Application Note

AN #: 268C
DATE: 1-Nov-21

PYRAMID MODEL #: SVR-200 / SVR-250 / SVR-300
RADIO MODEL: Motorola XTL1500/2500/5000 PM1500 Mid/Low Power with Smart Cable
ENGINEER: C. Carbajal

APPROVAL INITIALS
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SVR Jumpers:	JP1	[-]	Remote Enable	**SVR Program:**	Mobile COR Polarity:	Low
	J1	[Out]	Tx audio level		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 7505-10-1094 or 7506-10-1094* for the SVR-200
Order 7505-10-1294 or 7506-10-1294* for the SVR-250 and SVR-300

* 7506-10-xxxx version 1.9 and newer cables are jumper selectable for APX and XTL models. J1= OUT for APX, J1 = In for XTL (see figure 1)

Additional Modifications (SVR-200): None.

Additional Modifications (SVR-250/300): Set EMG Jumper to NC. Ensure that R25 is a 100K ohm resistor.

Additional Modifications (Radio):

1. In the Astro Mobile CPS, program the **Radio Wide / Advanced** menu options to:
   a. **Aux PTT Audio Source = Aux_ Mic**
   b. **Aux Transmit Sensitivity = 80 mV**

2. 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.

3. 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 enablingthe 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 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.

Figure 1: