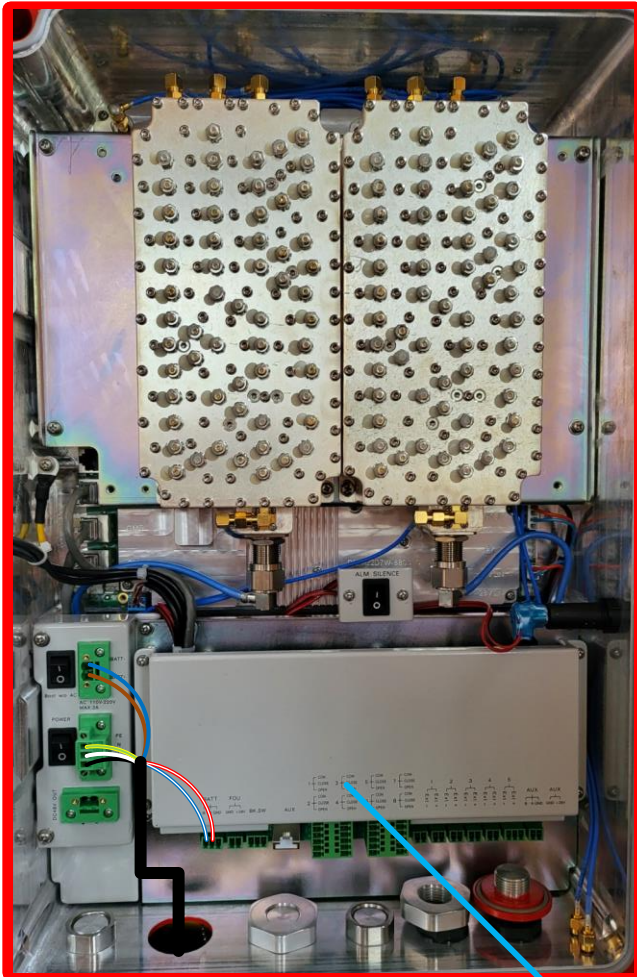


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BDA V3 Alarm Wiring Diagram

(Normally Open Example)

Comba BDA V3



Dry alarm setting

* Alarm name: NORMAL AC POWER

Select all

<input checked="" type="checkbox"/> AC Normal	<input type="checkbox"/> AC Lost Alarm	<input type="checkbox"/> Charger Fault Alarm	<input type="checkbox"/> Charger Comm. Fault Alarm
<input type="checkbox"/> PA Alarm DL 700MHz	<input type="checkbox"/> LNA Alarm DL 700MHz	<input type="checkbox"/> PA Shutdown Alarm DL 700MHz	<input type="checkbox"/> Ext Alarm 1
<input type="checkbox"/> PA Alarm DL 800MHz	<input type="checkbox"/> LNA Alarm DL 800MHz	<input type="checkbox"/> PA Shutdown Alarm DL 800MHz	<input type="checkbox"/> Ext Alarm 2
<input type="checkbox"/> PA Alarm UL 700&800MHz	<input type="checkbox"/> LNA Alarm UL 700&800MHz	<input type="checkbox"/> PA Shutdown Alarm UL 700&800MHz	<input type="checkbox"/> Ext Alarm 3
<input type="checkbox"/> DL_P_in Over Alarm 700MHz	<input type="checkbox"/> DL_P_in Low Alarm 700MHz	<input type="checkbox"/> Oscillation Shutdown Alarm	<input type="checkbox"/> Ext Alarm 4
<input type="checkbox"/> DL_P_out Over Alarm 700MHz	<input type="checkbox"/> DL_P_out Low Alarm 700MHz	<input type="checkbox"/> Oscillation Gain Reduction Alarm	<input type="checkbox"/> Ext Alarm 5
<input type="checkbox"/> DL_P_in Over Alarm 800MHz	<input type="checkbox"/> DL_P_in Low Alarm 800MHz	<input type="checkbox"/> PLL Alarm	<input type="checkbox"/> Over Temperature Alarm
<input type="checkbox"/> DL_P_out Over Alarm 800MHz	<input type="checkbox"/> DL_P_out Low Alarm 800MHz	<input type="checkbox"/> Digital Clock Alarm	<input type="checkbox"/> DT ANT Disconnection Alarm
<input type="checkbox"/> VSWR Alarm DL 700MHz	<input type="checkbox"/> VSWR Alarm DL 800MHz	<input type="checkbox"/> Battery Low Alarm	<input type="checkbox"/> Battery Connection Fail Alarm
<input type="checkbox"/> Battery Over Temperature Alarm	<input type="checkbox"/> Battery Comm. Fault Alarm	<input type="checkbox"/> Battery Over-Discharge Alarm	

Save Cancel

Setting 1

* Dry Contact Alarm Preset: NFPA 1221 2019

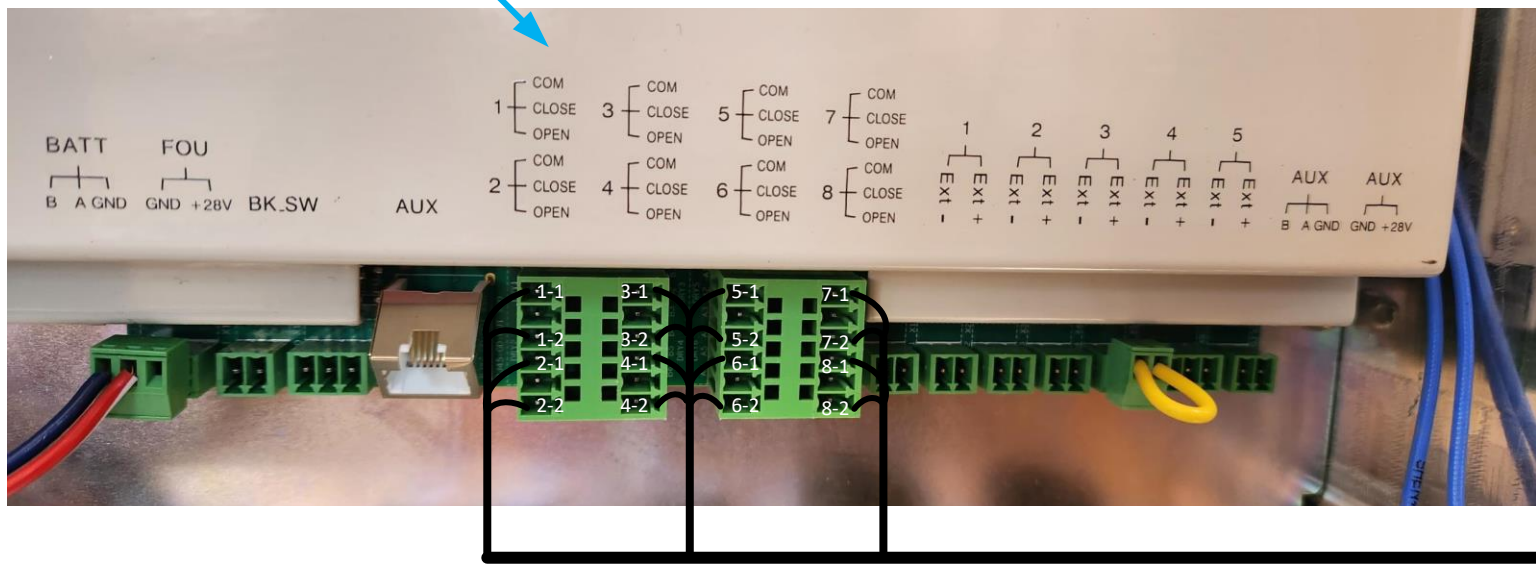
Save

Name	Value	Actions
Dry Contact Alarm Preset	NFPA 1221 2019	Modify Test

Dry Contact Alarm Name	Alarm Status	Actions
NORMAL AC POWER	●	Modify Test
LOSS OF NORMAL AC POWER	●	Modify Test
BATTERY CHARGER FAILURE	●	Modify Test
LOW-BATTERY CAPACITY	●	Modify Test
DONOR ANTENNA MALFUNCTION	●	Modify Test
ACTIVE RF-EMITTING DEVICE MALFUNCTION	●	Modify Test
ACTIVE SYSTEM COMPONENT MALFUNCTION	●	Modify Test

FACP

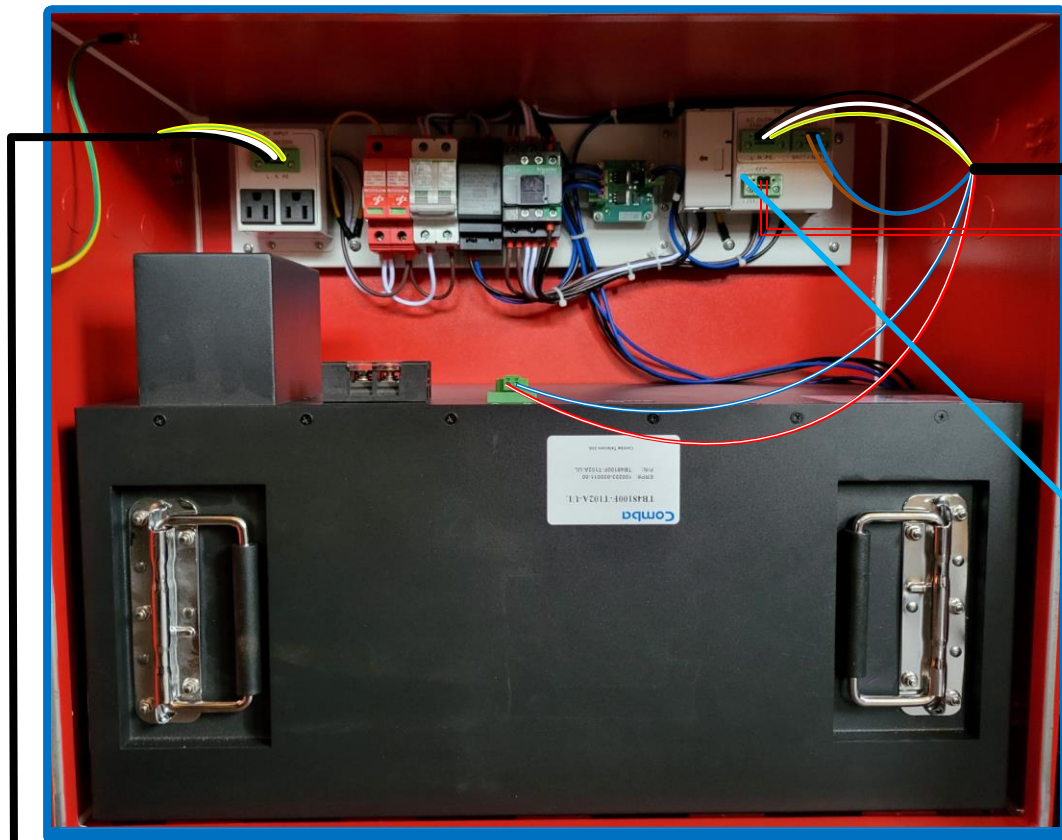
- 1-1 NO (Alarm 1 / eg. NORMAL AC POWER)
- 1-2 COM
- 2-1 NO (Alarm 2 / eg. LOSS OF NORMAL AC POWER)
- 2-2 COM
- 3-1 NO (Alarm 3 / eg. BATTERY CHARGER FAILURE)
- 3-2 COM
- 4-1 NO (Alarm 4 / eg. LOW-BATTERY CAPACITY)
- 4-2 COM
- 5-1 NO (Alarm 5 / eg. DONOR ANTENNA MALFUNCTION)
- 5-2 COM
- 6-1 NO (Alarm 6 / eg. ACTIVE RF-EMITTING DEVICE MALFUNCTION)
- 6-2 COM
- 7-1 NO (Alarm 7 / eg. ACTIVE SYSTEM COMPONENT MALFUNCTION)
- 7-2 COM
- 8-1 NO (Alarm 8)
- 8-2 COM



Alarm Cable not provided by Comba!

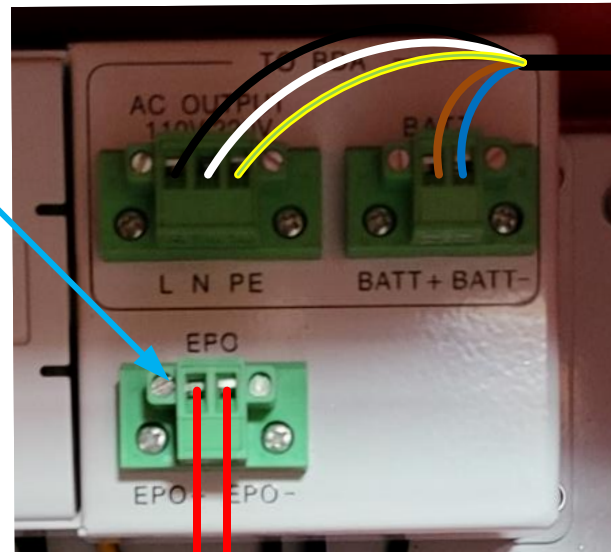
Comba BBU V3 EPO Wiring Diagram

Comba BBU V3



To BDA V3

To EPO Switch

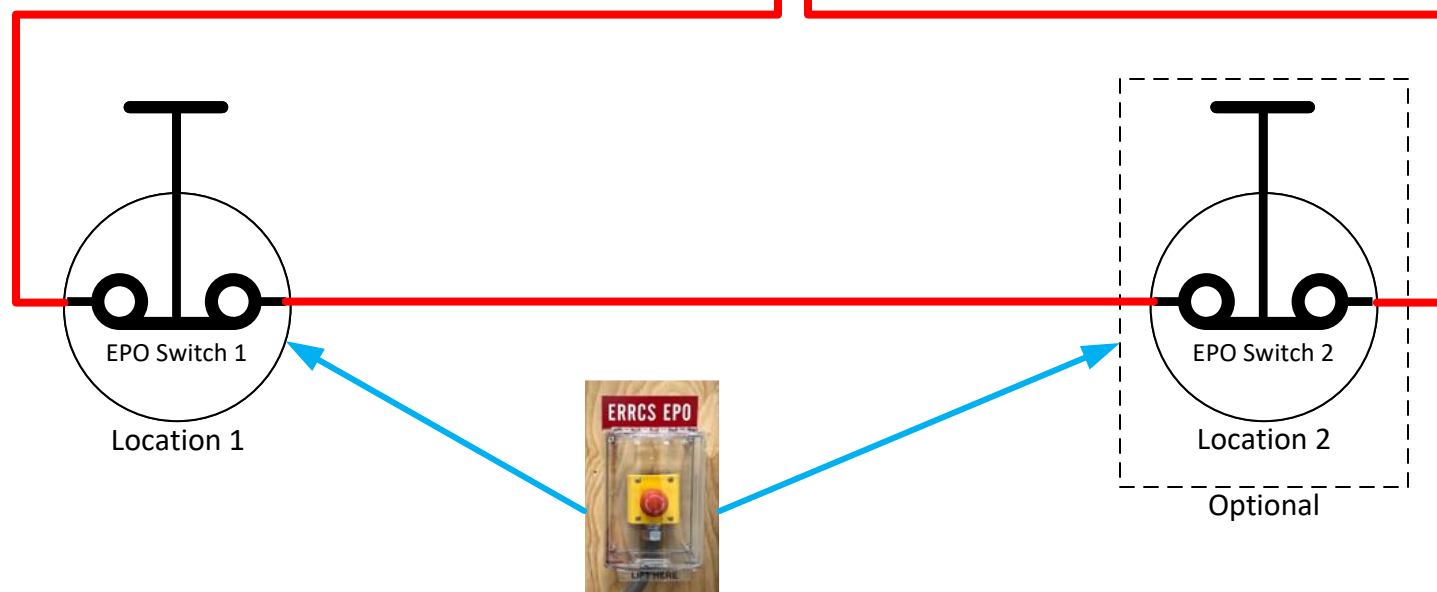
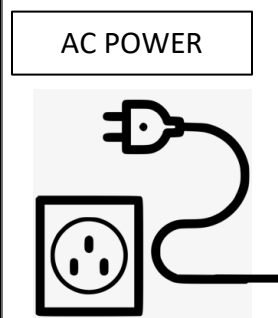


Install EPO switch

- If you wish to install an EPO switch: Note that the EPO connections have a preinstalled wire that shorts the EPO+ and EPO-. Remove the preinstalled wire and connect the EPO switch; then turn the EPO switch to its "Closed" position (Normal Status)
- DO NOT Set the EPO switch to "Open" (Cut Off Status)
- The EPO switch can be installed at a remote location; note that the voltage-drop should be considered!
- The EPO function is triggered from a relay and this relay is energized by the battery or the charger; if the battery is over-discharged, then the EPO function may not work properly.
- If you do not wish to use an EPO switch, do not remove the preinstalled shorting wire!

BBU & BBU EPO Relay Information:

EPO Relay control circuit voltage: 24-60V DC
 EPO Relay current: <100mAmps
 BBU Battery Nominal voltage: 51.2V
 BBU Cut Off TH: 46V

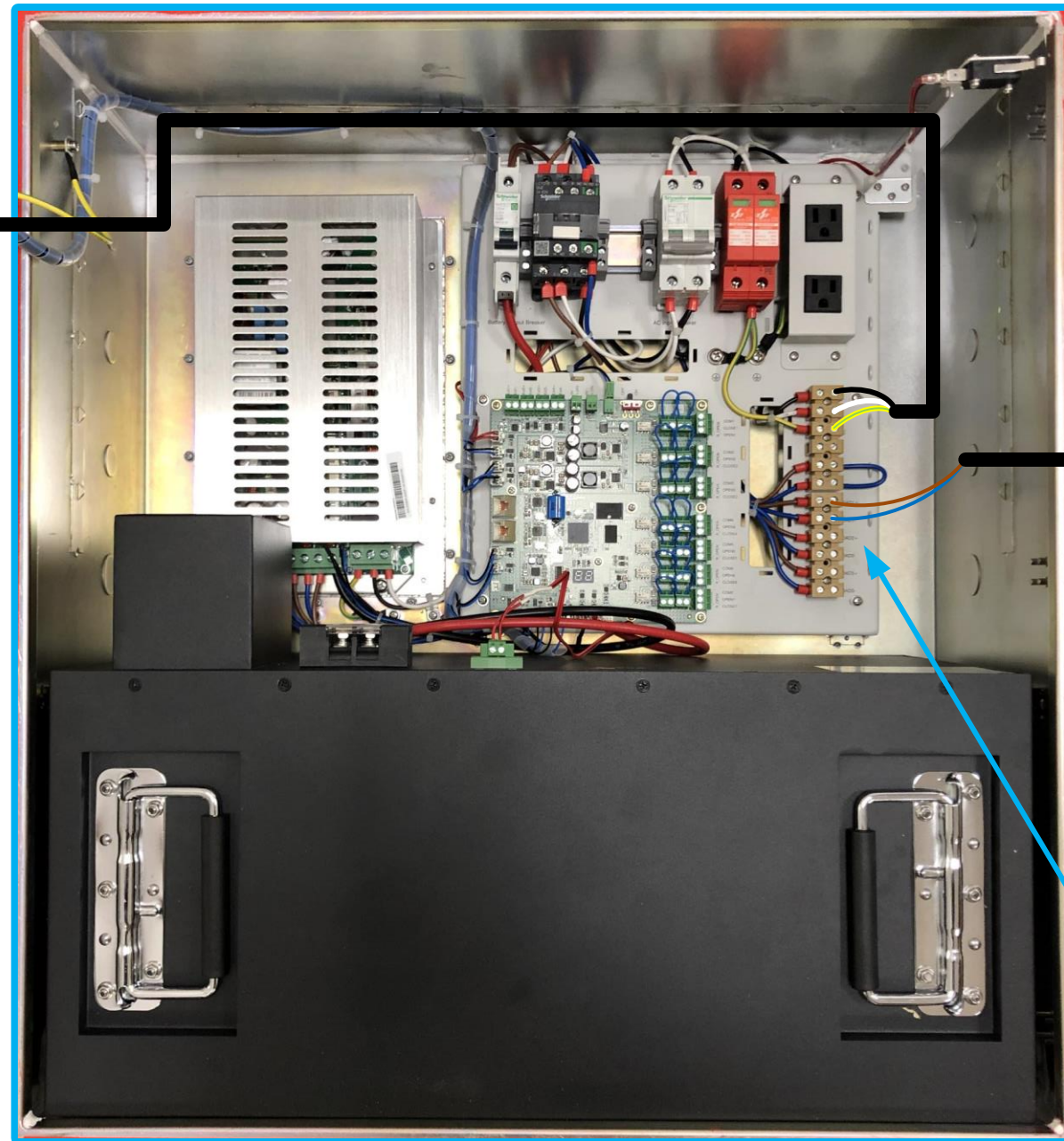


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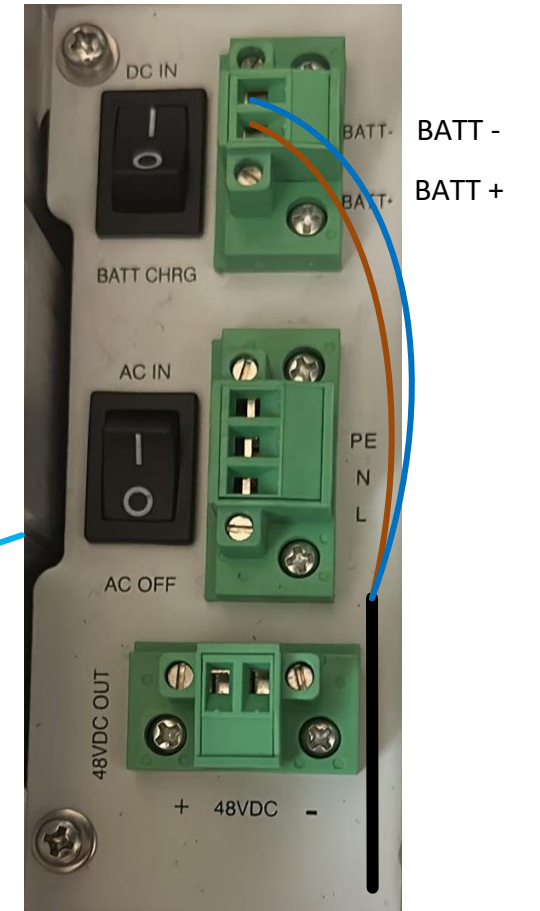
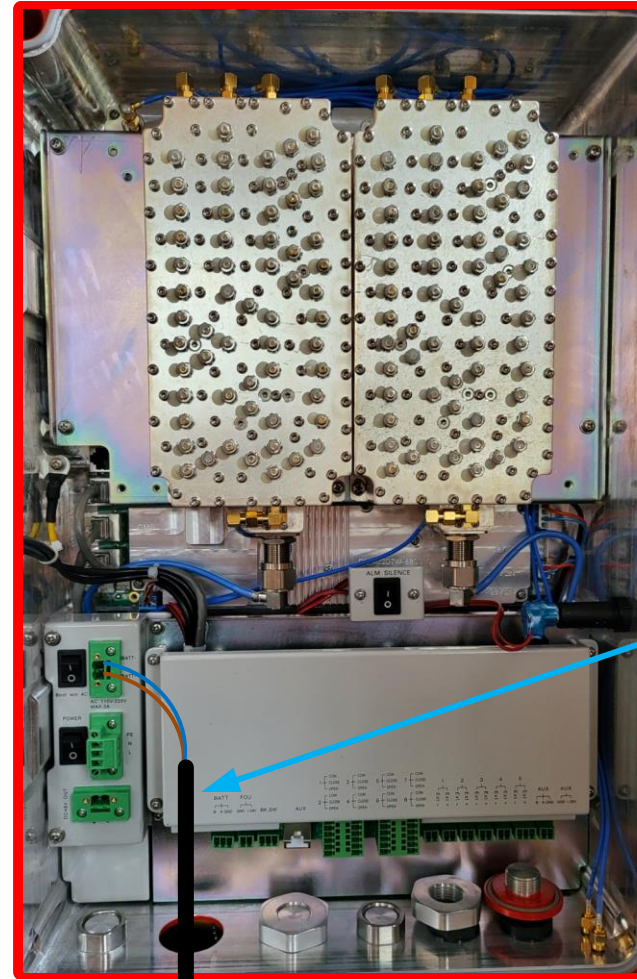
Comba BBU V2 to BDA V3 Wiring Diagram

(BDA-BBU V2)

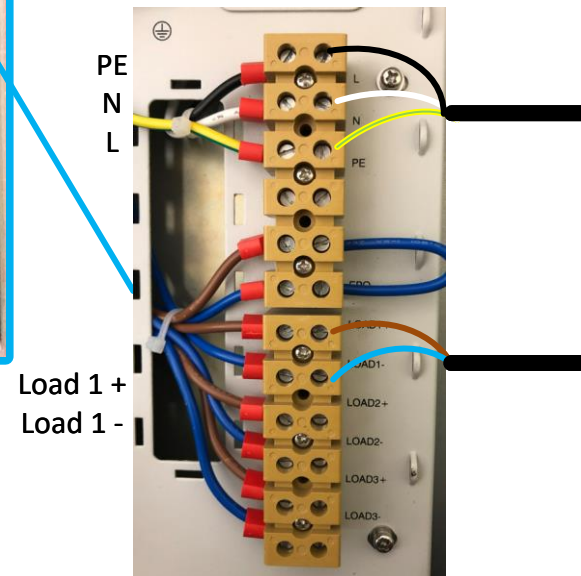
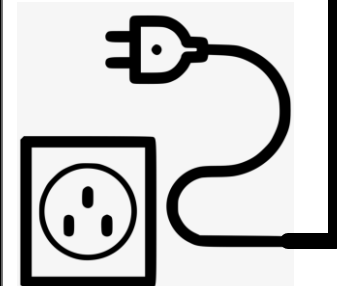
Comba BBU V2



Comba BDA V3



AC POWER



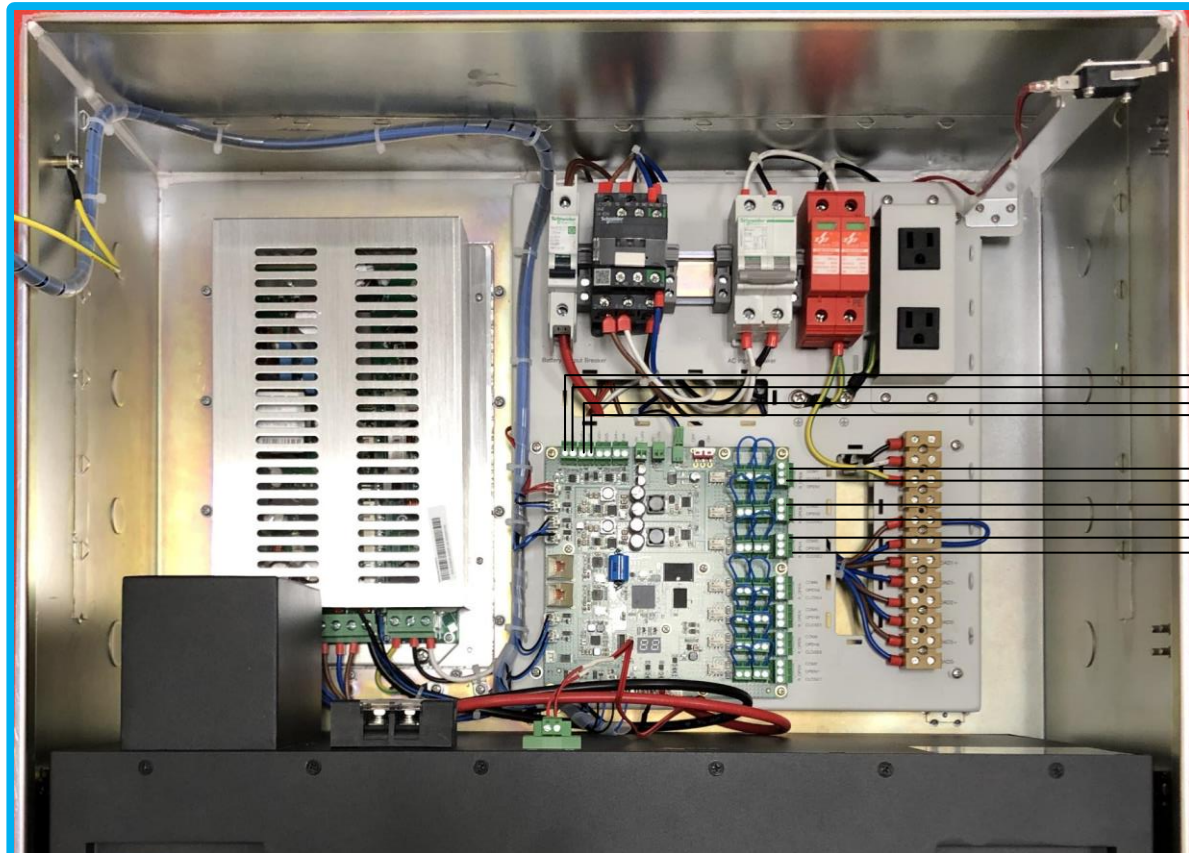
**Please change under Device/Overview/
Internal Charger Status the Battery Backup
Unit settings to "3rd Party-OFF" when
operating with V2 BBU!**

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Comba BBU V2 to BDA V3 Alarm Wiring Diagram

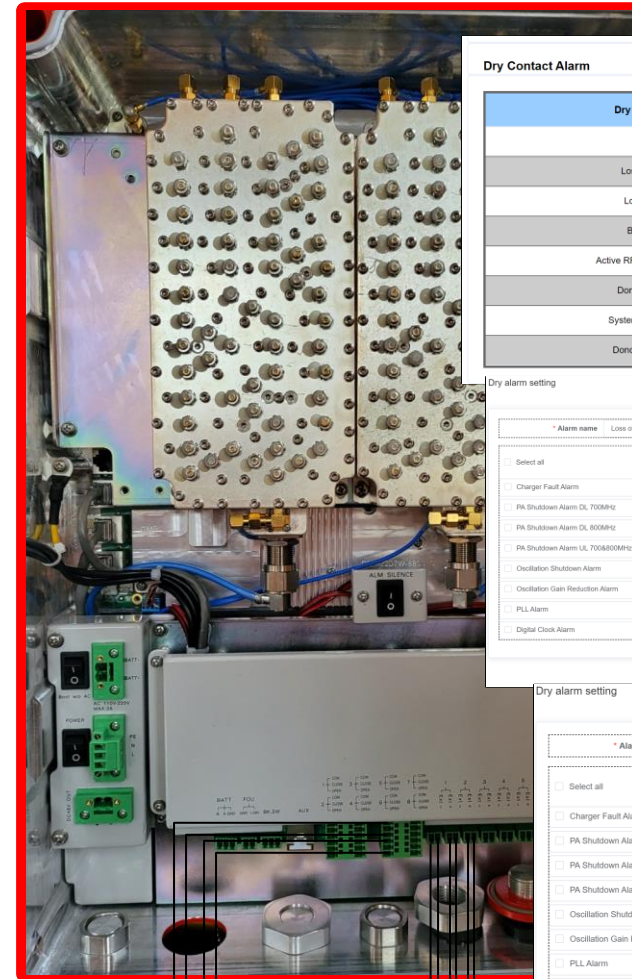
Based on UL 2524 Preset and Normally Open

Comba BBU V2



1. BDA Dry Contact 5 (Active RF emitting device malfunction) to BBU Ext. Alarm 1
2. BDA Dry Contact 6 (Donor antenna malfunction) to BDA Ext. Alarm 2

Comba BDA V3



Assigned Ext. ALM 1 to Dry Contact 2, Ext. ALM 2 to Dry Contact 3 and Ext. ALM 3 to Dry Contact 4, in the BDA V3 GUI.

Item	Status	Name	Modify	Test
Dry Contact ALM1	●	AC Fail	⚙	⚙
Dry Contact ALM2	●	Battery Low	⚙	⚙
Dry Contact ALM3	●	Charger Fail	⚙	⚙
Dry Contact ALM4	●	Signal Booster Fail	⚙	⚙
Dry Contact ALM5	●	Antenna Malfunction	⚙	⚙
Dry Contact ALM6	●	System Component Fail	⚙	⚙
Dry Contact ALM7	●	Not Configured	⚙	⚙

Ext Alarm	Status	Name	EOLR	Alarm Type	Modify
Ext ALM1	●	EXT ALARM1	Not Config	Normally Open	⚙
Ext ALM2	●	EXT ALARM2	Not Config	Normally Open	⚙
Ext ALM3	●	EXT ALARM3	Not Config	Normally Open	⚙
Ext ALM4	●	EXT ALARM4	Not Config	Normally Open	⚙

Alarms	Alarms	Alarms
<input type="checkbox"/> AC Lost ALM	<input checked="" type="checkbox"/> Ext ALM1	<input type="checkbox"/> Comm. Wire Fault ALM1
<input type="checkbox"/> Charger Fail ALM	<input type="checkbox"/> Ext ALM2	<input type="checkbox"/> Comm. Wire Fault ALM2
<input type="checkbox"/> Over TEMP ALM	<input type="checkbox"/> Ext ALM3	<input type="checkbox"/> Comm. Wire Fault ALM3
<input type="checkbox"/> Battery Low ALM	<input type="checkbox"/> Ext ALM4	<input type="checkbox"/> Comm. Wire Fault ALM4
<input type="checkbox"/> Battery Over-Discharge ALM	<input type="checkbox"/> Battery Connection ALM	<input type="checkbox"/> Battery Comm. Fault ALM
<input type="checkbox"/> Charger Comm. Fault ALM		

Alarm name/remark	Item	Current Value	Config Value
	Dry Contact Remark4	Signal Booster Fail	

Dry Contact Alarm Name	Alarm Status	Actions
AC input normal	●	Modify Test
Loss of normal AC power	●	Modify Test
Loss of battery capacity	●	Modify Test
Battery charger failure	●	Modify Test
Active RF emitting device malfunction	●	Modify Test
Donor antenna malfunction	●	Modify Test
System component malfunction	●	Modify Test
Donor antenna disconnection	●	Modify Test

Dry alarm setting

* Alarm name: Loss of normal AC power

Select all

Charger Fault Alarm Charger Comm. Fault Alarm PA Alarm DL 700MHz LNA Alarm DL 700MHz

PA Shutdown Alarm DL 700MHz Ext Alarm 1 PA Alarm DL 800MHz LNA Alarm DL 800MHz

PA Shutdown Alarm DL 800MHz Ext Alarm 2 PA Alarm UL 700&800MHz LNA Alarm UL 700&800MHz

PA Shutdown Alarm UL 700&800MHz Ext Alarm 3 DL_P_in Over Alarm 700MHz DL_P_in Low Alarm 700MHz

Oscillation Shutdown Alarm Ext Alarm 4 DL_P_out Over Alarm 700MHz DL_P_out Low Alarm 700MHz

Oscillation Gain Reduction Alarm Ext Alarm 5 DL_P_in Over Alarm 800MHz DL_P_in Low Alarm 800MHz

PLL Alarm Over Temperature Alarm DL_P_out Over Alarm 800MHz DL_P_out Low Alarm 800MHz

Digital Clock Alarm DT ANT Disconnection Alarm VSWR Alarm DL 700MHz VSWR Alarm DL 800MHz

Save Cancel

Dry alarm setting

* Alarm name: Loss of battery capacity

Select all

Charger Fault Alarm Charger Comm. Fault Alarm PA Alarm DL 700MHz LNA Alarm DL 700MHz

PA Shutdown Alarm DL 700MHz Ext Alarm 1 PA Alarm DL 800MHz LNA Alarm DL 800MHz

PA Shutdown Alarm DL 800MHz Ext Alarm 2 PA Alarm UL 700&800MHz LNA Alarm UL 700&800MHz

PA Shutdown Alarm UL 700&800MHz Ext Alarm 3 DL_P_in Over Alarm 700MHz DL_P_in Low Alarm 700MHz

Oscillation Shutdown Alarm Ext Alarm 4 DL_P_out Over Alarm 700MHz DL_P_out Low Alarm 700MHz

Oscillation Gain Reduction Alarm Ext Alarm 5 DL_P_in Over Alarm 800MHz DL_P_in Low Alarm 800MHz

PLL Alarm Over Temperature Alarm DL_P_out Over Alarm 800MHz DL_P_out Low Alarm 800MHz

Digital Clock Alarm DT ANT Disconnection Alarm VSWR Alarm DL 700MHz VSWR Alarm DL 800MHz

Save Cancel

Dry alarm setting

* Alarm name: Battery charger failure

Select all

Charger Fault Alarm Charger Comm. Fault Alarm PA Alarm DL 700MHz LNA Alarm DL 700MHz

PA Shutdown Alarm DL 700MHz Ext Alarm 1 PA Alarm DL 800MHz LNA Alarm DL 800MHz

PA Shutdown Alarm DL 800MHz Ext Alarm 2 PA Alarm UL 700&800MHz LNA Alarm UL 700&800MHz

PA Shutdown Alarm UL 700&800MHz Ext Alarm 3 DL_P_in Over Alarm 700MHz DL_P_in Low Alarm 700MHz

Oscillation Shutdown Alarm Ext Alarm 4 DL_P_out Over Alarm 700MHz DL_P_out Low Alarm 700MHz

Oscillation Gain Reduction Alarm Ext Alarm 5 DL_P_in Over Alarm 800MHz DL_P_in Low Alarm 800MHz

PLL Alarm Over Temperature Alarm DL_P_out Over Alarm 800MHz DL_P_out Low Alarm 800MHz

Digital Clock Alarm DT ANT Disconnection Alarm VSWR Alarm DL 700MHz VSWR Alarm DL 800MHz

Save Cancel

1. BBU Dry Contact 1 (AC Fail) to BDA Ext. Alarm 1
2. BBU Dry Contact 2 (Battery Low) to BDA Ext. Alarm 2
3. BBU Dry Contact 3 (Charger Fail) to BDA Ext. Alarm 3

Make sure External Alarm 1 is assigned to Dry Contact 4 and External Alarm 2 is assigned to the Dry Contact 5 in the BBU V2 GUI.

See BDA V3 Alarm Wiring Diagram to connect to FACP!

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