

# RF Technology Eclipse Repeater & Trident Micro Systems NTS/ Passport Controller

## Y-CABLE (1 x DB25M to 2 x DB25M)

### Cable Pin Out Description for NTS and Dual Repeaters

NTS			Trunking Card <b>REPEATER 1</b>		
DB-25M	Description	Colour	DB-25M	Links	Description
1	RX Disc Aud	Yellow	20	PS4-Disc	RX p18 Disc
2	TX Audio	Blue	19	PS3-HiZ	TX p4 HiZ[+]
3	TX Data	Brown	7	-	TX p18 Tone[-]
4	TX PTT	Purple	6	-	TX p3 PTT
-	Com. Alarm	White	4	-	RX/TX Alarm
9	Audio Ground	Green	13		0V Ground
12	Ground (Shield N/C)	Black	25	Shield connect	0V Ground
NTS			Trunking Card <b>REPEATER 2</b>		
DB-25M	Description	Colour	DB-25M	Links	Description
14	RX Disc Aud	Yellow	20	PS4-Disc	RX p18 Disc
15	TX Audio	Blue	19	PS3-HiZ	TX p4 HiZ[+]
16	TX Data	Brown	7	-	TX p18 Tone[-]
17	TX PTT	Purple	6	-	TX p3 PTT
-	Com. Alarm	White	4	-	RX/TX Alarm
22	Audio Ground	Green	13		0V Ground
25	Ground (Shield N/C)	Black	25	Shield connect	0V Ground

**N/C = Not Connected**

**NOTE: Shield wire is connected to Ground at Repeater end ONLY**

### Eclipse Transmitter Setup

Serial No: \_\_\_\_\_

Freq: \_\_\_\_\_

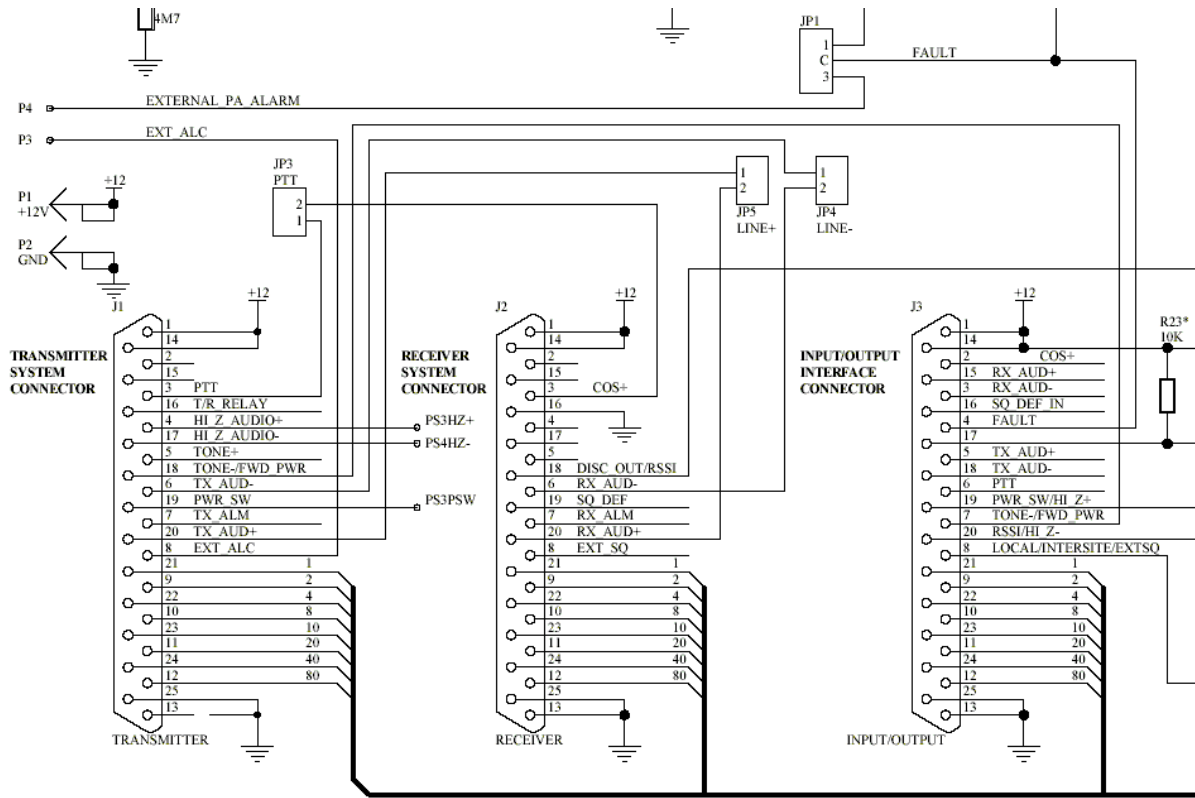
Item	Description	Check
TL	Set JP4 for Pins 1 and 2 (shorted, up position) ie HiZ input – Audio in	
TL	Set JP6 for Pins 2 and 3 (shorted, other position) ie 20dB attenuated	
TL	Remove jumpers JP9, JP10, JP11. Disables the dc loop switching.	
TL	Remove JP8, not required.	
PD	Remove <u>R46</u> (10K), <u>C39</u> (1N0), <u>C116</u> (1uF), <u>R127</u> (470K) Replace R127 with 1M Ohm resistor Using the wire specified, connect Pin 6 of JP8 to the junction of C116 and R127 (which is adjacent to screw mounting hole). Secure the wire with tape or silicone adhesive	

### Eclipse Receiver Setup

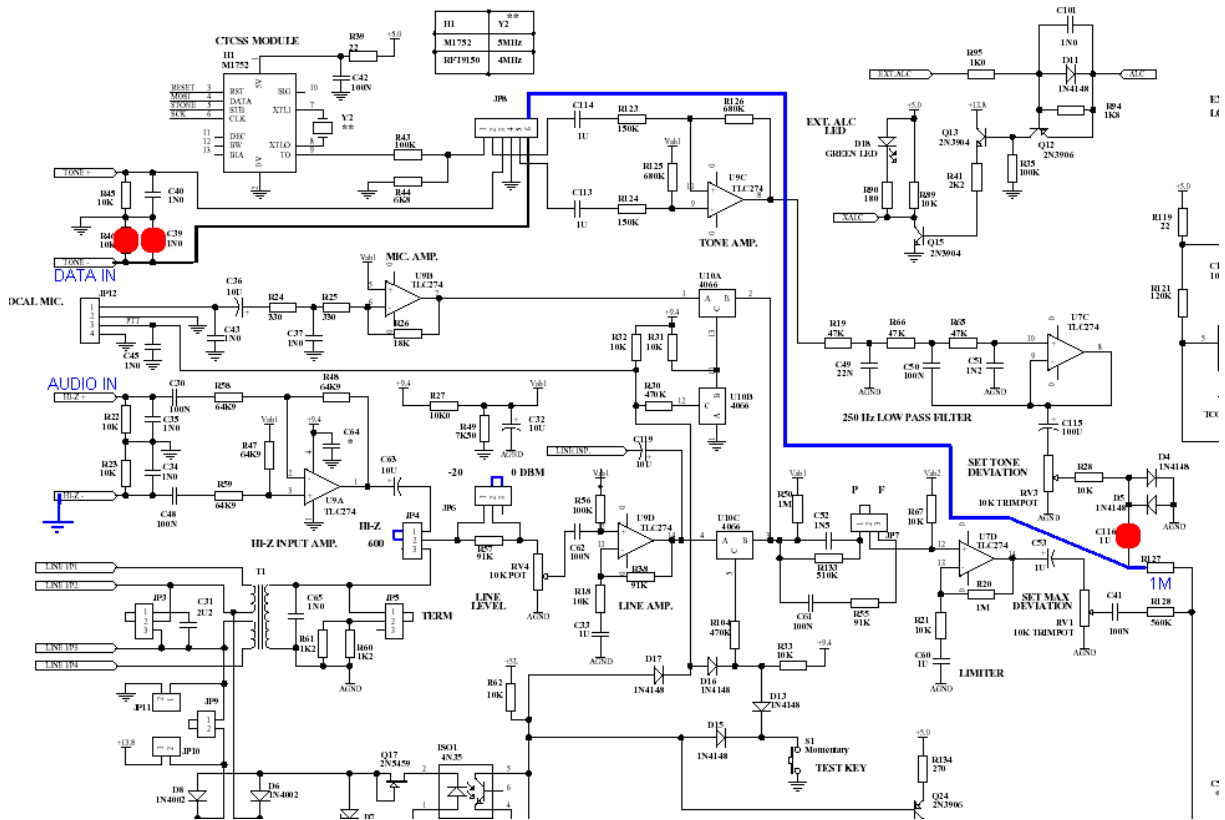
Serial No: \_\_\_\_\_

Freq: \_\_\_\_\_

Item	Description	Check
TL	Remove jumpers JP7, JP8, JP9. Disables the dc loop switching	
TL	Locate C35, 0.47uF capacitor on pcb (U3 pin 6 to U2 pin 5) and replace with 1uF polyester capacitor (if not already done)	
TL	Apply RF signal to RX antenna port (channel frequency) @ -70-100dBm. FM modulated with 1000Hz @ 1.5KHz of deviation	
TL	Adjust Discriminator Audio level control RV1 (located near U2) to 1.1V p/p for Trident Raider	



DB25 INPUT/OUTPUT TRUNKING INTERFACE



MODS TO TX FOR NTS PASSPORT