

# Application Note

AN #: 265C

DATE: 28-Dec-09

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

**RADIO MODEL:** Motorola Astro Spectra Mid/Low Pwr w/ Smart Cable

**ENGINEER:** C. Carbajal

**APPROVAL INITIALS**

ENGINEER

DEPT. HEAD

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

**Cable Part Numbers:** Order 7505-10-1012 for the SVR-200  
Order 7505-10-1212 for the SVR-250 and SVR-300

**Additional Modifications (SVR-200):** Adjust RV1 for 2.5VDC  
Change C21B to .1uF 0805 Capacitor

**Additional Modifications (SVR-250/300):** Change C1 to .1uF 0805 Capacitor. Set EMG Jumper to NC  
Ensure that R25 is a 100K ohm resistor.

## Additional Modifications (Radio):

1. Install JU513 and Remove JU521 to enable external Mic Hi on accessory connector J2.
2. Install JU500 and Remove JU518 to enable external PTT on accessory connector J2.
3. Install JU528 and Remove JU519 to enable Disc Audio Out on accessory connector J2.
4. In the Astro Mobile CPS, program the **Radio Configuration / Display & Menu / Menu Items:**
  - a. Program One of the Control Head Keys for **PWR**. The SVR will use the Low power menu setting for remote enable/disable.
5. In the Astro Mobile CPS, program the **Radio Wide / Transmit Power Levels:**
  - a. Set Low and High power tx levels equal. This ensures that when enabling the SVR, the radio remains in High power mode.

*Note: Not all control head types will support enabling/disabling the SVR using the High/Low power button on the radio. Generally all Seires 05 control heads do support low/high power enable/disable. In cases where this setting does not work, use the blue wire provided on the smart cable to enable the repeater. This enable line is active low.*