

Application Note

AN #: 246C

DATE: 1-Mar-18

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PYRAMID MODEL #: SVR-200 / SVR-250

RADIO MODEL: Kenwood TK-7180 / 8180

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 # 7502-10-1245 for the SVR-250

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	(See additional mods below)
	J7	[Out]	Rx Sensitivity			
	J8	[+]	Pull up resistor			
	J9	[Out]	MCOR Pull up resistor			

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

* Note, If local mic repeat is enabled, replace R72 in SVR-200 to a 1K Ohm 0805 Resistor.

Additional Modifications (SVR-250): Connect Red/Black wires from factory cable to 12VDC.

* Note, If local mic repeat is enabled, replace R43 in SVR-250 to a 1K Ohm 0603 Resistor.

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

Additional Modifications (Radio):

- On factory cables, Rev A - Replace F401 with a 3A Fuse. Rev B cables require NO fuse change.
- In the *Key Assignment* menu set one of the soft keys for **AUX A** to enable the repeater.
- In the *Extended Function/AUX Tab* set the following:
 - DB-25 4 Pin = Input, Ext PTT (Voice)
 - DB-25 8 Pin = Output, TXS, High
 - DB-25 21 Pin = Output, AUX A, Low
 - DB-25 22 Pin = Output, TOR, High
- In the *Extended Function/Modulation Line Tab* set the following:
 - MIC PTT: Mic Line = Connect, MI2 line = Connect, DI Line = Disconnect, QT = Yes, STE = Yes
 - External PTT (Voice): Mic Line = Disconnect, MI2 line = Connect, DI Line = Disconnect, QT = Yes, STE = Yes