INSTALLATION INSTRUCTIONS

MicroComm DXI

TSB-100 and TSB-400 Telephone Set Board

1. Intent & Scope

This document describes the installation procedure for the TSB-100 and TSB-400 Telephone Set Boards.

2. Description

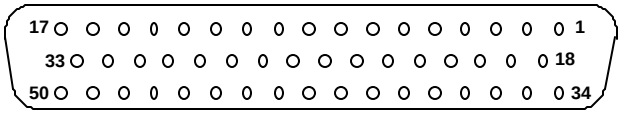
The TSB-100 and TSB-400 Telephone Set Boards are designed to plug into a standard DXI card cage. Up to eight standard 2500 set compatible DTMF (touch-tone) telephones can be connected to a TSB-100 or a TSB-400. These telephone sets can be configured to perform submaster intercom station or administration intercom functions. The TSB ports can be used to connect a MicroComm DXI intercom system to a PBX, through its CO line ports, or to other equipment, such as an auto dialer, that operates with standard telephone lines.

The only difference between the TSB-100 and TSB-400 is the audio signal levels between the TSB card and the station audio cards (SABs). TSB-100s should be used if the system uses SAB-100 cards; TSB-400s should be used if the system uses SAB-400 or SAB-300 cards.

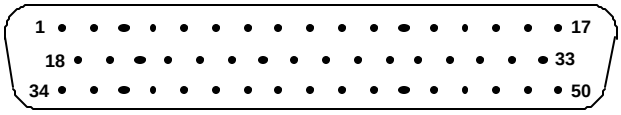
TSB-100

3. Field Interface Cable

The Telephone Set Board requires a CBL-170 cable (these cables can be ordered in different lengths) with a DB-50 male connector. This cable interfaces between the TSB and the field wiring from the 2500 telephone sets. The following table gives the pin numbers, wire colors, and terminal block position for each of the telephone Tip and Ring connections. Note that two of the pins on the DB-50 (pins 17 and 50) are connected internally to the chassis (labeled EGND). The CBL-170 cable connects these pins to the terminal block (pins 33 and 34). These two should be left open at the terminal block



Female DB-50 Connector



Male DB-50 Connector

Wiring Table

DB50 Pin Number	Signal	TSB Cable Wire Color*	Terminal Block Pin Number
1	Tip 1	White-Blue	1
18	Ring 1	Blue-White	2
3	Tip 2	White-Orange	3
20	Ring 2	Orange-White	4
5	Tip 3	White-Green	5
22	Ring 3	Green-White	6
7	Tip 4	White-Brown	7
24	Ring 4	Brown-White	8
9	Tip 5	White-Slate	9
26	Ring 5	Slate-White	10
11	Tip 6	Red-Blue	11
28	Ring 6	Blue-Red	12
13	Tip 7	Red-Orange	13
30	Ring 7	Orange-Red	14
15	Tip 8	Red-Green	15
32	Ring 8	Green-Red	16
34	NC	Red-Brown	17
35	NC	Brown-Red	18
36	NC	Red-Slate	19
37	NC	Slate-Red	20
38	NC	Black-Blue	21
39	NC	Blue-Black	22
40	NC	Black-Orange	23
41	NC	Orange-Black	24
42	NC	Black-Green	25
43	NC	Green-Black	26
44	NC	Black-Brown	27
45	NC	Brown-Black	28
46	NC	Black-Slate	29
47	NC	Slate-Black	30
48	NC	Yellow-Blue	31
49	NC	Blue-Yellow	32
17	Earth Ground[1]	Yellow-Orange	33
50	Earth Ground[1]	Orange-Yellow	34
			35
			36
			37
			38
			39
			40
			41
			42
			43
			44
			45
			46
			47
			48
			49
			50

[1]The terminal block input terminals should be left open.

* Note: The cable pairs may or may not be striped, i.e. instead of the first pair being White/Blue Stripe and Blue/White Stripe it may be a White Blue pair.

4. System Planning Worksheet

The following page contains a blank system planning worksheet for either the TSB-100 or TSB-400 Telephone Set Board. It contains a cross reference that includes the I/O board's mating connector, pin signal identification, field wiring cable conductor color, terminal block terminal point, and space to identify the field connection.

TSB-100 and TSB-400 Telephone Set Board

Card Cage: _____ Card Slot: _____

DB50 Pin Number	Signal	TSB Cable Wire Color*	Terminal Block Pin Number	Station Name
1	Tip 1	White-Blue	1	
18	Ring 1	Blue-White	2	
3	Tip 2	White-Orange	3	
20	Ring 2	Orange-White	4	
5	Tip 3	White-Green	5	
22	Ring 3	Green-White	6	
7	Tip 4	White-Brown	7	
24	Ring 4	Brown-White	8	
9	Tip 5	White-Slate	9	
26	Ring 5	Slate-White	10	
11	Tip 6	Red-Blue	11	
28	Ring 6	Blue-Red	12	
13	Tip 7	Red-Orange	13	
30	Ring 7	Orange-Red	14	
15	Tip 8	Red-Green	15	
32	Ring 8	Green-Red	16	
34	NC	Red-Brown	17	
35	NC	Brown-Red	18	
36	NC	Red-Slate	19	
37	NC	Slate-Red	20	
38	NC	Black-Blue	21	
39	NC	Blue-Black	22	
40	NC	Black-Orange	23	
41	NC	Orange-Black	24	
42	NC	Black-Green	25	
43	NC	Green-Black	26	
44	NC	Black-Brown	27	
45	NC	Brown-Black	28	
46	NC	Black-Slate	29	
47	NC	Slate-Black	30	
48	NC	Yellow-Blue	31	
49	NC	Blue-Yellow	32	
17	Earth Ground[1]	Yellow-Orange	33	Unconnected
50	Earth Ground[1]	Orange-Yellow	34	Unconnected
			35	
			36	
			37	
			38	
			39	
			40	
			41	
			42	
			43	
			44	
			45	
			46	
			47	
			48	
			49	
			50	

[1]The terminal block input terminals should be left open.

*Note: The cable pairs may or may not have a stripe i.e. instead of the first pair being white/blue stripe and blue/white stripe it may be a white and blue pair.