

262-6 and 262-12 NCTE/DST Mounting Assemblies

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1. description and application

1.01 The 262-6 and 262-12 Network Channel Terminating Equipment/Data Station Termination (NCTE/DST) Mounting Assemblies (figure 1) provide enclosed mounting for up to 6 and 12 Tellabs Type 10 modules, respectively. The 262-6 Assembly contains one integral six-position Type 10 Mounting Shelf and a -48Vdc. 1.25A power supply. The 262-12 Assembly contains two integral six-position Type 10 shelves and is available with either of two power supplies: a -48Vdc, 1.25A supply or a -48Vdc, 2.5A supply. For each assembly, a 10W ringing generator is optional. Both assemblies are universally prewired via a connectorized printed-circuit backplane to accept a wide variety of NCTE, DST, and/or other modules with industry-standard NCTE/DST pinouts on an interchangeable basis. Designed for customerpremises installation, these assemblies feature handsome, functional styling and lightweight yet rugged construction.

1.02 In the event that this practice section is revised or reissued, the reason for revision or reissue will be stated in this paragraph.

1.03 Two versions of the 262-6 Assembly and four versions of the 262-12 Assembly are currently available. Table 1 summarizes the differences between these assemblies.

model no.	no. of circuits	power supply	ringing generator
262PO-6	6	-48Vdc, 1.25A	none*
262PR-6	6	-48Vdc, 1.25A	10W
262PO-12	12	-48Vdc, 1.25A	none*
262PR-12	12	-48Vdc, 1.25A	10W
262PO-12A	12	-48Vdc, 2.5A	none*
262PR-12A	12	-48Vdc, 2.5A	10W

A ringing generator can be customer-installed at a later time as a field upgrade.

table 1. Ordering guide for 262-6 and 262-12 Assemblies

1.04 Additional features and options of the 262-6 and 262-12 Assemblies include the following:

- Space-saving design, with integral power and (where present) ringing supplies housed on the hinged back cover.
- Translucent smoke-grey polycarbonate plastic front cover that allows viewing of indicator LED's on enclosed modules.

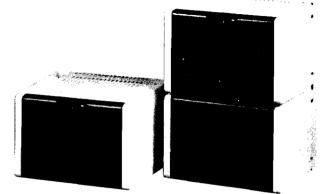


figure 1. 262-6 and 262-12 NCTE/DST Mounting Assemblies

- Highly effective ventilation via top and bottom air vents for cooler module operating temperatures, which can contribute to increased component life.
- Full compliance with all FCC requirements concerning radiated emissions (EMI and RFI) when equipped with Tellabs modules.
- Printed-circuit backplane engineered to minimize intermodule crosstalk and ring-generator induction.
- External connections simplified by means of 50pin Amphenol-type cable connectors (RJ2HX format) on the assembly backplane.
- Easy access to transmission, signaling, and control leads at each module position via wire-wrapping pins on the assembly backplane. These pins are useful in applications involving modules with nonstandard pinouts.
- Individual fusing for each circuit via 0.5A GMTtype fuses on assembly backplane.
- Blown-fuse and power-on indicator LED's visible through front cover.
- Fuse-alarm relay for external blown-fuse indications.
- Full line of Tellabs Type 10 shelf-mount power supplies and ringing generators available (no KTU-type hardware required) for applications where additional power and/or ringing sources are needed.
- Rubber feet for desktop/tabletop placement, plus keyhole slots in back for mounting flush to a wall.
- Integral front-cover security clasp to prevent unauthorized access.
- Single external power cord (for operation from a 117Vac, 60Hz, grounded wall-type outlet) regardless of the power and ringing equipment housed in the assembly.
- Back-cover hinge convertible from lefthand to righthand side for easy access in any application.
- Convenient dual-socket ac outlet inside assembly (262-12A Assembly only).

2. installation inspection

2.01 The 262 NCTE/DST Mounting Assembly should be visually inspected upon arrival to find possible damage incurred during shipment. If damage is noted, a claim should immediately be filed with the carrier. If stored, the assembly should be visually inspected again prior to installation.

Note: To open the case for internal inspection and access, simply depress the plastic tab (two tabs on the 262-12) protruding through the round hole(s) in the metal backplate of the case on the side opposite the hinge, and swing the front portion of the case outward.

Caution: Do not plug the assembly's power cord into a wall outlet until all wiring connections are made and all modules are installed.

hinge reversal (optional)

2.02 Although the 262 Assembly is shipped with the backplate hinge on the righthand side (as viewed from the front), the hinge can be changed to the lefthand side if required. Contact Tellabs Technical Marketing Services at your Tellabs Regional Office (see section 4 of this practice) for the proper procedure.

mounting

2.03 The 262 Assembly can be located on a tabletop or mounted on a wall. The assembly is wallmounted by means of four screws (not provided), which are inserted through four keyhole slots in the backplate. The assembly's front cover must be removed before wall mounting (see note below). Take special care during wall mounting to use the proper size and type of screws (and wall plugs as well, if the mounting screws cannot be driven into studs). A drilling template is provided with the assembly to facilitate marking hole locations on walls. If this template is lost or misplaced, see the last two pages of this practice for mounting diagrams that indicate the required distances between the mounting holes for the 262-6 and 262-12 Assemblies, respectively. If desired, this information can be used to construct a new template.

Note: To remove the assembly's front cover, first pull the round latch handle at the top of the cover outward until it clicks. Then pivot the cover outward approximately 30° to 40° until it can be disengaged from the assembly at its hinge points. To reinstall the cover, reverse this procedure.

wiring

2.04 **Overview.** All external connections to the modules housed in the 262 Assembly are normally made via the two (262-6) or three (262-12) 50-pin Amphenol-type connectors on the assembly backplane(s). These connectors are arranged in a Universal Service Order Code (USOC) RJ2HX (4wire Type II E&M) format. Male connector *P1* on the 262-6 and 262-12 Assemblies is used for facility-side connections. Female connector *J1* on

the 262-6 and female connectors J1 and J2 on the 262-12 are used for terminal-side connections and for auxiliary ringing-generator connections. Barriertype terminal strip TB1 on both the 262-6 and 262-12 is used for power and, if present, ringinggenerator connections (these are factory-prewired) and for user-installed external fuse-alarm connections. In applications where modules with nonstandard pinouts are used, wire-wrapping pin blocks are provided at each module position for making the required external connections. At module positions 1 through 5 and, for the 262-12 only, module positions 7 through 11, two 8-pin blocks are provided. At module position 6 and, for the 262-12 only, module position 12, one 8-pin block and two 4-pin blocks are provided. Lead designations for the 16 available pins at each module position are clearly indicated on the assembly backplane adjacent to the pins.

2.05 Pinout Arrangement, Cable Assignments, and Power/Ringing/Alarm Connections. Circuit numbering by module position in the 262-6 and 262-12 Assemblies is shown in figure 2. Figure 3 shows the pinout arrangement for module position 1 in the 262-6 and 262-12 Assemblies. Tables 2 and 3 indicate the cable assignments for all module positions of the 262-6 and 262-12 Assemblies, respectively. Figure 4 shows power, ringing-generator, and optional customer-installed external fuse-alarm connections. Make all connections to the assembly in accordance with these tables and figures.

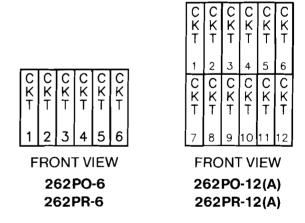


figure 2. Circuit numbering by module position in 262 Assemblies

2.06 **Cable Routing and Dressing.** Unless local requirements dictate otherwise, route and dress all cables as shown in figures 5 (262-6) and 6 (262-12).

2.07 Ringing Generator Optioning (262PR Versions Only). For the 262PR-6, 262PR-12, and 262PR-12A Assemblies only, set the four option switches on the 8103 Ringing Generator as directed in the Tellabs 8103 practice supplied with the assembly.

CIRCUIT 1 (TYPICAL FOR CIRCUITS 2-6 IN 262PX-6 AND FOR CIRCUITS 2-12 IN 262PX-12(A))

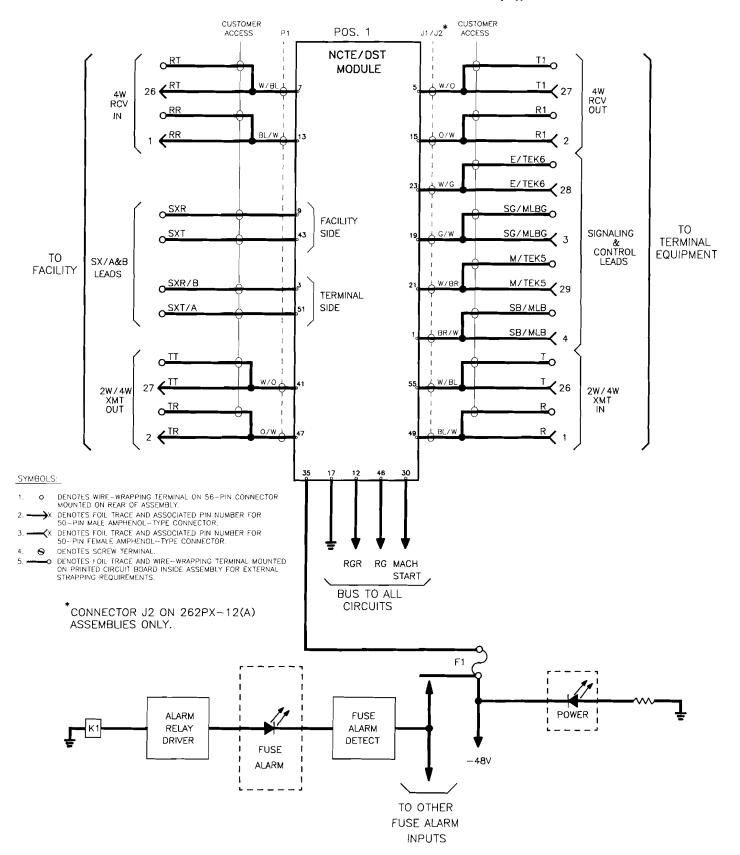


figure 3. Pinout arrangement for module position 1 of all 262-6 and 262-12 Assemblies

		FACIL	ITY	TERM EQUIP.		
		P1		J1		
PIN NO	COLOR	DESIG.	CKT.	DESIG. CKT.		
26	W/BL	RT		T		
1	BL/W	RR	1 .	R	1	
27	W/O	TT	1	T1	1	
2	0/W	TR	1	R1	1.	
28	W/G	RT		E/TEK 6	1 1	
3	G/W	RR	1 .	SG/MLBG	1	
29	W/BR	TT	2	M/TEK 5	1	
4	BR/W	TR	1	SB/MLB	1	
30	W/S	RT		Т		
5	S/W	RR] ,	R	1	
31	R/BL	TT	3	T1	1	
6	BL/R	TR	1	R1	1	
32	R/0	RT		E/TEK 6	2	
7	O/R	RR	4	SG/MLBG	1	
33	R/G	TT	1 '	M/TEK 5	1	
8	G/R	TR	1	SB/MLB	1	
34	R/BR	RT		Т		
9	BR/R	RR	_	R	Ì.,	
35	R/S	TT	5	T1		
10	S/R	TR	1	R1	7	
36	BK/BL	RT		E/TEK 6	3	
11	BL/BK	RR	6	SG/MLBG		
37	BK/0	TT	ľ	M/TEK 5		
				, , , , , , , , , , , , , , , , , , , ,		
12	0/BK	TR		SB/MLB		
12 38		TR SPARE	SPARE			
$\overline{}$			SPARE	SB/MLB		
38	BK/G		SPARE	SB/MLB T		
38 13	BK/G G/BK		SPARE	SB/MLB T R	4	
38 13 39	BK/G G/BK BK/BR		SPARE	SB/MLB T R T1 R1 E/TEK 6	4	
38 13 39 14	BK/G G/BK BK/BR BR/BK		SPARE	SB/MLB T R T1 R1	4	
38 13 39 14 40	BK/G G/BK BK/BR BR/BK BK/S		SPARE	SB/MLB T R T1 R1 E/TEK 6	4	
38 13 39 14 40	BK/G G/BK BK/BR BR/BK BK/S S/BK Y/BL BL/Y		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB	4	
38 13 39 14 40 15 41 16 42	BK/G G/BK BK/BR BR/BK BK/S S/BK Y/BL BL/Y Y/O		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T	4	
38 13 39 14 40 15 41 16 42	BK/G G/BK BK/BR BR/BK BK/S S/BK Y/BL BL/Y		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R	4	
38 13 39 14 40 15 41 16 42 17 43	BK/G G/BK BK/BR BR/BK BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1	4	
38 13 39 14 40 15 41 16 42 17 43 18	BK/G G/BK BK/BR BR/BK BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1	4	
38 13 39 14 40 15 41 16 42 17 43 18	BK/G G/BK BK/BR BR/BK S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6		
38 13 39 14 40 15 41 16 42 17 43 18 44	BK/G G/BK BK/BR BR/BK BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG		
38 13 39 14 40 15 41 16 42 17 43 18 44 19	BK/G G/BK BK/BR BR/BK BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5		
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45	BK/G G/BK BK/BR BR/BK S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB		
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46	BK/G G/BK BK/BR BR/BK S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG M/TEK 5		
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL BL/V		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG M/TEK 5		
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL BL/V V/O		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5		
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL BL/V V/O O/V		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5		
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22 48	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL BL/V V/O O/V		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6	5	
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22 48 23	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL BL/V V/O O/V U/O O/V		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG T R T1 R1 E/TEK 6 SG/MLBG SG/MLBG G SG/MLBG	5	
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22 48 23 49	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL 8L/V V/O O/V V/G G/Y V/G O/V V/G O/V V/G V/G V/G V/G V/G V/G V/G V/G V/G V		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5	5	
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22 48 23 49 24	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL BL/V V/O O/V V/G G/V V/G G/V V/G G/V V/G BR/Y		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R1 E/TEK 6 SG/MLBG T R T1 R1 E/TEK 6 SG/MLBG SG/MLBG G SG/MLBG	5	
38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22 48 23 49	BK/G G/BK BK/BR BK/S S/BK Y/BL BL/Y Y/O O/Y Y/G G/Y Y/BR BR/Y Y/S S/Y V/BL 8L/V V/O O/V V/G G/Y V/G O/V V/G O/V V/G V/G V/G V/G V/G V/G V/G V/G V/G V		SPARE	SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLBG M/TEK 5 SB/MLBG M/TEK 5 SB/MLBG M/TEK 5 SB/MLB T R T1 R1 E/TEK 6 SG/MLBG M/TEK 5 SB/MLB SB/MLB	5	

PIN NO			-			
DIAL NO		FACILITY P1		J1 J2		J2
LIM NO	COLOR	DESIG.	скт.	DESIG.	CH	KT.
26	W/BL	RT		T	_	
1	BL/W	RR		R	1	
27	W/0	TT	1	T1	1	
2	0/W	TR	1	R1	1	\
28	W/G	RT		E/TEK6	1	7
3	G/W	RR	1	SG/MLBG	1	
29	W/BR	TT	2	M/TEK5	ſ	
4	BR/W	TR	1	SB/MLB	1	
30	W/S	RT		T	_	
5	S/W	RR	1	R	1	
31	R/BL	TT	3	T1	1	
6	BL/R	TR	}	R1	}	
32				-	2	8
\vdash	R/0	RT	1	E/TEK6	ł	
7	0/R	RR	4	SG/MLBG	ł	
33	R/G	TT_	-	M/TEK5	1	
8	G/R	TR		SB/MLB	ļ	
34	R/BR	RT		T	ļ	
9	BR/R	RR	5	R		1
35	R/S	TT] ~	T1		
10	S/R	TR		R1	3	9
36	BK/BL	RT		E/TEK6	1	
11	BL/BK	RR	6	SG/MLBG		
37	BK/O	TT	ľ	M/TEK5	1	
12	O/BK	TR		SB/MLB	ĺ	[
38	BK/G	RT		Ţ		
13	G/BK	RR	١ _	R	1	
39	BK/BR	TT	7	T1	1	
-	BR/BK	TR	1	R1	4	10
40	BK/S	RT		E/TEK6	"	'0
15	S/BK	RR		SG/MLBG		
41	Y/BL	TT	8	M/TEK5		
16	BL/Y	TR		SB/MLB	1	
42	Y/0	RT		T		
17	0/Y	RR		R		
43	Y/G	TT	9	T1		
18		TR		R1	ا ۔ ا	
-	G/Y Y/BR	RT		E/TEK6	5	11
19	BR/Y	RR TT	10	SG/MLBG		
45	Y/S			M/TEK5		
20	S/Y	TR	 -	SB/MLB		<u> </u>
-	V/BL	RT		T		
-	BL/V	RR_	11	R		
47	V/0	<u> </u>		T1		
22	0/V	TR		R1	6	12
48	V/G	RT		E/TEK6		_
23	G/V	RR	12	SG/MLBG		
49	V/BR	TT	'-	M/TEK5		
	BR/V	TR		SB/MLB		
24	DIV/ V					
24 50	V/S	SPARE	SPARE	SPARE	SPARE	CDVDL

table 2. Cable assignments for 262-6 Assemblies

table 3. Cable assignments for 262-12 Assemblies

SEE NOTE 2

8103

TO

EXTERNAL

ALARM

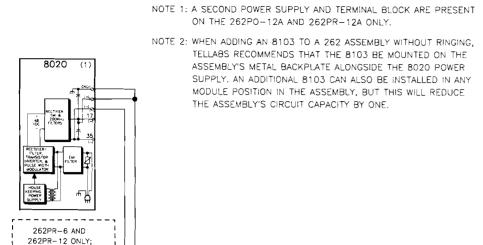
(CUSTOMER-

INSTALLED

WIRING)

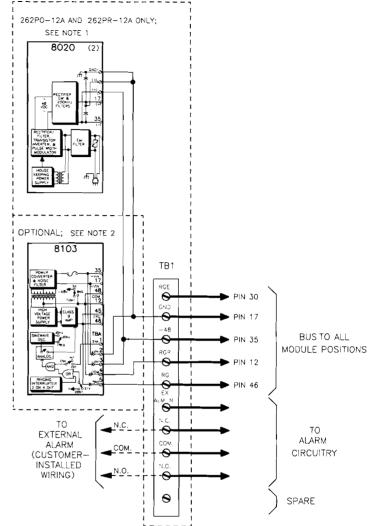
TB1

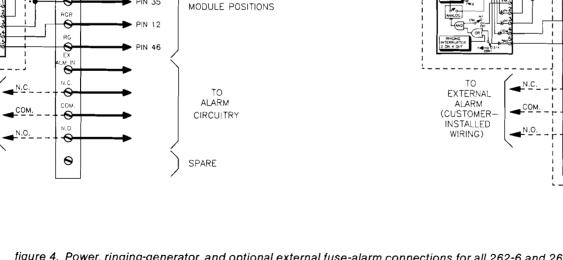
9



PIN 30

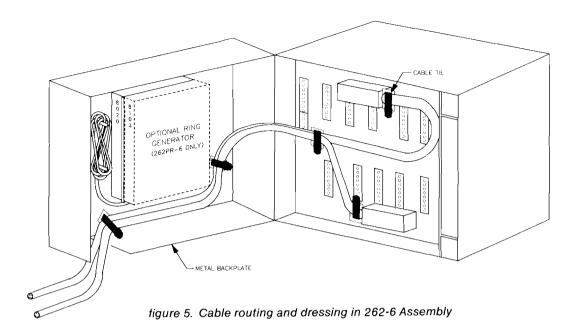
PIN 35

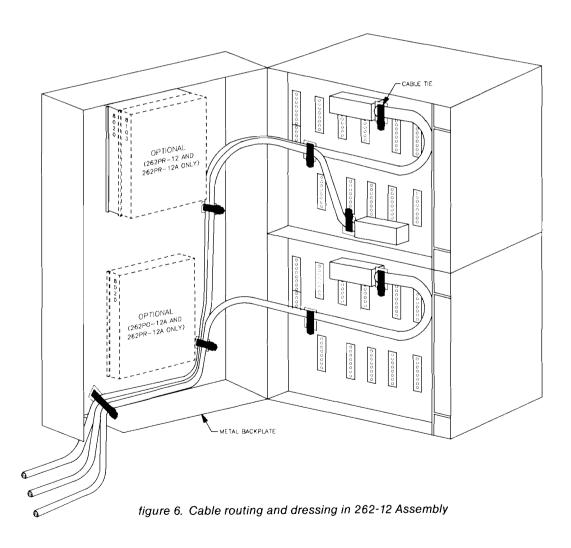




BUS TO ALL

figure 4. Power, ringing-generator, and optional external fuse-alarm connections for all 262-6 and 262-12 Assemblies





2.08 **Module Arrangement.** All Tellabs modules listed in table 4 have the same transmission-lead pinouts and can therefore be used interchangeably in any module position of the 262 Assembly. (See the individual Tellabs practices on the signaling modules in table 4 for each module's signaling-lead pinouts.) In addition, a number of Type-10 shelf-mount power supplies and ringing generators are also listed in table 4 for use in

applications where additional power and/or ringing capacity is required. Table 5 lists NCTE modules from table 4 and indicates the Registered Facility Interface Codes that these modules fulfill. Do not plug the 262 Assembly's power cord into a wall outlet (117Vac, 60Hz, grounded) until all modules and the 8103 Ringing Generator (if present) are properly optioned and all modules are installed in the assembly.

module type	model no.	description
DX-to-E&M NCTE	6041	2W-2W DX-to-E&M (DX1) Network Channel Terminating Module with repeat coil
DX-to-E&M NCTE, slope equalization	6042 6042A 6043 6043A 6044 6044A	4W-2W DX-to-E&M Term. Repeater with rcv. slope eql. and 310-type jks. 4W-2W DX-to-E&M Term. Repeater with rcv. slope eql., 310-type jks., and 2-tone lpbk. w/timeout 4W-4W/2W DX-to-E&M Term. Repeater with presc. gain, presc. rcv. slope eql., and bantam jks. 4W-4W/2W DX-to-E&M Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., and 2-tone transm. and sig. lpbk. w/timeout 4W-4W DX-to-E&M Term. Repeater with rcv. slope eql. and 310-type jks. 4W-4W DX-to-E&M Term. Repeater with rcv. slope eql., 310-type jks., and 2-tone lpbk. w/timeout
SF-to-E&M NCTE, slope equalization	6047 6047A 6048 6048A 6122 6122A	4W-4W SF-to-E&M Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., and seal. curr. 4W-4W SF-to-E&M Term. Repeater with presc. gain, rcv. slope eql., bantam jks., seal. curr., and 2-tone transm. and sig. lpbk. w/timeout 4W-4W/2W SF-to-E&M Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., and seal. curr. 4W-4W/2W SF-to-E&M Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., seal. curr., and 2-tone transm. and sig. lpbk. w/timeout 4W-2W SF-to-E&M Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., and seal. curr. 4W-2W SF-to-E&M Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., seal. curr., and 2-tone transm. and sig. lpbk. w/timeout
SF-to-FXS NCTE, slope equalization	6123 6123A	4W-2W SF-to-FXS Intermed. Repeater with presc. gain, presc. rcv. slope/bump eql., xmt. slope pre-eql., and bantam jks. 4W-2W SF-to-FXS Intermed. Repeater with presc. gain, presc. rcv. slope/bump eql., xmt. slope pre-eql., bantam jks., and 2-tone transm. and sig. lpbk. w/timeout
SF-to-FXO NCTE, slope equalization	6124 6124A	4W-2W SF-to-FXO Intermed. Repeater with presc. gain, presc. rcv. slope/bump eql., xmt. slope pre-eql., and bantam jks., accepts plug-on PBN 4W-2W SF-to-FXO Intermed. Repeater with presc. gain and rcv. slope/bump eql., xmt. slope pre-eql., bantam jks., and 2-tone transm. and sig. lpbk.
SF-to-E&M NCTE, 309B-equivalent equalization	6161 6161A 6161B 6161C 6162 6162A 6162B 6162C	4W-4W SF-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and bantam jks., no lpbk. 4W-4W SF-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., bantam jks., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout 4W-4W SF-to-E&M Term. Repeater with presc. gain and rcv. 309B-equiv. eql. no jks., no lpbk. 4W-4W SF-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout, no jks. 4W-2W SF-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and bantam jks., no lpbk. 4W-2W SF-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., bantam jks., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout 4W-2W SF-to-E&M Term. Repeater with presc. gain and rcv. 309B-equiv. eql., no jks., no lpbk. 4W-2W SF-to-E&M Term. Repeater with presc. gain, and 309B-equiv. eql., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout, no jks.

table 4 continued on next page

module type	model no.	description
SF-to-FXS NCTE, 309B-equivalent	6163 6163A	4W-2W SF-to-FXS/ARD Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and bantam jks., no lpbk. 4W-2W SF-to-FXS/ARD Term. Repeater with presc. gain, rcv. 309B-equiv. eql.,
equalization	6163B	bantam jks., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout 4W-2W SF-to-FXS/ARD Term. Repeater with presc. gain and rcv. 309B-equiv. eql., no jks., no lpbk.
	6163C	4W-2W SF-to-FXS/ARD Term. Repeater with presc., gain, rcv. 309B-equiv. eql., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout, no jks.
SF-to-FXO NCTE,	6164	4W-2W SF-to-FXO Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and bantam jks., no lpbk.
309B-equivalent equalization	6164A	4W-2W SF-to-FXO Term. Repeater with presc. gain, rcv. 309B-equiv. eql., bantam jks., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout
	6164B	4W-2W SF-to-FXO Term. Repeater with presc. gain and rcv. 309B-equiv. eql., no jks., no lpbk.
	6164C	4W-2W SF-to-FXO Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout, no jks.
DX-to-E&M NCTE,	6166	4W-4W DX-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and bantam jks., no lpbk.
309B-equivalent equalization	6166A	4W-4W DX-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., bantam jks., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout
	6166B	4W-4W DX-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., no jks., no lpbk.
	6166C 6167	4W-4W DX-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout, no jks. 4W-2W DX-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and
	6167A	bantam jks., no lpbk. 4W-2W DX-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql.,
	6167B	bantam jks., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout 4W-2W DX-to-E&M Term. Repeater with presc. gain and rcv. 309B-equiv. eql., no
	6167C	jks., no lpbk. 4W-2W DX-to-E&M Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and 2-tone transm. and sig. lpbk. with 4/20-min. timeout, no jks.
DST, passive	4417	4W-4W DST with passive presc. loss, seal. curr., and 2-tone lpbk. w/20-min. timeout, no jks. (829A equiv.) (Issue 2)
	4417A	4W-4W DST with passive presc. loss, bantam jks., seal. curr., and 2-tone lpbk. w/20-min. timeout (829A equiv.) (Issue 2)
	4417B	4W-4W DST with passive presc. loss, bantam jks., seal, curr., and 2-tone lpbk. with 4/20-min. timeout (829A equiv.) (Issue 2)
DST, slope equalization	4419B	4W-4W/2W DST with presc. gain, rcv. slope/bump eql., bantam jks., seal. curr., and 2-tone lpbk. with 4/20-min. timeout, accepts plug-on xmt. pre-eql. (829B/C equiv.)
	4420B	4W-4W DST with presc. gain, presc. rcv. slope/bump eql., bantam jks., seal. curr., and 2-tone lpbk. with 4/20-min. timeout, accepts plug-on xmt. pre-eql. (829B/C equiv.)
DST, 309B-type equalization	4418	4W-4W DST with presc. gain, rcv. 309B-equiv. eql., seal. curr., and 2-tone lpbk. w/20-min. timeout, no jks., accepts plug-on xmt. pre-eql. (829B/C equiv.) (Issue 2)
	4418A	4W-4W DST with presc. gain, rcv. 309B-equiv. eql., bantam jks., seal. curr., and 2-tone lpbk. w/20-min. timeout, accepts plug-on xmt. pre-eql. (829B/C equiv.) (Issue 2)
	4416	4W-4W/2W DST with presc. gain, rcv. 309B-equiv. eql., xmt. seal. curr., and 2-tone lpbk. w/20-min. timeout, no jks., accepts plug-on xmt. pre-eql. (Issue 2)
	4416A	4W-4W/2W DST with presc, gain and rcv. 309B-equiv. eql., bantam jks., seal. curr, and 2-tone lpbk. w/20-min. timeout, accepts plug-on xmt. pre-eql. (829B/C equiv.) (Issue 2)
	4416B	4W-4W/2W DST with presc. gain, rcv. 309B-equiv. eql., bantam jks., seal. curr., and 2-tone lpbk. with 4/20-min. timeout, accepts plug-on xmt. pre-eql. (829B/C equiv.) (Issue 2)

table 4 continued on next page

module type	model no.	description
4wire-to-4wire repeaters 4001 4001A 4001C 4001E 4001F 4002F		4W-4W Intermed. Repeater with rcv. slope/bump eql., xmt. slope pre-eql., and 310-type jks. 4W-4W Intermed. Repeater with rcv. and xmt. slope/bump eql. and 310-type jks. 4W-4W Intermed. Repeater with presc. gain, presc. rcv. and xmt. slope eql., bantam jks., and seal. curr. on fac. and sta. sides 4W-4W Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., and seal. curr. on fac. side 4W-4W Term. Repeater with presc. gain, rcv. 309B-equiv. eql., bantam jks., and seal. curr. on fac. side 4W-4W Term. Repeater with presc. gain, rcv. 309B-equiv. eql., and seal. curr. on fac. side, no jks.
4wire-to-2wire repeaters	4024B 4024C 4024D 4024E	4W-2W Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., SX/AB switch, and NCTE pinouts, accepts plug-on PBN 4W-2W Term. Repeater with presc. gain, rcv. 309B-equiv. eql., bantam jks., SX/AB switch, and NCTE pinouts 4W-2W Term. Repeater with presc. gain, rcv. 309B-equiv. eql., SX/AB switch, and NCTE pinouts, no jks. 4W-2W Term. Repeater with presc. gain, presc. rcv. slope eql., bantam jks., SX/AB switch, and NCTE pinouts, accepts plug-on PBN
pad and pad/transformer modules	4401 4402 4402S 4403 4404 4404S	4Wire Pad Module with 310-type jks. and no transformers 4Wire Pad/Transformer Module, facility, with 310-type jks. 4Wire Pad/Transformer Module, facility, with seal. curr. and 310-type jks. 4Wire Pad/Transformer Module, office, with 310-type jks. 4Wire Pad/Transformer Module, station, with 310-type jks. 4Wire Pad/Transformer Module, station, with seal. curr. and 310-type jks.
dial long line (DLL) modules	7001A 7002A	Dial Long Line, loop start only, with NCTE pinouts Dial Long Line, loop start or ground start, with NCTE pinouts
miscellaneous modules	4006 4041	Compression Amplifier with 310-type jks. Amplitude/Delay (conditioning) Equalizer with 310-type jks.
power and ringing supplies	8007 8020 8035 8050 8103 8104	Power Supply, 117/230Vac 60Hz input, 48Vdc 10A output, 19-inch rack mounted Power Supply, 117Vac 50/60Hz input, 48Vdc 1.25A output, Type 10 or KTU mount, KTU hardware included Power Supply, 117Vac 50/60Hz input, switchable 24Vdc 4.0A or 48Vdc 2.0A output, Type 10 (two positions) or KTU mount, KTU hardware included Power and Ringing Supply, 117Vac 60Hz input, 24Vdc 2.5A or 48Vdc 1.25A power output, 96Vac 20/30Hz 12W ringing output, 10Vac 700mA unregulated lamp output, Type 10 (two positions) or KTU mount, KTU hardware included Ringing Generator, 48Vdc input, 95Vac 20/30Hz 10W output, with ringing interrupter, Type 10 or KTU mount, KTU hardware included Ringing Generator, 117Vac 60Hz input, 80 to 110Vac 20/30Hz 10W output, Type 10 mount

table 4. Modules that can be used interchangeably in all 262 Assemblies

3. specifications

capacity

262-6: six modules via one integral six-position

Type 10 Shelf

262-12: twelve modules via two integral six-position

Type 10 Shelves

power supply

262PO/PR-6: -48Vdc, 1.25A via one Tellabs

8020 Power Supply

262PO/PR-12: -48Vdc, 1.25A via one Tellabs

8020 Power Supply

262PO/PR-12A: -48Vdc, 2.5A via two Tellabs 8020 Power Supplies operating in parallel (see Tellabs 8020 practice for additional features and specifications) ringing generator (262PR versions only)

262PR-6, 262PR-12, and 262PR-12A: nominal 96Vac ringing voltage, 10W continuous sine-wave output at 20 or 30Hz (switchable) via one Tellabs 8103 Ringing Generator (see Tellabs 8103 practice for additional switch options and specifications)

wiring connections

262-6: made via two 50-pair Amphenol-type cable connectors (one male, one female) and one 10-position barrier-type terminal strip. Wire-wrapping pins (16 per module position) are also available to accommodate modules with nonstandard pinouts.

262-12: made via three 50-pin Amphenol-type cable connectors (one male, two female) and one 10-position barrier-type terminal strip. Wire-wrapping pins (16 per module position) are also available to accommodate modules with nonstandard pinouts.

specifications continued on next page

NCTE module type	model no.	Registered Facility Interface Codes	termination interface	signaling format
2wire-to-2wire DX-to-E&M	6041	TL11M TL12M	lossless	Type I E&M Type II E&M
4wire-to-4wire DX-to-E&M and SF-to-E&M	6044/A 6166/A/B/C 6047/A	TL31E TL31M TC31E TC31M	lossless	Type I E&M
3F-10-E&M		TC31W TC32E TC32M TL32E TL32M	lossless	Type II E&M
4wire-to-4wire or 4wire-to-2wire (switchable)	6043/A 6048/A	TC11E TC11M TC12E	conventional	Type I E&M
DX-to-E&M and SF-to-E&M		TC12M TL11E TL11M TL12E	lossless	Type II E&M
		TL12M TC31E TC31M TC32E	conventional	Type I E&M
		TC32M TL31E TL31M TL32E	lossiess	Type I E&M
4wire-to-2wire SF-to-FXS and	6123/A 6163/A/B/C 6124/A	OC13A OC13B OC13C	conventional	loop signaling (loop start or ground
SF-to-FXO	6164/A/B/C	OL13A OL13B OL13C	lossless	start)
dial long line	7001A	OL13A OL13B OL13C	lossless	loop signaling (loop start only)
	7002A	OL13A OL13B OL13C	lossless	loop signaling (loop start or ground start)

table 5. NCTE modules (from table 4) and Registered Facility Interface Codes fulfilled by each

dimensions

262-6:

8.50 inches (20.6cm) high

11.00 inches (27.9cm) deep

12.75 inches (32.4cm) wide

262-12:

17.00 (43.2cm) inches high

11.00 (27.9cm) inches deep

12.75 (32.4cm) inches high

weight (without modules)

262PO-6: 13 pounds 13 ounces (6.28kg) 262PR-6: 14 pounds 10 ounces (6.65kg) 262PO-12: 25 pounds 8 ounces (11.59kg) 262PR-12: 26 pounds 5 ounces (11.96kg)

262PO-12A: 27 pounds (12.27kg)

262PR-12A: 27 pounds 13 ounces (12.64kg)

mounting wall or desktop

4. troubleshooting information

4.01 The 262 NCTE/DST Mounting Assembly should be thoroughly physically inspected before mounting to ensure that there are no visible defects. If trouble is encountered, ensure that all modules and other equipment are seated correctly and operating properly and that all wiring is correct. (For the 8020, the 8103 [if present], and other Tellabs products, see their individual Tellabs practices for wiring and troubleshooting information.) Please note that if the assembly is part of a registered system, unauthorized repairs will result in noncompliance with Part 68 of the FCC Rules and Regulations.

Note: Warranty service does not include removal of permanent customer markings on Tellabs products, although an attempt will be made to do so. If a product must be marked **defective**, we recommend that it be done on a piece of tape or on a removable stick-on label.

4.02 If a situation arises that is not covered in this practice, contact Tellabs Customer Service as follows (telephone numbers are given below):

USA customers: Contact Tellabs Customer Service at your Tellabs Regional Office.

Canadian customers: contact Tellabs Customer Service at our Canadian headquarters in Mississauga, Ontario.

International customers: Contact your Tellabs distributor.

US atlantic region: (203) 798-0506 US capital region: (703) 478-0468 US central region: (312) 357-7400 US southeast region: (305) 834-8311 US southwest region: (214) 869-4114 US western region: (714) 850-1300

Canada: (416) 624-0052

4.03 If an assembly is diagnosed as defective, follow the replacement procedure in paragraph 4.04 when a critical service outage exists (e.g., when a system or a critical circuit is down and no spares are available). If the situation is not critical, follow the repair and return procedure in paragraph 4.05.

replacement

4.04 To obtain a replacement assembly, notify Tellabs via letter or telephone (see addresses and numbers below) or via TWX (910-695-3530 in the

USA, 610-492-4387 in Canada). Be sure to provide all relevant information, including the 8X0262PX-6/12/12A part number that indicates the issue of the assembly in question. Upon notification, we shall ship a replacement to you. If the assembly in question is in warranty, the replacement will be shipped at no charge. Pack the defective assembly in the replacement's carton, sign the packing slip included with the replacement, and enclose it with the defective assembly (this is your return authorization). Affix the preaddressed label provided with the replacement to the carton being returned, and ship the assembly prepaid to Tellabs.

repair and return

4.05 Return the defective assembly, shipment prepaid, to Tellabs (attn: repair and return).

in the USA: Tellabs, Inc. 4951 Indiana Avenue Lisle, Illinois 60532 telephone (312) 969-8800

in Canada:

Tellabs Communications Canada, Ltd. 1200 Aerowood Drive, Unit 39 Mississauga, Ontario, Canada L4W 2S7 telephone (416) 624-0052

Enclose an explanation of the assembly's problem. Follow your company's standard procedure with regard to administrative paperwork. Tellabs will repair the assembly and ship it back to you. If the assembly is in warranty, no invoice will be issued.

