

Application Note

AN #: 323

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PYRAMID MODEL #: SVR-200 / SVR-250 / SVR-300 / SVR-350

RADIO MODEL: Kenwood NX-5000 Series

ENGINEER: C. Carbajal

APPROVAL INITIALS

ENGINEER

DEPT. HEAD

Order the Pyramid TK-x180/5x20/NX Series interface cable Part# 7502-10-1045 for the SVR-200

Order the Pyramid TK-x180/5x20/NX Series interface cable Part# 7502-10-1245 for the SVR-250 / SVR-300

| Connections: | SVR | Function | Radio | DB25 Connector |
|--------------|--------------|-----------------------|--------|----------------|
| | Black/Shield | Ground | Pin 7 | Ground |
| | White | Tx Audio Out | Pin 6 | MI2 |
| | Blue | Remote enable/disable | Pin 21 | Aux I/O 4 |
| | Green | PTT Out | Pin 4 | Aux I/O 9 |
| | Red | Switched B+ | Pin 14 | SB+ |
| | Yellow | Rx Audio In | Pin 17 | AFO |
| | Violet | COR | Pin 22 | Aux I/O 3 |
| | Brown | Local Mic In | N/C | |
| | Grey | On Air Detect | Pin 8 | Aux I/O 8 |

| | | | | | | |
|-----------------|-----|-------|-----------------------|-----------------|----------------------|------------|
| 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 | [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 | No |
| | J7 | [Out] | Rx Sensitivity | | | |
| | J8 | [+] | Pull up resistor | | | |
| | J9 | [Out] | MCOR Pull up resistor | | | |
| | J11 | [Out] | Tx audio level | | | |

Additional Modifications: On 7502-10-1245 cables, connect Red/Black wires from factory cable to 12VDC.

* KLF-2 or similar DC line filter is recommended on any installation to ensure clean power to mobile and SVR.

Additional Modifications (Radio):

1. On factory cables, Rev A - Replace F900 with a 3A Fuse. Rev B cables require NO fuse change.
2. In the **Key Assignment** menu set one of the soft keys for **AUX A** to enable the repeater.
3. In the **Extended Function/AUX** settings, set the following:
 - a. DB-25 4 Pin = Input, Ext PTT (Voice), Low
 - b. DB-25 8 Pin = Output, TXS, High
 - c. DB-25 21 Pin = Output, AUX A, Low
 - d. DB-25 22 Pin = Output, TOR, High
4. In the **Extended Function/Modulation Line** settings, set the following:
 - a. MIC PTT: Mic Line = Connect, MI2 line = Connect, DI Line = Disconnect, QT = Yes, STE = Yes
 - b. External PTT (Voice): Mic Line = Disconnect, MI2 line = Connect, DI Line = Disconnect, QT = Yes, STE = Yes
5. In the **Audio Profile** settings, set the following:
 - a. External Microphone Sense = 6db
 - b. ANR Preset = Off