

**Lucent Technologies**  
Bell Labs Innovations



# **INTUITY™ Messaging Solutions**

Release 4

Release Notes for Technicians

585-313-403  
Comcode 108204272  
Issue 1  
May 1998

## Notice

Every effort was made to ensure that the information in this book was complete and accurate at the time of printing. However, information is subject to change.

## Your Responsibility for Your System's Security

Toll fraud is the unauthorized use of your telecommunications system by an unauthorized party, for example, persons other than your company's employees, agents, subcontractors, or persons working on your company's behalf. Note that there may be a risk of toll fraud associated with your telecommunications system and, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

You and your system manager are responsible for the security of your system, such as programming and configuring your equipment to prevent unauthorized use. The system manager is also responsible for reading all installation, instruction, and system administration documents provided with this product in order to fully understand the features that can introduce risk of toll fraud and the steps that can be taken to reduce that risk. Lucent Technologies does not warrant that this product is immune from or will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. Lucent Technologies will not be responsible for any charges that result from such unauthorized use.

## Lucent Corporate Security

Whether or not immediate support is required, all toll fraud incidents involving Lucent products or services should be reported to Lucent Corporate Security at 1 800 821-8235. In addition to recording the incident, Lucent Corporate Security is available for consultation on security issues, investigation support, referral to law enforcement agencies, and educational programs.

## Lucent Technologies Fraud Intervention

If you suspect that you are being victimized by toll fraud and you need technical support or assistance, call the Lucent Technologies National Customer Care Center Toll Fraud Intervention Hotline at 1 800 643-2353.

## Federal Communications Commission Statement

**Part 15: Class A Statement.** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Part 68: Network Registration Number.** This equipment is registered with the FCC in accordance with Part 68 of the FCC Rules. It is identified by an FCC registration number.

**Part 68: Answer-Supervision Signaling.** Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 Rules. This equipment returns answer-supervision signals to the public switched network when:

- Answered by the called station
- Answered by the attendant
- Routed to a recorded announcement that can be administered by the CPE user

This equipment returns answer-supervision signals on all DID calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered
- A busy tone is received
- A reorder tone is received

## Canadian Department of Communications (DOC)

### Interference Information

This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

Le Présent Appareil Numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le reglement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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### Warranty

Lucent Technologies provides a limited warranty on this product. Refer to the "Limited Use Software License Agreement" card provided with your package.

### European Union Declaration of Conformity

Lucent Technologies Business Communications Systems declares that the equipment specified in this document conforms to the referenced European Union (EU) Directives and Harmonized Standards listed below:

EMC Directive 89/336/EEC  
Low-Voltage Directive 73/23/EEC



The "CE" mark affixed to the equipment means that it conforms to the above directives.

### Comments

To comment on this document, return the comment card at the front of the document.

### Acknowledgment

This document was prepared by Product Documentation, Lucent Technologies, Columbus, OH.

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# Release Notes for Technicians

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## Overview

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This addendum describes procedures for installing ferrites on the:

- MAP/5P
- MAP/40P
- MAP/100P

## Purpose

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The purpose of this chapter is to ensure that ferrites are installed correctly.

## Electromagnetic Conductance Reduction Components Overview

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Before connecting peripherals or external devices, install ferrites to each interface cable. All installations require the use of ferrites to meet the individual country agency EMC (electromagnetic conductance) regulations. Installation of ferrites must be in accordance with these procedures to meet individual country compliances.

A ferrite is a 1 inch (2.5 cm) rectangular device. Ferrites are made of a variable conductive carbon type material to reduce special EMC frequency band width. Available in split and solid ferrite forms, a special snap-back protective cover is used to install and keep the halves together.

A toroid is a 2.5 inch (6.4 cm) circular ferrite (comcode: 405853458). Toroids are made of a highly conductive carbon type of material that is very brittle. If a toroid ring fractures, it should immediately be replaced.

Handle toroids and ferrites with care. Toroids and ferrites are easily fractured and broken. Immediately replace any fractured or broken toroids or ferrites as they are no longer effective for EMC control.

## General Toroid and Ferrite Installation Guidelines

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### CAUTION:

*Handle all toroids and ferrites with care. They are easily broken. Do not use any that are broken or fractured.*

When installing toroids or ferrites:

- Place toroids or ferrites as close as possible to the computer chassis.
- Minimize the amount of cable between the toroids or ferrites and the chassis.
- Wrap cables as tightly as possible. Do not leave large amounts of slack in the loop(s).
- Use large cable ties behind the ferrite to help them to stay in place.

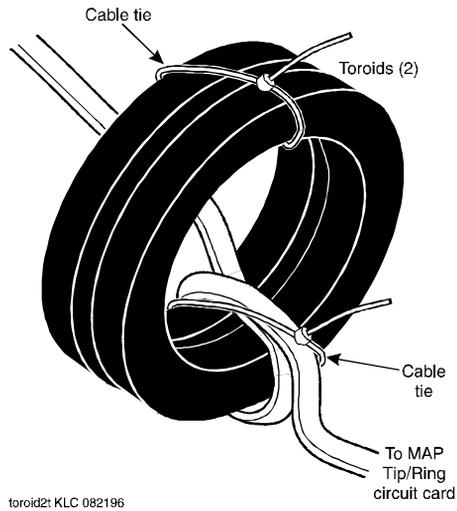
## Installing a Toroid

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The following is the general toroid installation procedure. [Figure 1](#) shows a paired toroid example installation.

To install a toroid, do the following:

1. Wrap each modular cable tightly around the toroid.
2. Secure the cable(s) with a small cable tie to reduce cable movement.
3. Trim off any excess from the cable tie.



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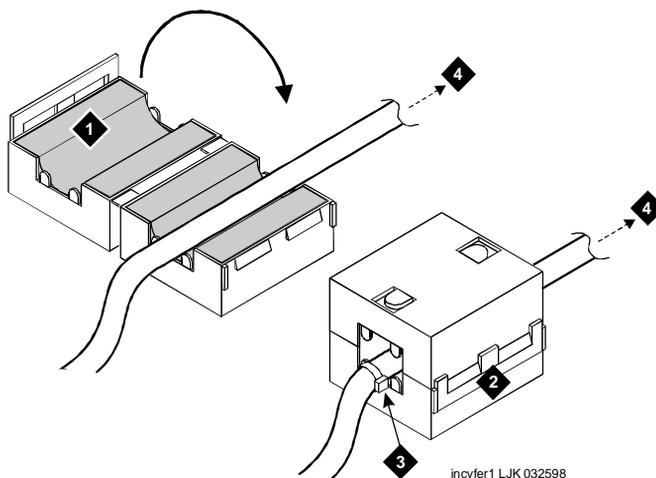
**Figure 1. Example Toroid Installation**

## Installing a Ferrite

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To install a ferrite, do the following:

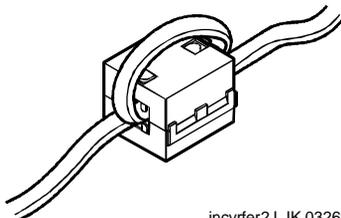
1. Open the ferrite by gently pulling the fastener away from the body of the ferrite.
2. Place the cord or cable in the groove inside the ferrite ([Figure 2](#)).



1. Ferrite in open position
2. Ferrite in closed position
3. Cable tie
4. To the computer

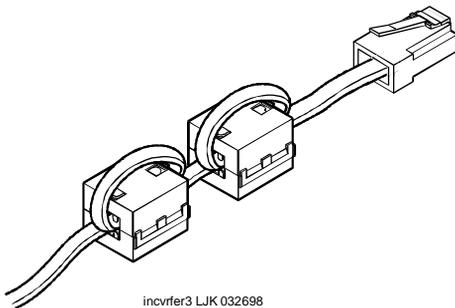
**Figure 2. Example Ferrite Installation**

3. If the cable is to be wrapped around the ferrite, wrap the cable tightly around half of the ferrite and place the cable into the groove ([Figure 3](#)).



**Figure 3. Example Ferrite Installation**

- If the cable is to be wrapped around two ferrites, make sure the ferrites are close together ([Figure 4](#)).

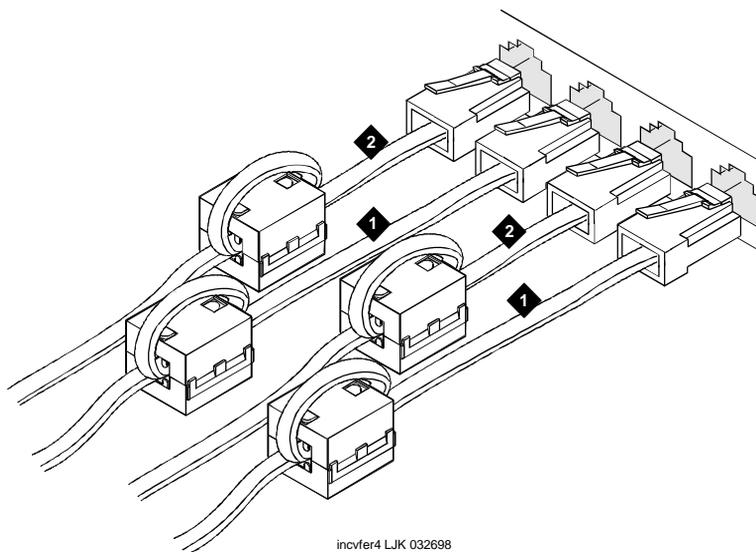


**Figure 4. Example Ferrite Installation**



**NOTE:**

It may be necessary to space ferrites differently on modular cables that are being installed in close proximity to each other ([Figure 5](#)).



1. 3 inches of cable between ferrite and circuit card
2. 1.5 inches of cable between ferrite and circuit card

**Figure 5. Example Ferrite Installation**

4. Gently snap the ferrite shut.
5. Attach a large cable tie directly behind the ferrite to secure it.



**NOTE:**

If the cable is wrapped around the ferrite, no cable tie is required.

6. Trim the cable tie.

## **MAP/5P Electromagnetic Conductance Reduction Components**

Use [Table 1](#) to determine which table applies to your configuration.

**Table 1. MAP/5P Configurations**

Location	Tip/Ring Circuit Card Type	P5 CPU Type	Ferrite Information
Domestic	AYC10	133 MHz, 200 MHz	No ferrites installed.
International	AYC30	133 MHz, 200 MHz	<a href="#">Table 2</a>
Australia New Zealand	AYC29	133 MHz	<a href="#">Table 3</a>
Australia New Zealand	AYC29	200 MHz	No ferrites installed.

**Table 2. European MAP/5P Ferrite Installation**

Component	Location	Cabling
Tip/Ring circuit card (AYC30)	Place the ferrite on each modular cable.	Wrap the modular cable once around the ferrite.

**Table 3. Australian MAP/5P, with P5 133 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Tip/Ring circuit card (AYC29)	Place the ferrite on each modular cable.	Wrap the modular cable once around the ferrite.

## **MAP/40P Electromagnetic Conductance Reduction Components**

Use [Table 4](#) to determine which table applies to your configuration.

**Table 4. MAP/40P Configurations**

Location	Tip/Ring Circuit Card Type	P5 CPU Type	Ferrite Information
Domestic	AYC10	120 MHz	<a href="#">Table 5</a>
Domestic	AYC10	200 MHz	<a href="#">Table 6</a>
International	AYC30	120 MHz	<a href="#">Table 7</a>
International	AYC30	200 MHz	<a href="#">Table 8</a>
Australia New Zealand	AYC29	120 MHz	<a href="#">Table 9</a>

**Table 5. Domestic MAP/40P, with P5 120 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Tip/Ring circuit card (AYC10)	Place 1 ferrite on each modular cable.	Wrap the modular cable once around each ferrite.

**Table 6. Domestic MAP/40P, with P5 200 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Multi-port serial circuit card	Place 2 ferrites on each cable.	Wrap the modular cord once around each ferrite.
Tip/Ring circuit card (AYC10)	Place 2 ferrites on each modular cable.	Wrap the modular cable once around each ferrite.

**Table 7. International MAP/40P, with P5 120 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Tip/Ring circuit card (AYC30)	Place 1 ferrite on each modular cable.	Wrap the modular cable once around the ferrite.

**Table 8. International MAP/40P, with P5 200 MHz CPU, Toroid and Ferrite Installation**

Component	Location	Cabling
Multi-port serial circuit card	Place 2 ferrites on each cable.	Wrap the modular cord once around each ferrite.
Tip/Ring circuit card (AYC30)	Place 2 ferrites on each modular cable.	Wrap each modular cord twice through a toroid. Wrap the modular cable once around each ferrite.

**Table 9. Australia/New Zealand MAP/40P, with P5 120 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Monitor	Place the ferrite on the monitor cable near the MAP/40P video port.	Do not wrap the cable around the ferrite.
Modem	Place the ferrite on the shielded serial cable.	Wrap the shielded serial cable once around the ferrite.
Remote maintenance circuit card (AYC55)	Place the ferrite on the shielded serial cable.	Do not wrap the cable around the ferrite.
ACCX circuit card	Place the ferrite on the shielded serial cable.	Do not wrap the cable around the ferrite.
Switch interface circuit card	Place the ferrite on the shielded serial cable.	Do not wrap the cable around the ferrite.
Tip/Ring circuit card (AYC29)	Place the ferrite on each modular cable.	Wrap the modular cable once around the ferrite.

## **MAP/100P Electromagnetic Conductance Reduction Components**

Use [Table 10](#) to determine which table applies to your configuration.

**Table 10. MAP/100P Configurations**

Location	Tip/Ring Circuit Card Type	P5 CPU Type	Ferrite Information
Domestic	AYC10	200 MHz	<a href="#">Table 11</a>
International	AYC30	200 MHz	<a href="#">Table 12</a>
Australia New Zealand	AYC29	200 MHz	<a href="#">Table 13</a>

**Table 11. Domestic MAP/100P, with P5 200 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Tip/Ring circuit card (AYC10)	Place 1 ferrite on each modular cable.	Wrap the modular cable once around the ferrite.

**Table 12. International MAP/100P, with P5 200 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Multi-port serial circuit card	Place 1 ferrite on each cable.	Wrap the modular cord once around the ferrite.
ACCX circuit card	Place 1 ferrite on the shielded cable.	Do not wrap the shielded cable around the ferrite.
LAN circuit card	Place 1 ferrite on each cable.	Wrap the modular cord once around the ferrite.
Tip/Ring circuit card (AYC30)	Place 2 ferrites on each modular cable.	Wrap the modular cable once around each ferrite.

**Table 13. Australia/New Zealand MAP/100P, with P5 200 MHz CPU, Ferrite Installation**

Component	Location	Cabling
Multi-port serial circuit card	Place 1 ferrite on each cable.	Wrap the modular cord once around the ferrite.
ACCX circuit card	Place 1 ferrite on the shielded cable.	Do not wrap the shielded cable around the ferrite.
LAN circuit card	Place 1 ferrite on each cable.	Wrap the modular cord once around the ferrite.
Tip/Ring circuit card (AYC29)	Place 2 ferrites on each modular cable.	Wrap the modular cable once around each ferrite.