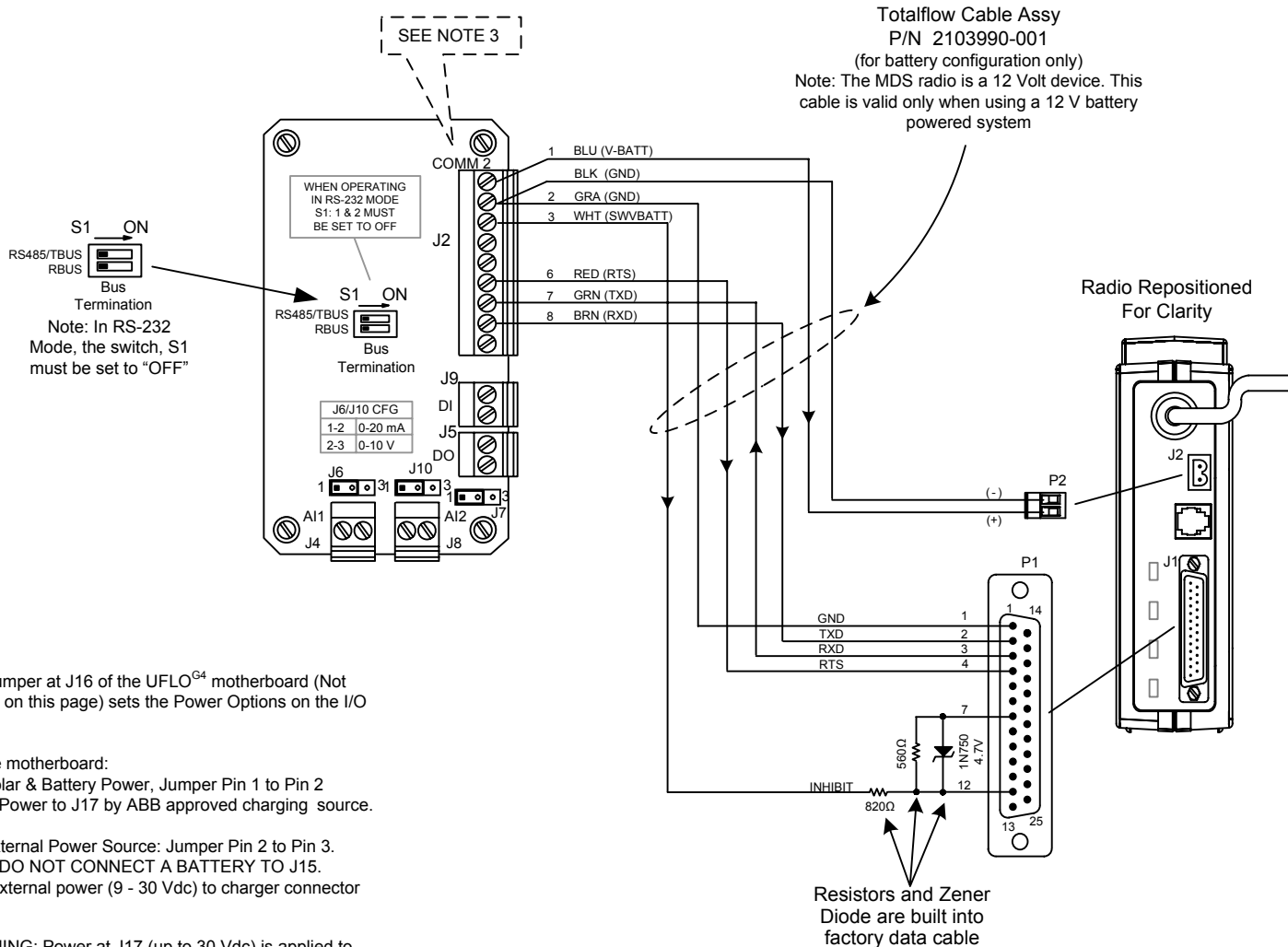


**NOTES:**

1. **WARNING:** This drawing does not illustrate the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product's name tag and national and local codes.
2. **WARNING:** Using a non-factory RS232 data cable between uFLO and radio may result in damage and may void system warranty.



SEE NOTE 3

**Totalflow Cable Assy**  
P/N 2103990-001

(for battery configuration only)  
Note: The MDS radio is a 12 Volt device. This cable is valid only when using a 12 V battery powered system

**PRIMARY SETUP ITEMS FOR THESE MDS RADIOS:**

1. *Mode R.*
2. *ADDR XXXX* - where (xxxx) is radio's address, which is also the same as the Master Radio's Address.
3. *SLEEP ON.*
4. *BAUD 9600 8n1* - (other baud rates can be used but needs to match flow computer's baud rate).

Note: Typically, all other setup items can be left in their default state, except for the following radio-specific changes:

**Recommended changes for X710 "A" model GE MDS radios**

Remove Request to Send (RTS) wire from the Totalflow connected device. RTS is not required on "A" radios and could be a source for spurious unintended transmissions (chirping). Tie this wire back and tape so that it doesn't make electrical contact with any other electrical wiring or ground source.

*GE MDS software setting changes:*  
DATAKEY = ON, set to on so that the radio will key on data without the need for RTS from the Totalflow device.  
PTT delay = 30 milliseconds, defaults to 0, change to 30 to eliminate the spurious unintended transmissions (fast chirping) in the 5-25 milliseconds range.

**Recommended changes for X710 "B" model GE MDS radios**

*GE MDS software setting changes:*  
PTT delay = 30 milliseconds, defaults to 0, change to 30 to eliminate the spurious unintended transmissions (fast chirping) range in duration from 5-25 milliseconds

NOTE: Request to Send (RTS) must be utilized on all "B" radios for proper operations.

3. The Jumper at J16 of the uFLO<sup>G4</sup> motherboard (Not shown on this page) sets the Power Options on the I/O board:

On the motherboard:

For Solar & Battery Power, Jumper Pin 1 to Pin 2  
**Note:** Power to J17 by ABB approved charging source.

For External Power Source: Jumper Pin 2 to Pin 3.  
**Note:** DO NOT CONNECT A BATTERY TO J15.  
Wire external power (9 - 30 Vdc) to charger connector J17.

**WARNING:** Power at J17 (up to 30 Vdc) is applied to the Communication connector terminals as power for radios, etc. Radio operation and the Inhibit feature may not work properly if other than a nominal 12 Vdc power source is utilized.

REF: N/A

	<b>TOTALFLOW</b> Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
		D31821	UD	uFLO <sup>G4</sup> OPT1 I/O (2104395 BOARD) COMM2 TO MDS 4710/9710B/9810 RADIO (RS-232)	2104577	AB	1 OF 1