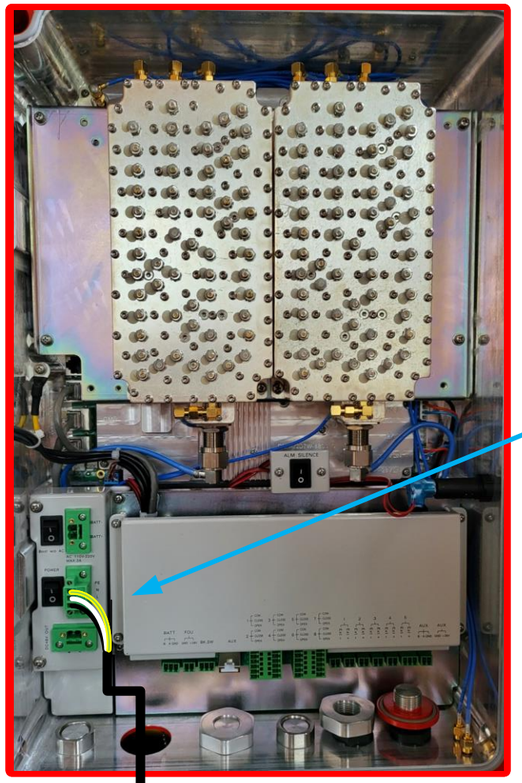
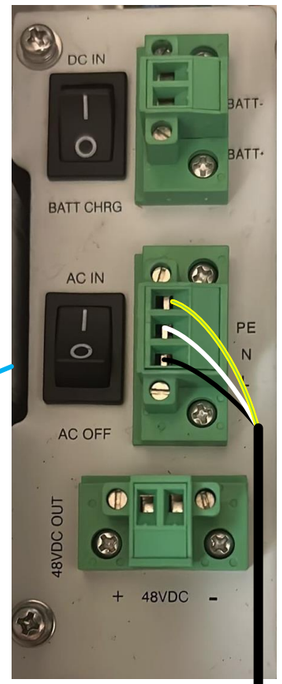
Comba BDA V3 Wiring Diagram

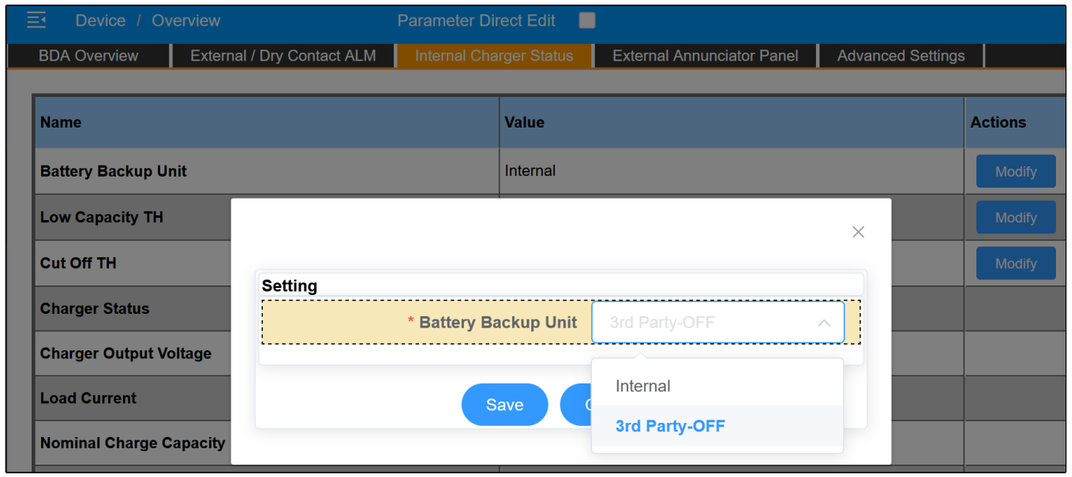
(AC ONLY)

Comba BDA V3



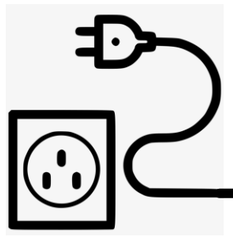


PE
N
L



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



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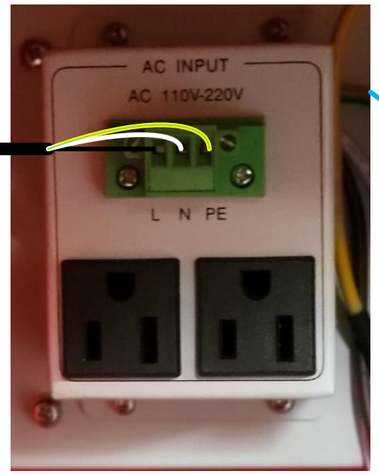
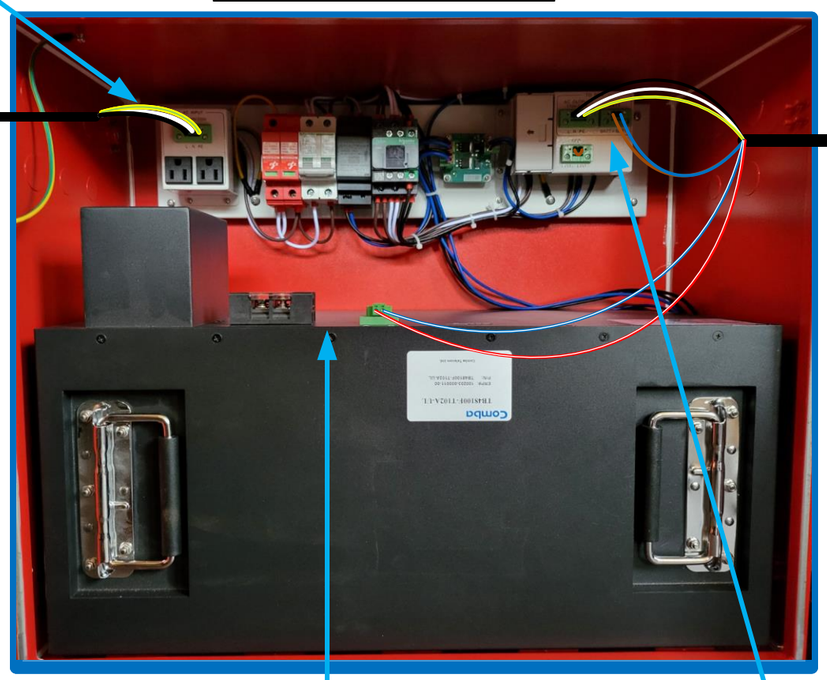
Comba BBU V3 to BDA V3 Wiring Diagram

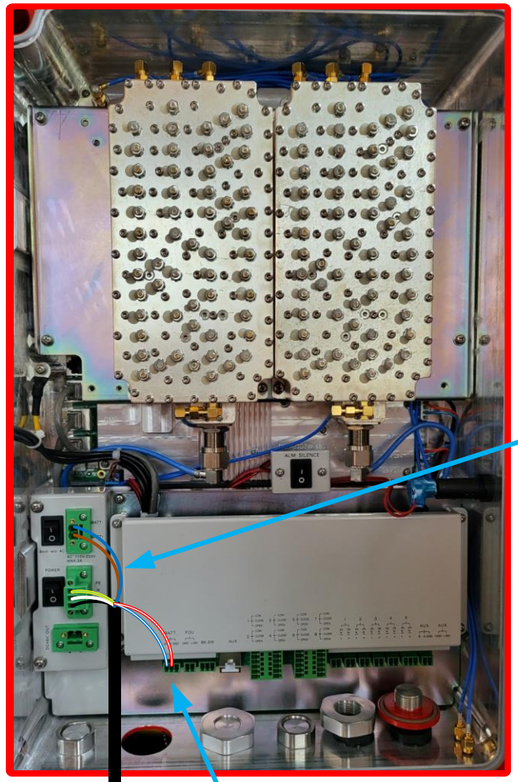
(BDA-BBU V3)

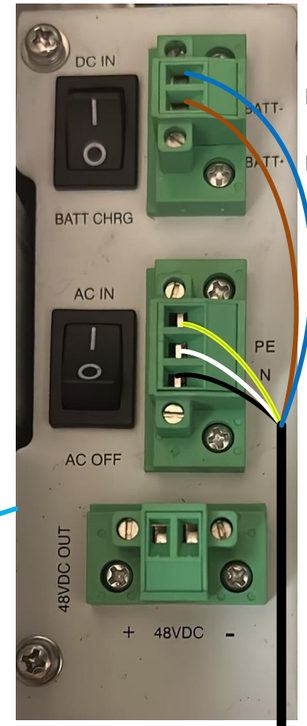


Comba BBU V3



Comba BDA V3

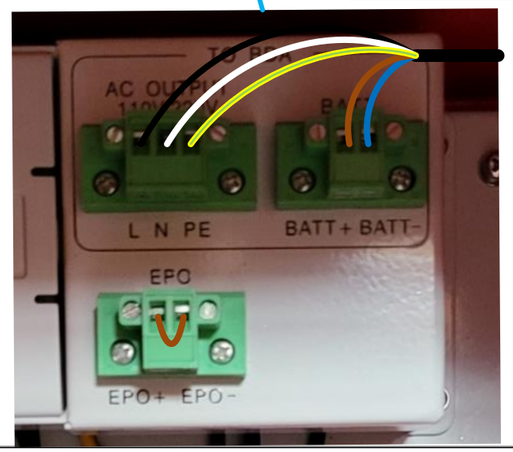


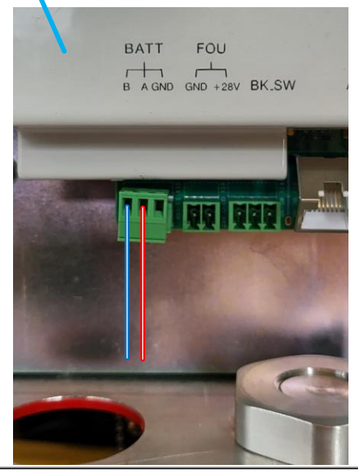


BBU Internal connection
BATT - BATT +

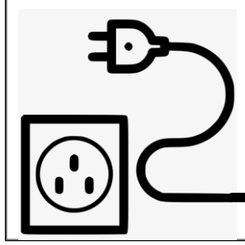
Note: One of the wires maybe be brown

To BDA
A B





AC POWER



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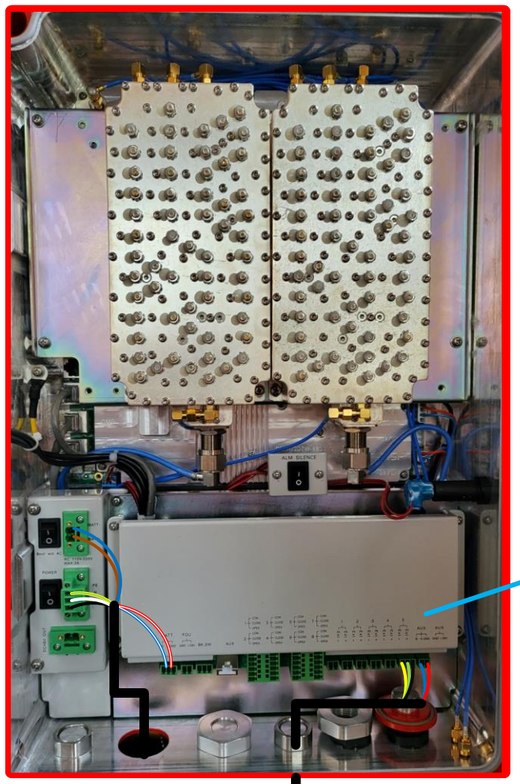
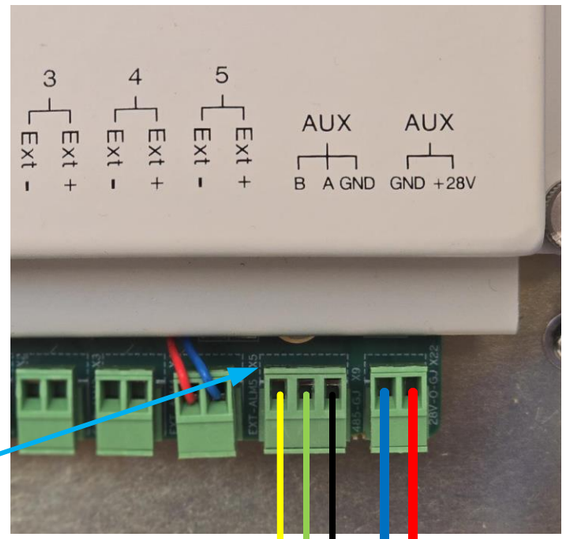
BDA V3 – Comba Annunciator V1 Wiring Diagram

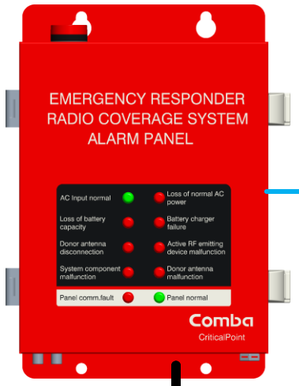
Power OFF the V3 BDA and V1 Annunciator Panel before installation!

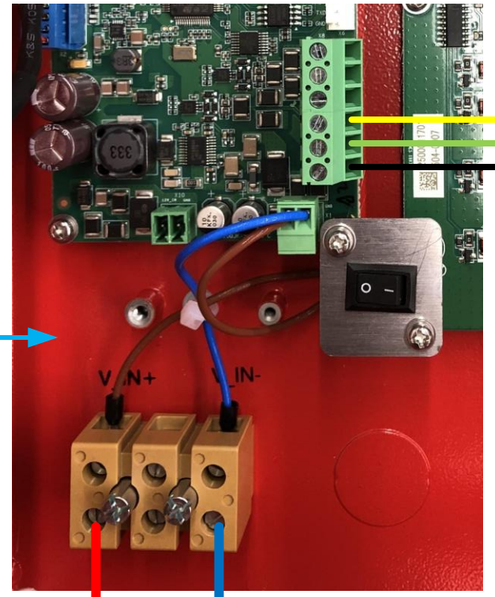
Comba BDA V3





AP V1





The V1 annunciator panel Alarm Definition and Display uses UL2524 and is non-configurable. For the best matching, select <UL2524 OCT 19 2018> in the V3 BDA/MU/RU software, and replace with the <UL2524> Alarm Plate on the V3 BDA/MU/RU front panel.

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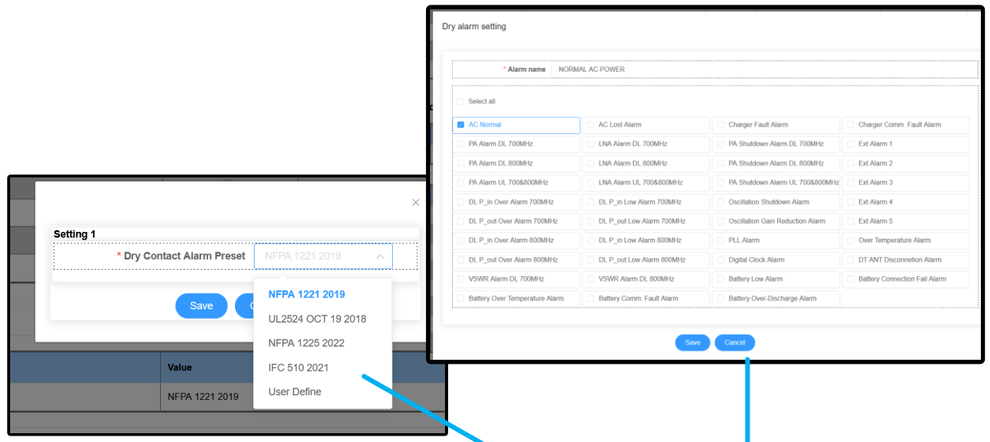
BDA V3 Alarm Wiring Diagram

(Normaly Open Example)

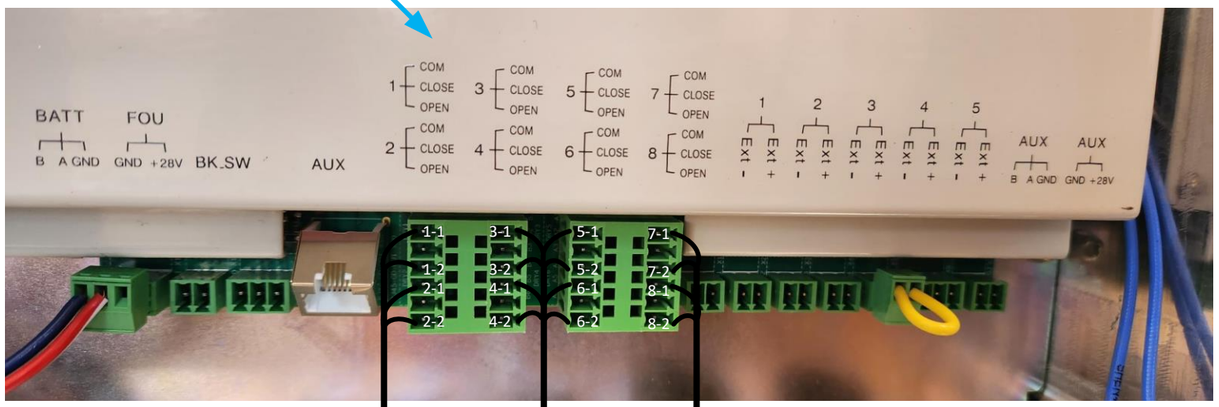
Comba BDA V3



Dry Contact Alarms

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
		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!

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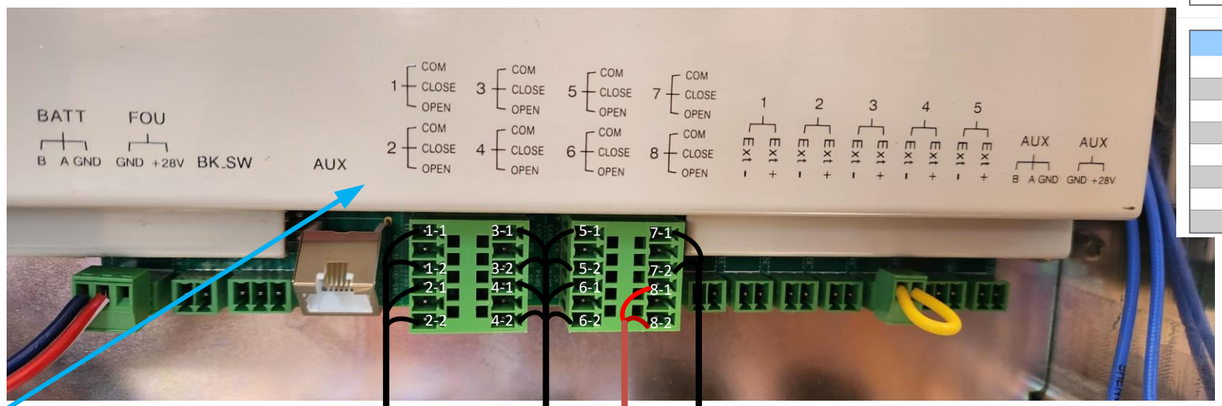
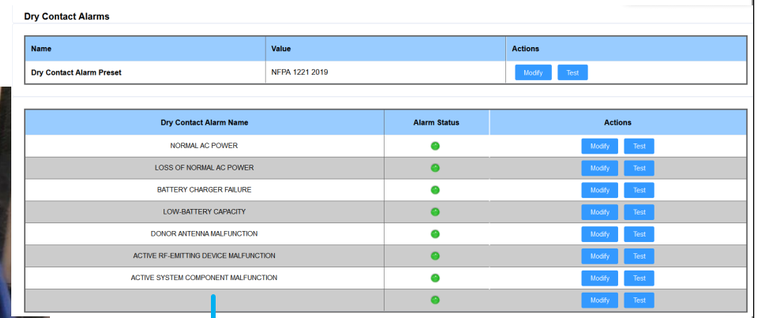
BDA V3 - 3rd Party Auto Dialer Wiring Diagram

(Normaly Open Example)

Comba BDA V3



To FACP

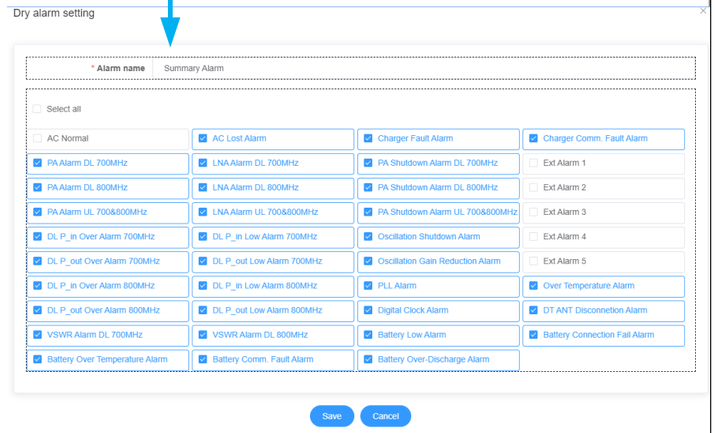


Dry Contact Alarms

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
		Modify Test

Create summery alarm on free or unused Dry Contact relay (eg. DC 8)



Dry alarm setting

* Alarm name: Summary Alarm

Select all

AC Normal	AC Lost Alarm	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 Disconnetion Alarm
VSWR Alarm DL 700MHz	VSWR Alarm DL 800MHz	Battery Low Alarm	Battery Connection Fail Alarm
Battery Over Temperature Alarm	Battery Comm. Fault Alarm	Battery Over-Discharge Alarm	

Save Cancel

48VDC Power backed up by BBU

Auto Dialer

Alarm Contacts

Phone

Dedicated phone line

DC/DC Converter
(Step Down Transformer)

+ 48V -

12V + + 12V -

3rd Party DC/DC Converter and Auto Dialer could be placed in BBU V3!

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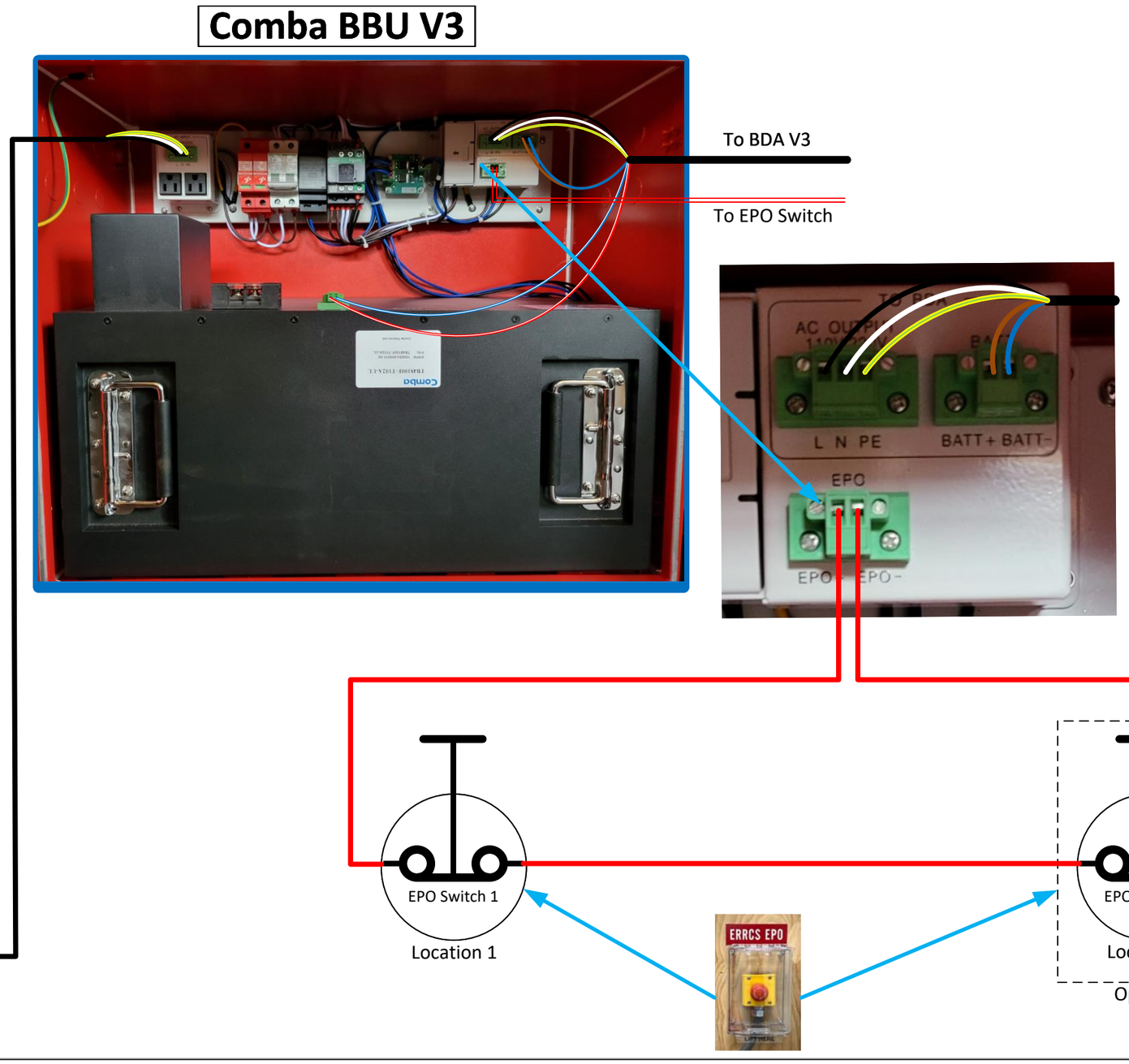
Comba BBU V3 EPO Wiring Diagram



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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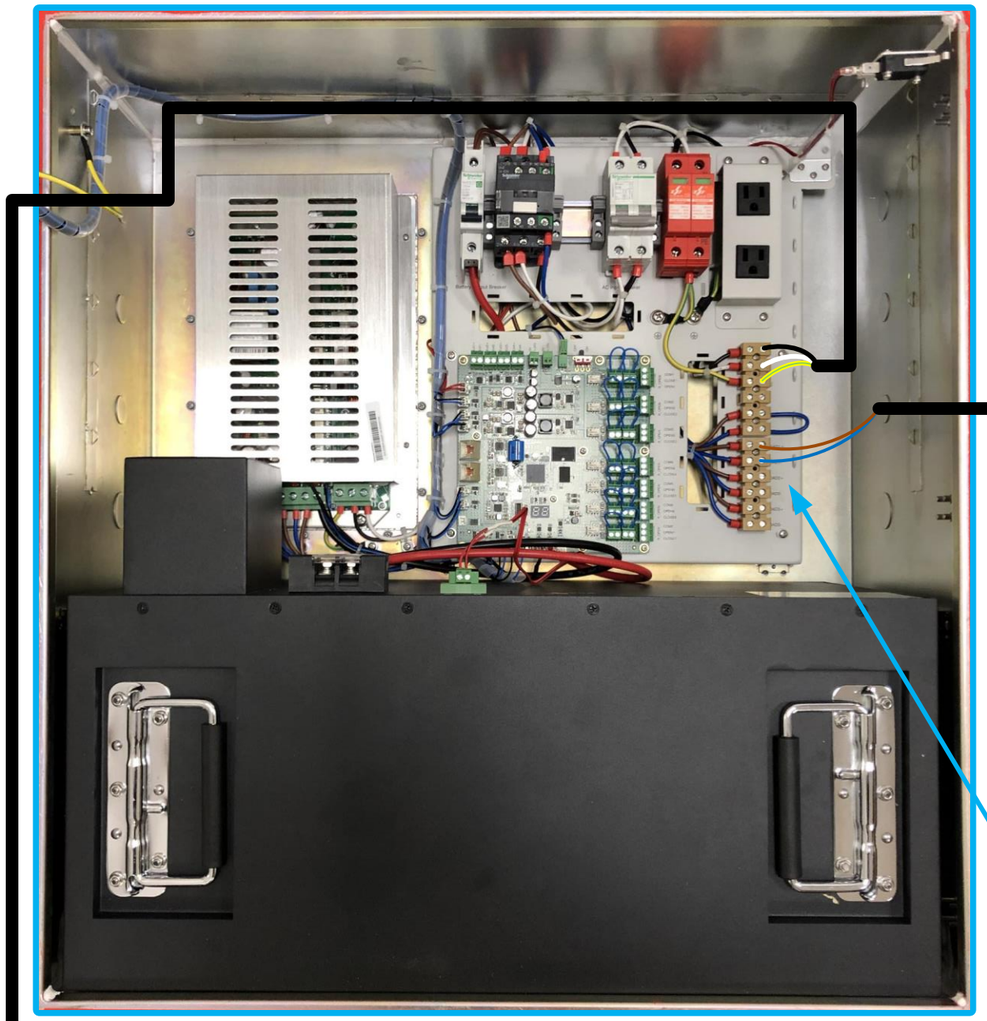
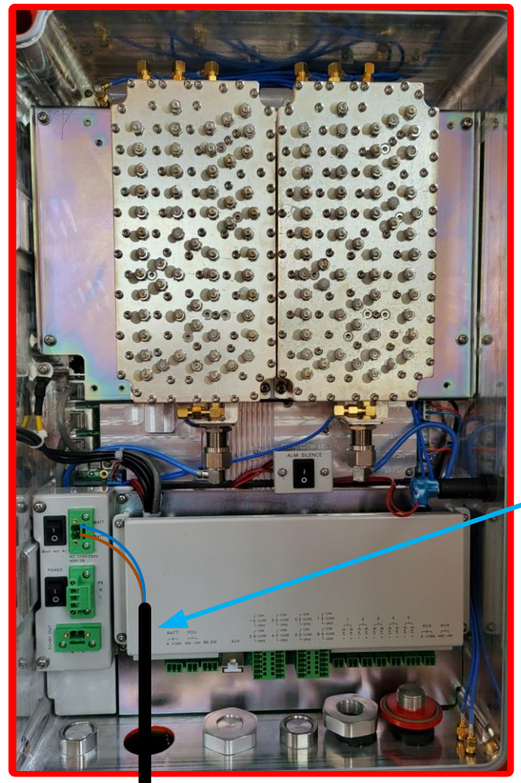
Comba BBU V2 to BDA V3 Wiring Diagram

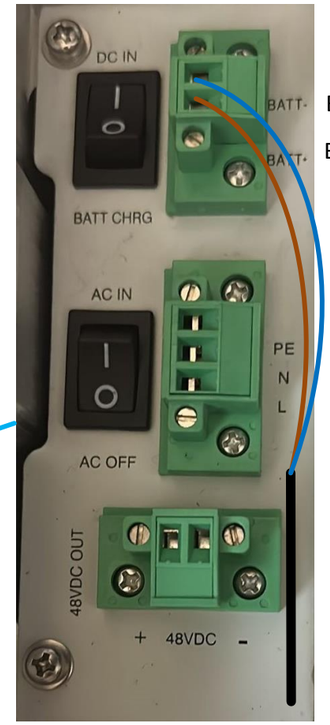
(BDA-BBU V2)

Comba BBU V2



Comba BDA V3





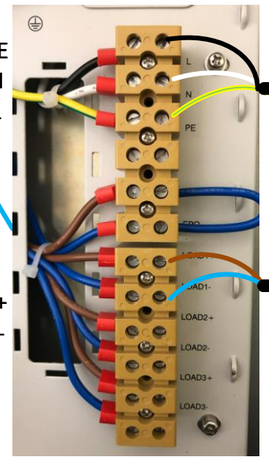
BATT -

BATT +

PE

N

L

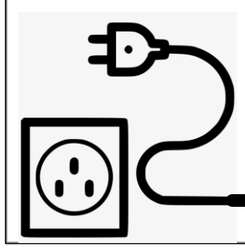


Load 1 +

Load 1 -

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

AC POWER



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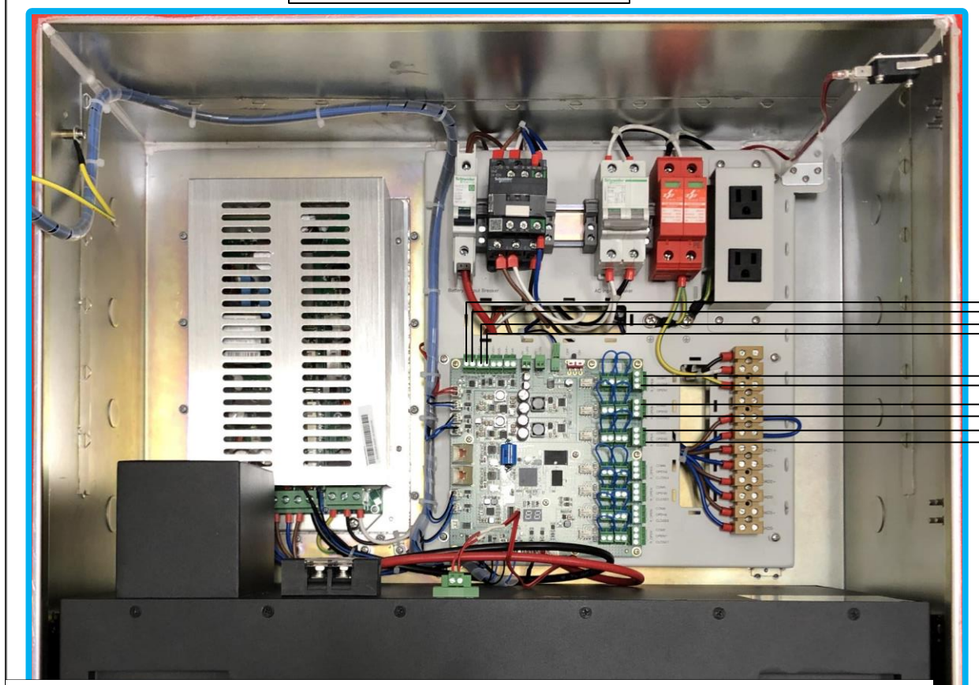
Comba BBU V2 to BDA V3 Alarm Wiring Diagram

Based on UL 2524 Preset and Normally Open

Comba BBU V2



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

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

Alarms	Alarms	Alarms
AC Lost ALM	Ext ALM1	Comm. Wire Fault ALM1
Charger Fail ALM	Ext ALM2	Comm. Wire Fault ALM2
Over TEMP ALM	Ext ALM3	Comm. Wire Fault ALM3
Battery Low ALM	Ext ALM4	Comm. Wire Fault ALM4
Battery Over-Discharge ALM	Battery Connection ALM	Battery Comm. Fault ALM
Charger Comm. Fault ALM		

Alarm name/remark

Item	Current Value	Config Value
Dry Contact Remark4	Signal Booster Fail	

Ok Cancel

Dry Contact ALM5

Alarms	Alarms	Alarms
AC Lost ALM	Ext ALM1	Comm. Wire Fault ALM1
Charger Fail ALM	Ext ALM2	Comm. Wire Fault ALM2
Over TEMP ALM	Ext ALM3	Comm. Wire Fault ALM3
Battery Low ALM	Ext ALM4	Comm. Wire Fault ALM4
Battery Over-Discharge ALM	Battery Connection ALM	Battery Comm. Fault ALM
Charger Comm. Fault ALM		

Alarm name/remark

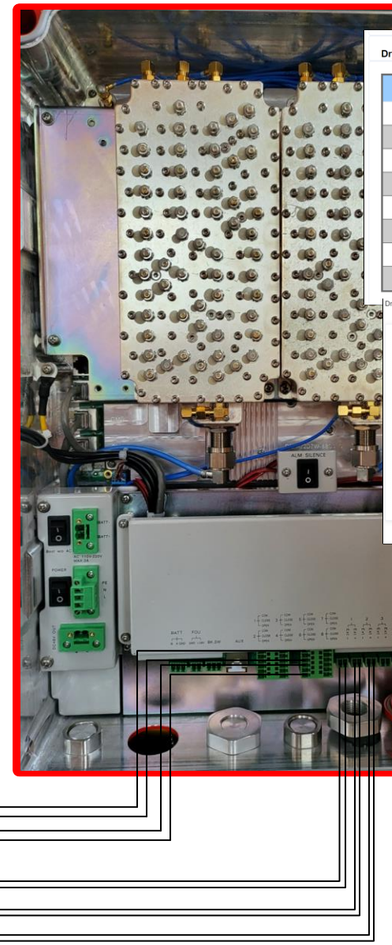
Item	Current Value	Config Value
Dry Contact Remark5	Antenna Malfunction	

Ok Cancel

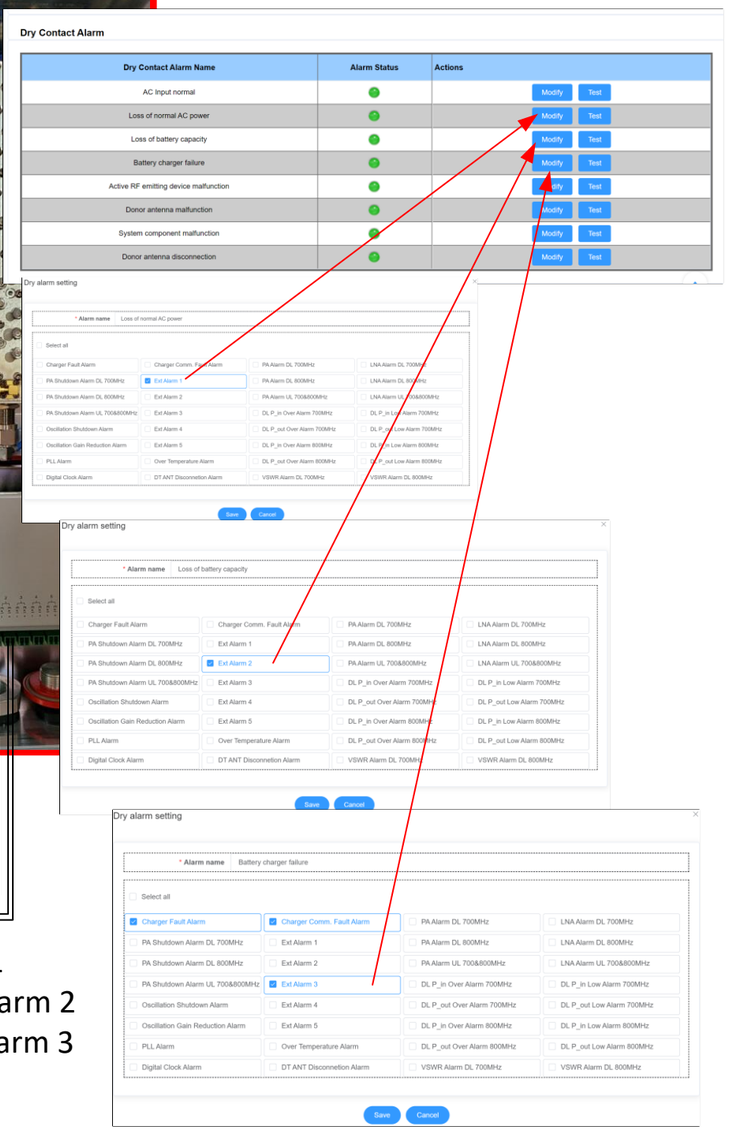
Make sure External Alarm 1 is assigned to Dry Contact 4 and External Alarm 2 is assigned to the Dry Contact 5 in the BBU V2 GUI.

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.



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

See BDA V3 Alarm Wiring Diagram to connect to FACP!

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