RS232 PC-FAX EXPANDER
Type 450e

USER'S GUIDE

Read this manual carefully before you use this product and keep it handy for future reference.
For safety, please follow the instructions in this manual.

RS232 PC-FAX EXPANDER Type 450e USER'S GUIDE

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Introduction

To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

Please read the Safety Information in the “Operating Instructions” before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Trademarks

Note

The proper names of Windows operating system are as follows:

- Microsoft® Windows® 95 operating system

TABLE OF CONTENTS

Introduction

The PC-FAX EXPANDER Type 450e option is a combination of the physical connection between a PC and the fax machine using EIA Class 2 faxing software and PC software that expand the operations of the equipment by providing:

- faxing directly from the PC using the fax machine's modem
- the use of fax memory for improved faxing from the PC
- the use of the fax machine as a laser printer

RS232 PC-FAX EXPANDER Type 450e offers two fax communication paths: direct, and through fax memory.

Direct communication uses the fax machine's modem as its external modem, and increases broadcasting potential by being able to use the large PC memory.

Memory communication brings access to the fax machine faxing capabilities and the ability to direct where incoming fax messages will be received.

- Modified Modified Read (MMR) fax compression technique for more efficient transmission
- Error Control Mode (ECM) for higher quality transmission
- The fax machine's programmed Quick Dial, Speed Dial, and Group numbers to dial from the PC
- G4 communication from your PC (with ISDN unit option only)

The RS232 PC-FAX EXPANDER Type 450e connection adds the laser printer to your PC system's capabilities.

Documents from your PC can be printed with 200 x 200 dpi resolution and proprietary using the fax machine's laser printer.

RS232 Cable Connection and Modem Setup

When RS232 PC-FAX EXPANDER Type 450e is installed, your fax machine can be connected like an external modem to one of your PC communication ports. A PC usually has two communications, or serial, ports located in the back. These ports will accept 25-pin or 9-pin connectors (the type known as DB25 or DB9). The fax machine will use one of them. If you have a serial mouse, it may be using the other.

A serial port must be available to connect RS232 PC-FAX EXPANDER Type 450e to your PC.

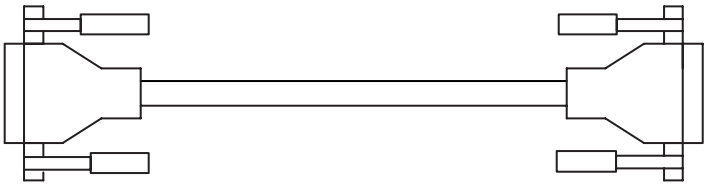
You will need a "straight-through" shielded serial cable to connect the fax to one of the serial ports located in the back of the PC. A shielded cable will protect the communication in noise radiating environments. The cable can be purchased at a local computer supply store.

One end of the cable should have a **25-pin male DB25-type** connector to plug into the fax machine's PC-FAX EXPANDER port. The other end should have either a **25-socket female or a 9-socket female** connector to plug into the serial port on your PC.

It is important to examine your PC to determine which female connector you will need for your cable.

DB25 MALE

DB25 OR DB9 FEMALE



Straight-through double-shielded cable

Note

❒ Do not connect or disconnect the RS232C cable while the power is on to the connection device.

❖ **Modem Setup**

After the RS232 cable is connected to your PC, open **[Modems]** in the control panel of Windows, select “Standard Modem Types” in the **[Manufacturers]** box and select “Standard 14400 bps Modem” in the **[Models]** box.

PC Software

To aid installation of PC fax software, you will find some suggestions concerning the availability and configuration of COM ports.⇒ P.25 *"Installation Suggestions"*

Quick Start

QUICK START procedures assume that you have installed a faxing application in your PC and that you are familiar with the fax machine's operation. For CFM TWAIN installation and scanning procedures, see the supplement, "Scanning Via TWAIN".

Basic Transmission Procedure

Check the PC and fax machine settings.

DIRECT TRANSMISSION	FAX MEMORY TRANSMISSION
• The PC is running the faxing software and modem is Class 2.	
• The fax machine is on.	
• FAX : User Parameter Switch 20 Digit 0 : 0 Direct Transmission	• FAX : User Parameter Switch 20 Digit 0 : 1 Memory Transmission Digit 0 : 1 Memory Transmission Digit 1 : 1 G3 TTI
1 PC: Prepare the file or message for sending.	
2 PC: Change the printer to the faxing application. Select options.	
3 PC: Choose the Print command. Select options.	
4 PC: In the dialing dialog box enter the recipient's name and other data.	
5 PC: Dial the fax number.	5 PC : Dial the full fax number (for G3 or G4), or use coded dial numbers: # (Quick Dial Number) G3/G4 *1 #* (Speed Dial Number) G3/G4 *1 #** (Group Number) G3/G4 *1
6 PC: Click Start (or Send).	

Reference

To change the User Parameter Switch 20 digit settings, see P.9 *"Programming Switch 20 and 21"*.

❖ Quick Dial, Speed Dial, and Group Dial Prefixes

Fax numbers programmed at the fax machine as Quick Dial, Speed Dial, and Group numbers can be dialed from the PC by prefixing the numbers with the symbols, #, #*, #**.

For example:

TO DIAL FROM THE PC	ENTER	FOR
Quick Dial 01	# 0 1	G3/G4 *1
Speed Dial 01	# * 0 1 (or # * 0 0 1)	G3/G4 *1
Group 01 (stored in Quick Dial 02)	# * * 0 1 (or # 0 2)	G3/G4 *1

*1 Requires ISDN unit option.

Basic Reception

Check the PC and fax machine settings.

DIRECT RECEPTION	FAX MEMORY RECEPTION
• The PC is running the faxing software and set for automatic answering.	
• The PC modem is Class 2.	
• The fax machine is on.	
FAX : User Parameter Switch 21 Digit 0 : 0 Fax Reception	FAX : User Parameter Switch 21 Digit 0 : 1 PC Reception Digit 1 : 0 PC Direct Reception Digit 1 : 1 PC Memory Reception Digit 2 : 0 Send to PC Digit 2 : 1 Print at FAX and send to PC

Reference

To change the User Parameter Switch 21 digit settings, see P.9 *"Programming Switch 20 and 21"*.

Printing from the Fax Machine

Check the PC and fax machine settings.

• The PC is running the faxing software and modem is Class 2.
• The fax machine is on.
1 PC: Change the printer to the faxing application. Select options.
2 PC: Select the file to print.
3 PC: Select the **Print** command.
4 PC: From the Dial (or Send) dialog box, dial **0 0 0 0**.
5 PC: Click **Send** (Start).

User Parameter Switch 20 and 21

For more details, see "User Parameter Settings" in the fax machine manual.

1

The RS232 PC-FAX EXPANDER Type 450e option User Parameter Switch 20 and 21 provides new PC transmission and reception options:

- direct transmission and reception
- fax memory transmission and reception
- fax TTI on or off for PC memory transmissions
- specifying the location of memory reception output

Choosing memory transmission gives PC faxing.

- MMR fax compression for more efficient fax transmission
- ECM error correction for improved fax quality
- use of fax machine Quick Dial, Speed Dial, and Group numbers
- G4 network communication (with ISDN unit option only)

❖ Switch 20 - Type 450e Transmission Options

Digit	Description	Default
0	Transmission 0 : PC Direct 1 : PC Memory	0
1	Send G3 TTI with Memory Transmission (when Digit 0 is 1) to avoid conflict with PC header 0 : Fax TTI Off 1 : Fax TTI On	0
2	Checkered Mark on the first page of fax messages or Files in Memory 0 : Not print Checkered Mark 1 : Print Checkered Mark	0
3	Not used for this product. Do not change the factory settings.	0
4	Not Used. Do not change the factory settings.	0
5	*1 Line selection at PC Memory Transmission(when Digit 0 is 1) 0 : G3 1 : G4 *2	0
6 7	Not used for this product. Do not change the factory settings.	0

*1 Line selection is only available when dialing numbers directly with the numeric keypad.

*2 Required ISDN unit option

❖ Switch 21 - Type 450e Reception Options

Digit	Description	Default
0	Reception 0 : Fax Reception 1 : PC Reception	0
1	PC Reception (when Digit 0 is 1) 0 : PC Direct Reception 1 : PC Memory Reception	0
2	Output Destination (when Digit 0 is 1 and Digit 1 is 1) 0 : Send to PC 1 : Print at Fax and send to PC Memory	0
3 4 5 6 7	Not used for this product. Do not change the factory settings.	0

If the PC cannot receive messages, the fax machine will print them (See P.15 *"Substitute Reception"*).

Programming Switch 20 and 21

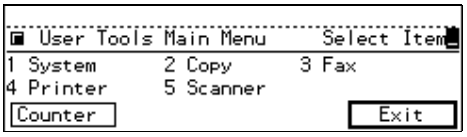
Make User Parameter Switch changes by using the User Tools Key to bring the switch into the character display, and then pressing the number of the digit to be changed on the **fax machine's telephone keypad.** When installed, the machine will set Switch 20 and 21 as shown in the Default column. See P.8 *"User Parameter Switch 20 and 21"*.

Pressing the NUMBER of the digit on the keypad toggles the setting between 0 and 1. See P.21 *"User Parameter Settings"* for more information.

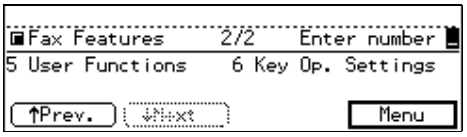
❖ User Tools Key

1 Press【User Tools】on Standby mode.

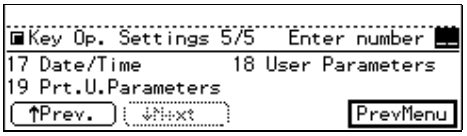
2 Enter the function number for "Fax" with the number keys.



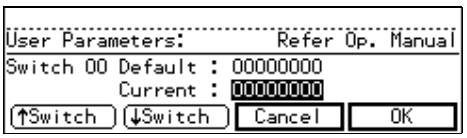
3 **Enter the function number for "Key Op. Settings" with the number keys and press [#].**



4 **Enter the function number for "User Parameters" with the number keys.**



5 **Select a number for a switch you wish to change by [↑Switch] and [↓Switch].**



6 **When you have finished, press [OK].**

Transmission

A RS232 PC-FAX EXPANDER Type 450e transmission from the PC will be either direct or through the fax machine memory. The transmission path is set by the fax machine's **User Parameter Switch 20 Digit 0.** See P.8 *"User Parameter Switch 20 and 21"* for more Switch 20 information.

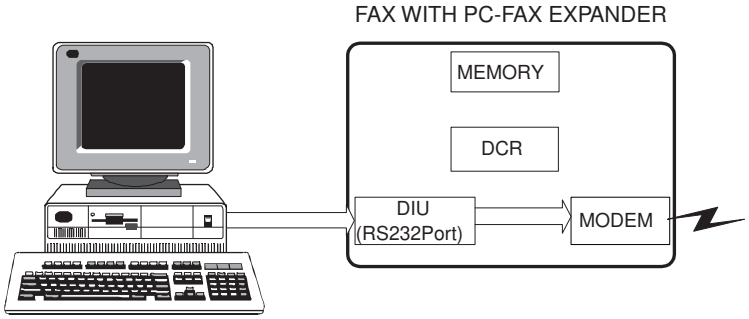
Special sending procedures for either direct or memory transmission are not required. The Quick Start section, P.5 *"Quick Start"*, offers a general description of faxing from the PC. Consult your faxing application's user manual for specific procedures and suggestions.

Direct Transmission

Direct transmission uses only the fax machine's modem. The operation is governed from PC faxing application and not the fax machine.

① **User Parameter Switch 20** is set for direct transmission.
Digit 0 is 0.
This is the default, or initial, setting. See P.8 *"User Parameter Switch 20 and 21"*.

② Follow the sending procedure of your faxing application's user manual.



DIU : Digital Interface Unit, or RS232 Port
DCR : Data Compression/Reconstruction Unit

The following fax capabilities will not be available.

- MMR fax data compression technique
- ECM will be available only if your faxing application supports it
- Quick Dials, Speed Dials, and Group Dials
- Direct G4 transmission from the PC (with ISDN unit option)
- JBIG Transmission (with Fax Function Upgrade unit option)

Memory Tramsmission

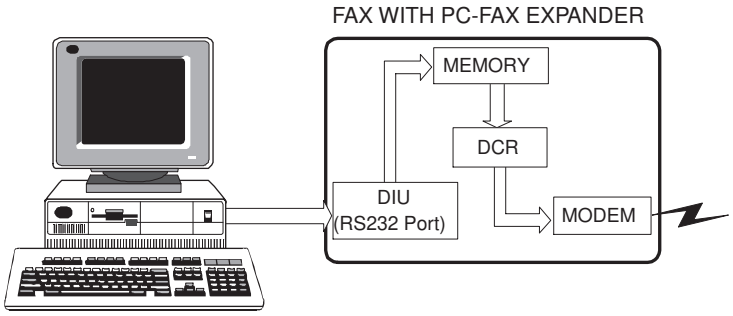
Using fax memory will contribute the fax data processing to the fax transmission and give you additional dialing capabilities from your faxing application:

- MMR fax data compression technique
- ECM
- use of fax Quick Dial, Speed Dial, and Group Dial
- G4 transmission (with ISDN Unit Option)
- G3 Transmit Terminal Identifier (TTI) can be turned on or off.
  The TTI is initially turned off by User Parameter Switch 20 to avoid possible conflicts with the PC faxing application's fax header

① Program **User Parameter Switch 20** for memory transmission.
Digit 0 is 1.
To program Switch 20, see P.9 *"Programming Switch 20 and 21"*.

② To send TTI, program **Switch 20 Digit 1 to 1.**

③ Follow the sending procedures of your faxing application's user manual.



DIU : Digital Interface Unit, or RS232 Port
DCR : Data Compression/Reconstruction Unit

❖ Fax Memory Overflow

If transmission from the PC fills the fax machine's memory to capacity, the accumulated pages will be sent as a file. An error report will be issued by the fax machine.

Quick Dials, Speed Dials, and Group Dials

For more details, see "Quick Dial", "Speed Dial", "Group Dial" in the fax machine manual.

For Memory Transmissions, you can use the fax machine's programmed Quick Dials, Speed Dials, and Group Dials to dial G3 and G4 [*1] destinations from the PC by using a dialing prefix.

① **The User Parameter Switch 20** is set for memory transmission.
Digit 0 is 1.
See P.8 *"User Parameter Switch 20 and 21"* for more Switch 20 information.

② Follow the sending procedures of your faxing application's user manual.

③ Dial as follows.

Quick Dial #	Press the pound key (#). Press the numbers of the Quick Dial.
Speed Dial # *	Press the pound key (#). Press the asterisk key *once* (*). Press the numbers of the Speed Dial.
Group Number # * *	Press the pound key (#). Press the asterisk key *twice* (* *). Press the numbers of the Group.
Group Quick Dial #	Press the pound key (#). Press the numbers of the *Quick Dial* programmed with the *Group*.

For example :

TO DIAL:	**PRESS:**	**FOR:**
Quick Dial 01	# 0 1	G3/G4 [*1]
Speed Dial 01	# * 0 1 (or # * 0 0 1)	G3/G4 [*1]
Group 01 (stored in Quick Dial 02)	# * * 0 1 (or # 0 2)	G3/G4 [*1]

[*1] Requires ISDN unit option

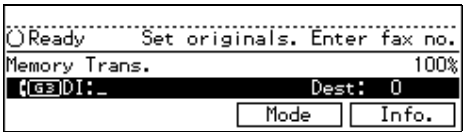
Deleting PC Fax Memory Files

The PC-FAX EXPANDER Type 450e option introduces "Info." on standby mode and the "Check/Cancel TX Files" function number specifically to delete PC-FAX EXPANDER memory transmission files.

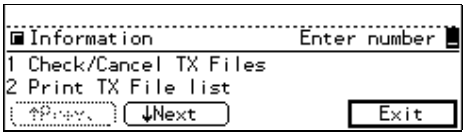
A file can be deleted while being sent as a memory transmission or during an automatic redialing operation. The deletion will end the operation.

❖ Check/Cancel TX Files

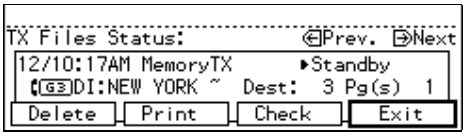
1 **Press [Info.].**



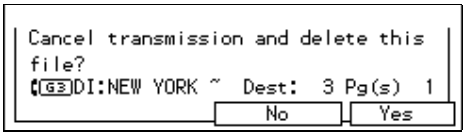
2 **Enter the function number for "Check/Cancel TX Files" with the number keys.**



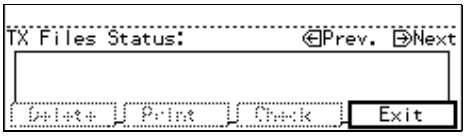
3 **Press the ◀ or ▶ key until the file you want to delete is shown and press [Delete].**



4 **Press [Yes].**



5 **Press [Exit] and press again [Exit].**



Reception

A RS232 PC-FAX EXPANDER Type 450e reception will be either direct, or through the fax machine memory. The reception path is set by the fax machine's **User Parameter Switch 21 Digit 1**. See P.8 *"User Parameter Switch 20 and 21"* for more Switch 21 information.

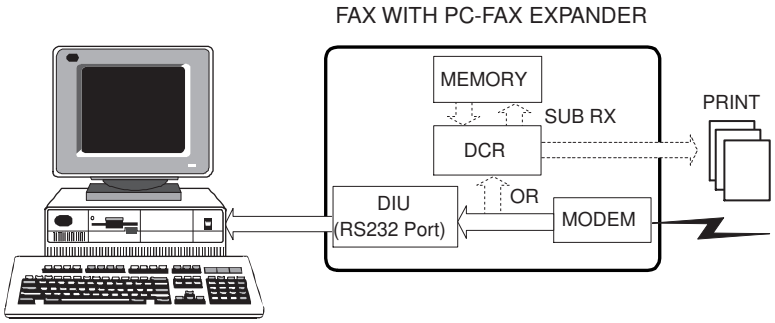
The Quick Start section, P.5 *"Quick Start"*, gives a general description of receiving fax messages. Consult your PC faxing application's user manual for specific procedures.

Direct Reception

① The User Parameter Switch 21 is set for PC Direct Reception.
Digit 0 is 1 and digit 1 is 0, digit 2 is 0.
To program Switch 21, see P.9 *"Programming Switch 20 and 21"*.

② The PC faxing application is running and set for automatic answering so that incoming faxes will be received without operator assistance.

If the PC cannot receive the faxes, the fax machine will print them automatically. If the fax also cannot print the faxes, it will store them in fax memory.



DIU : Digital Interface Unit, or RS232 Port
DCR : Data Compression/Reconstruction Unit

❖ Substitute Reception

For more details, see "Substitute Reception" in the fax machine manual.

Memory Reception and Destinations

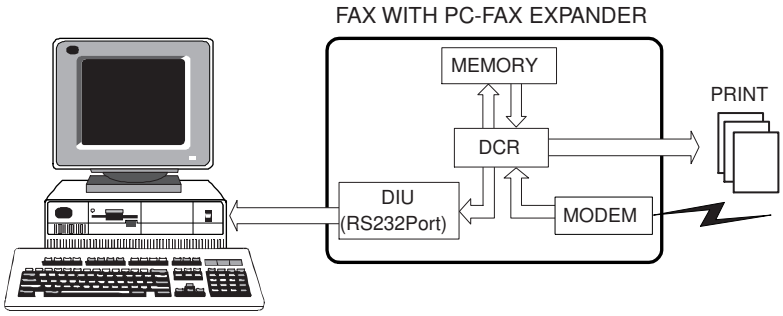
PC-FAX EXPANDER Memory Receptions will use the fax data processing resources of the fax machine. The destination of Memory Receptions are specified by User Parameter Switch 21, Digits 0,1, and 2. The fax machine is initially set to receive and print all Memory Receptions for the PC. See P.8 *"User Parameter Switch 20 and 21"* for more information about Switch 21.

① The **User Parameter Switch 21** is set for memory reception.
Digit 0 is 1 and Digit 1 is 1.
To program Switch 21, see P.9 *"Programming Switch 20 and 21"*.

② The **User Parameter Switch 21** output destination is:
To PC : **Digit 0 is 1** and **Digit 1 is 1** and **Digit 2 is 0**.
To fax and PC : **Digit 0 is 1** and **Digit 1 is 1** and **Digit 2 is 1**.

③ The PC faxing application is running and set for automatic answering so that incoming faxes will be received without operator assistance.

If the PC cannot receive the faxes, the fax machine will print them automatically. If fax also cannot print the faxes, it will store them in fax memory.



DIU : Digital Interface Unit, or RS232 Port
DCR : Data Compression/Reconstruction Unit

❖ Fax Memory Overflow

If receptions fill the fax machine's memory to capacity, the accumulated pages will be sent as a file to the location specified by Parameter Switch 21.

Printing at the Fax Machine

To use your fax machine as a printer, follow your PC faxing application's procedures for faxing documents from a Windows application.

When the dialing dialog box appears, use the **special four-digit fax dialing number, 0 0 0 0**, to send the document to the fax machine where it will be printed. No other settings are necessary.

From the Windows application :

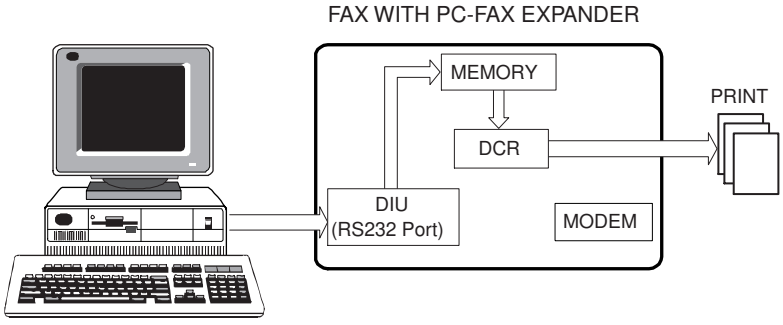
① Choose your faxing application as your printer.

② Open the document you want to print.

③ Select the Print command and print options.

④ The PC fax application dialog box appears : **Dial 0 0 0 0**.

⑤ Click **Start** (or Send).



DIU : Digital Interface Unit, or RS232 Port
DCR : Data Compression/Reconstruction Unit

Reports and Lists

Transmission Confirmation Report - Journal

For more details, see "Printing the TCR" or "Pringintg the Journal" in the fax machine manual.

RS232 PC-FAX EXPANDER transmissions and receptions are recorded on the TCR(Transmission Confirmation Report) or Journal. They are identified with the new symbol.

```
                    *  *  *  TCR (July 23. 1999 5:15PM)  *  *  *

                                                          1) TTI1   XYZ COMPANY
                                                          1) TTI2   Head Office
< TX >                                                                          File
 Date    Time    Destination             Mode      TXtime Page  Result    Pers. Name          No.
-------------------------------------------------------------------------------------------------
 Jul 23  9:00AM  NEW YORK               G3ITSM    0'20"  P. 3   OK                            0001
         1:00PM  PC ----->               PCTS      0'58"  P. 2   OK                            0002
         1:00PM  BOSTON                  G3ITESM*  0'35"  P. 2   OK                            0002
         1:02PM  CHICAGO                 G4TSM*    0'30"  P. 2   OK                            0002
         2:10PM  PC ----->               PCTS      0'15"  P. 2   E                             0004


         2:10PM  NEW YORK                G3TSM*    0'15"  P. 1   OK                            0004


< RX >                                                                          File
 Date    Time    Destination             Mode      RXtime Page  Result    Pers. Name          No.
-------------------------------------------------------------------------------------------------
 Jul 23  1:40    TORONTO                 G3IRES    0'40"  P. 1   OK                            003

 Jul 23  1:40    ----> PC                PCRS      0'40'  P. 1   OK                            003

 Jul 23  3:30    NEW YORK                G3IRES    0'25"  P. 1   OK                            005


 TX Count        000003                          RX Count         000002

 # : Batch                C : Confidential     $ : Transfer            P : Polling
 M : Memory               L : Send later       @ : Forwarding          E : ECM
 S : Standard             D : Detail           F : Fine                u : Super Fine
 > : Reduction            * : P  C
```

Transmit Files for July 23

File 1 (9:00AM)	G3 immediate transmission from fax machine to New York
File 2 (1:00PM)	G4 memory transmission (broadcasting) from PC to Boston and Chicago
File 4 (2:10PM)	G3 memory transmission failure from PC to New York

Receive Files for July 23

File 3 (1:40PM)	G3 memory reception to PC from Toronto
File 5 (3:30PM)	G3 memory reception to fax machine from New York

Memory Transmission Reports

Memory transmission reports include a new mode name to identify memory transmissions from the PC: PC MEMORY TX.

❖ Result Report

```
                * * * Transmission Result Report (JUL. 23. 1999 1:01PM) * * *

                                                                    1) TTI1   XYZ COMPANY
                                                                    2) TTI2   Head Office

File
 No. Mode                  Destination                    Pg(s)      Result                Page
------------------------------------------------------------------------------------------------
004  PC MEMORY TX          TOKYO OFFICE                   P. 1       OK                    P.1

------------------------------------------------------------------------------------------------
        Reason for errors
             1) Hang up or line fail             2) Busy
             3) No anser                         4) No facsimile connection
```

❖ Failure Report

```
                * * * Transmission Result Report (JUL. 23. 1999 1:01PM) * * *

                                                                    1) TTI1   XYZ COMPANY
                                                                    2) TTI2   Head Office
File
 No. Mode                  Destination                    Pg(s)      Result                Page
------------------------------------------------------------------------------------------------
008  PC MEMORY TX          NEW YORK OFFICE                P. 1       E-2)2)2)2)2)          P.1

------------------------------------------------------------------------------------------------
        Reason for errors
             1) Hang up or line fail             2) Busy
             3) No anser                         4) No facsimile connection
```

User Parameter List

User Parameter Switch 20 and 21 appears on the User Parameter List (User tool keys).

```
                  * * * User Parameters List (JUL. 23. 1999 10:00AM) * * *

                                                          1) TTI1   XYZ COMPANY
                                                          2) TTI2   Head Office
   :
 User Switch
   :
  (SW20) TR29
  PC TX Mode                          Immediate TX        * Memory TX
  TTI                                 ON                  * OFF
  Chequered Mark                      ON                  * OFF
  (SW21) TR29
  PC RX Mode Selection              * ON                    OFF
  PC RX Mode                          PC Direct RX        * PC                  * PC+FAX
  Image Density (Lighter)           * 1                     2                     3
  Image Density (Darker)              5                     6                   * 7
```

User Parameter Settings

For more details, see "User Parameter Settings" in the fax machine manual.

The fax machine's User Parameter Switches allow you to alter your fax machine operations to suit your needs and preferences.

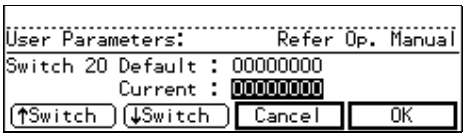
❖ Switch 20 Outline

Digit	Description	Default
0	Transmission 0 : PC Direct 1 : PC Memory	0
1	Send G3 TTI with Memory Transmission (when Digit 0 is 1) to avoid conflict with PC header 0 : Fax TTI Off 1 : Fax TTI On	0
2	Checkered Mark on the first page of fax messages or Files in Memory 0 : Not print Checkered Mark 1 : Print Checkered Mark	0
3	Not used for this product. Do not change the factory settings.	0
4	Not Used. Do not change the factory settings.	0
5	*1 Line selection at PC Memory Transmission(when Digit 0 is 1) 0 : G3 1 : G4 *2	0

*1 Line selection is only available when dialing numbers directly with the numeric keypad.

*2 Required ISDN unit option

The switches will appear in the fax machine character display as rows of eight digits. The digits have a value of 0 or 1. These values define what the fax machine will do, and changing them will change what the fax machine will do.



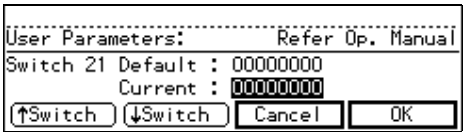
Each digit in the display is referred to in the Operator's Manual by a number from 0 to 7, starting from the ***right***.

```
SWITCH 20     : 0 0 0 0 0 0 0 0
DIGIT NUMBER : 7 6 5 4 3 2 1 0
```

❖ Switch 21 Outline

Digit	Description	Default
0	Reception 0 : Fax Reception 1 : PC Reception	0
1	PC Reception (when Digit 0 is 1) 0 : PC Direct Reception 1 : PC Memory Reception	0
2	Output Destination (when Digit 0 is 1 and Digit 1 is 1) 0 : Send to PC 1 : Print at Fax and send to PC	0

The switches will appear in the fax machine character display as rows of eight digits. The digits have a value of 0 or 1. These values define what the fax machine will do, and changing them will change what the fax machine will do.



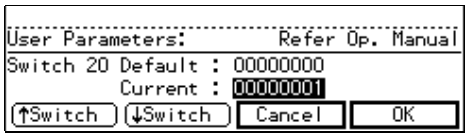
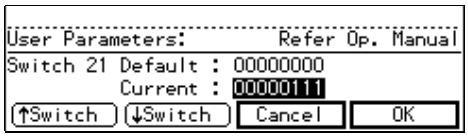
Each digit in the display is referred to in the Operator's Manual by a number from 0 to 7, starting from the ***right***.

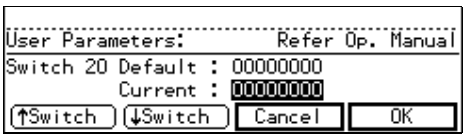
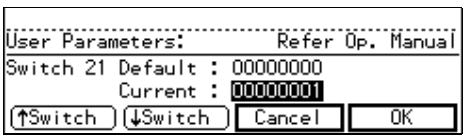
```
SWITCH 21     : 0 0 0 0 0 0 0 0
DIGIT NUMBER : 7 6 5 4 3 2 1 0
```

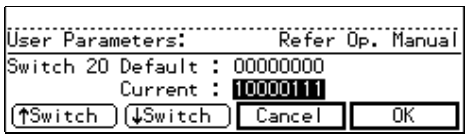
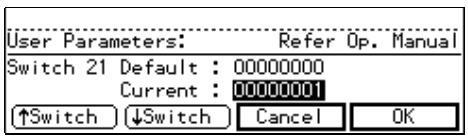
The Default row is the switch as it was set at the factory. The Current row will show the changes that have been made. In the display on P.21 *"User Parameter Settings"*, the rows are identical; the Switch has not been changed.

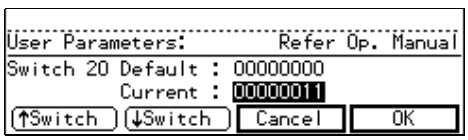
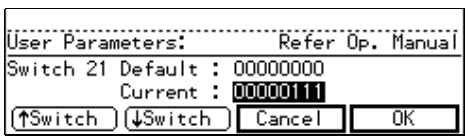
❖ Examples

User Parameter Switches appear in the character display when you are programming new digit values. See P.8 *"User Parameter Switch 20 and 21"*, for information. Following are some of the ways Switch 20 and 21 would appear.

Memory TX, TTI off, No Print C-Mark **G3**	001 (NA) (NA) 0	
PC Reception, PC Memory RX Print at FAX and send to PC	11 1 (NA)	

Direct TX, TTI off, No Print C-Mark **G3**	000 (NA) (NA) 0	
PC Reception, PC Direct RX Print at Fax and send to PC	01 0 (NA)	

Memory TX, TTI on, Print C-Mark **G4(ISDN option required)**	111 (NA) (NA) 1	
PC Reception, PC Direct RX Send to PC	01 0 (NA)	

Memory TX, TTI on, No Print C-Mark **G3**	011 (NA) (NA) 0	
PC Reception, PC Memory RX Print at FAX and send to PC	11 1 (NA)	

G4 Transmission From the PC (with ISDN unit option)

For more details, see "ISDN unit option" in fax machine manual.

G4 transmission requires the installation of the ISDN Unit in the fax machine.

To dial G4 fax numbers from the PC, use programmed Quick Dials and Speed Dials with special prefixes. Using the programmed Dials requires setting the fax for memory transmission. The fax machine will add the G4 Terminal ID to the transmission.

① The **User Parameter Switch 20** is set for memory transmission.
Digit 0 is 1.
See P.8 *"User Parameter Switch 20 and 21"* for more Switch 20 information.

② Program fax machine Quick Dials and Speed Dials with G4 fax number and subaddress if needed.
For more details, see Quick Dials and Speed Dials with G4 fax number in the fax machine manual:

③ Follow the sending procedures of your faxing application's user manual.

④ Dial the prefixes and the G4 Quick Dial or Speed Dial numbers from the PC as described in P.13 *"Quick Dials, Speed Dials, and Group Dials"*.
For example:

TO DIAL :	**PRESS :**
G4 Quick Dial 03	# 0 3
G4 Speed Dial 03	# * 0 3 (or # * 0 0 3)
G4 Group 04 (stored in Quick Dial 05)	# * * 0 4 (or # 0 5)

Installation Suggestions

If your faxing application has difficulty in locating the modem, check the fax machine to make sure it is on and ready: Turn it off. Wait a few seconds. Turn it back on.

Run the MS-DOS diagnostics to review the COM ports and IRQs for possible conflicts.

Communication Ports

The PC's serial ports are usually configured as COM1 and COM2. They are assigned Interrupt Request numbers (IRQs). IRQs establish priorities, which prevent conflicts occurring when two devices want to use the same resources at the same time.

To determine the availability of COM ports and their IRQs, Windows users can run the MS-DOS [*1] diagnostics program. Change the directory to the root and type **msd:**

```
C:\WIN> cd\
C:\>msd
```

When the diagnostics menu appears, choose "COM Ports". The next screen will show what COM ports are enabled or available. Choose "IRQ Status" to show what Interrupt Request status each COM port has. The COM ports must not have the same IRQ: they are usually configured with IRQ4 and IRQ3.

For example:

		IRQ STATUS		
IRQ	ADDRESS	DESCRIPTION	DETECTED	HANDKED BY
3	F000: EF6F	COM2: COM4:	COM2	BIOS
4	CE29: 0096	COM1: COM3:	COM1:	BIOS

The installation of an internal modem might cause an IRQ conflict between two ports, even if no device is using the second port. The second port may have been disabled to overcome the problem.

One solution is to remove the internal modem and re-enable the COM port. Another solution is to install a third serial port.

[*1] MS-DOS Version 5.0 and higher; Windows 95

Technical Service Assistance

For assistance, please contact your local dealer.