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# LAN Bridge 200

digital™

**ROM Upgrade** 

Order Number: EK-DEBAM-RU-001

### **NOTICE** – Class A Laser Device:

The lasers in this equipment are Class 1 devices, compliant with CDRH Rules 21, CFR Subchapter J, Part 1040.10, at date of manufacture. Class 1 laser devices are not considered to be hazardous.

### **NOTICE** – Class A Computing Device:

This equipment generates, uses, and may emit radio frequency energy. The equipment has been type tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such radio frequency interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference; in which case, measures taken to correct the interference are at the user's expense.

#### **CAUTION**

This equipment is in the 1st Class category (information equipment to be used in commercial and/or industrial areas) and conforms to the standards set by the Voluntary Control Council for Interference by Data Processing Equipment and Electronic Office Machines aimed at preventing radio interference in commercial and/or industrial areas. Consequently, when used in a residential area or in an adjacent area thereto, radio interference may be caused in radios and TV receivers etc. Read the instructions for correct handling.

# LAN Bridge 200

## **ROM Upgrade**

June 1992

This manual describes how to upgrade the LAN Bridge 200 ROMs. The information includes how to remove and install two ROM chips and verify the upgrade.

Supersession/Update Information: This is a new manual.



Order Number: EK-DEBAM-RU-001

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# Safety $\triangle$

Any warning or caution that appears in this manual is defined as follows:

Warning Caution	Contains information to prevent personal injury.  Contains information to prevent damage to equipment.
Vorsicht Achtung	Enthält Informationen, die beachtet werden müssen, um den Benutzer vor Schaden zu bewahren.  Enthält Informationen, die beachtet werden müssen, um die Geräte vor Schaden zu bewahren.
Danger Attention	Signale les informations destinées à prévenir les accidents corporels.  Signale les informations destinées à prévenir la détérioration du matériel.
Aviso Precaución	Contiene información para evitar daños personales.  Contiene información para evitar daños al equipo.

The warnings and cautions that must be observed for the hardware described in this manual are listed below in English, German, French, and Spanish. The pages on which these safety messages appear are also listed.

WARNING 🔨	The LAN Bridge 200 upgrade procedure should only be performed by qualified personnel familiar with safety procedures for electrical equipment and the LAN Bridge 200 unit. [Page ix, 2–1]
VORSICHT	Die Erweiterung der LAN Bridge 200 darf nur von Fachleuten durchgeführt werden, die mit den Sicherheitsvorkehrungen im Umgang mit elektrischen Geräten und mit der LAN Bridge 200 vertraut sind.
DANGER	La mise à jour du LAN Bridge 200 doit être effectuée par du personnel qualifié connaissant les normes de sécurité sur l'équipement électrique et les unités LAN Bridge 200.
AVISO	El procedimiento de actualización del LAN Bridge 200 debe efectuarlo únicamente personal especializado que conozca los procedimientos de seguridad de equipos eléctricos y de la unidad del LAN Bridge 200.
CAUTION 🛆	Make sure the bridge ports are properly disabled before beginning the upgrade. [Page 1–1]
ACHTUNG	Vergewissern Sie sich, daß die Bridge-Anschlüsse ordnungsgemäß ausgeschaltet sind, bevor Sie mit der Erweiterung beginnen.
ATTENTION	Assurez-vous que les ports de passerelles sont désactivés avant de commencer la mise à jour.
PRECAUCIÓN	Asegúrese de que las puertas del puente están debidamente desactivadas antes de comenzar con la actualización.

**WARNING** When performing any removal or replacement procedures, al-

ways remove the ac power cord from the ac power source.

[Page 1–3]

**VORSICHT** Ziehen Sie immer zuerst das Netzkabel aus der Steckdose,

wenn Sie Teile austauschen oder entfernen müssen.

**DANGER** Au moment de retirer ou de remplacer des composants in-

ternes, débranchez toujours le cordon d'alimentation de la

prise.

AVISO Al realizar operaciones de retirada o sustitución, quite

siempre el cable de alimentación de corriente alterna de su

toma correspondiente.

**CAUTION** Components in the bridge can be damaged by electrostatic

discharges (ESD). When replacing components in the unit,

always use a grounded wrist strap (ESD strap) and a

grounded work surface. [Page 2–1]

**ACHTUNG** Durch elektrostatische Aufladung können Bestandteile der

Bridge beschädigt werden. Benutzen Sie deshalb beim Auswechseln von Teilen immer eine geerdete Gelenk-

manschette und eine geerdete Arbeitsfläche.

**ATTENTION** Les composants de la passerelle peuvent être endommagés

par contact électrostatique. Utilisez toujours un bracelet antistatique et travaillez sur une surface mise à la terre

lorsque vous remplacez un composant.

**PRECAUCION** Los componentes del puente pueden quedar dañados por

descargas electroestáticas (ESD). Al sustituir componentes de la unidad, use siempre una muñequera antiestáticay una

superficie de trabajo conectada a tierra.

## **Preface**

This manual explains how to upgrade LAN Bridge 200 unit ROMs and how to verify the bridge's operation once you have installed the new ROMs.

## WARNING A

The LAN Bridge 200 upgrade procedure should only be performed by qualified personnel familiar with safety procedures for electrical equipment and the LAN Bridge 200 unit.

### **Intended Audience**

This manual is for the hardware installer or system/network manager who is familiar with the LAN Bridge 200 unit.

## **Preparing to Upgrade**

Preparing the LAN Bridge 200 unit for upgrade includes the following tasks:

- Unpacking and inspecting the upgrade kit
- Preparing the bridge by removing it from either a wall or a rackmount installation or removing the plastic enclosure from a tabletop installation
- Opening the unit



Make sure the bridge ports are properly disabled before beginning the upgrade.

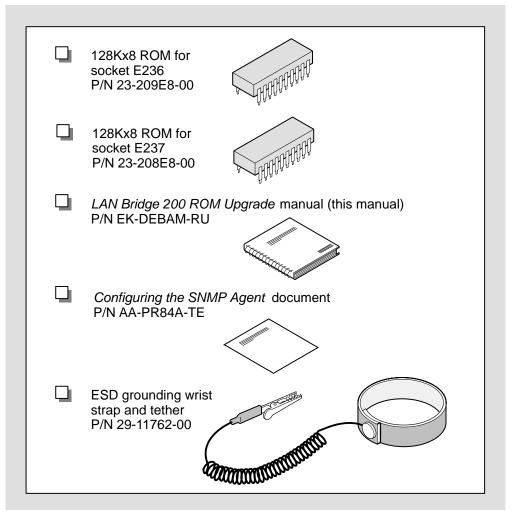
#### NOTE

Consider performing bridge upgrades during a planned system shutdown.

### 1.1 Unpacking and Inspecting the Upgrade Kit

Figure 1–1 illustrates the contents of the upgrade kit. Check the shipment for damaged or missing parts. In particular, check the ROM pins to ensure they are not bent. If parts are damaged, contact your delivery agent and your Digital sales representative. If parts are missing, contact your Digital sales representative.

Figure 1-1: LAN Bridge 200 ROM Upgrade Package Contents



LKG-6629-92I

## 1.2 Tools Required

You need a #2 Phillips-head screwdriver, a small flatblade screwdriver (approximately 3mm [1/8 inch]) for removing ROMs, and the ESD grounding wrist strap.

### 1.3 Preparing the Bridge

The LAN Bridge 200 unit may be installed in a rack, a wallmount installation, or reside on a desktop. If the unit is in a rack or wallmount, remove it before servicing. If the unit resides on a desktop, remove the plastic enclosure before servicing. The following two sections explain removing the unit from a rack or wallmount and removing the plastic enclosure.

## **WARNING**

When performing any removal or replacement procedures, always remove the ac power cord from the ac power source.

#### 1.3.1 Removing the Bridge from a Rack or Wallmount Installation

To remove a LAN Bridge 200 unit from a rack or wallmount, follow these steps:

- 1. Unplug the bridge power cord from the ac power source and then remove the cord from the LAN Bridge 200 unit.
- 2. Ensure that all cable connectors are removed from the unit.
- 3. Support the bridge and remove the screws holding the mounting brackets to the rack (no screws for the wallmount).

#### **NOTE**

Two people may be needed to remove the bridge.

- 4. Remove the bridge.
- 5. Remove the rack or wallmount brackets from the bridge and place it on a flat surface.
- 6. Place all removed parts nearby for replacement later.
- 7. Proceed to Section 1.3.3.

#### 1.3.2 Removing the Plastic Enclosure

To remove the plastic enclosure from the bridge, follow these steps:

- 1. Unplug the bridge power cord from the ac power source and then remove the cord from the LAN Bridge 200 unit.
- 2. Carefully turn the unit upside down and remove the four screws that secure the rubber feet to the bottom of the unit (see the following figure). These screws also hold the top plastic cover and the two side spacers in place.
- 3. Remove the four other screws (see Figure 1–2) that hold the bottom cover to the metal chassis.

#### NOTE

The top and bottom of the enclosure have **arrows** imprinted on the inside to help with reassembly. The arrows indicate the front of the unit.

- 4. Remove the plastic enclosure and place all removed parts nearby for replacement later.
- 5. Place the unit rightside up.

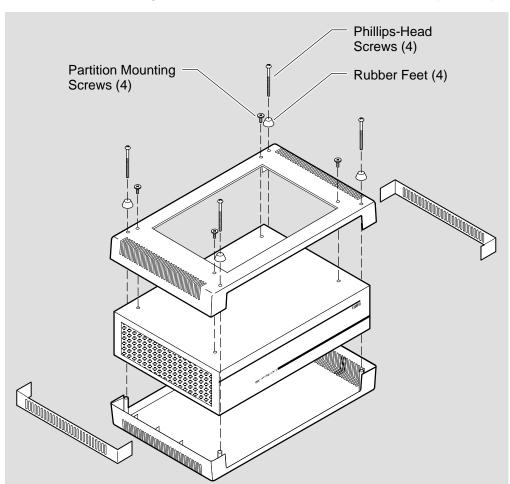


Figure 1–2: Removing the Rubber Feet and Plastic Enclosure (Bottom)

LKG-2727-92I

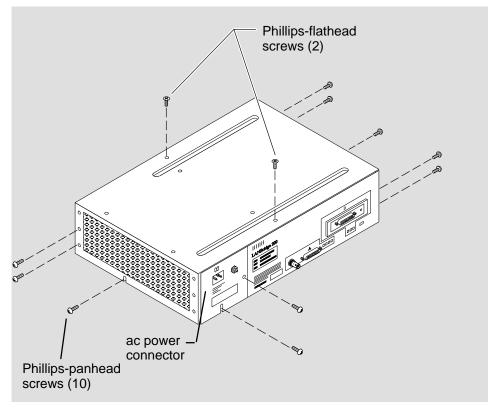
#### 1.3.3 Opening the Unit

To open the unit, follow steps 1 and 2:

- 1. Remove the 12 chassis cover screws (see Figure 1–3) as follows:
  - a. Remove two flathead screws from the top of the chassis.
  - b. Remove eight screws from the ends of the chassis (five on one end, three on the other). Do not remove the four screws located in the grill area that hold the fan assembly (see Figure 1–4).
  - c. Remove two screws from the ac power connector area.

Place all screws nearby for replacement later.

Figure 1-3: Removing Chassis Screws



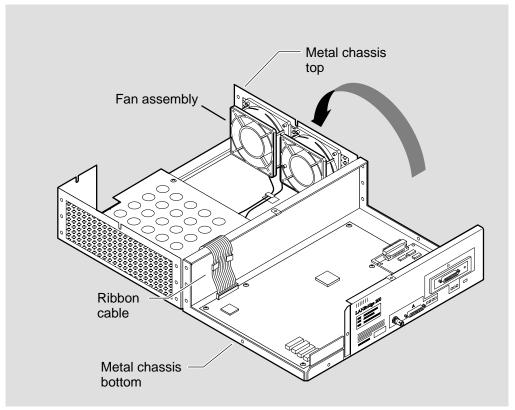
LKG-2761-92I

2. With the I/O panel facing you, lift the top of the chassis upward and turn it upside down (see Figure 1–4).

## NOTE

Be careful not to damage the ribbon cable.

Figure 1–4: Opening the Chassis Cover



LKG-2765-92I

## **Performing the Upgrade**

Installing LAN Bridge 200 ROMs includes the following tasks:

- Removing the ROMs from sockets E236 and E237
- Installing new ROMs into sockets E236 and E237
- Updating labels

### 2.1 Installing ROMs

To install the new LAN Bridge 200 ROMs, follow steps 1 through 4.

## WARNING

The LAN Bridge 200 upgrade procedure should only be performed by qualified personnel familiar with safety procedures for electrical equipment and the LAN Bridge 200 unit.

## CAUTION

Components in the bridge can be damaged by electrostatic discharges (ESD). When replacing components in the unit, always use a grounded wrist strap (ESD strap) and a grounded work surface.

1. Attach the ESD grounding wrist strap to your wrist and connect the alligator clip to the LAN Bridge 200 metal chassis to act as a ground (see Figure 2–1).

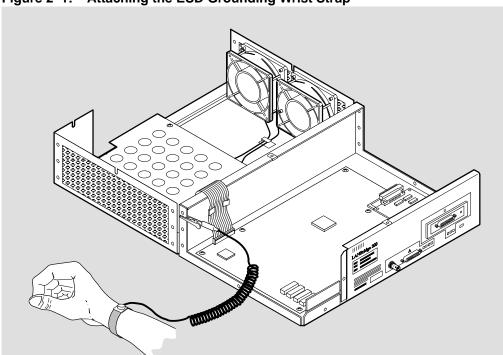


Figure 2–1: Attaching the ESD Grounding Wrist Strap

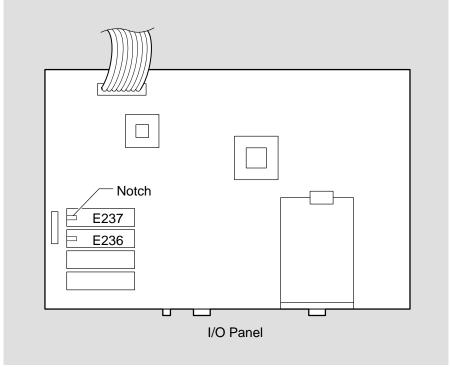
LKG-2765-92I

2. Use the small flatblade screwdriver to remove ROMs from socket locations E236 and E237 (see Figure 2–2). Carefully slide the screwdriver blade under one end of the ROM and slightly pry it upwards. Repeat this on each end of the ROM until it is removed.

#### NOTE

Ensure that you do not damage nearby components with the screwdriver.

Figure 2-2: ROM Locations



LKG-6644-92I

- 3. Install a new ROM, labeled E236, into socket E236. Lightly set the ROM onto socket E236, making sure the notch is nearest the edge of the board and pins are aligned. Then, press down slowly until the ROM is seated in the socket.
- 4. Install a new ROM, labeled E237, into socket E237. Lightly set the ROM onto socket E237, making sure the notch is nearest the edge of the board and pins are aligned. Then, press down slowly until the ROM is seated in the socket.

#### **NOTE**

Once you have installed the new ROMs, store the used ROMs in the cases the new ROMs were shipped in.

Installing ROMs 2–3

### 2.2 Updating Labels

Update the identification labels that appear on the bridge once you have completed the ROM installation. Peel-and-stick labels are provided in the shipping package. Apply one label on the module inside the bridge and the other on the outside of the unit on the I/O panel. Replace two labels:

- 1. Peel the backing from the label with the 54-class number and place it directly over (covering) the number located on the left side of the module as you face the I/O panel (see Figure 2–3). Do not cover up the serial number. Press firmly so that the label stays in place.
- 2. Peel the backing from the label containing the revision number and place it directly over (covering) the revision number and barcode located on the I/O panel label (see Figure 2–3). Do not cover the part number or serial number on the label. Press firmly so that the label stays in place.

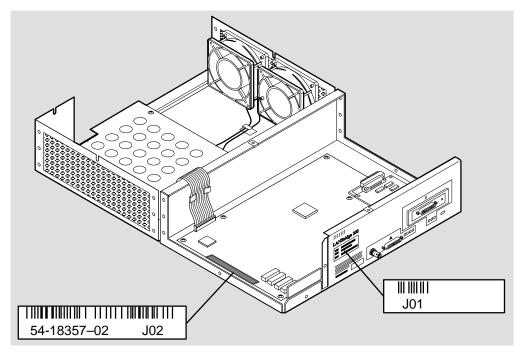


Figure 2–3: Locations for Applying Labels

LKG-6659-92I

Proceed to Chapter 3 and follow the instructions for completing the upgrade.

## **Completing the Upgrade**

Completing the LAN Bridge 200 ROM upgrade involves the following tasks:

- Closing the unit
- Verifying operation
- Reinstalling the unit

## 3.1 Closing the Unit

To close the unit and verify that the bridge is working properly, remove the wrist strap and perform the following steps:

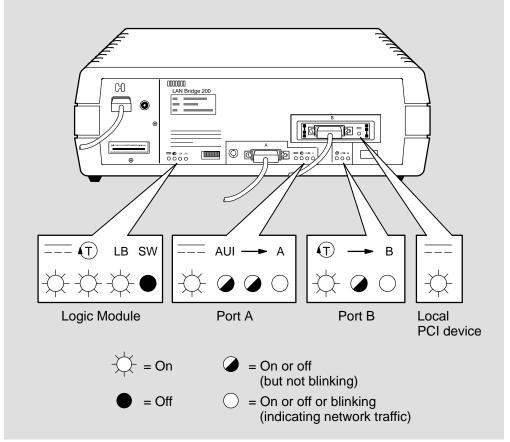
- 1. Lift the top of the chassis (with power supply and fan) and turn it over, carefully replacing it onto the bottom of the chassis.
- 2. Reinstall the 12 screws on the sides and top of the unit. Note that the two flathead screws go on the top of the chassis and should be reinstalled first to help with cover alignment (see Figure 1–2 for screw locations).

## 3.2 Verifying Operation

To verify that the bridge is working properly, perform the following steps:

- 1. Reconnect the ac power cord.
- 2. Verify that the LEDs are working and the bridge is operating properly (see Figure 3–1 and Figure 3–2). Refer to Chapter 4 in the *LAN Bridge 200 Installation* manual for more information on verifying unit operation.

Figure 3-1: Local LAN Bridge 200 LEDs After Power Up



LKG-2419-92I

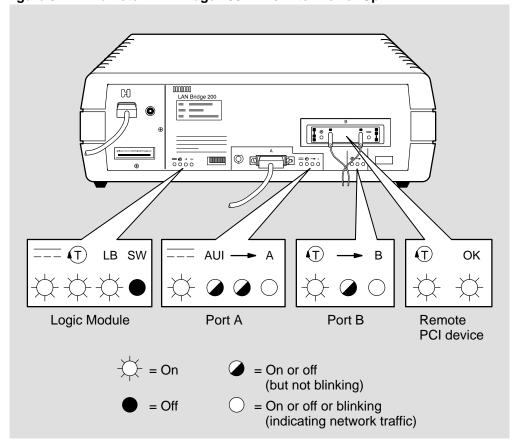


Figure 3-2: Remote LAN Bridge 200 LEDs After Power Up

LKG-2420-92I

## 3.3 Reinstalling the Bridge

To reinstall the bridge, unplug the ac power cord after verifying that it is working properly and perform one of the following procedures:

• If the unit is used on a desktop, reinstall the plastic enclosure by referring to Figure 1–2. Note that the unit is upside down so that you can reinstall the rubber feet and screws. Connect all cables and reinstall the unit by referring to Chapter 4 in the *LAN Bridge 200 Installation* manual.

### NOTE

The arrows imprinted on the inside of the top and bottom of the enclosure indicate the front of the unit.

• If the unit is used in a wall or rackmount, reinstall the unit by referring to Chapter 4 inside the *LAN Bridge 200 Installation* manual.

## **Related Documents**

The following documents contain additional information about the LAN Bridge 200 product:

- LAN Bridge 200 Installation (Order No. EK-DEBAM-IN)
   Explains how to install the LAN Bridge 200 bridge and verify its operation.
   It also describes the bridge's controls and indicators.
- LAN Bridge 200 Problem Solving (Order No. EK-DEBAM-PS)

Explains how to troubleshoot and service LAN Bridge 200 units. Information includes a product overview, problem-solving methods, and removal and replacement procedures for field-replaceable units (FRUs).

### HOW TO ORDER ADDITIONAL DOCUMENTATION

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