Job Aid:
Option Switch Settings

Some of the interface units used between a media gateway and other types of equipment require specific option switch settings for each application.

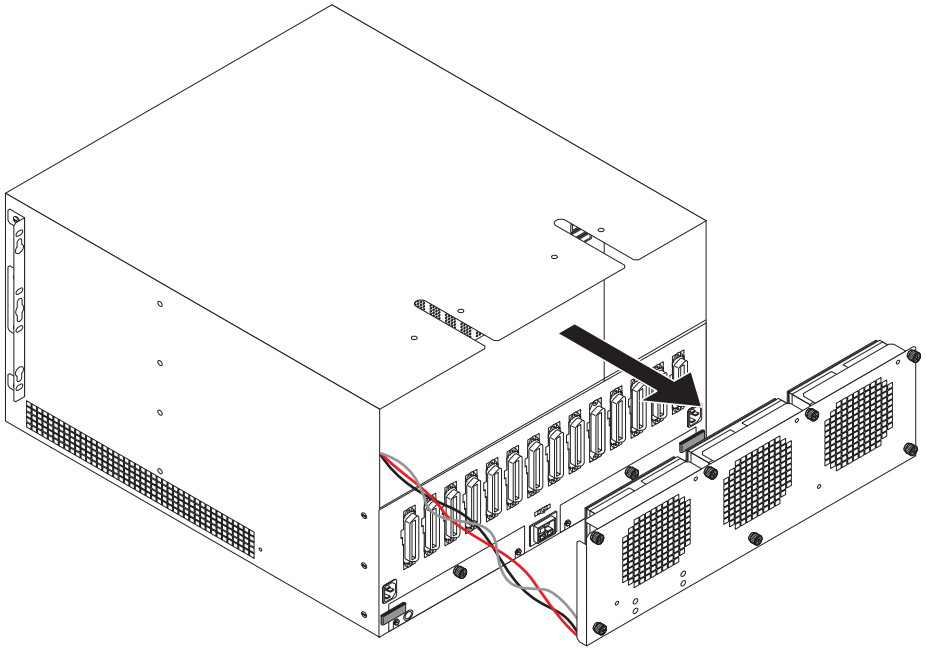
- Avaya G650 Media Gateway Carrier ID Address
- TN760E Tie Trunk Circuit Pack Option Settings
- TN464GP/2464BP Option Settings
- TN1654 Option Switch Settings

Refer to the user's guide for each type of equipment for information on how to locate and set the option switches.

Avaya G650 Media Gateway Carrier ID Address

The Avaya G650 Media Gateway has a carrier ID address, depending on its location in the rack. The media gateways are "lettered" bottom to top as A, B, C, D, E. Set the Carrier Address ID either before or after installing each media gateway. You must remove the fan assembly to get to the address paddle-board connector. See Removing the fan assembly on page 2.

Figure 1: Removing the fan assembly



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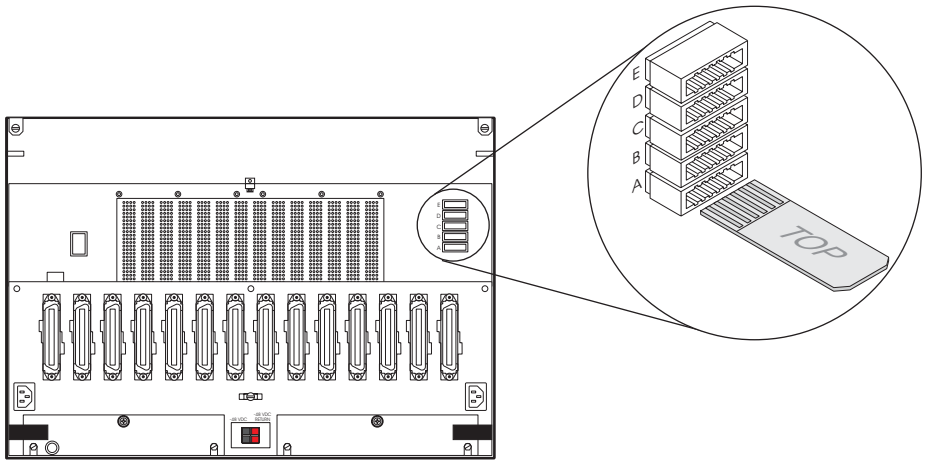
Place the address paddle-board in the connector as shown in Setting the G650 carrier address ID on page 2.

Figure 2: Setting the G650 carrier address ID



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- A slot is for the media gateway in the A location
- B slot is for the media gateway in the B location

- C slot is for the media gateway in the C location
- D slot is for the media gateway in the D location
- E slot is for the media gateway in the E location

TN760E Tie Trunk Circuit Pack Option Settings

The TN760E Tie Trunk circuit pack interfaces between the tie trunks and the Time Division Multiplex (TDM) bus. Two tip and ring pairs form a 4-wire analog transmission line. An E and M pair is used for signaling and are DC signaling leads used for call setup. The E lead receives signals from the tie trunk and the M lead transmits signals to the tie trunk.

To choose the preferred signaling format (Signaling Formats for TN760E on page 3 and Table 2: Signaling Type Summary on page 4), set the switches on the TN760E and administer the port per TN760E Tie Trunk Option Switches (Component Side) on page 4 and TN760E Tie Trunk Option Switch Settings and Administration on page 5.

CAUTION:

To prevent damage from static electricity, wear an EMC wrist strap when handling circuit packs or other components.

Table 1: Signaling Formats for TN760E

Mode	Type
E&M	Type I Standard (unprotected)
E&M	Type I Compatible (unprotected)
Protected	Type I Compatible, Type I Standard
Simplex	Type V
E&M	Type V
E&M	Type V Revised

Table 2: Signaling Type Summary

Signaling Type	Transmit (M-Lead)		Receive (E-Lead)	
	On-Hook	Off-Hook	On-Hook	Off-Hook
Type I Standard	grd	bat	open*/bat	grd
Type I Compatible	open*/bat	grd	grd	open*/bat
Type V	open*/bat	grd	open	grd
Type V Reversed	grd	open	grd	open

*. An open circuit is preferred instead of battery voltage.

Figure 3: TN760E Tie Trunk Option Switches (Component Side)

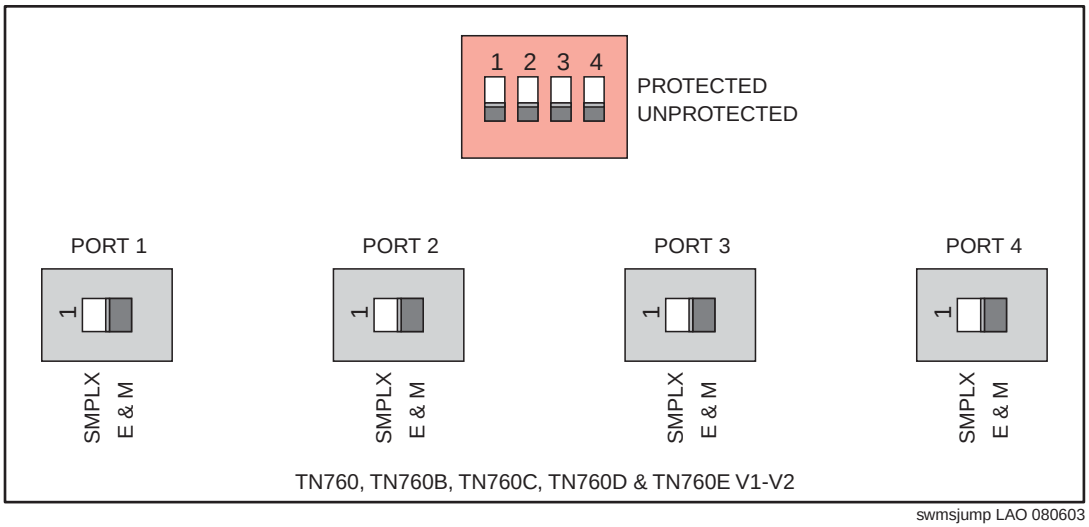

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Table 3: TN760E Tie Trunk Option Switch Settings and Administration

Installation Situation		Preferred Signaling Format		Set E&M/ SMPLX Option Switch	Set Prot/ Unprot Option Switch	Administered Port*
Circumstance	**To**	**System**	**Far-End**			
Co-Located	Sys75/G1	Simplex	Simplex	SMPLX	Either	Type 5
		Type 5	Type 5			
Inter-Building	Sys75/G1	Simplex	Simplex	SMPLX	Either	Type 5
		Type 5	Type 5			
Co-Located	Sys85/G2	Simplex	Simplex	SMPLX	Either	Type 5
		Type 5	Type 5			
Inter-Building	Sys85/G2	Simplex	Simplex	SMPLX	Either	Type 5
		Type 5	Type 5			
Co-Located	DIMENSION	E&M Type 1	E&M Type 1	E&M	Unprotected	Type 1
	PBX	Compatible	Standard			Compatible
Inter-Building	DIMENSION	Protected Type 1	Protected Type 1	E&M	Protected	Type 1
	PBX	Compatible	Standard			Compatible
Co-Located	Other	E&M Type 1	E&M Type 1	E&M	Unprotected	Type 1
		Compatible	Standard			Compatible
Inter-Building	Other	Protected Type 1	Protected Type 1	E&M	Protected	Type 1
		Compatible	Standard Plus Protection Unit			Compatible
Co-Located	Net Integrated	E&M Type 1	Any PBX	E&M	Unprotected	Type 1
		Standard				

*. Administer the items in this column on the Trunk Group screen.

TN464GP/2464BP Option Settings

The TN464GP/2464BP DS1/E1 Interface-T1/E1 circuit pack interfaces between a 24 or 32 channel CO/ISDN or tie trunk and the Time Division Multiplexing (TDM) bus.

Set the switches on the circuit pack to select bit rate and impedance match. See Option Switch Settings on TN464GP/2464BP on page 6 and TN464GP/2464BP Option Settings on page 6.

Table 4: Option Switch Settings on TN464GP/2464BP

120 ohms	Twisted pair
75 ohms	Coaxial requiring 888A adapter
32 channel	2.048 Mbps
24 channel	1.544 Mbps

Figure 4: TN464GP/2464BP Option Settings

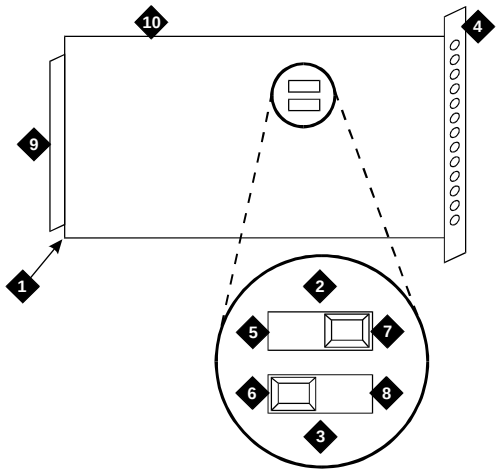

Figure notes:

1. Backplane Connectors
2. 24/32-Channel Selector
3. 75/120-ohm Selector
4. Faceplate
5. 32 Channel
6. 120 ohm (shown selected)
7. 24 Channel (shown selected)
8. 75 ohm
9. Connector
10. TN464GP/2464BP

TN1654 Option Switch Settings

The configuration switches on the TN1654 must be set before the circuit pack is installed. The TN1654 can be configured for either T1 or E1 operation. All 4 facilities on the circuit pack are configured as a group. It is not possible to mix T1 and E1 facilities on the same circuit pack.

The T1 line impedance is fixed at 100 ohms, and the T1 framing is selectable for ESF (Extended Super Frame) or D4 for each facility. The E1 facility line supports termination impedances of 120 ohms for twisted-pair and 75 ohms for coax wiring.

DS1 Converter Circuit Pack Switches on page 7 shows the location of the switches. TN1654 DS1 Converter Switch Functions on page 8 and TN1654 DS1 Converter Switch Settings on page 8 show the switch-setting functions and positions, respectively.

Figure 5: DS1 Converter Circuit Pack Switches

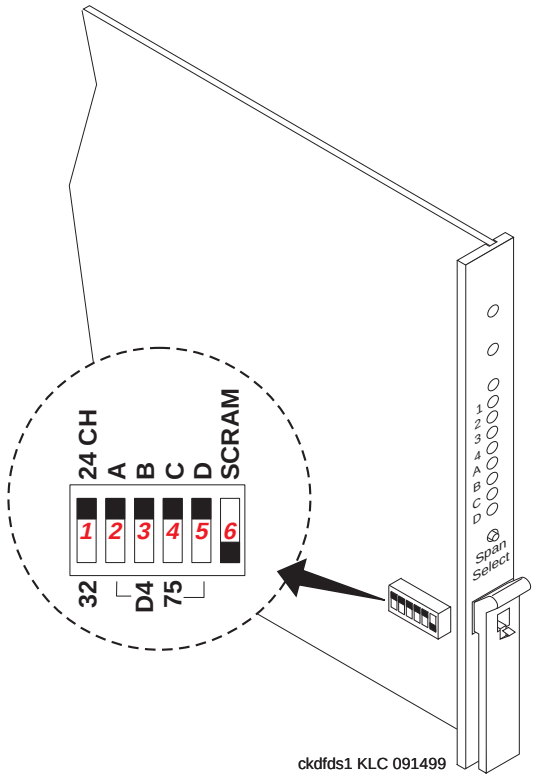

Table 5: TN1654 DS1 Converter Switch Functions

Switch	Function
1	Type of Facility
2	Span A Line Impedance (E1 Only) Span A Framing (T1 Only)
3	Span B Line Impedance (E1 Only) Span B Framing (T1 Only)
4	Span C Line Impedance (E1 Only) Span C Framing (T1 Only)
5	Span D Line Impedance (E1 Only) Span D Framing (T1 Only)
6	Force Fiber Data-Stream Scrambling

Table 6: TN1654 DS1 Converter Switch Settings

	1	2	3	4	5	6
up	T1	120 ohms ESF	120 ohms ESF	120 ohms ESF	120 ohms ESF	Enabled
down	E1*	75 ohms D4	75 ohms D4	75 ohms D4	75 ohms D4	Disabled

*. Although the TN1654 circuit pack supports 75 ohms, use the 127A BALUN to convert the 120 ohms to 75 ohms rather than the switch settings.