# *Application Note*

***AN #: 289A***
DATE: 1-Mar-18


**PYRAMID MODEL #**: SVR-200 / SVR-250 / SVR-300 / SVR-350
**RADIO MODEL**: Kenwood TK-5720 / TK-5820 P25
**ENGINEER**: C. Carbajal

**APPROVAL INITIALS**
ENGINEER
DEPT. HEAD

**Order the Pyramid TK-x180/5x10/5x20/NX Series interface cable Part # 7502-10-1045 for the SVR-200**
**Order the Pyramid TK-x180/5x10/5x20/NX Series interface cable Part # 7512-10-1245 for the SVR-250/300/350**

| **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 |

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

**Additional Modifications:** On 7512-10-1245 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 F401 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 Tab*** set the following:
   a. DB-25 4 Pin = Input, Ext PTT (Voice)
   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 Tab*** 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