

Application Note

AN #: 224B

DATE: 23-Feb-05

Page 1 of 1

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

APPROVAL INITIALS
ENGINEER _____
DEPT. HEAD _____

| Connections: | SVR | Function | Radio DB25 (JU0006) |
|--------------|--------------|-----------------------|-----------------------|
| | 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) |

| | | | | | | |
|-----------------|-----|-------|-----------------------|-----------------|----------------------|------------|
| SVR | JP1 | [-] | Remote Enable | SVR | Mobile COR Polarity: | High |
| Jumpers: | J1 | [Out] | Tx audio level | Program: | 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): 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 (HLN6486D)

1. Install JU627 to connect On Air Detect to JU0006 (Spare 2). Located directly adjacent to Pin 16 of J0006.
2. Install JU605 to connect PTT to JU0006 (Spare 1). Located second pad adjacent to Pin 1 of J0006.