

# Application Note

**AN #: 293**

DATE: 8-Jun-11

Page 1 of 1

**PYRAMID MODEL #:** SVR-200 / SVR-250 / SVR-300 Series  
**RADIO MODEL:** Motorola APX Mid/Low Power with 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	[Out]	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		Local Mic Repeat	Disabled
	J7	[Out]	Rx Sensitivity			
	J8	[+]	Pull up resistor			
	J9	[In]	MCOR Pull up resistor			

**Smart Cable Part Numbers:** Order 7506-10-1094 for the SVR-200  
Order 7506-10-1294 for the SVR-250 / SVR-P250 / SVR-300

**Additional Modifications (SVR-200):** None.

**Additional Modifications (SVR-250 / SVR-300):** Set EMG Jumper to NC.

**Additional Modifications (Radio):**

1. Ensure that the firmware in the APX mobile radio is version 6.0 or newer.
2. In the APX CPS, program the **Radio Wide / Advanced** menu options to:
  - a. **Aux PTT Audio Source = Aux\_Mic**
  - b. **Aux Transmit Sensitivity = 80 mV**
3. In the APX 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.
4. In the APX 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: Generally all Seires 05 control heads support low/high power enable/disable.  
In cases where this setting does not work or you want to use an external switch  
or device to enable the SVR, use the blue wire provided on the smart cable to enable the repeater.  
This enable line is active low.*