

# Application Note

**AN #: 248**

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**PYRAMID MODEL #:** SVR-200 / SVR-250 / SVR-300  
**RADIO MODEL:** Motorola ASTRO Spectra PLUS - High Power  
**ENGINEER:** C. Carbajal

## APPROVAL INITIALS

ENGINEER \_\_\_\_\_

DEPT. HEAD \_\_\_\_\_

<b>Connections:</b>	<b>SVR</b>	<b>Function</b>	<b>Radio DB25 (JU0006)</b>
	Black/Shield	Ground	Pin 18 (Dig Ground)
	White	Tx Audio Out	Pin 12 (Mic Hi)
	Blue	Remote enable/disable	External Sw to Ground
	Green	PTT Out	Pin 1 (PTT)
	Red	Switched B+	Pin 22 (SW B+)
	Yellow	Rx Audio In	Pin 9 (Disc)
	Violet	COR	Pin 16 (Spare 1)
	Brown	Local Mic In	N/C
	Grey	On Air Detect	Pin 17 (Spare 2)

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

**Additional Modifications (SVR-200):** Adjust RV1 for 5VDC  
Change C21B to .1uF 0805 Capacitor

**Additional Modifications (SVR-250/300):** Change C1 to .1uF 0805 Capacitor

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

### **On the Main Control Board (HLN5558 B-F)**

1. Install a jumper between the Audio PA IC (TDA 7256) pin 10 (PA enable) and J503 pin 19 (VIP Out 1). This provides COR to accessory connector JU0006.
2. Install a jumper between J500 pin 15 (K9.4V) and J503 pin 22 (VIP Out 2) to bring On Air Detect to JU0006.
3. Remove JU521 and Install JU513 to enable external Mic Hi.
4. Remove JU518 and Install JU500 to enable external PTT.
5. Remove JU519 and Install JU528 to enable Disc Audio Out.

### **On the Interconnect Board (HLN6486E)**

1. Install JU627 to connect On Air Detect to JU0006 (Spare 2). Located directly adjacent to Pin 16 of J0006.