

# Application Note

AN #: 285A

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**PYRAMID MODEL #:** SVR-200 / SVR-250 / SVR-300

**RADIO MODEL:** Vertex VX-7200

**ENGINEER:** C. Carbajal

**APPROVAL INITIALS**

ENGINEER

DEPT. HEAD

<b>Connections:</b>	<b>SVR</b>	<b>Function</b>	<b>Compact DB-15 Ext. Accy.</b>	
	Black/Shield	Ground	Acc Conn pin 15	GND
	White	Tx Audio Out	Acc Conn pin 1	AF IN
	Blue	Remote enable/disable	Acc Conn pin 11	ACC3
	Green	PTT Out	Acc Conn pin 6	EXT PTT
	Red	Switched B+	Acc Conn pin 4	SB
	Yellow	Rx Audio In	Acc Conn pin 2	AF OUT
	Violet	COR	Acc Conn pin 9	ACC1
	Brown	Local Mic In	Acc Conn pin 14	* See Note 2
	Grey	On Air Detect	Acc Conn pin 7	TRX

<b>SVR</b>	JP1	[-]	Remote Enable	<b>SVR</b>	Mobile COR Polarity:	Low
<b>Jumpers:</b>	J1	[In]	Tx audio level	<b>Program:</b>	Mobile Type:	Conv / Trunk
	J2	[In]	Tx audio impedance		On-Air Polarity:	Low
	J4	[Out]	Local mic audio loop		Tx Audio Response:	Flat
	J5	[Out]	Local mic PTT loop		Rx Audio Response:	Flat
	J6	[In]	Local Mic Sensitivity		Local Mic Repeat	Yes
	J7	[In]	Rx Sensitivity			
	J8	[+]	Pull up resistor			
	J9	[In]	MCOR Pull up resistor			

### **Additional Modifications (SVR-200 / SVR-250 / SVR-300):**

1. On newer SVR-200 and all SVR-250/300 series, remove J1, J2 and J11.
2. Install a 10K pull up resistor to 5VDC on Pin 9 of J1 (DSUB Radio Connector). This adds a pull up to On Air Detect.

### **Additional Modifications (Radio):**

1. Replace F1001 with a 3 Amp 0603 pico fuse.
2. If local microphone repeat is enabled; Remove R1419 and run a jumper wire from TP1087 to TP1091. This bridges local microphone audio to Pin 14 of the DSUB-15.

In the radio programming software, set the following:

*Common / Key Function:*

3. Program the A Key for External ACC2

*Common / DSUB-15:*

4. Acc I/O Port 1 = Output = AF Mute
5. Acc I/O Port 3 = Output = ACC2

*Common / Miscellaneous:*

6. Enable External PTT