4275-9005-01

RS-232C INTERFACE

OPERATING INSTRUCTIONS

MINOLTAFAX 5500

MINOLTA

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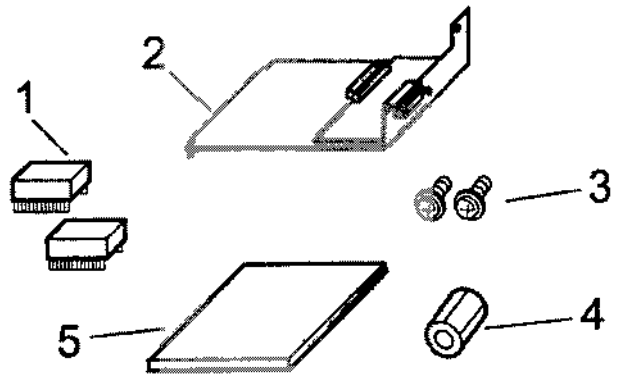
Installation

Note: The optional RS-232C interface must be installed by your MINOLTA authorized dealer. Please contact your MINOLTA authorized dealer.

Unpacking

The drawing, below, shows what should be included in the package:

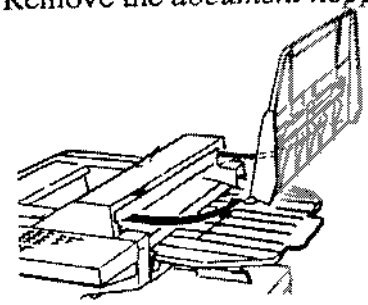


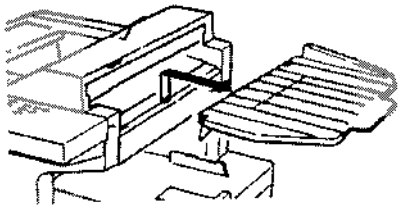
1. Two RS-232C upgrade ROMs
2. RS-232C printed circuit board (PCB) assembly
3. Two screws
4. Ferrite core
5. RS-232C instructions (this manual)

To connect between your fax machine and your computer, you need an extra RS-232C interface cable (see page 4).

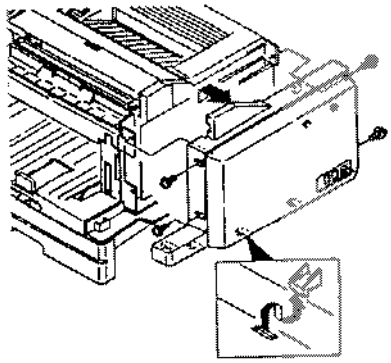
Installing RS-232C upgrade

1. Make sure to **turn off** your fax machine and your computer before proceeding.
2. Remove the *document hopper* and *document tray*.

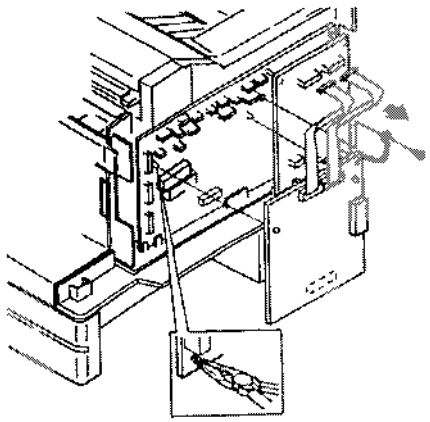




3. Remove the four *mounting screws* holding the *rear cover* in place. Then remove the rear cover.

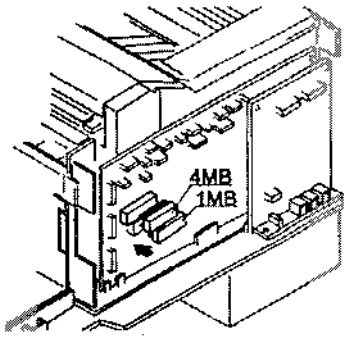


4. Release the two tabs, disconnect the connector that connected with the Main control PCB, and remove the ground wire mounting screw. Then remove the Modem PCB.

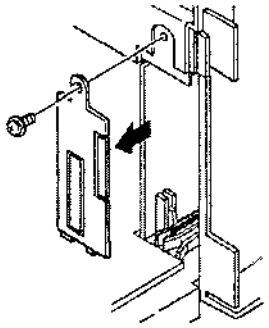


5. Exchange the standard ROM on the main control PCB for the two upgrade ROMs.

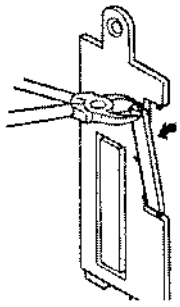
   Note: Use the latest ROM version of MF5500US8 as compared your MINOLTAFAX 5500's ROMs with optional upgrade ROMs.



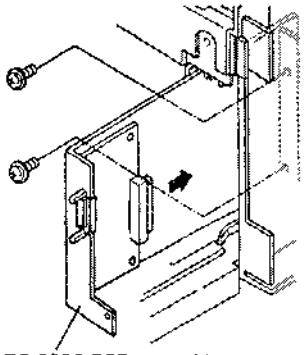
6. Remove the mounting screws holding the *option cover* in place.
   Then remove the option cover.



7. Cut out the rectangular *connector space* on the option cover.

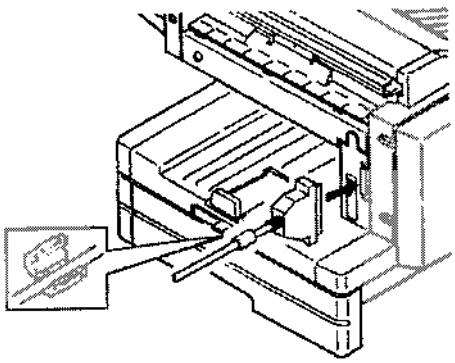


8. Insert the *RS-232C PCB assembly* into the slot until the connector is firmly seated.
   Then attach the assembly using its two mounting screws.



9. Re-attach the rear cover using its four mounting screws.
10. Re-attach the option cover using its mounting screws.
11. Attach the ferrite core to your RS-232C interface cable.
12. Connect one end of the RS-232C interface cable to the *RS-232C interface port* on your fax machine.

    Note: Please see below for more detail on the RS-232C interface cable.



13. Connect the other end of the RS-232C interface cable to your computer's RS-232C port.

    Note: If you don't know where your computer's RS-232C port is, check the computer's operating instructions.

RS-232C interface cable

The RS-232C interface port on your newly installed RS-232C interface has a *DB-25* (standard 25-pin serial) *female receptacle* which accepts a *male DB-25 cable plug*. Your computer's port may have either a DB-25 or *DB-9* (9-pin) receptacle. Please consult the interface's *pin assignment* (next page).

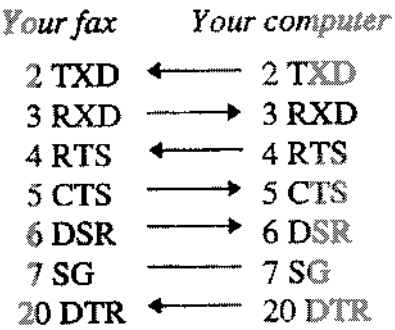
Note: Please see your computer's operating instructions about the serial interface port of your computer.

Pin assignment

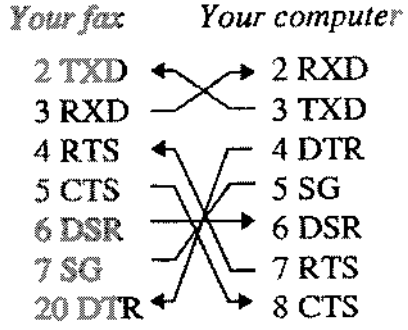
Pin No.	Signal code	Signal name	Contents
2	TXD	Transmitted data	Data signal sent from computer to your fax.
3	RXD	Received data	The data sent to computer by your fax.
4	RTS	Request to send	Signal for request to send data.
5	CTS	Clear to send	Data Enable signal for data transmission from your fax to your computer.
6	DSR	DCE ready	Turning on always.
7	SG	Signal ground	Ground for signal.
20	DTR	DTE ready	Data Terminal Enable — ready to communicate

Signal direction

25-pin type



9-pin type



Operation

Your fax machine isn't only a fax — it can also be an image scanner and plain-paper printer for your computer!

Note: If there is no fax software (see "Requirements for your computer," below) installed on your computer, this interface serves no function. So, until you do install such software, you can skip making the RS-232C settings (see next page).

Setting your fax machine

Requirements for your computer

To use your fax's RS-232C interface feature with your computer, you must have properly installed fax software on the computer. Otherwise, please install the Windows® software included in the carton box.

MINOLTA has tested this interface with the following software titles:

- BitWare™ Ver.3.30
- BitWare™ Plus Ver.4.0
- HydraFax™ Ver.3.5 (34) [U. S. and Canada]
- LaserFax™ Ver. 3.5 [Except North America]
- WinFax PRO™ Ver.4 for Windows 3.1 and Ver.7 for Windows 95®

Note: While this RS-232C interface should work with most fax software, there may be some fax packages with which it may not work. If you experience trouble, please confirm that you are following all instructions and following them in the right order. If you still have trouble, please contact your fax software package's maker.

Making the RS-232C settings

Note: If you choose the wrong RS-232C parameters, your fax machine cannot communicate with your computer.

1. Press ►/**PROGRAM**, **P**, **2**, **ENTER**. The LCD shows the fax's RS-232C transmission speed (*baud rate*) in *bps* (*bits* per second):

   ```
   Baud Rate: Variable
         Program/Enter
   ```

   Note: This setting is just for the RS-232C port; it does not change the speed at which your machine sends faxes.

2. If necessary, press ◄ or ►/**PROGRAM** to choose the appropriate baud rate for your computer and software. The settings are: *Variable;* or *600, 1200, 2400, 4800, 9600* or *19200 bps*. When you see your desired setting, press **ENTER**.

   Note: If using any of the MINOLTA-tested packages (see page 6) **other than** either HydraFax or LaserFax, select *Variable*.

3. If necessary, press ◄ or ►/**PROGRAM** to choose the *data parity* — *None*, *Odd*, or *Even* — and press **ENTER**.

   ```
   Parity:          None
         Program/Enter
   ```

4. If necessary, press ◄ or ►/**PROGRAM** to toggle the *stop bit* between *1 bit* or *2 bit*. When you see your desired setting, press **ENTER**.

   ```
   Stop Bit:        1 bit
         Program/Enter
   ```

5. If necessary, press ◄ or ►/**PROGRAM** to toggle the *data length* between *7 bit* or *8 bit*. When you see your desired setting, press **ENTER**.

   ```
   Data Length:     8 bit
         Program/Enter
   ```

Initializing your machine

Now, *initialize* your machine so it can handle PC/fax communications:

1. Make sure your fax is connected to your computer (see page 4).
2. *Computer:* Make sure that your fax software is up and running and is in *receive* mode.

   Note: If necessary, consult your fax software's instructions.
3. *Fax:* Press ►/PROGRAM, P, 3, ENTER.

   ```
   PC-FAX Connection
   ```

   It will take a while to initialize settings.

Using your fax's new PC connection

Scanning from your fax to your computer

You can store logos, signatures, line art or even photographs onto your computer by using the fax machine to *scan* to your computer:

1. Make sure your fax is connected to your computer (see page 4).
2. *Fax machine:* Insert the document. Adjust resolution and contrast if necessary.
3. *Computer:* Instruct your fax software to *receive*.

   Note: If necessary, consult your fax software's instructions.
4. *Fax machine:* Press ►/PROGRAM, P, 1, ENTER.

   ```
   PC-FAX Scan
   A4          Memory 99%
   ```

Your fax software now will "receive" the fax (including the TTI, if you've set one) onto your computer.

To cancel the scanning operation while it's in progress, just press **STOP**. (To cancel the command after scanning the document, consult your software's operating instructions.)

Printing from your computer to your fax

With the RS-232C interface installed, you now can team your fax machine with your personal computer for direct printing of letters, reports, graphics and other business correspondence from your computer's hard disk drive:

1. Make sure your fax is connected to your computer (see page 4).
2. *Computer:* Use your application — for example, a word-processing program — to send the document to your fax software, just as if you were actually going to fax the document.
3. *Fax machine:* Make sure that you have stored your *subscriber ID* (your fax number) on your machine.

   Note: Please consult your fax machine's operating instructions concerning how to enter the subscriber ID.
4. *Computer:* When the fax software asks for a fax number to which to send the document, enter your subscriber ID.
5. *Computer:* Instruct your fax software to *transmit*. The fax machine will begin to print.

Sending/receiving faxes with your computer

You can receive documents from another fax onto your computer, as well as transmit documents from your computer to other faxes. As with scanning, the exact procedure for sending/receiving will vary depending upon how your computer's particular fax software works.

Note: Please consult your software's operating instructions for more details.

1. Make sure your fax is connected to your computer (see page 4).
2. *Computer:* If your fax software allows it, turn off Error Correction Mode (ECM).
3. *Computer:* Instruct your fax software to send or receive. The fax machine will begin either transmitting or receiving.

"AT" commands

Note: This is a list of standard "AT" modem commands. For more information, please consult your fax software's instructions.

Command	Parameter	Description	Default value
A	none	Call answer	
D	0 – 9, *,#	Dial number	
	P	Pulse dial	
	T	Tone dial	
	,	Pause	
E	0	Not echo command character	E0
	1	Echo command character	
H	0	On Hook (Disconnect line)	
	1	Off Hook (Connect line)	
M	0	Monitor speaker is always off	M1
	1	Monitor speaker is on until carrier is detected	
	2	Monitor speaker is always on	
P	none	Set pulse dial mode	
T	none	Set tone dial mode	
V	0	Short formed response code	V1
	1	Long formed response code	
Z	none	Reset modem	
&F	none	Initialise to factory setting	
\Q	1	XON/XOFF flow control	\Q2
	2	RS/CS flow control	
+FCLASS?	none	Indicate current service class	
+FCLASS=?	none	Indicate service class capability	
+FCLASS=n	none	Set service class	
+FRH=n	none	Receive HDLC frame (n=3;300 bps)	
+FLO=n	none	XON/XOFF flow control (n=1)	+FLO=2
	none	RS/CS flow control (n=2)	
+FRM=n	none	Facsimile receive message (14400/12000/9600/7200/4800/ 2400 bps)	
+FRS=n	none	Detect silence for n x10ms	
+FTH=n	none	Transmit HDLC frame (n=3:300 bps)	
+FTM=n	none	Facsimile transmit message (14400/12000/9600/7200/4800/ 2400bps)	
+FTS=n	none	Wait for n x10ms