

NOTES:

- WARNING:** This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the ControlDrawing referenced on the product's name tag and national and local codes.
- WARNING:** Using a non-factory RS485 data cable between UC12 and first unit may result in damage and may void system warranty.

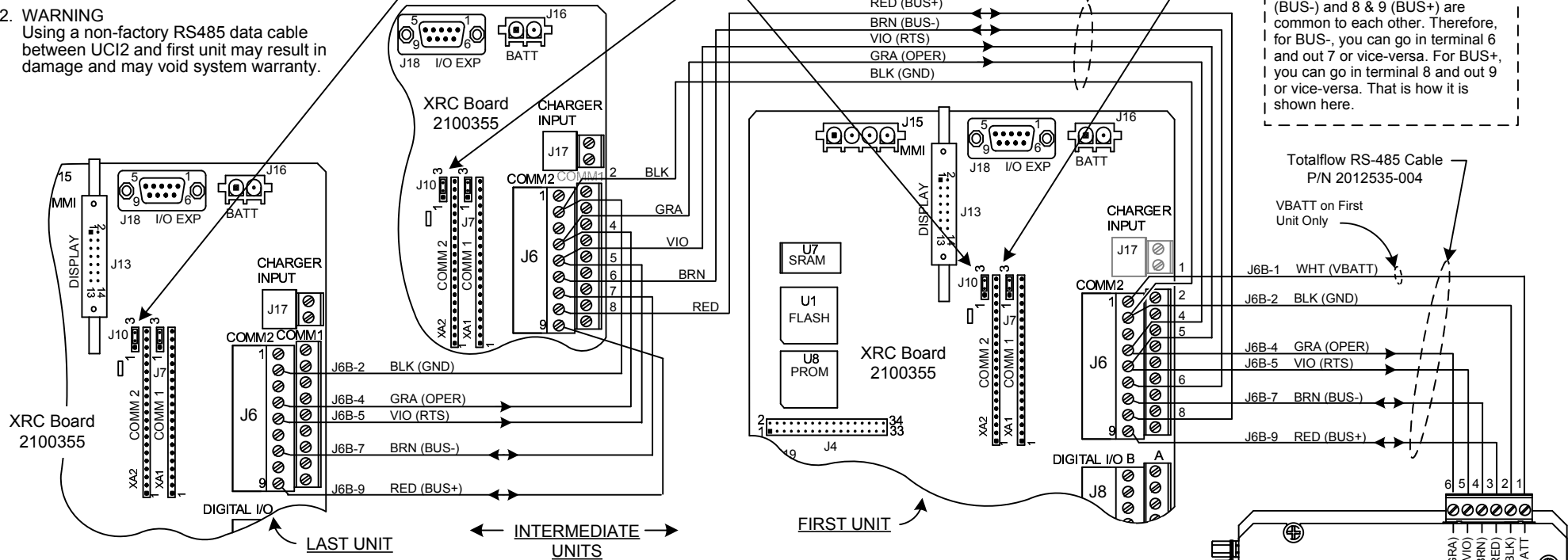
Jumper 1 to 2 on J10 to terminate last unit on bus.

Jumper 2 to 3 on J10 for first and intermediate units.
or
If the first unit is the only unit, jumper 1 to 2 to terminate.

Totalflow RS485 Cable
P/N 2011648-001
Between Each Unit

RS-485 Communications Module
In Comm 1 Of Each Unit.
Totalflow P/N 2015193-002/003

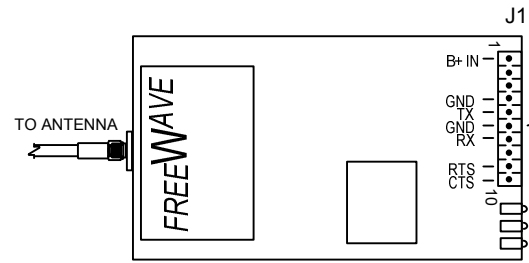
Hint:
In RS-485 Mode, terminals 6 & 7 (BUS-) and 8 & 9 (BUS+) are common to each other. Therefore, for BUS-, you can go in terminal 6 and out 7 or vice-versa. For BUS+, you can go in terminal 8 and out 9 or vice-versa. That is how it is shown here.



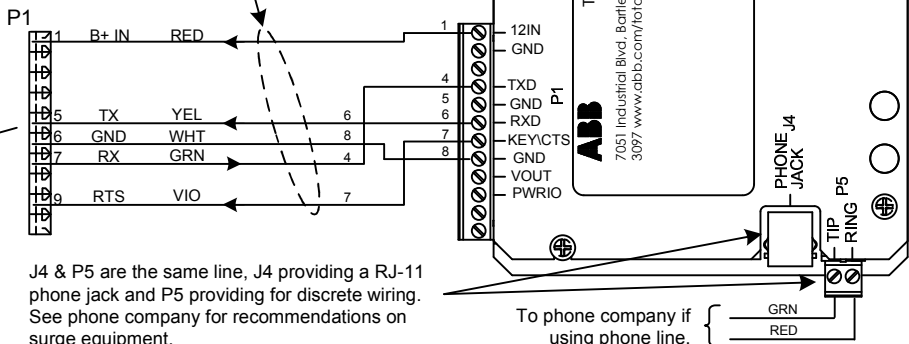
Totalflow RS-485 Cable
P/N 2012535-004

VBATT on First Unit Only

- Maximum length of RS485 bus is 4000 Ft. @9600 baud using Totalflow cable P/N 2011648-001 or equivalent.
- Units must be daisy-chained; No Star Configurations.
- Cable Shielding – Cable segments between units should have their shields terminated on one end only. The RS-485 Cable (P/N 2011648-001) has two shields, each with its own drain wire. When connecting multiple units together, connect the two drain wires on the first unit to one of the two ground screws on the bottom left-hand side of the enclosure. Cut the cable and terminate the wiring on the second unit but do not connect the drain wires. On the next segment between the second and third units, connect the two drain wires to the second unit but not to the third unit. Repeat this process until all units are wired.



Totalflow RS-232 Cable Assy
P/N 2100759-001
(A cable from FreeWave will use different colors)



J4 & P5 are the same line, J4 providing a RJ-11 phone jack and P5 providing for discrete wiring. See phone company for recommendations on surge equipment.

To phone company if using phone line.

REF: N/A

ABB TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
	L19731	UD	XRC COMM 2 (2100355 BD) WUCI2 (RS-485) TO FREEWAVE RADIO DGR09RFS REV AE/AH FGRIO-M/S (RS-232) W/FCU PWR	2103172	AA	1 OF 1