GRASS VALLEY GROUP

7500 NB TERMINATION KIT

Installation Instructions

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SERIES 7000

SIGNAL MANAGEMENT SYSTEM

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7500 NB Termination Kit

Use this kit to properly terminate your 7500 NB frame. You'll recall that 7500 Narrow Band routers use the same frames, Matrix Controllers and Crosspoint Modules for:

- Synchronous AES (50-pin D or 75 ohm BNC),
- Asynchronous AES (50-pin D or 75 ohm BNC),
- Compressed video (MPEG) stream (75 ohm BNC) and
- Digital signals with these parameters:
  - 200 mVpp-1 Vpp signal amplitude below 10 Mbps data (50-pin D or 75 ohm BNC)
  - 1 Vpp signal amplitude up to 50 Mbps data speed (75 ohm BNC).

Kit Contents

The kit contains the following items:

Table 1. Kit Contents

Item	Part #	Quantity
Upper Termination Boards	671473900	2
Lower Termination Boards	671514600	2
Upper Cover	200451701	1
EMI Shield Gasket	34816500	3 feet

Figure 1. Components in the Termination Kit.

Planning Your Installation

Despite the shared components and capabilities in 7500 NB routers, various configurations may require termination as listed in Table 2.

Table 2. Termination Requirements

	256x256	512x512	768x512	1024x512
Sync AES 50-pin D (balanced) or BNC	Termination Optional	Termination Optional	Terminate	Terminate
Async AES or Digital Signals to 10Mbps	Termination Optional	Terminate	Terminate	Terminate
MPEG or 10 - 50 Mbps Digital Signals	Terminate	Terminate	Terminate	Terminate

Core Frames

The core frame (the one with inputs 1-256) must be on top of the frame containing inputs 257-512. For further expansion, ensure that all subsequent frames in the matrix are below the core frame and that frames containing higher numbered inputs are below the frames containing the lower numbered inputs.

Note For systems which require termination (see Table 2), both the core frame and all crosspoint modules in the system must be version -01 or newer. Version -00 frames will perform as specified without signal degradation or integrity, if they are not core frames. If you need a newer core frame or components, please contact Sales.

Mixed Signals

When you're using your router for a mixture of signals, you can employ our configuration software to partitition the router into virtual matrices as small as 1 input by 1 output, though that would eliminate access to all other inputs and outputs on the board. A much more realistic minimal matrix size is 64 inputs and 64 outputs. Whenever you've created mixed matrix virtual partitions, terminate *all* matrices if any require termination (see Table 2 to determine your termination scheme).

Sync AES - Async AES Mixtures

- BNC Sync AES to BNC Digital Mix: I/O minimum matrix size is 64
- 50-pin D (balanced) Sync AES to 50-pin D (balanced) Digital Mix: I/O minimum matrix size is 64
- BNC MPEG or Digital and 50-pin D (balanced) AES Mix: This is not an alternative in a single frame since the backpanel in a frame can't be partitioned, nor are BNC and 50-pin D connectors on a single backplane.
- BNC AES to 50-pin D (balanced) AES Mix: I/O minimum matrix size is 256, but within the frames, I/O minimum matrix size is 64. For example:

  Frame 1 (the core frame) has 50-pin D (balanced) Sync AES and 50-pin D (balanced) Async AES mixed. Its minimum matrix size is 64. Frame 2 (an expansion frame) has BNC Sync AES and BNC Async AES mixed. Its minimum matrix size is also 64. A 50-pin D (balanced) Sync AES input on Frame 1 can be switched to a BNC Sync AES output on Frame 2. The same is true for an Async AES pair.

Installation Instructions

Follow these steps and precautions to install your termination kit(s). The same procedures apply to BNC or 50-pin D connector units.

You'll need the following equipment:

- Scissors or another tool to cut the EMI shield gasket into appropriate lengths.
- Number 2 crosshead (Phillips) screwdriver

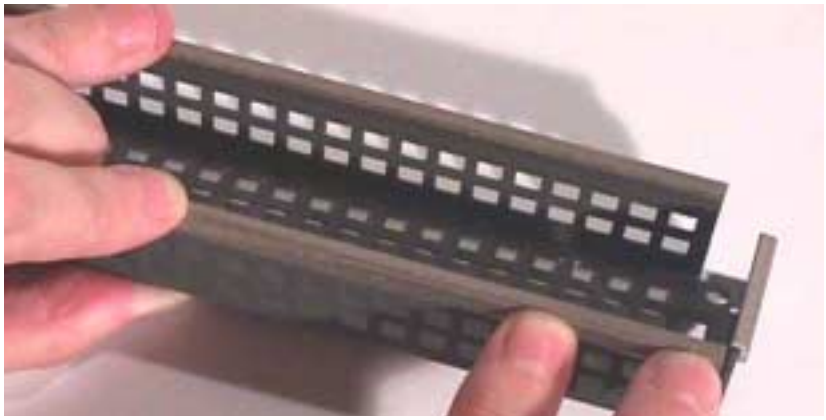
CAUTION **Use anti-static procedures --** Static-sensitive components are present which may be damaged by electrostatic discharge. Use anti-static procedures, equipment and surfaces during these procedures.

WARNING **Avoid exposed circuitry -- Do not touch exposed connections, components or circuitry when power is present.**

1. Use the parts list (see Table 1) to confirm that you have all of the parts in the termination kit.
2. Apply the EMI shield gasket to the termination board cover.
   a. Use scissors to cut the gasket material into appropriate lengths for each edge of the termination board cover.

b. Peel the adhesive cover material from a gasket piece and stick the long "leg" of the L-shaped gasket the appropriate unpainted edge of the termination board cover. Repeat this process for the remaining edges.

Figure 2. Applying the Last Piece of Gasket Material



3. Remove the top termination cover at the rear of the core frame and save the screws.

4. Remove the two identical upper termination boards from their electrostatic-safe bag, ensure that they are properly oriented (arrows pointing up) and carefully, but firmly insert them fully into the exposed female connectors — either board will work on either side of the frame.

Figure 3. Inserting the First Termination Board

5. Retrieve the screws you saved when you removed the old upper termination cover and attach the new perforated upper termination cover you prepared at the beginning of this procedure.

6. Remove the lower termination cover at the rear of the last frame in your matrix and save the screws.

7. Remove the two identical lower termination boards from their electrostatic-safe bag, ensure that they are properly oriented (arrows pointing up) and carefully, but firmly insert them fully into the exposed female connectors — either board will work on either side of the frame.

8. Retrieve the lower termination cover and reattach it with the screws you saved earlier. A perforated cover is not required in this position.

Congratulations, you've completed installing your termination kit. Consult your *Configuration Manual* and *User Manual* for help in configuring and using your system. In particular, you'll need to change your configuration for the following:

- Matrix controller,
- Configuration limits (Sources and Destinations),
- Source assignment, and
- Destination assignment.

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