

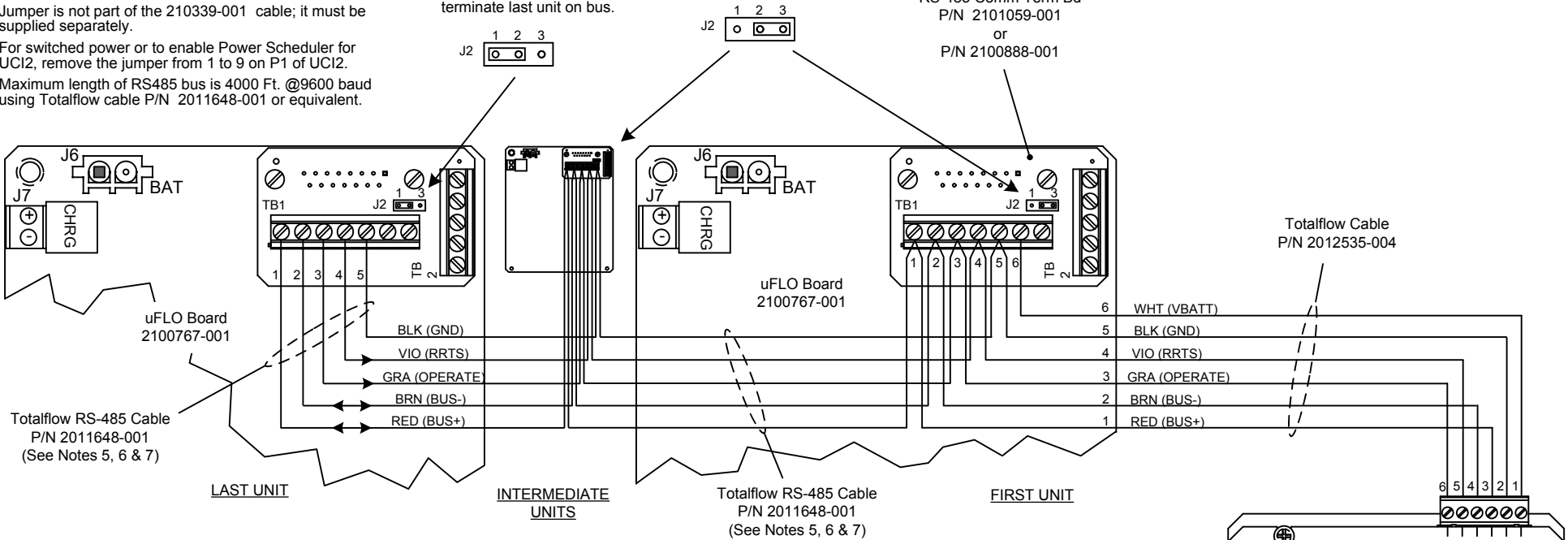
NOTES:

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 cables may result in damage and may void system warranty.
3. Jumper is not part of the 210339-001 cable; it must be supplied separately.
4. For switched power or to enable Power Scheduler for UCI2, remove the jumper from 1 to 9 on P1 of UCI2.
5. Maximum length of RS485 bus is 4000 Ft. @9600 baud using Totalflow cable P/N 2011648-001 or equivalent.

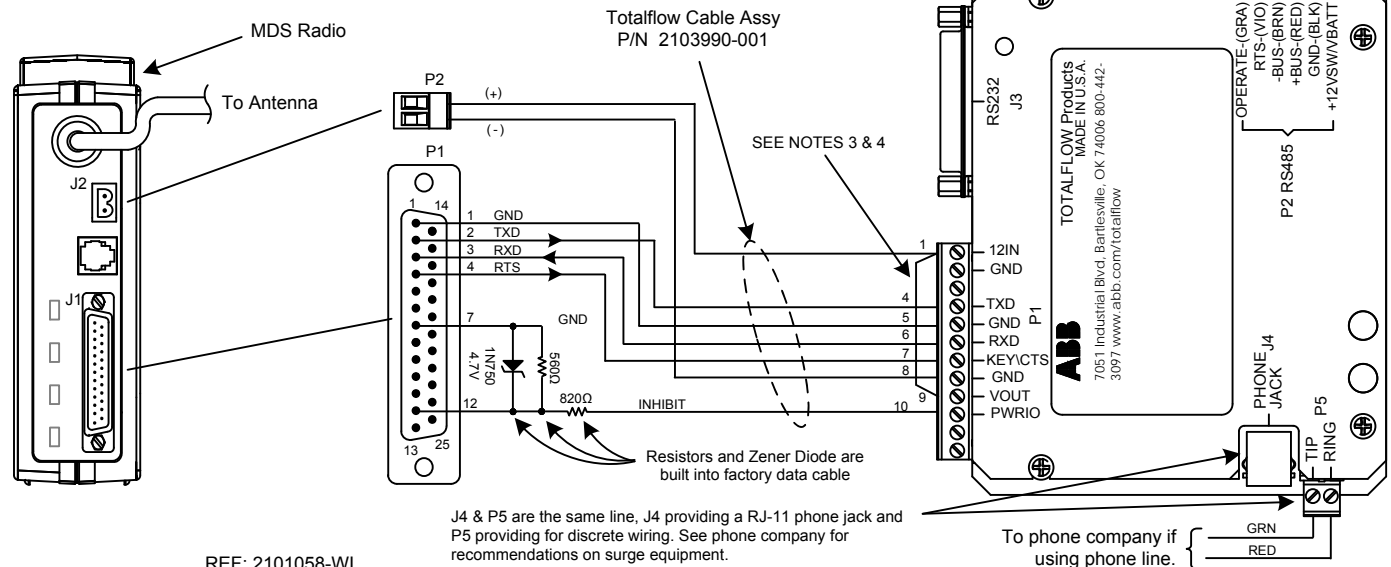
Jumper 2 to 3 on J2 for first and intermediate units.  
 or  
 If the first unit is the only unit,  
 jumper 1 to 2 to terminate.

RS-485 Comm Term Bd  
 P/N 2101059-001  
 or  
 P/N 2100888-001

Jumper 1 to 2 on J2 to terminate last unit on bus.



6. No Star Configurations.
7. 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.



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.

REF: 2101058-WI

<b>ABB</b> TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
	L30037	UD	UFLO W/RS-485 COM TERM BD W/FCU PWR & UCI2 (RS-485) TO MDS 4710/9710B/9810 RADIO (RS-232)	2104331	AA	1 OF 2

**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**

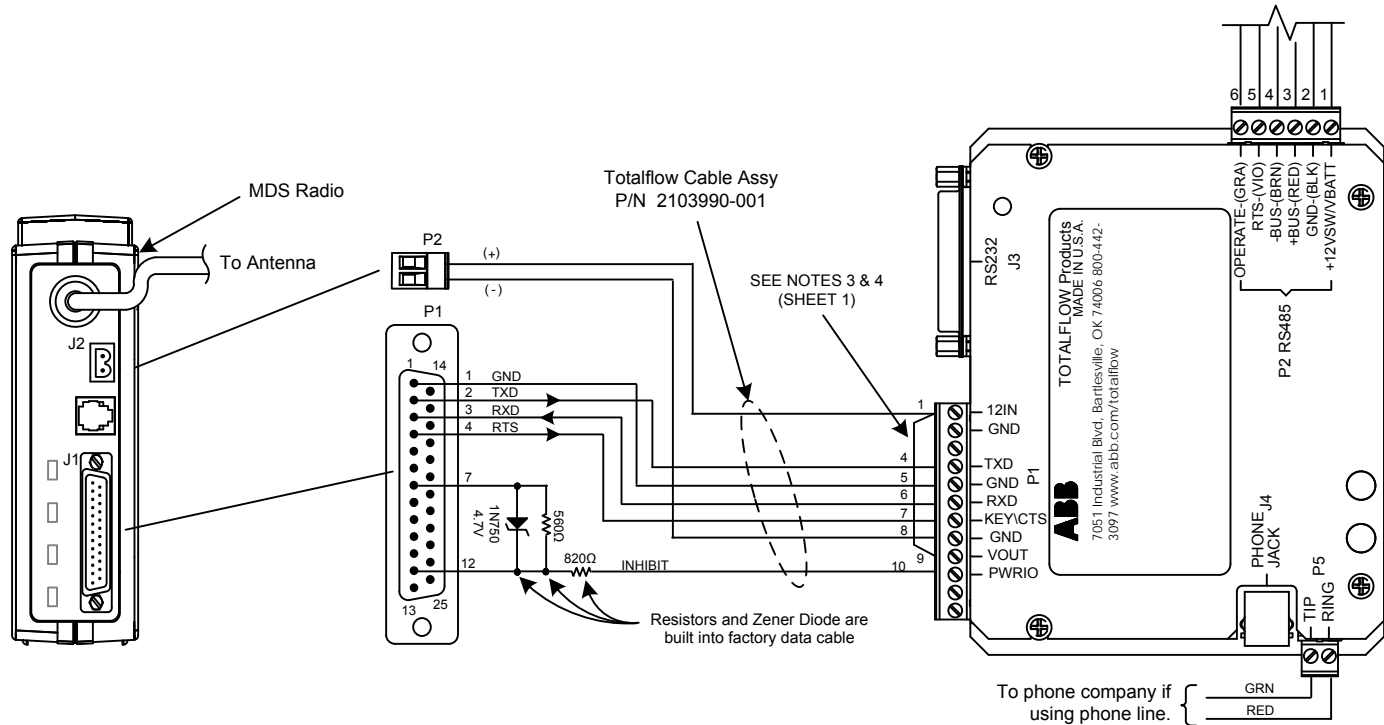
Remove Request to Send (RTS) wire from the Totalflow connected device. RTS is not required on "A" radios and could be a source for spurious unintended transmissions (chirping). Tie this wire back and tape so that it doesn't make electrical contact with any other electrical wiring or ground source.

*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.



REF: N/A

<b>ABB</b>	TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
		L30037	UD	UFLO W/RS-485 COM TERM BD W/FCU PWR & UC12 (RS-485) TO MDS 4710/9710B/9810 RADIO (RS-232)	2104331	AA	2 OF 2