

Application Note

AN #: 306A

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

RADIO MODEL: Tait TM9300 Series DMR

ENGINEER: C. Carbajal

APPROVAL INITIALS

ENGINEER

DEPT. HEAD

Connections:	SVR	Function	Radio (Auxillary Connector DB15)
	Black/Shield	Ground	Pin 15
	White	Tx Audio Out	Pin 7
	Blue	Remote enable/disable	Pin 9
	Green	PTT Out	Pin 12
	Red	Switched B+	Pin 8
	Yellow	Rx Audio In	Pin 13
	Violet	COR	Pin 2
	Brown	Local Mic In	Pin 5
	Grey	On Air Detect	Pin 10 (Not Connected In Factory Cable)
	Black/White	Emergency	Pin 5 (SVR-250 ONLY)

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	[Out]	Local mic audio loop		Tx Audio Response:	Pre-Emp
	J5	[Out]	Local mic PTT loop		Rx Audio Response:	De-Emp
	J6	[Out]	Local Mic Sensitivity		Local Mic Repeat	Disabled
	J7	[Out]	Rx Sensitivity			
	J8	[+]	Pull up resistor			
	J9	[In]	MCOR Pull up resistor			

Note: Due to possible TDMA noise, ensure proper grounding. Pyramid offers a universal Tait TM Series interface cable P/N 7500-10-1011 (SVR-200) and 7500-10-1210 (for SVR-250/300). These cables do not have On-Air Detect wired, which is used for Pyramid Smart Trunking operation. These cables have 3 wires coming out of the DB-15. Orange=Ignition Sense, Red = 12V Output from the radio accy connector, Black = GPIO4, which can be used to enable an external accessory, such as a horn relay or as an input.

Additional Modifications (Radio):

1. In the TM9300 Programming Application:
 - a. In the **Global Parameters / Programmable I/O / Digital** screen
 1. Set AUX_GPI1, Mode = All, Direction = Input, Action = External PTT 1, Active = Low
 2. Set AUX_GPIO4, Mode = All, Direction = Output, Action = Transmission Status, Active = Low
 3. Set AUX_GPIO5, Mode = All, Direction = Output, Action = Signalling Audio Mute Status, Active = Low
 4. Set AUX_GPIO6, Mode = All, Direction = Output, Action = F3 Key Status, Active = High, Signal = Latching
 5. Set AUX_GPI2, Mode = All, Direction = Input, Action = Enter Emergency Mode, Active = Low
 - b. In the **Global Parameters / Programmable I/O / Audio** screen
 1. Set RX/PTT Type **RX**, Tap Out = R10, Tap Out Type = D, Tap Out Unmute = Except on PTT
 2. Set RX/PTT Type **EPTT1**, Tap In = T3, Tap In Type = A, Tap In Unmute = On PTT
 - c. In the **Trunked Features and/or Conventional Features / Key Settings** screen
 1. Program one desired key = Action Digital Output Line. This will set one key as the remote enable of the SVR.
 - d. In the **Global Parameters / PTT / External PTT (1)** screen
 1. PTT Transmission Type = Voice
 2. Audio Source = Audio Tap In