

ST-050 / 051 / 052 APPLICATION NOTE # 0391

FOR USE WITH: Yaesu Vertex VX-3000V

APPROVAL DATE: 22Dec98R BY: RTS

CONNECTIONS

Note	Pin	ST-050 Function	Wire	Host Radio Connection
	#		Color	
	3	(+) Supply	Red	J1006-3 13V
	9	(-) Supply	Black	Ground
1	11	Rx Audio Input	Blue	Junction J1005-3 and C1261
2	1	Rx Audio Output	Wht/Blu	Junction of C1025 Q1047-32
3	12	Tx Audio Input	Green	Junction of J1003-2 and C1178
4	13	Tx Audio Output	Wht/Grn	Junction of C1178 and R1118
5	6	PTT Input	Yellow	Junction of J1003-3 and R1113
	10	PTT Output	Blk/Yel	Junction of R1113 and Q1045-28
6	7	Monitor/Clear/Ciphered	Brown	Add External Switch
	8	Amp. Enable	Blk/Brn	Not used
	5	COS	Blk/Org	JP1002
	2	RS-232 Input	Violet	Used for setup only
	4	RS-232 Output	Wht/Org	Used for setup only

Notes:

- 1. Remove C1025.
- 2. Add a 4.7Mfd capacitor in series with the Wht/Blue (-) side toward ST-05x.
- 3. Remove C1178.
- 4. Add a 0.1 Mfd capacitor in series with the Wht/Grn wires.
- 5. Remove R113.
- 6. Add an external switch. Add 100K Resistor between J1-3 and J1-7 on the ST-05x



Configuration Settings for Product Manager

Operating Mode Tab

Tx PowerUp Mode		Ciphered		Clear		
Functional Rx Conditions		Ciphered		Clear		
COS (Carrier Operated Switch)		Active Low		Active High		
User Code Key Selection		Double Click		Toggle		
PTT Input		Active Low		Common PTT		
PTT Output		Active Low		Active High		
Special Functions		Amp. Enable		Special PTT In/Out		
Missed Sync Reset 5	1	Power Save				
Initial Syncronization Delay 250 Ms				System Related		

Audio Levels Tab

Receiver Input Level	843				
Receiver Output Level	843				
Microphone Input Level	150				
Microphone Output Level	150				
Syncronization Level	3dB	9dB	15dB	•	21dB
Segment Filtering Tx Threshold	132				
Segment Filtering Rx Threshold	132				