

Application Note

AN #: 270F

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

RADIO MODEL: Motorola Astro Spectra High Power with Smart Cable

ENGINEER: C. Carbajal

APPROVAL INITIALS

ENGINEER

DEPT. HEAD

SVR	JP1	[-]	Remote Enable	SVR	Mobile COR Polarity:	Low
Jumpers:	J1	[Out]	Tx audio level	Program:	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	[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 7505-10-1045 for the SVR-200
Order 7505-10-1245 for the SVR-250 & SVR-300

Additional Modifications (SVR-200): Adjust RV1 for 2.5 VDC
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):

- In the Astro Mobile CPS, program the **Radio Configuration / Display & Menu / Menu Items:**
 - Program One of the Control Head Keys for **PWR**. The SVR will use the Low power menu setting for remote enable/disable.
- In the Astro Mobile CPS, program the **Radio Wide / Transmit Power Levels:**
 - Set Low and High power tx levels equal. This ensures that when enabling the SVR, the radio remains in High power mode.
- On the radio Logic PCB (HLN5558), configure the following jumpers:
 - Remove JU521 and Install JU513 to enable external Mic Hi.
 - Remove JU518 and Install JU500 to enable external PTT.
 - Remove JU519 and Install JU528 to enable Disc Audio Out.
 - Ensure JU605 is installed adjacent to pin 1 of the DB25 connector (Mobile PTT input).

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.