Novell® NEST Autoroute™

Function Upgrade Card Type 140
Plus Novell® NEST™

Feature Expander Type 100 2M
Plus Novell® NEST™

SERVICE MANUAL

April 22th, 1996
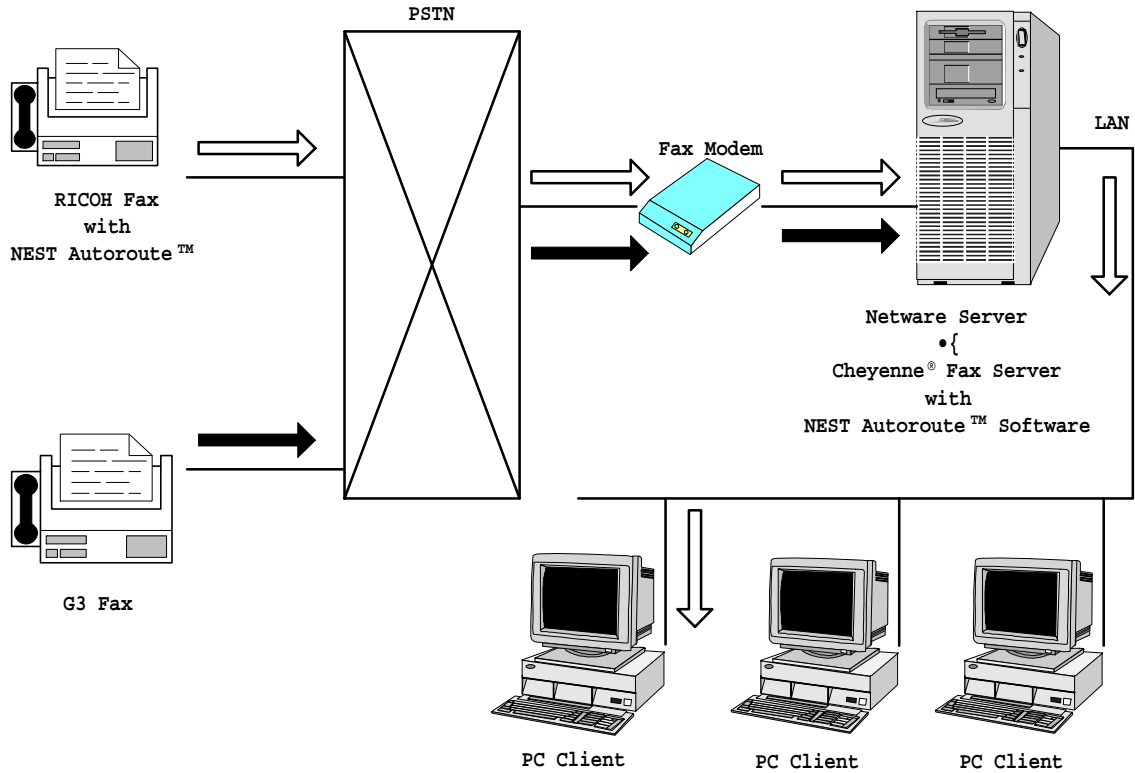Subject to change

Lithium Batteries

> **⚠CAUTION**
>
> **The danger of explosion exists if a battery of this type is incorrectly replaced. Replace only with the same or an equivalent type recommended by the manufacturer. Discard used batteries in accordance with the manufacturer's instructions.**

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1. OVERALL INFORMATION

1.1. OVERVIEW

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Novell$^®$ Embedded System Technology (NEST) Autoroute^{TM} is an alternative routing methodology, patented by Novell$^®$. It allows a user to send a fax to a NetWare network and have the fax routed directly to the recipient's PC clients.

In order to take advantage of NEST Autoroute^{TM}, the user on the receiving end must be connected to a NetWare network (Novell$^®$ NetWere 3.12 or 4.1).

Using the standerd Group 3 T.30 protocol for routing information, NEST Autoroute^{TM} works by including an Autoroute ID code with each fax transmission. The code, which is sent in the TSI frame, provides the information required to deliver a fax to its destination.

Both the NEST cards for the fax machine, and the extra software released by Cheyenne$^®$ for the Server and PC clients, are required to perform the Autoroute function.

1.2. NEST CARD

The contents of both card options are as follows.

Function Upgrade Card Type 140 Plus Novell® NEST^{TM}
IC Card
Operation Manual for the NEST Autoroute^{TM}
Battery
Operation Manual for the battery

Feature Expander Type 100 2M Plus Novell® NEST^{TM}
IC Card
Operation Manual for the NEST Autoroute^{TM}

1.3. AUTOROUTE ID

The Autoroute ID code included in TSI is made of up to 20 alphanumeric code, which start from "#" and end with "#". When the operator enters the telephone number and the Autoroute ID code, and then starts to send a message, the machine replaces the "#" and "∗" codes which are entered by the operator to "++" and "+" codes, then sends them out on the line. This is because the "#" and "∗" codes are not permitted in the TSI for Group 3 T30.

User operation : #12345678∗1234∗1234#
TSI sent out   : ++12345678+1234+1234
                           [A]   [B]   [C]

A : Autoroute ID (4 digits to 8 digits)
B: Function ID / Argument
C: Security Code / Document ID

B and C are the optional codes for the Cheynne® FAXSERVE.

When the user TSI is already stored in the machine, the Autoroute ID replaces it, then the Autoroute ID is sent out. The TSI is made of up to 20 digits. In the following example, the user TSI "123" is replaced.

User TSI   : 123+1234567890
Autoroute ID   : #12345678#
TSI sent out   : 1234567890++12345678

Note ;

Using "++" codes in the TSI must be avoided, because the Autoroute ID may
not be recognized correctly by the NetWare Server, as shown in the follow-
ing example.

User TSI   : 123++456
Autoroute ID   : #12345678#
TSI on the line : 123++456++12345678
                              [A]

The NetWare Server may recognize "++" codes [A] as the start of an
Autoroute ID.

2. INSTALLATION

2.1. OVERVIEW

Refer to the Operator's Manual for the installation environment and how to install and set up the machine.

"NEST" is listed as a parameter on the system parameter list while the NEST card is installed in the machine.
A sample system parameter list is given below.

```
        *  *  *   SYSTEM PARAMETER LIST (Date and Time) *  *  *
                                                TTI
SERIAL NO. - Serial number programmed by function 14)
ROM VER.    [Version]   [Software release no.]   [Software release date]
ROM NO.     [Software part no.] [Check sum values (total) (boot) (main)]
R  T  I
T  T  I
C  S  I
ID CODE                           CONFIDENTIAL ID
MEMORY LOCK ID
NUMBER
   OWN NUMBER
   OWN NUMBER(ISDN G4)
   OWN NUMBER(ISDN G3)
   SERVICE NUMBER
NCU PARAMETER


COUNTER


PARAMETER
   SCAN THRESHOLD
   2MB, 4MB or HD        - Optional memory card or Hard Disk installed
   CASSETTE 2            - Optional paper feed unit installed
   CASSETTE 3            - Optional paper feed unit installed
   FUNCTION CARD or FOD - Optional function upgrade card or Fax on demand kit
                             installed
   PRINTER INTERFACE    - Optional printer interface installed
   G4                   - Optional ISDN G4 kit installed

   NEST                 - NEST Card installed
SWITCH (UPPER:DEFAULT LOWER:CURRENT)

(SWUSR) - User Parameter Settings
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Model: FX4, FX6, FX6MK2, FX6CD, FX7, LX7, LSO, AD1	Date: 31-Aug-97	No: 005

INSTALLATION May 20th,1997
INSTALLING THE NEST CARD

2.2. INSTALLING THE NEST CARD

> ⚠ **CAUTION**
>
> **Before installing the NEST card,do the following:**
> **1.Print out all messages stored in the memory.**
> **2.Print out the lists of user-programmed items and the system parameter list.**

2.2.1. Function Upgrade Card Type 140 Plus Novell® NEST™

Note

- The following installation procedure initializes (erases) all the user-programmed data stored in the card, if the Function Upgrade Card already installed in the machine is replaced with a NEST card.

Installation Procedure (Without a Function Upgrade Card)

- **Turn off the main switch.**
- **Install the battery on the NEST card.**
- **Turn on the battery switch.**
- **Install the NEST card in the slot.**
- **Turn on the main switch.**
- **Print the system parameter list and make sure that "NEST" is listed as an option on the list.**

Installation Procedure (Replacing a Function Upgrade Card with the NEST card)

- **Read and back-up the user-programmed data stored in the Function Upgrade Card with RDS.**
- **Turn off the main switch.**
- **Remove the Function Upgrade Card from the slot.**
- **Install the battery on the NEST card and turn on the battery switch.**
- **Install the NEST card in the slot.**
- **Turn on the main switch.**
- **Print the system parameter list and make sure that "NEST" is listed as an option on the list.**
- **Write the backed-up data to the NEST card.**

Model: FX4, FX6, FX6MK2, FX6CD, FX7, LX7, LSO, AD1	Date: 31-Aug-97	No: 005

May 20th,1997   **INSTALLATION**
                                              INSTALLING THE NEST CARD

When the NEST card is replaced with another NEST card, do the following so the machine can recognize the new card.

1. **Turn off the main switch**
2. **Remove the old card.**
3. **Turn on the machine without the card and turn off.**
4. **Install the new card.**
5. **Turn on the main switch.**

⚠ **CAUTION**

The IC card contains a lithium battery.
The danger of explosion exists if a battery of this type is incorrectly replaced. Replace only with the same or an equivalent type recommended by the manufacturer. Discard used batteries in accordance with the manufacturer's instructions.

INSTALLATION May 20th,1997
INSTALLING THE NEST CARD

2.2.2. Feature Expander Type 100 2M Plus Novell NEST

Note

- The following installation procedure initializes (erases) all the data stored in the card, if the Feature Expander already installed in the machine is replaced with a NEST card.

Installation Procedure

- Turn off the main switch.

- Install the NEST card in the slot in the machine.

- Turn on the main switch.

- Print the system parameter list and make sure that "NEST" is listed as an option on the list.

When the NEST card is replaced with another NEST card, do the following so the machine can recognize the new card.

1. Turn off the main switch.
2. Remove the old card.
3. Turn on the machine without the card and then turn off.
4. Install the new card.
5. Turn on the main switch.

3. TROUBLESHOOTING

Refer to the Service Manual of the machines for the common troubleshooting procedures.

3.1. "NEST" is not listed on the System Parameter List

Possible Cause:
- The NEST card is not installed completely.
- The NEST card is broken.
- The software of the facsimile machine was not updated for the Autoroute function.

Action:

· Check if software of the facsimile machine has been updated.

. Re-install the NEST card.
   Caution: Turn off the machine while replacing.

. Install a new card.

Cross reference
Installing the NEST card: Section 2.

3.2. Communication Error

Possible Cause:
- The other terminal may be faulty.
- The Autoroute ID Code was input incorrectly.

Action:
. Check if the Autoroute ID Code are in the wrong format.

. Try sending to another machine.

. Call Cheyenne $^{®}$ support center.

Cross reference
Autoroute ID format: Section 1-3.

3.3. The Autoroute Feature is not working correctly

Possible Cause:
- The NEST card is not installed completely.
- The NEST card is broken.
- The software of the facsimile machine was not updated for the Autoroute function.
- Manual sending is not available for the NEST Autoroute function.
- The Autoroute ID Code was not input correctly.
- The other terminal may be faulty.

Action:

. Check if software of the facsimile machine has been updated.

. Try sending from memory.

. Re-install the NEST card.
  Note: Turn off the machine while replacing.

. Check if the Autoroute ID code is in the wrong format.

. Try sending to another machine.

. Install a new card.

. Call Cheyenne $^{®}$ support center.

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| **Cross reference** |
| Installing the NEST Card: Section 2. |
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| **Cross reference** |
| Autoroute ID format: Section 1-3. |
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