magicolor[®] 2200 User's Guide

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Registering the Printer

Mail—Fill out and send in the registration card enclosed in your shipment.

Internet—www.qms.com/support/prodreg (US only)

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Replacing Consumables



Consumable Life Expectancies

The stated life expectancy of each consumable is based on printing under specific operating conditions, such as media type, number of color planes, page size, and page coverage (@ normal 5% coverage of letter/A4-size media). The actual life expectancy will vary depending on these and other printing variables, including continuous or intermittent printing, ambient temperature, and humidity. For further information about the consumables statistics page and replacement menus, refer to the *CrownBook*.

Replacing Consumables

Attention

Failure to follow instructions as outlined in the *User's Guide* could result in voiding your warranty.

Item/Message Display	This item needs replacing by user after	Page Reference
Fuser oil roller REPLACE OIL ROLLER	FUSER OIL LOW, FUSER OIL EMPTY, or REPLACE OIL ROLLER displays in the message window (after up to 21,000 sin- gle-sided continuous monochrome or 7,500 continuous color pages, or 7,000 intermittent monochrome or 5,000 intermittent color pages). Heavy coverage, intermittent print- ing, and different media types can use up oil at an accelerated rate, reducing fuser oil roller life.	"Replacing the Fuser Oil Roller" on page 26
Fuser unit/transfer roller kit REPLACE FUSER UNIT	100,000 single-sided pages maximum at an equal mix of black and 4-color pages, all with 5% coverage of each color; however, fuser unit life is coverage and media dependent).	"Replacing the Fuser Unit and Transfer Roller Kit" on page 20
OPC drum kit (OPC drum, laser lens cover, waste toner pack) REPLACE OPC DRUM REPLACE WASTE TONER WASTE TONER NEAR FULL	Up to 30,000 continuous monochrome or 7,500 continuous four-color pages, or 10,000 intermittent [one-page jobs] mono- chrome or 5,000 intermittent [one-page jobs] color pages). Other factors also affect car- tridge life.	"Replacing the OPC Drum, Laser Lens Cover, and Waste Toner Pack" on page 13

The following messages indicate that a consumable needs to be replaced:

Item/Message Display	This item needs replacing by user after	Page Reference
Toner <pre></pre> <pre>COLOR> TONER EMPTY</pre>	Approximately 6,000 single-sided pages per cartridge—black, yellow, magenta, cyan at 5% coverage of each color.	"Replacing Toner Cartridges" on page 9
Transfer belt REPLACE TRANSFER BELT	100,000 single-sided images (1:1 color/ monochrome printing)	"Replacing the Transfer Belt" on page 28

*A **plane** (also called an **image**) is a single **pass** of the OPC drum (one toner color). For example, a black-only, single-sided (simplex) print job makes one pass, and a two-color (duplex) print job makes two passes. A single-sided color **page** (also called a **face**) consists of four passes of the OPC drum, since most color print jobs use all four toner colors. A two-sided color page may consist of up to eight passes of the OPC drum, since most color drum, since most color print jobs use all four toner colors. A two-sided color page may consist of up to eight passes of the OPC drum, since most color print jobs use all four toner colors. Stated consumable life is expressed at 5% in simplex letter/A4 pages. A duplex page is equivalent to two simplex pages.

The number of sheets/faces printed shown on the startup page differs from the number of sheets/ faces printed statistics in CrownView and on the consumables statistics page (Operator Control/ Consumables/Print Statistics). The numbers on the startup page refer to number of sheets/faces printed during the lifetime of the printer. The numbers in CrownView and on the consumables statistics page refer to the number of sheets/faces printed to date during the current consumables tracking period (Administration/Consumables/Start Period menu).

Ordering Consumables

Choosing the right consumables for your magicolor 2200 printer not only increases its reliability and performance, but also minimizes the risk of damage.

For example, only MINOLTA-QMS toner cartridges are designed to meet the exact specifications of your MINOLTA-QMS printer, giving maximum performance, efficiency, and long life.

Toner cartridges and other consumables for the magicolor 2200 are available from your local vendor or Q-SHOP (www.q-shop.com). See the *Service & Support Guide* for the telephone number of the MINOLTA-QMS office nearest you for information on ordering.

Replacing Toner Cartridges

Characters and images are created in your laser printer through a process that applies toner to the photosensitive (OPC) drum (which functions like photographic film). Your printer

uses four toner cartridges: black, yellow, magenta, and cyan. Handle the toner cartridges carefully to avoid spilling toner inside the printer or on yourself.

EX The carbon-particle toner is nontoxic. If you get toner on your hands, wash them in cool water or a neutral detergent. If you get toner on your clothes, lightly dust them off as much as possible. If some toner remains on your clothes, use cool, not hot water, to rinse the toner off, provided your clothing is washable.

Attention

If you get toner in your eyes, wash it out immediately and consult a doctor. Material Safety Data Sheets (MSDS) information can be found at www.minolta-qms.com (click on the Answer Base).

Toner Cartridge Life

A toner cartridge contains enough toner (yellow, magenta, cyan, or black) to print a maximum of 6,000 (@ normal 5% page coverage) letter/A4-size pages.

When toner runs low in a cartridge, X TONER LOW displays in the message window (X indicates the toner color). It's your option whether to continue printing; usually, parts of the page print lighter.

When toner is low, it's sometimes helpful to take the cartridge out of the printer and redistribute the toner by gently rocking the cartridge horizontally side to side (as you do for a new cartridge) five or six times. Then reinstall the cartridge.

The printer, approximately 100 pages after detecting that toner in a cartridge is low, displays X TONER EMPTY in the message window (X indicates the toner color). Printing continues even though the out-of-toner warning appears. However, the color gradually fades, so replace the toner cartridge as soon as possible.

Toner Cartridge Handling

Attention

Do not hold a toner cartridge vertically. Do not touch the toner roller surface \bigcirc or the protective shutter \oslash . This could lower image quality.



Keep toner cartridges:

- In their packaging until you're ready to install them.
- In a cool, dry location away from sunlight (due to heat).

The maximum storage temperature is $95^{\circ}F(35^{\circ}C)$ and the maximum storage humidity is 80% without condensation.

■ Level during storage.

Do not stand or store cartridges on their ends or turn them upside down; the toner inside the cartridges may become caked or unequally distributed.

- Away from salty air and corrosive gases such as aerosols.
- Away from disk drives and floppy disks.

The magnets in the cartridges can damage stored data.

Toner Cartridge Replacement

- 1 Check the message display to see what toner color is out.
- 2 Open the printer's front cover.

Attention

Be careful not to spill toner on the inside of the printer's front cover. Toner will fall from there into the upper media tray. If toner does fall onto the open cover, immediately wipe it with a dry, lint-free soft cotton cloth or swabs.

If the toner cartridge you want to replace is the one showing, go to step 5. If not, go to step 3.

3 Press the toner cartridge carrousel button ① and release the button ② before turning the carrousel dial ③ counterclockwise until it stops.

The carrousel rotates 90° and stops.

The toner cartridge carrousel may start to turn automatically from the weight of the inserted toner cartridge. Make sure you have fully turned to the next slot before trying to insert another toner cartridge.

- 4 Continue step 3 until the color to be replaced is visible.
- 5 Pull the release lever to eject the toner cartridge you are going to replace.







- Dispose of it properly according to your local regulations (do not dispose of it by burning).
- 6 Remove the new toner cartridge from its shipping carton.

Replacing Toner Cartridges

7 Distribute the toner inside the cartridge.

Holding a cartridge with both hands, gently shake it five or six times.

- Each toner cartridge has a colored end that corresponds to a colored label inside the cartridge slots. Always install the toner cartridge in the slot with a label of the same color.
- 8 Place the front end of the toner cartridge installation guides into the cartridge installation rails on the cartridge carrousel.
- **9** Gently push the new cartridge into the printer.
- **10** Close the printer's front cover.

Refilled Toner Cartridges





Attention

Refilled toner cartridges may produce variations in toner quality and reliability and can reduce the print quality of your documents. Any damage to the printer or quality problems caused by a refilled toner cartridge use will void your warranty.

Replacing the OPC Drum, Laser Lens Cover, and Waste Toner Pack

Attention

The OPC drum is extremely sensitive to bright light and direct sunlight. Always leave it in its protective bag until you're ready to install it. Any exposure to light should be avoided, or permanent damage could result. Any damage resulting from mishandling of the OPC drum will void the warranty of the OPC drum. Also, handle the cartridge carefully by its sides so you don't touch the surface (the green part) of the drum. The drum is also extremely sensitive to hand oils and scratches, both of which reduce print quality. When the OPC drum is worn out, the message REPLACE DRUM appears. The printer will not print until the drum kit is replaced.

When you replace the OPC drum cartridge after a DRUM LOW or REPLACE DRUM message displays in the message window, the printer automatically recovers. However, the replaced waste toner pack consumables monitoring system must be reset.

The three items below are included in the OPC drum kit. If one needs replacing, replace all three items.

- Waste toner pack
- OPC drum cartridge
- Laser lens cover



The OPC drum life is directly related to the number of rotations of the drum. Longest drum life is achieved with continuous printing. Intermittent printing with small job sizes requires cleaning rotations before and after each job, and subsequently will impact OPC life.

The steps are:

- Removing the used waste toner pack
- Removing the used OPC drum cartridge
- Replacing the laser lens cover
- Installing the new OPC drum cartridge
- Installing the new waste toner pack

Removing the Used Waste Toner Pack

When the waste toner pack is nearly full, the message "WASTE TONER NEAR FULL" appears. Prepare to replace the entire OPC drum kit.

- 1 Turn off the printer.
- 2 Open the printer's front cover.

3 Carefully remove the waste toner pack using the handle.

Keep the waste toner pack upright so the toner does not spill.



4 Turn the two caps labeled "A" counterclockwise and remove them.



 $5 \quad \mbox{Twist the two "A" caps } \ensuremath{\mathbb{O}}\xspace$ onto the two "A" holes $\ensuremath{\mathbb{O}}\xspace.$

Turn the caps clockwise to secure them.



7 Dispose of the used waste toner pack.

Dispose of it properly according to your local regulations (do not dispose of it by burning).

8 Continue with replacing the OPC drum cartridge.

Reinstall the new waste toner pack after replacing the OPC drum.

Removing the Used OPC Drum Cartridge

1 With the front cover open, rotate the transfer belt unit left release lever counterclockwise to the top (12 o'clock) position.

This raises the transfer belt unit.

2 Hold the OPC drum cartridge handle and carefully pull it out about 8 inches (20 cm).



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- 3 Support the bottom of the drum with your hand, then carefully pull the cartridge toward you and remove it.
- Dispose of it properly according to your local regulations.



Replacing the Laser Lens Cover

- **1** Press on the laser lens cover lock release lever and gently pull the laser lens cover toward you.
- Dispose of it properly according to your local regulations.
- 2 Remove the new laser lens cover from the OPC drum kit box.



Attention

Do not touch the glass surface of the laser lens.

- **3** Place the front end of the laser lens cover into its installation rail.
- 4 Carefully insert the laser lens cover and check to make sure it is fully inserted.



Attention

If the laser lens cover is not properly installed, serious damage to the printer could result.

Installing the New OPC Drum Cartridge

1 Remove the new OPC drum cartridge from its shipping box.



Attention

Keep the protective sheet on the cartridge. Do not touch the protective sheet on the photosensitive (green) surface or scratch the surface. This could lower image quality.

Make sure the transfer belt left release lever is still set to its top position (12 o'clock).

- 2 Hold the OPC drum cartridge level, place the front end of the OPC drum cartridge installation guide into the installation rail.
- **3** Carefully push the OPC drum cartridge in.



Attention

The cartridge should slide easily into the printer. Don't force it.

- 4 Press on the front handle of the OPC drum cartridge with one hand and hold the front handle of the OPC protective cover with the other hand.
- 5 Peel the protective cover off (straight toward you).
- Dispose of it properly according to your local regulations.
- 6 Turn the left release lever of the transfer belt clockwise to its correct position (2 o'clock).

This lowers the transfer belt.

Also make sure the transfer belt right release lever is set to its correct position (10 o'clock).



1

If the transfer belt left release lever is at its top position (12 o'clock), the waste toner pack cannot be installed.

Installing the New Waste Toner Pack

Remove the new waste toner pack from the drum kit box.







- 2 Insert the bottom of the waste toner pack ① into its installation position in the printer.
- 3 Insert the top of the waste toner pack ② into its installation position in the printer until it is firmly seated.
- 4 Close the printer's front cover.

If the waste toner pack is not correctly installed or the transfer belt right release lever is at its top position (12 o'clock), the front cover cannot be closed. Turn on the printer.



5 In the Operator Control/Consumables/Items Replaced/Waste Toner menu, choose Yes to reset the consumables monitoring system.

Replacing the Fuser Unit and Transfer Roller Kit

WARNING!

The fuser unit is hot. When the top cover is opened, the fuser unit temperature drops gradually (one hour wait time). Do not replace the fuser oil roller until you are sure that the fuser unit has cooled down.



When the fuser is worn out, the message "REPLACE FUSER UNIT" appears and the printer does not print. Replace the fuser kit. After the new fuser kit is installed, printing automatically resumes.

The fuser kit includes the two items below. When replacing the fuser unit, replace the transfer roller as well.

- Fuser unit
- Transfer roller unit



Replacing the Fuser Unit

- 1 Turn off the printer.
- 2 Open the printer's top cover.
- **3** Rotate the two fuser oil roller lock levers to release the fuser oil roller.







5 Place the fuser oil roller on a table or level surface.

Attention

Since the fuser oil roller removed here is to be installed in the new fuser unit, handle it with care. If you set the fuser oil roller on the table do it as shown in the illustration. Do not allow the roller surface to contact the table or get dirty. This could lower image quality.



6 Turn the release levers (front, rear) to release the fuser unit.





Replacing the Fuser Unit and Transfer Roller Kit

- 7 Holding the fuser unit handles, lift up the unit.
- Dispose of it properly according to your local regulations.

Remove the new fuser from its

shipping box.

8

9 Carefully lower the new fuser unit so that the two pins in the fuser unit installation section go into the two installation holes in the fuser unit.





10 Press in on the fuser unit release levers \mathbb{O} and rotate them downward \mathbb{Q} .

This secures the fuser unit.



Attention

If the fuser unit release levers are not set correctly, the fuser oil roller cannot be installed. Set the fuser unit release levers to the fixed position.

11 Reinstall the fuser oil roller (removed in step 4).



12 Rotate the two oil roller levers to lock the oil roller into place.



13 Close the printer's top cover.

Check the release button to make sure the top cover is properly closed.

Replacing the Transfer Roller Unit

If there is media in the multipurpose tray, remove it. Close the multipurpose tray.

1 Press the right cover release button and carefully open the right cover.



- Holding the two transfer roller unit handles, remove the transfer roller unit.
- Dispose of it properly according to your local regulations.
- 3 Remove the new transfer roller unit from the fuser kit box.

Attention

Do not touch the surface of the transfer roller unit. This could lower image quality.

- 4 Place the new transfer roller unit on a level surface.
- 5 Lift up the two transfer roller unit handles.
- 6 Holding the two transfer roller unit handles, carefully lower it so the transfer roller unit shaft goes into the two transfer roller unit installation guides.







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- 7 Lower the two transfer roller unit handles.
- 8 Carefully close the right cover.

Check the release button status to make sure the cover is properly closed.

9 If necessary, reopen the multipurpose tray and put the media back in.



Replacing the Fuser Oil Roller 🖷

The fuser oil roller provides a lubricant for the printer via an oil-impregnated roller. This oil is necessary for the proper functioning of the printer.

WARNING!

The fuser unit is hot. When the top cover is opened, the fuser unit temperature drops gradually (one hour wait time). Do not replace the fuser oil roller until you are sure that the fuser unit has cooled down.



When the fuser oil roller is worn out, the message "REPLACE OIL ROLLER" appears and the printer does not print. Replace the fuser oil roller. After the new roller is installed, printing automatically resumes.

When you replace the fuser oil roller after a REPLACE OIL ROLLER message displays in the message window, the printer automatically recovers.

- **1** Turn off the printer.
- 2 Open the printer's top cover.
- **3** Rotate the two fuser oil roller lock levers to release the fuser oil roller.
- Dispose of it properly according to your local regulations.
- 4 Remove the new fuser oil roller from its shipping box.



Attention

If you set the new fuser oil roller on a table, do it as shown in the illustration. Do not allow the roller surface to contact the table or get dirty. This could lower image quality.



- 5 Insert the new fuser oil roller installation guides (front, rear) into the fuser unit installation rail.
- 6 Carefully lower the roller.



7 Rotate the two oil roller levers to lock the oil roller into place.

Attention

If the two fuser oil roller release levers are not correctly set, the top cover cannot be closed. Set the release levers to the roller fixed position.

8 Carefully close the top cover.

Check the release button to make sure the top cover is properly closed.

9 Turn on the printer.

Replacing the Transfer Belt

When the transfer belt is at its end of life, the message "REPLACE TRANSFER BELT" appears, and the printer does not print. Replace the transfer belt. After the new transfer belt is installed, printing automatically resumes.

- 1 Open the printer's front cover.
- 2 Remove the waste toner pack.
- **3** Rotate the left transfer belt lock lever.



4 Remove the OPC drum cartridge and set it aside.



Attention

The OPC drum is extremely sensitive to bright light and direct sunlight. Always put it in its protective bag until you're ready to reinstall it. Any exposure to light should be avoided, or permanent damage could result.

Also, handle the cartridge carefully by its sides so you don't touch the surface (the green part) of the drum. The drum is also extremely sensitive to hand oils and scratches, both of which reduce print quality.

5 Rotate the left lever to its 4 o'clock position.



6 Grasp the handles of the transfer belt and remove it.



Dispose of it properly according to your local regulations.

7 Remove the new transfer belt from its packaging and insert it into the printer.



- 8 Press on the transfer belt front handle with one hand, take the handle of the transfer belt fixture with your other hand, and pull the fixture straight toward you.
- Dispose of it properly according to your local regulations.





9 Rotate the transfer belt lock lever.



 $10 \ \ {\rm Reinstall \ the \ OPC \ drum \ cartridge.}$



- **11** Close the transfer belt lock lever.
- 12 Check to make sure the laser lens cover is firmly seated.



- **13** Reinstall the waste toner pack.
- 14 Close the front cover and turn on the printer.



Using Media



Introduction

This chapter provides information on handling, selecting, and storing media. Refer to the *Maintenance Guide* for media specifications.

Media Handling

Before purchasing a large quantity or special media, do a trial printing with the same media and check print quality. Check with our web site www.minolta-qms.com for a list of current approved media.

Attention

Do not use the media types listed below. These could cause poor print quality, media jams, or damage to the printer.

Do not use media that is

- Not approved
- Meant for ink jet printers
- Folded, embossed, warped, or wrinkled
- Perforated or prepunched
- Too slick, too coarse
- Composed of foil or gilt
- Coated with a processed surface (such as carbon paper, heat-sensitive paper, heatpressure paper)
- Irregularly shaped (not rectangular); not uniform in size
- Bound with glue, tape, or paper clips
- Attached to ribbons, hooks, buttons, etc.

Do not use envelopes that have

Sticky flaps

- Metal clasps, fasteners, transparent windows, peel-off strips for sealing
- Material that will melt, vaporize, offset discolor, or emit dangerous fumes

Do not use labels that have

- Label(s) already peeled off
- Labels that peel off easily
- Glue or sealer that might come off
- Material that will melt, vaporize, offset discolor, or emit dangerous fumes

Media Types

Plain Paper

Formatting	Format data within your application.	
Input	Upper and Optional Trays	500 sheets of 20 lb bond (75 g/m ²) paper (letter/A4/legal) each; capacity for other weights varies accordingly.
	Multipurpose Tray	150 sheets of 20 lb bond (75 g/m ²) paper; capacity for other weights varies accordingly.
Orientation	Upper and Optional Trays	Simplex—Face up; Duplex—Face down
	Multipurpose Tray	Simplex—Face down; Duplex—Face up
Туре	Any standard or recycled office paper suitable for plain-paper laser printers, such as Hammermill Laser Print	
	Georgia-Pacific Microprint Laser 1000	
	Neusiedler Color Copy 90	
	Xerox 4024	
Weight	16–24 lb bond (60–90 g/m ²)	
Duplexing	Up to 28 lb bond (105 g/m ²)	

Letterhead and Memo Media

Formatting	Format letterhead or memo data within your application. Try printing your data on a plain sheet of paper first to check placement.	
Input	Upper and Optional Trays	Up to 500 sheets
	Multipurpose Tray	Up to 150 sheets
Orientation	Upper and Optional Trays	Face up—top of page toward the right
	Multipurpose Tray	Face down—top of page toward the printer side
Туре	 Any standard or recycled office paper suitable for plain-paper laser printers, such as Hammermill Laser Print Georgia-Pacific Microprint Laser 1000 Neusiedler Color Copy 90 	
	Xerox 4024	
Weight	16–24 lb bond (60–90 g/m²)	
Duplexing	Upper and Optional Trays	Face down—top of page toward the right
	Multipurpose Tray	Face up—top of page toward the printer side
Notes	Check your application documentation for other information about printing on letterhead and memo media.	

Thick Stock

Formatting	Format the information to be printed on the thick stock within your application. Try printing your data on a plain sheet of paper first to check placement.	
Input	Multipurpose Tray Only	Up to 50 sheets, depending on the thickness of the media
Orientation	Face down	
Туре	For information about thick stock media recommended for your printer, go to www.minolta-qms.com/support, then click on Answer Base, or contact Technical Support. See the <i>Service & Support Guide</i> for a complete listing of support telephone numbers.	
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Weight	Simplex: 24–43 lb bond (90–163 g/m ²)	
	Autoduplex: Up to 28 lb bond (105 g/m ²)	
	Manual Duplex: 24 lb (90 g/m ²) to 43 lb (163 g/m ²) bond	
Duplexing	Autoduplexing thick stock over 28 lbs (105 g/m ²) is not supported. Thicker stock may be manually duplexed.	
Notes	You should test the number of sheets of thick stock the multipurpose tray can hold to ensure that its performance is acceptable.	
	43 lb (163 g/m ²) bond is also referred to as 90 lb index stock.	

Envelopes

Formatting	Your printer receives the instructions to print on envelopes from your application.		
	Print on the front side only. Some parts of the envelope consist of three layers of paper—the front, back, and flap. Anything printed in these layered regions may be lost or faded.		
	See your application documentation for specific information on printing envelopes.		
Input	Multipurpose Tray Only	Up to 50, depending on the thickness of the envelopes	
Orientation	Face down		
Туре	Use common office envelopes approved for laser printing with diagonal joints, sharp folds and edges, and ordinary gummed flaps, such as ■ Commercial #10: Columbian Recycled COR02		
	International DL: Auto Fil #01914		
Duplexing	Not supported		
Notes	You can print only on the address side of the envelope.		
	Envelopes should be dry.		
	Do not preload or preseal envelopes.		

Labels

Formatting	Format label data within your application. Try printing your data on a plain sheet of paper first to check placement.		
Input	Multipurpose Tray Only	Up to 50 sheets, depending on the thickness of the labels	
Orientation	Face down		
Туре	Use only labels recommended for laser printers, such as ■ Avery 5260		
Weight	16–90 lb (60–163 g/m²)		
Duplexing	Not supported		
Notes	Avoid using labels with exposed adhesive; it may stick to the transfer belt or the fuser roller, causing labels to peel off and media jams to occur.		
	Adhesive label stock is supported only in letter or A4 sheets.		
	 A label consists of a face sheet (the printing surface), adhesive, and a carrier sheet 		
	 The face sheet must follow the plain paper specification. 		
	 The face sheet surface must cover the entire carrier sheet, and no adhesive should come through on the surface. 		
	 You can prin media feed, problems or 	nt continuously with label paper. However, this could affect the depending on the media quality and printing environment. If ccur, stop the continuous print and print one sheet at a time.	
	Check your printing labe	application documentation for other information on els.	

Postcards

Formatting	Format postcard data within your application. Try printing your data on a plain sheet of paper first to check placement.	
Input	Multipurpose Tray Only	Up to 50 sheets, depending on the thickness of the postcards
Orientation	Face down	
Туре	Use only postcards recommended for laser printers	
Weight	16–90 lb (60–163 g/m²)	
Duplexing	Not supported	

Notes	If the postcard is warped, press on the warped area before putting in multipurpose tray.	
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Transparencies

Formatting	Format the information to be printed on the transparencies within your application. Try printing your data on a plain sheet of paper first to check placement.	
Input	Location Upper and Optional Trays Multipurpose tray	
	Capacity	Up to 50 sheets, depending on the thickness of the transparencies
		If you have problems feeding 50 sheets, try loading only 5–10 sheets at a time. Loading a large number of transparencies at a time may cause static buildup, thus causing feeding problems.
Orientation	n Upper and Face up Optional Trays	
	Multipurpose Tray	Face down
Туре	Use any full-color transparencies (also known as OHP film) that meet normal photocopier standards. We recommend	
	 G-media transparency media for the magicolor 2200 for color printing 3M PP2500 for monochrome printing 	
Duplexing	Not supported	

Notes	If you touch the face of transparencies with your bare hands, print quality may be affected.
	Do not handle transparency media too much. Do not fan transparency media before loading it. Resulting static electricity may cause printing errors.
	Keep the media path clean. Transparencies are especially sensitive to a dirty media path. If there are shadows on either the top or the bottom of the sheets, see "Cleaning the Printer Interior" in the <i>Maintenance Guide</i> .
	You can print continuously with transparencies. However, this could affect the media feed, depending on the media quality and printing environment. If problems occur, stop the continuous print and print one sheet at a time.
	Check your application documentation for other information about printing on transparencies.

Loading Media 👻

Take off the top and bottom sheets of a ream of paper. Holding a stack of approximately 250 sheets at a time, fan the stack to prevent static buildup for the paper before inserting it in a tray.





Do not fan transparency media.



Always load the media short edge first.



Do not mix media of different sizes, types, or weights, as this will cause printer jamming.

When refilling media, first remove any media remaining in the tray. Stack it with the new media, even the edges, then reload it. Although the magicolor 2200 was designed for printing on a wide range of media types, it is not intended to print exclusively on a single media type except plain paper. Continuous printing on media other than plain paper (such as envelopes, labels, thick stock, or transparencies) may adversely affect print quality or reduce engine life.

• For media other than standard plain paper or transparencies, both the driver (Paper tab, Paper Type option) and the MP Size key on the control panel need to be selected.

It is important to use the MP Size key to set the multipurpose tray to the appropriate media size in order to obtain optimum printing results.

Autoduplexing

Duplex (2-sided) printing can be done automatically with the optional duplex unit installed.

 \bigcirc Only up to 28 lb bond (105 g/m²) plain paper can be duplexed.

If you are printing duplex from the upper or optional tray, load the media printing-side down with the top of the media (or letterhead or memo information) toward the right side of the tray. If you are printing duplex from the multipurpose tray, load the media printing-side up with the top of the media toward the printer. Set the driver, for example:

- 1 In the printer driver, make sure you have selected Duplexer and clicked on the Add button.
- 2 In the printer driver, select Simplex (1-sided pages), or Long Edge (flipped horizontally as in a loose-leaf notebook), or Short Edge (flipped vertically as on a clipboard) as the Duplex option.
- 3 Click OK.

Upper and Optional Media Trays

1 Slide the media tray open.



2 Push the media pressure plate down to lock it in position.



3 Adjust the media guides to fit the size paper you're loading.

Squeeze the retainers, move the guides to the appropriate location (media sizes are listed on the tray), and release the retainers. The media should fit easily between the guides.



Often, an arrow on the media package label indicates the printing-side of the media.

Do not overfill the tray.

A fill limit mark is provided on the inside of the tray. The media tray holds 500 sheets of 20 lb bond (75 g/m²) paper.

Make sure that the paper fits easily between the guides and the paper corners are under the left and right media-separating tabs and are not bent.







Attention

Always readjust the media guides after inserting the media. Improperly adjusted guides may cause poor print quality, media jams, or printer damage. 5 Slide the tray back into the printer.

If you have removed the tray from the printer, slightly tilt up the tray to insert it into the installation rails to slide it back in.



Multipurpose Tray 🖷

Page sizes other than letter, A4, and legal can be printed only from the multipurpose tray (also known as tray 1). Use the **MP** (Multipurpose) **Size** key on the control panel to set the page size.

Other special types of media (such as thick stock, transparencies, and envelopes) are also fed from the multipurpose tray. See "Media Specifications" in the *Maintenance Guide* for more information about media.

1 Open the multipurpose tray on the right side of the printer.



2 Open the media support.



Attention

Load only one type/size of media per tray at a time.

3 Load the media face down, short edge toward the printer.



Often, an arrow on the paper package label indicates the face-up (printing) side of the paper.

A fill limit mark is provided on the inside of the media guides on the multipurpose tray. The multipurpose tray holds 150 sheets of 20 lb bond (75 g/m²) paper.



4 Adjust the media guides to fit the size media you're loading.



Attention

Always adjust the media guides after inserting the media. A guide that is not properly adjusted can cause poor print quality, media jams, or printer damage.

5 Specify the media size in the multipurpose tray by using the MP Size key on the control panel.

Printing Envelopes from the Multipurpose Tray

- 1 Flex the envelope stack (including the edges) to remove any stiffness.
- 2 Place the envelopes on a flat surface, and flatten them by pressing down the corners.
- **3** Correct any bent corners, and then tap the envelopes on a flat surface to align them.
- 4 Place the envelope stack into the multipurpose tray with the flap-side up.

Check your application documentation to determine if the flap should be placed on the left or on the right. Print a single envelope to check the orientation before printing multiple copies.





Make sure the guides are snug enough to keep the envelopes straight, but not so tight that they buckle the envelopes.



Open the flap of each envelope immediately (before it cools) after the envelope is delivered to the output tray.

Because the envelopes pass through heated rollers, the gummed area on the flaps may seal. Using envelopes with emulsion-based glue avoids this problem.

Printing Area

The printing area on all media sizes is up to about 0.157 inch (4 mm) from the edges of the media.



Media Storage

When storing media, avoid:

- Direct sunlight
- Excess heat and humidity
- Dust

If media has been removed from its wrapper, place it in its original packaging and store in a cool, dark place on a level surface.

Maintaining the Printer



Maintaining the Printer

Handle the printer with care to preserve its life. Abuse may cause damage and void your warranty. If dust and paper scraps remain on the inside or outside of the printer, printer performance and print quality will suffer, so the printer should be cleaned periodically. Keep the following guidelines in mind:

When cleaning the printer, always turn it off (O) and unplug it. Disconnect all interface cables before cleaning inside the printer.

If you have an optional 5-bin mailbox installed, turn the printer off first, then turn off the mailbox.

• Either clean the printer before use, or allow time after unplugging it to allow the fuser unit to cool down.

Attention

The fuser unit is hot. When the top cover is opened, the fuser unit temperature drops gradually (one hour wait time).

- Be careful when cleaning the inside or removing paper jams, as the fuser unit and other internal parts may become very hot.
- Do not place anything on the top of the printer.
- Use a soft cloth to clean the printer.

WARNING!

Do not spill water or detergent into the printer; otherwise the printer will be damaged and an electric shock may occur.

- Never spray cleaning solution directly on the printer's surface; the spray could penetrate through the air vents of the printer and damage the internal circuits. Avoid using abrasive or corrosive solutions or solutions that contain solvents, (such as alcohol and benzene) to clean the printer.
- Always test any cleaning solution (such as mild detergent) on a small area of your printer to check the solution's performance.

- Never use sharp or rough implements, such as wire or plastic cleaning pads.
- Always close the printer covers gently. Never expose the printer to vibrations.
- Do not put a cover on the printer immediately after using it. Turn it off and wait until it cools down.
- Do not leave the printer's covers open for any length of time, especially in well-lit places; light may damage the OPC drum cartridge.
- Do not open the printer during printing.
- Do not tap paper stacks on the printer.
- Do not tilt, lubricate, or disassemble the printer.
- Do not touch the electrical contacts, gears, or laser beam devices. Doing so may damage the printer and cause the print quality to deteriorate.
- Keep media in the output tray at minimum level. If the media stacks too high, your printer may experience media jams and excessive media curl.
- Lift the printer from the bottom only, using the carrying grips and the carrying bars. Make sure two people are available to lift the printer when moving it.

When moving the printer, keep the printer level to avoid toner spillage.

■ If you get toner on your skin, wash it off with cool water and neutral detergent.

WARNING!

If you get toner in your eyes, wash it out immediately with cool water and consult a doctor. Material Safety Data Sheets (MSDS) information can be found at www.minolta-qms.com (click on the Answer Base).

- Read all caution and warning labels carefully, making sure to follow any instructions contained in them. These labels are located on the inside of the printer's covers and the interior of the printer body.
- Make sure any parts removed during cleaning are replaced before you plug in the printer.

See Chapter 7, "Repacking the Printer," for printer storing and shipping instructions.

Cleaning

You should perform a thorough cleaning every 30,000 single-sided pages or 12 months, whichever comes earlier.

Always test any cleaning solution (such as a mild detergent) on a small area of your printer to check the solution's performance.

Use	Avoid
A soft dry cloth to clean the control panel	Sharp or rough implements (such as wire or plastic cleaning pads) Any liquid
A soft damp cloth to clean the printer	Sharp or rough implements (such as wire or plastic cleaning pads)
Mild detergent to clean the printer	Abrasive or corrosive solutions that contain solvents (such as alcohol or benzine)

This item needs cleaning	After	Ву
Duplex unit paper guides or rollers	Every 30,000 single-sided pages, or 12 months, whichever comes earlier.	User See the <i>Maintenance</i>
Laser lens cover	Removing the waste toner pack to clean around it or to replace it.	Guide.
OPC drum cartridge	Every 30,000 single-sided pages, or 12 months, whichever comes earlier.	
Paper exit rollers	Every 30,000 single-sided pages, or 12 months, whichever comes earlier.	
Printer exterior	As needed.	
Printer interior	Every 30,000 single-sided pages, or 12 months, whichever comes earlier.	
Registration roller	Every 30,000 single-sided pages, or 12 months, whichever comes earlier.	
Transfer roller	Every 30,000 single-sided pages, or 12 months, whichever comes earlier.	

Troubleshooting



Introduction

This chapter provides information to aid you in resolving printer problems you may encounter, or at least guide you to the proper sources for help.

Printing a Status Page

Press Key	(Until) Display Reads
Online	IDLE (and online LED is off)
Menu	OPERATOR CONTROL
Next (🕨)	ADMINISTRATION
Select	ADMINISTRATION-SPECIAL PAGES
Select	PRINT STATUS
Select	YES
Online	IDLE (and online LED is on)

Print a status page to verify the printer is printing correctly.

Preventing Media Jams

Make sure that	Avoid
Media matches the printer specifications	Media that is folded, wrinkled, or excessively curled
Media is flat, especially on the leading edge	Double feeding (<i>remove the media and fan the sheets—they may be sticking together</i>)
The printer is on a hard, flat, level surface	Fanning transparencies since this causes static
You have the correct media type selected if you're printing on envelopes, labels, thick stock, or transparencies.	Loading more than one type/size/weight of media in a tray at the same time
You store media in a dry location away from moisture and humidity	Overfilling the media input trays

Make sure that	Avoid
You always adjust the media width regula- tion guides in the multipurpose tray <i>after</i> inserting the media (<i>a guide that is not</i> <i>properly adjusted can cause poor print</i> <i>quality, paper jams, or printer damage</i>)	Allowing the output tray to overfill (<i>the face-down output tray has a 500-sheet capacity—jamming may occur if you allow media to accumulate more than 500 sheets at a time</i>)
You remove transparencies from the output tray immediately to avoid static buildup.	
You load the media (for single-sided pages) printing-side up in the upper or optional trays or printing-side down in the multi- purpose tray (many manufacturers place an arrow on the end of the wrapper to indicate the printing side—if you can't determine which side of the media to print on, remove the media from the tray, rotate the stack a half-turn, turn the stack over, and then place it back in the tray)	
The printer is on a hard, flat, level surface	

Automatic Jam Recovery

The magicolor 2200 provides automatic jam recovery (when enabled through the Administration/Engine/Page Recovery menu). After you remove any jammed media, printing automatically resumes from the page the printer stopped at when the jam occurred.



For automatic jam recovery to work, it is necessary to leave the printer turned on when you remove the jammed media.

Understanding the Media Path

Understanding the printer's media path will help you locate media jams.

- ① Media exit unit
- ② Output tray
- ③ Fuser
- Transfer belt
- OPC drum cartridge
- © Duplex unit (standard on DP model)
- Ø Multipurpose tray
- Opper media tray
- Lower feeder unit and optional tray (standard on DP model)
- 5-bin mailbox



Understanding the Media Path

Media Tray (Upper Tray Standard on All Models and Optional Tray Standard on DP Model)

The media tray(s) is (are) located at the bottom front of the printer. The media is picked from the tray, passed under the OPC drum cartridge and the transfer belt, passed through the fuser, and delivered via the paper exit unit to the output tray on top of the printer.

Multipurpose Tray (Standard on All Models)

The multipurpose tray is located at the right of the printer. The media is picked from the multipurpose tray, passed under the OPC drum cartridge and the transfer belt, passed through the fuser, and delivered via the paper exit unit to the output tray on top of the printer.

Duplex Unit (Standard on DP Model)

The media is picked from a media tray, passed under the transfer belt, passed through the fuser, fed into the duplex unit where the media undergoes a change in direction, cycles through the transfer belt and fuser again, and is delivered via the paper exit unit to the output tray, which is the top of the printer.

Since several sheets cycle through the printer/duplex unit at the same time, recovering from a media jam may require the removal of more than one sheet.

To manually duplex, remove the media, flip it over, and reload it.

5-bin Mailbox (Optional on All Models)

The 5-bin mailbox is located on the top of the printer. The media is picked from the tray, passed under the transfer belt, passed through the fuser, and delivered via the paper exit unit to the 5-bin mailbox, which is on top of the printer.

Clearing Media Jams

To avoid damage, always remove jammed media gently, without tearing it. Any pieces of media left in the printer, whether large or small, can obstruct the paper path and cause further jams. Do not reload media that has jammed.

Attention

The image is not fixed on the media before the fusing process. If you touch the printed surface, the toner may stick to your hands, so be careful not to touch the print face when removing the jammed media. Make sure not to spill any toner inside the printer. Unfused toner can dirty your hands, clothes, or anything else it gets on. If you accidentally get toner on your hands, wash them in cool water. If you accidentally get toner on your clothes, lightly dust them off as much as possible. If some toner remains on your clothes, use cool, not hot water, to rinse the toner off, provided your clothing is washable. If toner gets on your skin, wash it off with water or a neutral detergent.

WARNING!

If you get toner in your eyes, wash it out immediately with cool water and consult a doctor. Material Safety Data Sheets (MSDS) information can be found at www.minolta-qms.com (click on the Answer Base).

If, after clearing the media jam, the jam message in the control panel window persists, open and close the printer's covers. This should clear the jam message.

Handling Media Jams by Location

Location of Jam	Page Reference
Tray 1—multipurpose tray	page 60
Tray 2—upper tray Tray 5—optional tray (lower feeder unit)	page 59
Near OPC drum	page 61
Near duplex unit	page 64
In mailbox	page 67

Clearing Misfeed (Upper or Optional Tray) Jams

1 Remove the media tray(s).

2 Carefully remove the jammed media.

- **3** Shuffle the media currently in the tray and even up the front edges.
- 4 Reinsert the media printing face up.

Make sure the media is lying flat, is under the media separating tabs, and doesn't exceed the media limit mark. Check to see if the media width guides are correct.

- 5 Slide the tray(s) back into the printer.
- 6 Open the front cover, then close it.

The media jam display is cancelled.





Clearing Misfeed (Multipurpose Tray) Jams

- 1 Remove the media from in the multipurpose tray.
- 2 Carefully remove the jammed media.



- **3** Shuffle the media that was removed in step 1 and even up the front edges.
- 4 Reinsert the media printing face down.

Make sure the media is lying flat and doesn't exceed the media limit mark. Check to see if the media width guides are correct.



5 Open the front cover, then close it.

The media jam display is cancelled.

Clearing Inner Jams, Outer Jams, and Drum Jams

Media Jams inside the Lower Right Door (Vertical Transport Area)

- **1** Open the lower right door(s).
- 2 Carefully remove the jammed media.
- **3** Close the lower right door(s).

The media jam display is cancelled.



Media Jams near the OPC Drum

- 1 If there is any media in the multipurpose tray, remove it and close the multipurpose tray.
- 2 Press the right-side cover release button and carefully open the cover all the way.



3 Remove the jammed media by pulling it slowly from the bottom of the fuser.



Attention

Do not pull jammed media from the top of the printer through the fusing rollers.

This prevents any unfused toner from dirtying the fuser rollers.



4 Close the right-side cover.

The media jam display is cancelled.

- 5 Check the release button to make sure the cover is securely closed.
- 6 If media was removed in step 1, open the multipurpose tray.
- 7 Shuffle the media that was removed in step 1 and even up the front edges.
- 8 Reinsert the media printing face down.

Make sure the media is lying flat and doesn't exceed the media limit mark. Check to see if the media width guides are correct.

Media Jams near the Duplex Unit (Standard on DP Model)

1 Open the top cover.



Attention

Do not pull jammed media from the top of the printer through the fusing rollers.

This prevents any unfused toner from dirtying the fuser rollers.



2 Carefully remove the jammed media in the top cover media reverse area.

- **3** Open the media jam removal cover with your left hand and carefully remove the jammed media in the duplex media feed area with your right hand.
- 4 Close the media jam removal cover with your left hand and close the top cover.
- 5 Check the release button to make sure the door is securely closed.





6 If the multipurpose tray is closed, open it.



- 7 Pressing the duplex unit cover release, carefully open the cover.
- 8 Remove the jammed media.
- 9 Close the duplex unit's cover.
- $10 \ \ {\rm Close \ the \ multipurpose \ tray.}$
- 11 If there still is a jam message, press the right-side cover release button and carefully open the cover all the way.

12 Lift the inner paper guide.





13 Remove the jammed media by pulling it toward you.

If the media came out easily, skip ahead to step 15.

If the media did not come out easily or if you cannot reach the media from this area, keep the duplex unit's lower cover open.

- **14** Open the duplex unit cover.
- **15** Remove the jammed media by pulling it slowly from the bottom of the fuser rollers. *Be careful not to touch the transfer belt while removing jammed media.*
- 16 Close the printer's top cover.
- 17 Close the duplex unit's paper guide, lower cover, and top cover.

Media Jams near the Fuser Unit

1 Open the top cover.



Attention

Do not pull jammed media from the top of the printer through the fusing rollers.

This prevents any unfused toner from dirtying the fuser rollers.



- 2 Carefully remove the jammed media.
- **3** Open the media jam removal cover and carefully remove the media that is jammed there.
- 4 Close the media jam removal cover.



5 Close the top cover.

Check the release button to make sure the top cover is securely closed.

- 6 Open the right-side cover.
- 7 Remove the jammed media by pulling it slowly from the bottom of the fuser.

Be careful not to touch the transfer belt while removing jammed media.







Close the right-side cover.

Check the release button to make sure the duplex unit cover is securely closed.

The media jam display is cancelled.



Media Jams in the Optional 5-bin Mailbox

1 Carefully remove the jammed media from the paper eject area of the mailbox.



2 Open the mailbox door.



3 Lift up the paper jam removal guide in the mailbox with your left hand, and use your right hand to carefully remove the jammed paper.





Clearing Other Jams

Close the mailbox door.

The media jam display is cancelled.

4

Remove jammed media from the output tray by gently pulling it to the left away from the media exit area.

Solving Problems with Media Jams

Frequent jams in any area indicate that area should be checked, repaired, or cleaned. Repeated jams may also happen if you're using the wrong weight print media.

Symptom	Cause	Solution
Several sheets go through the printer together.	The front edges of the media are not even.	Remove the media and even up the front edges, then reload it.
	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
Paper jam message stays on	Front cover needs to be opened and closed again to reset the printer.	Open and close the front cover of the printer again.
	Some media remains jammed in the printer.	Recheck the paper path and make sure you have removed all of the media jams.
5-bin mail- box jams.	- The wrong media is being used.	Make sure that you are using only plain paper (or recycled plain paper).
		Make sure that you are using only letter/A4 paper.
Duplex unit jams.	The wrong media is being used. Media may still be jammed.	Use only supported media. Refer to the "Media Types" on page 35.
		Plain paper and thick stock up to 28 lb bond (105 g/m ²) can be autoduplexed if the optional duplex unit is installed. For heavier weights, manual duplexing is required. To manually duplex, remove the media, flip it over, and reload it.
		Make sure that you have not mixed media types in your multipurpose tray.
		Do not duplex envelopes, glossy stock, labels, transfer media, or transparencies.
		Check for media stuck in the paper guides in the duplex unit's top cover, and the media supply area on the lower left of the printer.
		If you removed jammed media from near the OPC drum, reset the OPC drum's locking levers.

Symptom	Cause	Solution
Media is jamming.	The media is not correctly positioned in the tray.	Remove the jammed media aand reposition the media properly in the tray.
	The number of sheets in the tray exceeds the maximum allowed.	Remove the excess media and reload the correct num- ber of sheets in the tray.
	The width regulation guides are not correctly adjusted to the media size.	Adjust the regulation guides in the tray to match the size of the media.
	The media in upper or optional tray is not under the media separating tabs.	Remove the media and reload it so the front corners are under the media separating tabs.
	Warped or wrinkled media is loaded in the tray.	Remove the media, smooth it out, and reload it. If it still jams, do not use that media.
	Labels, letterhead, envelopes, postcards, thick stock, or transfer material are loaded in the upper or optional tray.	Special media must be loaded in the multipurpose tray only.
	The recommended transpar- ency (OHP) or label paper is facing the wrong way in the multipurpose tray.	Load the transparencies or labels according to the man- ufacturer's instructions.
	Envelopes are facing the wrong way in the multipur- pose tray.	Load the envelopes in the multipurpose tray so the the flaps are facing up.
		If the flaps are on the short edge, set the envelopes in the multipurpose tray so that the flaps are on the printer side.
	Multiple sheets of transpar- ency (OHP) media are collect- ing static electricity in the tray.	Remove the OHP media and load them in the tray one sheet at a time. Do not fan transparencies before loading them.
	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
	Unsupported media (wrong size, thickness, type, etc.) is being used.	Use media that is covered by the printer warranty.
	Media supply roller is dirty.	Clean the media supply roller.

Solving Other Problems

Symptom	Cause	Solution
Data was sent to the printer, but it doesn't print.	An error message is displayed in the message window.	Handle according to the message displayed.
	The transfer belt installa- tion guide is not set cor- rectly in the installation rail.	Remove the transfer belt. Place the front end of the intermediate transfer unit installation guide (2 locations) correctly in the installation rail. Next, lightly push in the unit. Carefully insert the transfer belt about 6 inches (152.4 mm). Let go with your right hand that was holding the top handle of the transfer belt, hold the front handle with both hands, and carefully push in.
Data indica- tor stays on.	Too many typefaces are being downloaded at the same time.	Make sure you have enough printer memory.
Printer resets.	Occasionally, software applications interfere with each other.	Some applications send a printer prep file to the printer at the beginning of each document. When this occurs, other prep files cannot be sent without resetting the printer. Monitor your activities to see if there is a correla- tion between your use of a certain application and the printer resetting. If so, contact the application developer.
	Downloading too many typefaces can overload the printer memory and cause the printer to reset to default.	Additional memory (RAM) or a hard drive, which can be used for font storage, is available and easily installed.
Printing takes too much time.	The printer is set to a slow printing mode (for example, for OHP, thick stock, or some other special kind of media).	It takes more time to print with special media. When using regular paper, make sure that the media type is set properly in the driver.
	The printer is set to power saving mode.	It takes a little time for printing to start in power saving mode. If you do not want to use this mode, disable it.
	The printer memory is insufficient.	Add more memory.

Symptom	Cause	Solution
You are experiencing problems duplexing.	Media or settings are not correct.	Make sure that you are using only plain paper. Do not duplex envelopes, glossy stock, labels, postcards, transfer media, or transparencies. Make sure that you have not mixed media types in your multipurpose tray.
		Make sure that your document has more than one page.
		Go into the printer's control panel and make sure that duplex is an available option.
		In the printer driver, choose Short Edge (flipped as on a clipboard) or Long Edge (flipped as in a loose-leaf note-book). Make sure that you are using correct media.
		Make sure that all of the covers are closed. Open and then close the covers to confirm that they are securely closed.
		If you turned the printer off, make sure that you have turned the printer on again and waited for it to warm up
Transfer belt cannot be removed.	The OPC drum unit is installed.	Remove the OPC drum unit first, then remove the trans- fer belt.
	The transfer belt left release lever is not set in the transfer belt removal position.	Turn the transfer belt left release lever clockwise to the 4 o'clock position, then remove the transfer belt.
You are experiencing problems with the 5-bin mailbox.	The wrong media is being used.	Make sure that you are using only letter/A4 plain paper.
The printer pauses.	The printer pauses for the Auto-Image Density Con- trol (AIDC) cycle.	After 100 1-sided pages of a continuous print run, the magicolor 2200 automatically pauses to do an AIDC cycle. This process is provided to make sure reliable printer operation with optimum output quality.
A blank startup page ejects or blank pages come out during a printing job	The toner cartridge is empty or missing.	Check the toner cartridges. The image does not print if the cartridges are empty.
		If the toner cartridges are not empty and blank pages are ejecting, take each cartridge out, rock it from side to side, and reinstall it in the printer.
	The wrong media is being used.	Check that the media type set in the driver matches the media loaded in the printer.
Symptom	Cause	Solution
--------------------------------------	---	--
Not all pages print.	The printer could have the wrong kind of cable, or your printer may not be configured for the correct cable and port.	Check your cable.
	The Cancel key was pressed.	Make sure no one pressed the Cancel key while your job was printing.
	The media tray is empty.	Check the message window to see if the tray you are using is out of media.
Text appears fuzzy or unclear.	A new toner cartridge has been installed, but the "break-in" period has not been reached.	Print at least 20 pages to achieve maximum printing quality in the new cartridges.

Symptom	Cause	Solution
Printer power is not on.	The power cord is not correctly plugged into the outlet.	Turn the power switch off (O position), then remove the power cord from the outlet and plug it back in.
	The mailbox power cord is not correctly connected.	 Turn the power switch and the mailbox power switch off (O position), then reconnect the mailbox power cord using the procedure below: Connect the mailbox power cord plug end to the mailbox power socket (lower connection). Connect the mailbox power cord socket end to the printer power plug. Connect the printer power cord socket end to the mailbox power plug (upper connection). Plug the printer power cord into the outlet.
	The power switch is not correctly turned on (I position).	Set the power switch to the off (O) position, then set it back to the on (I) position.
		Turn the printer power switch and the mailbox power switch off (O position), then turn on the power again using the procedure below: —Turn the mailbox power switch on. —Turn the printer power switch on.
	Something is wrong with the outlet you are using for the printer.	Plug another electrical appliance into the outlet and see whether it operates properly.
	The printer is connected to an outlet with a voltage or frequency that does not match the printer specifica- tions.	Use a power source with the following specifications: —Power Japan: 100 VAC 50–60 Hz 12 amps North America: 120 VAC 50–60 Hz 8 amps Europe: 220-240 VAC 50–60 Hz 6 amps Latin America: 120 VAC 50–60 Hz 8 amps 220-240 VAC 50–60 Hz 6 amps —Voltage fluctuation Japan: 100 VAC ±10% North America: 120 VAC ±10% Europe: 220-240 VAC ±10% Latin America: 120 VAC ±10% 220-240 VAC ±10% —Frequency fluctuation rate within 50/60 ±3 Hz

Solving Problems with Printing Quality

Symptom	Cause	Solution
Nothing is printed.	The toner cartridge is damaged.	Remove the toner cartridge and check for damage. If necessary, replace it.
	The driver is not set cor- rectly.	Select the proper setting in the driver to switch from trans- parency (OHP) film to plain paper.
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.
	The transfer roller unit is misinstalled.	Reset the transfer roller unit.
	The media is moist from humidity.	Adjust the humidity for paper storage. Remove the moist media and replace it with new, dry media.
	The media set in the driver mismatches the media loaded in the printer.	Load the correct media in the printer.
Image is too light; there is low image density.	Image darkness sensor is dirty.	Open the front cover. Lift up the transfer belt release lever to the 12 o'clock position. Next, return the lever to the 3 o'clock position. Repeat this operation several times. (This cleans the surface of the image darkness sensor.)
ABCDE	The media is moist from humidity.	Remove the moist media and replace with new, dry media.
ABCDE ABCDE	There is not much toner left in the cartridge.	Remove the toner cartridge and gently rock it horizontally five or six times to redistribute the toner.
ABCDE		Replace the toner cartridge.
	One or more toner cartridges are defective.	Remove the toner cartridges and check for damage. If necessary, replace it.
	Media type may be set incor- rectly.	Envelopes, glossy stock, labels, transfer media, and thick stock have to be set in the thick stock mode.
	The transfer unit may be misinstalled or defective.	Reinstall the image transfer unit. If necessary, replace it.
	Image darkness (Auto-Image Density Control [AIDC]) sen- sor is dirty.	Open the front cover. Lift up the transfer belt release lever to the 12 o'clock position. Next, return the lever to the 3 o'clock position. Repeat this operation several times. (This cleans the surface of the image darkness sensor.)

Symptom	Cause	Solution
The print contains	Media may be moist.	Remove the moist media and replace it with new, dry media.
whited out	Humidity may be too high.	Adjust the humidity in the paper storage area.
AFCDE	The fuser unit may be defec- tive.	Check the fuser unit for damage. If necessary, replace it.
AI COE	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.
ABCDF	The transfer roller unit is misinstalled.	Reset the transfer roller unit.
Horizontal white lines appear in image.	The toner cartridge is damaged.	Remove the toner cartridge and check for damage. If necessary, replace it.
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.
ABCDE	The transfer unit is mis- installed.	Make sure that the transfer unit was correctly installed.
ABCDE ABCDE	The transfer roller is dam- aged.	Replace the transfer roller.
Printouts seem faded on one side.	The printer is not on a level enough surface.	Level the printer (not exceeding 1.5° slant at any point around the machine).
ABCDEF ABCDEF ABCDEF ABCDEF ABCDEF		

Symptom	Cause	Solution
Irregular print or mot- tled image appears. AECDE ABCDE ABCDE ABCDE	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
There is insufficient	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
fusing or the image comes off when	Media with specifications not covered by the printer war- ranty is being used.	Use media that is covered by the printer warranty.
ABCDE ABCDE ABCDE ABCDE ABCDE	Your media type may be incorrectly set.	Envelopes, glossy stock, labels, transfer media, and thick stock have to be set in the Thick Stock mode.
The print or color density may be	The toner cartridges may be near empty or damaged.	Remove the toner cartridges and gently rock them five or six times to redistribute the toner. Then, reinstall the cartridges.
uneven.		Install new toner cartridges.
ABCDEF ABCDEF ABCDEF ABCDEF ABCDEF	The OPC drum may bave misinstalled or defective.	Reinstall the OPC drum cartridge. If necessary, replace the entire drum kit.

Symptom	Cause	Solution
Image is blurred; background is lightly	One or more toner cartridges may be defective.	Check the toner cartridges. If necessary, replace them.
	The OPC drum may be mis- installed or defective.	Reinstall the OPC drum cartridge. If necessary, replace the entire drum kit.
there is insuf- ficient gloss of the printed image.	The fuser oil may be depleted.	Check the fuser oil condition. If necessary, replace it.
ABCDE ABCDE ABCDE ABCDE		
Background is foggy.	The toner cartridge is defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.
Entire sheet is printed in	The toner cartridge is defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
black or color.	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.

Symptom	Cause	Solution
Part of image is missing.	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
	Media with specifications not covered by the printer war- ranty is being used.	Use media that is covered by the printer warranty.
1 10.	The toner cartridge is defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
20 A 19 19 19 19 19 19 19 19 19 19 19 19 19	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.
Image is too dark.	The toner cartridge is defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
ARCDE	The OPC drum cartridge is	Remove the OPC drum cartridge and check for damage. If
	damaged.	necessary, replace the entire drum kit.
ABCDE		
ABCDE		
Dark tones are uneven.	The toner in the toner car- tridges is uneven.	Remove the toner cartridges and gently rock them five or six times to redistribute the toner. Then, reinstall the car- tridges.
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.
There are toner	Toner cartridge misinstalled or defective.	If the toner smudges are on only the front of the page:
smudges or residual images.		Remove the toner cartridges and gently rock them five or six times to redistribute the toner. Then, reinstall the cartridges.
ABCDE		One or more toner cartridges may be defective. Check the toner cartridges. Install new ones, if necessary.
ABCDE	The image transfer roller	If toner smudges are on the front and back of the page:
ABCDE		Open the printer front cover once and close it again to clean the image transfer roller.

Symptom	Cause	Solution
There are dark spots on	The fuser oil roller is dirty or worn.	Remove the fuser oil roller and check the roller surface. If it is very dirty, replace it.
the image.	The transfer belt is defective.	Remove the transfer belt and check for damage. If neces- sary, replace it.
There are toner	The paper transport rollers may be dirty.	Clean the paper transport, pressure, and fuser oil rollers.
smudges on		Check the transport roller. If necessary, replace it.
the back side of the page (whether or not it has been duplexed).	The media path is dirty with toner.	Print several blank sheets and the excess toner should disappear.
	The fuser oil roller is dirty or worn.	Remove the fuser oil roller and check the roller surface for dirt or worn places. If necessary, replace the fuser oil roller.
	The toner cartridge is defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
	The OPC drum cartridge is defective.	Remove the OPC drum cartridge and check for damage. If necessary, replace the entire drum kit.
	The fuser unit is defective.	Replace the fuser unit.
Image defects in same place on every page.	The transfer belt is defective.	Remove the transfer belt. If necessary, replace it.
ABCDE ABCDE ABCDE ABCDE		

Symptom	Cause	Solution
Abnormal areas (white	Width of abnormal area: 1.25" (31.75 mm)	Remove the toner cartridge with the color causing the abnormal image. Replace it with a new toner cartridge.
appear in a regular	The toner cartridge is damaged.	
pattern.	Width of abnormal area: 3" (76.2 mm)	Replace the transfer belt.
ABCDE ABCDE	The transfer belt is damaged.	
ABCDE ABCDE ABCDE	Width of abnormal area: 3.25" (82.55 mm)	Replace the entire drum kit.
L	The OPC drum cartridge is damaged.	
	Width of abnormal area: 8" (203.2 mm)	Replace the transfer belt.
	The transfer belt is damaged.	
Image defects cycli-	Lateral image defects have 1–2 mm spacing.	Clean the laser lens cover.
cal (evenly spaced).	Lateral image defects have 35 mm spacing.	Replace the color toner cartridge.
	Lateral image defects have 75 mm spacing.	Replace the image transfer roller.
ABCDE	Lateral image defects have 95 mm spacing.	Replace the entire OPC drum kit.
ABCDE	Lateral image defects have 204 mm spacing.	Replace the fusing unit.
	Lateral image defects have other spacing.	Replace the entire OPC drum kit.

Symptom	Cause	Solution
Abnormal areas (white or black belt or spots) appear.	The toner cartridge may be defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
	The OPC drum cartridge may be defective or scratched.	Remove the OPC drum cartridge and check the photosen- sitive surface (the green surface) for scratches. If neces- sary, replace the entire drum kit.
ABCDE	The fuser oil roller is dirty or worn.	Remove the fuser oil roller and check the roller surface for dirt or scratches. If necessary, replace the fuser oil roller.
ABCDE	The fuser belt may be dirty.	Clean the fuser belt.
ABCDE	The fusing unit may be defective.	Replace the fusing unit.
Lateral lines or bands appear on image.	The printer is not on a level enough surface.	Level the printer (not exceeding 1.5° slant).
	The media path is dirty with toner.	Print several sheets and the excess toner should disappear.
ABCDE ABCDE ABCDE ABCDE	The toner cartridge is damaged.	Remove the toner cartridge and check for damage. If necessary, replace it.
	The fuser oil roller is dirty or worn.	Remove the fuser oil roller and check the roller surface for dirt or worn places. If necessary, replace the fuser oil roller.
	The toner cartridge is defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
	The OPC drum surface is scratched or damaged.	Remove the OPC drum cartridge and check the green photosensitive surface for scratches. If necessary, replace the entire drum kit.
	The transfer belt is misin- stalled or defective.	Remove the transfer belt and reinstall it. If necessary, replace it.

Symptom	Cause	Solution
Lateral lines appear cycli- cally (evenly spaced) on image.	Lateral lines have 1–2 mm spacing.	Replace the laser lens cover.
	Lateral lines have 35 mm spacing.	Replace the color toner cartridge.
	Lateral lines have 75 mm spacing.	Replace the image transfer roller.
ABCDE	Lateral lines have 95 mm spacing.	Replace the entire OPC drum kit.
ABCDE	Lateral lines have 204 mm spacing.	Replace the fusing unit
	Trailing edge 35 mm, other spacing	Replace the entire OPC drum kit.
Vertical streaking appears.	The laser lens cover may be dirty.	Check to see if the laser lens cover is dirty. If necessary, clean it with a clean soft cloth.
	One or more toner cartridges may be defective.	The item may be defective or misinstalled. Remove the designate item, check it for damage and reinstall it. If nec-
ABCDE	The OPC drum may be defective or misinstalled.	essary, replace the entire drum kit.
ABCDE ABCDE	The fuser unit may be defec- tive or misinstalled.	
	The transfer unit may be defective or misinstalled.	
	If a wide vertical white band	Clean the transfer belt surface. If necessary, replace it.
	appears, check the transfer belt surface.	Make sure that the transfer unit is closed.

Symptom	Cause	Solution
Colors are not register-	The front cover may not be properly closed.	Make sure that the printer's front cover is closed.
ing properly; colors are	The OPC drum cartridge is not correctly seated.	Remove the OPC drum cartridge and reinstall it.
have page-to-page	The toner in the cartridges may need to be redistributed.	Remove the toner cartridges and gently rock them five or six times to redistribute the toner. Then, reinstall the car- tridges.
ABCDE	The toner cartridge may be defective.	Remove the toner cartridge and check for damage. If necessary, replace it.
ABCDE ABCDE	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
ABCDE	The transfer roller is misinstalled.	Confirm the proper installation of the transfer roller.
	Agfa Screening is not enabled.	Make sure you have Agfa Screening chosen in the Administration/Emulations/PostScript/Halftone Type menu in the driver.
The image is offset.	The OPC drum cartridge is defective.	Check the OPC drum cartridge. If necessary, replace the entire drum kit.
ABCDE ABCDE ABCDE ABCDE	The fuser oil roller is defective.	Check the fuser oil roller. If necessary, replace it.
	The fuser unit is defective.	Check the fuser unit. If necessary, replace it.
Colors look drastically wrong.	The toner cartridges are incorrectly installed.	Remove the toner cartridges and reinstall them.

Symptom	Cause	Solution
The color has a poor repro-	The paper image transfer is defective.	Check the OPC drum cartridge. If necessary, replace the entire drum kit.
duction or has poor color density. ABCDE ABCDE ABCDE ABCDE	The Auto-Image Density Control (AIDC) detection sensor is dirty.	Open the front cover. Lift up the transfer belt release lever to the 12 o'clock position. Next, return the lever to the 3 o'clock position. Repeat this operation several times. (This cleans the surface of the AIDC detection [image darkness] sensor.)

Status, Error, and Service Messages

Status, error, and service messages are displayed in the control panel message window. They provide information about your printer and help you locate many problems. When the condition associated with a displayed message has changed, the message is cleared from the window.

Status and Error Messages

Status messages are not displayed while the printer is off line.

This message	means	Do this
<x> ACTIVE JOBS</x>	The printer is on line and actively processing jobs. (< <i>x</i> > identifies the number of jobs in process.)	No action needed.
<x> COVER OPEN</x>	The < <i>x</i> > (specified cover) is open and must be closed.	Close the cover.
<x> LIFE LOW</x>	The < <i>x</i> > (specified item) is near end of life, such as the fuser oil roller. If you have a new fuser oil roller on hand, you may want to install it now. If you don't, order one now. A limited number of copies (about 100) will still print. However, when the oil runs out, the printer stops and the FUSER OIL EMPTY message appears.	Replace the specified item.
<x> MISSING</x>	The < <i>X</i> > (specified item) is missing, such as the OPC drum or toner.	Install a new item.
<pre><x> TONER EMPTY</x></pre>	The < <i>X</i> > (color) toner cartridge is empty.	Replace the toner car- tridge.
<x> TONER LOW</x>	The < <i>X</i> > (color) toner cartridge is low. There is still enough for approximately 100 letter/A4 pages (at 5% coverage) before the printer stops.	Redistribute the toner in the cartridge, or replace the cartridge.
ACC ALREADY DISABLED	The accounting option selected	No action needed.
ACC ALREADY ENABLED	is now in effect.	
ACC DISABLED		
ACC ENABLED		

This message	means	Do this
ACC FILE 95% FULL ACC FILE 90% FULL ACC FILE 85% FULL ACC FILE 80% FULL	The Job Accounting File is 80, 85, 90, or 95% full.	If you want accounting enabled, copy the job accounting and paper accounting files to floppy disk(s), or transfer them to your host computer using ftp (if available). Then reset the account- ing files so that new jobs can be accepted. If you don't want to use accounting, you can dis- able it.
ACC FILES GOT REMOVED	The accounting option is dis- abled and the accounting files are empty. After a reset, the files are removed. This prevents you from wasting disk space with empty accounting files.	No action needed.
ACC FILES NOT EMPTY SHRUNK TO %D	An attempt to reduce the size of the accounting files has been made unsuccessfully because the size of files is bigger than the space required.	Reset the accounting files.
ACC_GETSTATUSREC;CODE-%D, RESETTING ACC TO INITIAL STATE	The accounting files have been reset.	No action needed.
ADJUST <input/> BIN	The< <i>INPUT</i> > (specified tray) is not inserted correctly.	Adjust the tray.
CALIBRATING PRINT QUALITY	After 100 1-sided pages of a continuous print run, the magi- color 2200 automatically pauses to do an Auto-Image Density Control (AIDC) cycle. This pro- cess is provided to make sure reliable printer operation with optimum output quality.	Wait. No action needed.

This message	means	Do this	
CANCEL ALL JOBS	The Cancel key has been pressed, and one or more of the print jobs in the print queue are being canceled.	Press Select for all jobs with a printing, interpret- ing, spooled, or termi- nating status to be completely removed from the system.	
CANCEL JOB	The Cancel key has been pressed, and the print job in the print queue is being canceled.	Press Select and the job in the print queue will be canceled.	
CHECK WASTE TONER	Either the waste toner is full and needs to be replaced, or it is incorrectly installed.	Make sure that the waste toner is not full and is correctly installed.	
CREATED FILE	The accounting file has been created.	No action needed.	
CREATING XXXXXXXXXXX FILE, WAIT	The specified accounting file is created when accounting is enabled and the files are not in existence or these files are cre- ated following a Reset Account- ing (<i>XXXXXXXXXX</i> represents the Job Accounting or Paper Accounting file).	Wait. No other action needed.	
DSK TOO SMALL ACC NOT ENABLED	There is not enough space in the hard disk to create the accounting file.	Remove unnecessary files stored in the hard disk.	
END JOB	The Cancel key has been pressed and the End Job option selected.	Press Select to provide an end-of-job indicator for a print job that does not have one.	

This message	means	Do this
ENERGY SAVER	The printer is in energy saver mode to reduce power con- sumption during periods of inac- tivity. When a print job is received, the printer returns to normal power within 90 sec- onds. While in "deep sleep," the printer's message window will not display operator status such as door- and tray-open mes- sages. The printer remains in "deep sleep," until a print job is received, or until the printer is manually switched from offline to online.	No action needed.
EXTENDED ACC FILE SIZE BY <x> KB</x>	The < <i>x</i> > (size of the non-empty accounting file) has been increased successfully.	No action needed.
FUSER OIL EMPTY	The fuser oil roller for the fuser is depleted. The printer will not print any more copies until a new fuser oil roller is installed.	Install a new fuser oil roller.
IDLE	The printer is on line, but no jobs are in process.	No action needed.
INITIALIZING	The printer is warming up and getting ready to go on line.	Wait. No other action needed.
INPUT BIN JAM	Input bin jams occur in the input bin.	Locate and remove the jam.
INPUT IDLE PRINTING	The printer is on line and print- ing jobs already in the queue. No new jobs are arriving at the communication interfaces.	No action needed.
MAILBIN POWER OFF	The mailbox unit power is off.	Turn off the printer, turn on the mailbox unit, then the turn on the printer.

This message	means	Do this
MAIN UNIT COVER OPEN	The front, top, or duplex covers are open and must be closed.	Close the specified cover(s).
MEDIA JAM DUPLEX	Media has jammed in the duplex area or duplex refeed area on the models with duplex units installed.	Locate and remove the jam.
MEDIA JAM EXIT	Media has jammed between the print engine and the output tray.	
	A media jam has been detected between the fuser and output tray rollers located near the top cover.	
	Exit jams occur in the media eject area.	
MEDIA JAM FUSER	Media has jammed leaving the fuser area.	
MEDIA JAM MAIL BIN	Mail bin jams occur if the media is jammed in the 5-bin mailbox on the models with the 5-bin mailbox installed, between the printer and the 5-bin mailbox, in the mailbox eject area, or in the mailbox transport area.	
MEDIA JAM MPT	Media has jammed while being pulled from the specified multi- purpose tray.	

This message	means	Do this
MEDIA JAM OPTIONAL TRAY	Tray jams occur between the standard upper or optional tray and the print engine. A misfeed jam may be as simple as a sheet of media not being picked, or it may be that the media was picked but not fed properly.	Locate and remove the jam.
	The lower feeder unit (optional on all models except the DP) door is open.	Close the door.
MEDIA JAM TRANSFER	Transfer jams occur in the trans- fer roller area. This type of jam means that the media did not make it to the paper exit area.	Locate and remove the jam.
MEDIA JAM UPPER TRAY	Media has jammed while being pulled from the specified tray.	
MEDIA SIZE MISMATCH	The media detected in the tray doesn't match the media size setting.	Change the media in the tray or change the media size setting.
NEW FILE SIZE IN EFFECT	The size of the accounting files has been increased or decreased.	Press Select to accept changes.
NO PRNTREQ ERROR	A printer hardware error has occurred.	Reboot printer. If mes- sage continues to appear, contact your service provider or Sup- port. See the <i>Service &</i> <i>Suuport Guide</i> for sup- port telephone numbers.
ONLINE	The printer is online and ready to print.	No action needed.
OUTPUT BIN FULL	The media has exceeded the limit in the specified output bin.	Remove the media from the specified output bin.

This message	means	Do this
PAPER MISMATCH	The media detected in the tray doesn't match the media size setting.	Change the media in the tray or change the media size setting.
PRINTING STATUS	A status page is printing	Wait until after the status page prints, and the message clears.
PUT <x> IN INPUT <y></y></x>	The < <i>x</i> > specified media is not in the input tray < <i>y</i> >.	Refill the tray with the specified type media.
PUT < <i>SIZE></i> PAPER IN < <i>BIN></i>	The Operator Control/Chain Inputbins is set to Off and the displayed tray is empty. Refill it with the specified size media. < <i>SIZE</i> > is the media size detected by the engine, and < <i>BIN</i> > is the empty tray.	Refill the tray with the specified size media.
PUT <i><type media=""></type></i> IN INPUT BIN	Operator Control/Chain Input- bins is set to On and a chained tray is empty.	Refill the tray with the specified type media.
REPLACE <x></x>	The specified item < <i>X</i> > needs to be replaced, such as the OPC drum.	Replace the specified item.
RESETTING ACCOUNTING	The reset accounting operation is in process.	No action needed.
WAITING FOR IDLE	An active job is in process. Access to the menu is not allowed until the job is finished.	Wait until the print job is finished and the printer goes idle.

This message	means	Do this	
WAITING ON INPUT END JOB?	The compiler is waiting on incoming data for the first job in the queue. The job may not have an end-of-job indicator and therefore cannot end. The mes- sage clears if more input arrives from the port or if you press the Cancel key. No other jobs can be printed until this job has ended.	Wait until the job is fin- ished and the printer goes idle to access the configuration menu.	
WARMING UP	The printer is warming up.	Wait. No other action needed.	
WASTE TONER NEAR FULL	The waste toner pack is nearly filled with toner.	Replace the waste toner pack.	

Service Messages

This service message	Means
SERVICE CALL 04 MAIN UNIT	An error has been detected with the
SERVICE CALL 05 FLASH ROM	sage. Correction of these errors is
SERVICE CALL 08 MAIN MOTOR	performed by a MINOLTA-QMS- authorized service provider only. Con-
SERVICE CALL 09 FUSING MOTOR	tact your local vendor.
SERVICE CALL OB XFER FAN BELT	A service message sometimes
SERVICE CALL OC PWR SUPPLY FAN	occurs as a result of an unusual com- bination of events, not because of an
SERVICE CALL OD ENGINE FAN	actual problem. When the printer stops and a service message dis-
SERVICE CALL OE SUCTION FAN	plays in the message window, turn
SERVICE CALL OF FUSING UNIT FAN	often clears the service message
SERVICE CALL 10 POLYGON MOTOR	indicator, and printer operation resumes. Always try this before
SERVICE CALL 12 LASER ERROR	making a service call.
SERVICE CALL 14 XFER ROLLER	Service calls should be placed to the
SERVICE CALL 15 XFER BELT CLN	printer. If you cannot get service from
SERVICE CALL 16 XFER BELT ROT	your vendor, see the <i>Service & Support Guide</i> for additional contact
SERVICE CALL 17 TONER RACK	information.
SERVICE CALL 18 FUS UPP WARMUP	
SERVICE CALL 19 FUS UPP LOWTMP	
SERVICE CALL 1A FUS UPP HIGHTMP	
SERVICE CALL 1B FUS UPP THERM	
SERVICE CALL 1C FUS LOW WARMUP	
SERVICE CALL 1D FUS LOW LOWTMP	
SERVICE CALL 1E FUS LOW HIGTMP	

This service message	Means
SERVICE CALL 1F FUS LOW THERM	An error has been detected with the
SERVICE CALL 20 FUS RETRACT	sage. Correction of these errors is
SERVICE CALL 21 TRANS DET SENS	performed by a MINOLTA-QMS- authorized service provider only. Con-
SERVICE CALL 22 MAN TRAY LIFT	tact your local vendor.
SERVICE CALL 29 MEM MALF COUNTER	A service message sometimes
SERVICE CALL 2A MEM MALF DATA	occurs as a result of an unusual com- bination of events, not because of an
SERVICE CALL 2B MEM MALF ACCESS	actual problem. When the printer
SERVICE CALL 2C MEM MALF INSTALL	plays in the message window, turn
SERVICE CALL 30 5BIN MAIL	often clears the service message
SERVICE CALL 31 5BIN INST MAIL	indicator, and printer operation resumes. Always try this before making a service call.
	Service calls should be placed to the vendor from whom you purchased the printer. If you cannot get service from your vendor, see the <i>Service & Support Guide</i> for additional contact information.

HP-GL Error Codes and PCL Error Codes

The following tables list error codes that could appear on the printer message window when running the HP-GL, PCL or HPXL emulation.

HP-GL		PCL	
Error Code	Description	Error Code	Description
0	Not enough memory for job.	0	Not enough memory for job.
1	Too many transformations.	1	State lost.
2	Math error.	2	Math error.
3	Job aborted.	3	Job aborted.
4	Instruction not recognized.	4	Out of memory for macros.
5	Wrong number of parameters.	5	Disk full. Cannot store fonts.
6	Out of range parameter, or illegal character.	6–13	Internal error 1–8.
7	Not used.		-
8	Unknown character set.		
9	Position overflow.		
10	Buffer overflow.		

HPXL

11

Error Code	Description
0	Not enough memory for job.
1	Math error.
2–7	Internal error 1–6

Not used.

PostScript Errors

If your printer is having trouble printing when using PostScript emulation, you should turn on the Error Handler in the control panel menu. Error Handler is a diagnostic tool that identifies PostScript errors encountered during a print job.

Menu	Administration/Startup Options/Do Error Handler
Choices	Yes—Load the Error Handler on reboot. No—Don't load the Error Handler on reboot.
Default	No
Notes	Refer to the <i>PostScript Language Reference Manual</i> (Adobe Systems Incorporated, Reading, PA: Addison-Wesley, 1990, ISBN 0-201-18127-4) for information on PostScript errors. You must reboot the printer after turning on the error handler.

Additional Assistance

If you've followed all of the instructions in this guide and still have problems you can't solve, refer to the *Service & Support Guide* or visit our web site at www.minolta-qms.com for current information on getting help.

Installing Other Accessories



Introduction

The optional lower feeder unit and duplex unit were discussed in the *Installation Guide*. This chapter provides information about the following accessories. Contact your local vendor for purchase information.

5-bin Mailbox	Three models: For 100-, 120-, or 220-volt printers
BuzzBox	Via parallel connection for 100, 120, and 220 volts
Dual In-Line Memory Modules (DIMMs)	Additional memory must be 32, 64, or 128 MB, PC-100 Compliant SDRAM DIMMs, up to a printer maximum of 384 MB.
Emulations, Fonts, and Other Software	 ImageServer LNO3 CGM Kanji Font Internal IDE Hard Disk QFORM PlanetPress (forms-creation utility) Fonts
Interfaces and Daughterboards	 Crown for DECnet-TCP/IP (equipped with 10BaseT) CrownNet for Ethernet 10BaseT/100BaseTX (equipped with RJ45 connector) CrownNet for Token-Ring (equipped with STP and UTP connectors) LocalTalk Interface SCSI Interface
Internal IDE Hard Disk Drive	Standard with models EN and DP
Media Tray, 500 Sheet	Purchasing extra trays may be convenient when changing media for- mats and/or media qualities vary.
Printer Stand and/ or Cabinet	Tabletop or floor model printer stand and/or cabinet
SC-210 Convenience Copier	SC-210 Color Convenience Copier
Time-of-Day Clock	Standard with models EN and DP

Installing an Optional 5-bin Mailbox

Read this section if you purchased a 5-bin mailbox for your magicolor 2200.

Kit Contents

- Mailbox unit
- 5 bins
- 2 thumbscrews
- Accessory screen cover
- Power cord

Installation

- 1 Remove the mailbox unit from its shipping box.
- 2 Remove any tape and packing material.





- **3** Open the mailbox unit cover and remove any packing material from the rear of the mailbox unit.
- 4 Close the mailbox unit cover.

5 Remove any packing material from the front of the mailbox unit.





6 Remove the two screen covers from the top of the printer.

Pry the covers off with your fingers. Retain these covers in case you ever want to remove the 5-bin mailbox.

7 Locate the two holes, the pin, and the positioning guide for the mailbox.



8 Slowly lower the mailbox unit so that the two pins at the bottom fit into the two holes in the printer and the pin on the printer fits into the hole at the bottom of the mailbox.

The mailbox bins will face the left side of the printer.

9 Push the mailbox toward the right-hand side of the printer until it stops.





- 10 Secure the mailbox tightly with the two thumbscrews supplied in the kit.
- **11** Place the slot on the right side of the accessory screen cover from the kit onto the tab on the mailbox then press on the left side of the accessory screen cover so the tab on that side fits into the slot on the mailbox.
- 12 Remove the five plastic bins from their packaging.

- **13** Hold a bin and insert the right side into the bottom level of the mailbox unit, then insert the left side.
- **14** Install the other four bins.









- **15** Plug the mailbox power cord from the kit into the mailbox unit (lower connection).
- 16 Plug the other end of the power cord into the printer.

17 Make sure the printer is turned off.

18 Make sure the 5-bin mailbox is turned off.

Always turn off the printer *before* turning off the mailbox.



Attention









19 Plug the printer power cord into the mailbox unit (upper connection) and into the dedicated, grounded, surge-protected electrical outlet.



- 20 Turn the mailbox unit on.
- 21 Turn the printer on.



BuzzBox

BuzzBox is a printer accessory that warns you with a buzzer and/or a blinking light any time the printer goes off line. This means you're alerted to print job interruptions, such as empty media trays or other consumable issues.

What's in the Kit?

The BuzzBox kit contains the following items:

- BuzzBox
- Interface box
- RJ-11 cable
- Power adapter
- Adhesive-backed clips

Installing BuzzBox

- 1 If you have a cable attached to the printer's parallel port, unplug it from the printer.
- 2 Attach one end of the parallel cable on the interface box to the printer's parallel port.
- The BuzzBox's ribbon cable is designed to be directly attached to the printer's parallel port, not to an adapter or an additional cable.



3 Use the included RJ-11 cable to connect BuzzBox to the interface box.

- 4 Choose a good location on the printer to mount the interface box. Make sure that the unit does not
 - interfere with paper exiting the printer.
 - cover any vents, doors, connectors, or labels.
 - cause the BuzzBox ribbon cable to stretch or twist.
- 5 Use the adhesive-backed clips provided to mount the BuzzBox where the printer operator can see and/or hear it.

A 14-foot (4.2 m) cable is provided, but you can use up to a 500-foot cable (RJ-11 4-pin or 6-pin).

6 Connect the interface box to an electrical outlet.

A 110/220-volt adaptor is provided in the US, and a universal power supply is provided outside the US.

- 7 If you unplugged a parallel cable from the printer in step 1, attach the cable to the parallel port on the interface box.
- 8 To test the BuzzBox, make sure its switches are on, then press the printer's Online key to take the printer off line.
- You can use the BuzzBox switches to enable or disable the buzzer, the light, or both

When the printer goes off line, the light flashes and the buzzer sounds until the printer is placed back on line or until the light and buzzer switches are turned off.

Using BuzzBox

- When the BuzzBox lights or buzzes, check the printer message window to find out what has interrupted printing. See "Status, Error, and Service Messages" on page 85 for a list of printer messages and how to respond to them.
- Remember that pressing the Online key to enter the printer configuration menu triggers the BuzzBox alarm.
Antistatic Protection

Attention

It's very important to protect the printer controller board and any associated daughterboard or module from electrostatic damage while performing any task involving the controller board.

If an antistatic wrist strap is provided in your printer option kit, attach one end of it to your wrist and the other end to any convenient electrical ground (for example, the bare metal chassis of equipment, as on the back of a computer, that is plugged in but turned off). Never attach the wrist strap to any piece of equipment with an electrical current present. Turn off all power switches first. Plastic, rubber, wood, painted metal surfaces, and telephones are not acceptable grounding points. The printer isn't an acceptable grounding point either because it must be unplugged before you perform this task. If you don't have an antistatic wrist strap, discharge your body's static electric charge by touching a grounded surface before you handle any printer boards or components and before removing the controller board. Also avoid walking around after grounding yourself.

Dual In-Line Memory Modules

Dual in-line memory modules (or DIMMs) are compact circuit boards with surface-mount memory chips. Your magicolor 2200 printer comes with the following printer memory:

- Model N—64 MB SDRAM
- Models GN and EN—128 MB SDRAM
- Model DP—256 MB SDRAM

However, you can upgrade these models to a maximum of 384 MB of RAM through the installation of additional DIMMs. Additional memory must be 32, 64, or 128 MB, PC-100 Compliant SDRAM DIMMs.

Additional memory allows you to download more fonts and increase the printer's buffer (area where data sent from the computer is stored while waiting to be printed).



You may also need additional memory to print on some media sizes at resolutions above 600x600 dpi.

How Much Memory Do You Need?

The amount of RAM installed in your printer governs which resolutions can be used with each media size.

If a certain resolution is chosen and the minimum amount of memory is not installed in the printer, the file is printed using the next lower resolution that can handle the job. For example, if you attempt to print a 4-color image at 1200x1200 dpi resolution on legal media, but the printer has only 64 MB of RAM instead of the required 128 MB minimum, the file prints at 600x600 dpi.

The magicolor 2200 will print all print jobs at the highest resolution that the installed memory will support.

Media Size	600x600				1200x1200			
	Mono	Mono Duplex	4-Color	4-Color Duplex	Mono	Mono Duplex	4-Color	4-Color Duplex
Letter, A4								
Basic*	64 MB	64 MB	64 MB	64 MB	64 MB	64 MB	96 MB	160 MB
Maximum Performance*	64 MB	64 MB	64 MB	96 MB	64 MB	96 MB	160 MB	224 MB
Legal								
Basic*	64 MB	64 MB	64 MB	96 MB	64 MB	96 MB	128 MB	192 MB
Maximum Performance*	64 MB	64 MB	96 MB	96 MB	96 MB	96 MB	192 MB	288 MB

Minimum System Memory Requirements

* "Basic" memory requirement is the minimum memory required to print at the indicated resolution. "Maximum Performance" memory requirement is the minimum memory required to achieve the maximum performance possible for any given job. The page rate, with maximum listed memory, will be determined solely by the complexity of the job.

You may also need additional memory (DIMMs) for the following:

- To print complex graphics or complex PostScript documents
- For increased collation performance
- For increased spooling performance

The magicolor 2200 has 3 DIMM slots available. The maximum memory that can be installed is 384 MB (3 x 128 MB DIMMs).

Model	Standard Memory	Supports up to
N	64 MB SDRAM DIMM	4-color 600x600 dpi simplex printing, at speed, on all paper sizes up to and including 8.5" x 14" (215 mm x 356 mm)
GN, EN	128 MB SDRAM DIMM	1200x1200 dpi simplex printing on paper sizes up to and including 8.5" x 14" (215 mm x 356 mm)
DP	256 MB SDRAM DIMM (2 x 128 MB SDRAM)	Full-speed duplexing at 1200x1200 dpi printing with most paper sizes

- Check the startup page to make sure the printer has enough RAM installed.
- If you have enough RAM installed, and you have configured the printer from the control panel to print at 600x600 or 1200x1200 dpi resolution (Administration/Engine/ Def Resolution menu) but the printer continues printing at a lower resolution, you may need additional memory allocated to the frame buffer. (See the *CrownBook* for instructions.)

To allocate the default amount of memory to the memory clients, use the Memory/ Quick Config menu to choose the correct resolution and paper size for your printing.

If you experience a problem with your magicolor 2200, first go through the installation procedure in this guide once more. Verify each item thoroughly. You may also refer to the *User's Guide* for troubleshooting tips. If you still experience a problem, contact your local vendor or contact Customer Service at 1 (877) 778-2687 (toll-free US).

Installation

Attention

It's very important to protect the printer controller board and any associated circuit boards from electrostatic damage. Before performing this procedure, review the antistatic caution on page 112. In addition, always handle circuit boards by the edges only.

1 If you are not to the point when you are able to print an advanced status page yet, skip to step 2.

If you have previously installed your printer and have confirmed that it is printing, print an advanced status page in case you need to restore any memory settings after the DIMM installation.

- Installing DIMMs automatically restores memory defaults. If your memory settings are specific to your environment, print an advanced status page before installing DIMMs, so you can recover the current memory settings.
- 2 Ensure that the printer is turned off and the power cord and all interface cables are disconnected.
- **3** Remove the printer's controller board.



Loosen five screws and, using the tab on the lower side of the connector panel, pull the controller board from the printer.

4 Position the controller board on a flat surface so the controller board lies flat and the I/O connector panel is facing you.

- 5 If you need to remove a DIMM before installing one, remove it as follows; otherwise skip to step 6.
- If all the DIMM connectors are filled and you want to install more memory, you have to exchange one or more DIMMs for DIMMs with a greater memory capacity.
 - **a** Using both thumbs, pull the latches (one on each side of the DIMM connector) outward.
 - **b** Lift the DIMM straight out of the DIMM connector.



6 Insert the new DIMM straight down into the DIMM connector until the latches snap into the locked position.

Observe the keyed side of the DIMM to align it with the connector. When seated, the DIMM stands upright, firmly in place. If you cannot snap the DIMM into place, do not force it. Reposition it, making sure that the bottom of the DIMM is seated completely in the connector.

- 7 Repeat steps 5–6 for each additional DIMM that you install.
- 8 Reinstall the controller board into the printer.

Gently slide the controller board into the printer until it is fully seated, and then tighten the five screws.

When you print a startup page, verify that the total size of the RAM installed in your printer is listed.

Emulations, Fonts, and Other Software

Emulations

Optional emulations, such as ImageServer, LN03, and CGM are available as PostScript files. This section describes how to download an emulation to the printer's hard disk.

You must have at least one hard disk, internal or external, attached to the printer in order to use an optional emulation. If more than one hard disk is available, the emulation automatically installs itself on the disk with the most free storage space. MINOLTA-QMS recommends that you have at least 4 MB of memory above the base configuration and that you add at least 1 MB memory to each emulation installed. This ensures that the printer can run the emulation without slowing down performance.

Downloading an Emulation via CrownAdmin

We recommend that you use CrownAdmin to download an emulation. Refer to the CrownAdmin online help for instructions.

Downloading an Emulation via a Parallel Interface

- 1 Turn on the printer, and wait for IDLE to display in the message window.
- 2 Insert the emulation CD-ROM or disk in your PC, and change to that drive (for example, if you're using the D drive, type d: الم).
- **3** Send the emulation to the printer's hard disk. Type

copy *filename* 1pt#↓

where filename is the name of the installation file and where # is 1 to 3.

4 When downloading is complete, reboot the printer.

The emulation should be listed in the Options section of the printer's startup page, in the Administration/Emulation printer's configuration menu, and on the advanced status page.

Downloading an Emulation via an Ethernet Interface

Before you begin this procedure, your printer and PC (or UNIX workstation) must be connected to an Ethernet network running TCP/IP and have valid IP addresses.

- 1 Turn on the printer, and wait for IDLE to display in the message window.
- 2 If your PC is running Windows, change to DOS.
- 3 Insert the emulation CD-ROM or disk in your PC, and change to that drive (for example, if you're using the D drive, type d: ↓).

If you want to download the emulation from a UNIX workstation, copy the installation file from the emulation CD-ROM or disk to a temporary directory on your UNIX workstation, then change to that directory.

4 Open an ftp session at your PC or workstation by typing one of the following commands:

ftp printername↓ (for example, ftp pctdev6↓)

ftp *ipaddress*, (for example, ftp 161.33.130.45,)

5 When prompted for a user name and password, press Enter for both.

An ftp > prompt displays.

6 At the ftp> prompt, change to binary mode by typing

bin↓

7 At the ftp> prompt, send the emulation file to the printer's hard disk by typing

put filename

where filename is the name of the installation file.

The printer's message window reads 1 Active Job to indicate that the emulation is being downloaded to the hard disk. The ftp> prompt returns when the emulation has finished loading.

8 At the ftp> prompt, end the ftp session by typing

quit↓

- 9 When the Disk light stops flashing and the printer's message window reads Idle for at least 30 seconds, turn the printer off and then on again.
- 10 When downloading is complete, reboot the printer.

The emulation should be listed in the Options section of the printer's startup page, in the Administration/Emulation printer's configuration menu, and on the advanced status page.

You may want to erase any installation files left on your computer (and/or workstation), and then remove any temporary directories.

Using an Optional Emulation

Refer to the documentation that came with your emulation for configuration and usage instructions.

ImageServer

MINOLTA-QMS ImageServer technology provides a high-performance, cost-effective way for businesses using document imaging to print their stored image files.

CCITT Emulation

A CCITT emulation (Group 4, monochrome only) is available through the MINOLTA-OMS ImageServer option, which image-enables your printer, allowing it to print many images at or near the rated engine speed and eliminating the need for a computer dedicated to rasterizing images. For complete information, refer to the documentation that comes with the ImageServer option.

Fonts

Optional fonts are available as files on floppy disks. This section describes how to download optional fonts from a floppy disk to the printer's hard disk.

EX At least one hard disk (internal or external) must be present on your printer before you can download a font. If more than one hard disk is available, the font automatically installs itself on the disk with the most free storage space.

Downloading Disk Fonts via CrownAdmin

We recommend that you use CrownAdmin to download PostScript fonts. Refer to the CrownAdmin online help for instructions.

Downloading Disk Fonts via a Parallel Interface

- **1** Turn on the printer, and wait for IDLE to display in the message window.
- 2 Insert the font disk or CD-ROM in your PC, and change to that drive (for example, if you're using the A drive, type a: ↓).
- **3** Send the fonts to the printer's hard disk. Type

copy filename↓

where filename is the name of the installation file

4 When the downloading is complete, reboot the printer.

Downloading Fonts via an Ethernet Interface

Before you begin this procedure, your printer and PC (or UNIX workstation) must be connected to an Ethernet network running TCP/IP and have valid IP addresses.

- 1 If your PC is running Windows, change to DOS.
- 2 Insert the fonts disk or CD-ROM in your PC, and change to that drive (for example, if you're using the A drive, type a: ↓).
- 3 If you want to download the fonts from a UNIX workstation, copy the installation file from the fonts disk to a temporary directory on your UNIX workstation.
- 4 Turn on the printer, and wait for IDLE to appear in the message window.
- 5 Open an ftp session at your PC or workstation by typing one of the following commands:

ftp printername (for example, ftp pctdev6)

ftp *ipaddress* (for example, ftp 161.33.130.45)

6 When prompted for a user name and password, press Enter for both.

An ftp > prompt displays.

At the ftp> prompt, change to binary mode by typing

bin⊣



7

At the ftp> prompt, send the fonts file to the printer's hard disk by typing

put filename

where filename is the name of the installation file.

The printer's message window reads 1 Active Job to indicate that the fonts are being downloaded to the hard disk. The ftp> prompt returns when the fonts have finished loading.



At the ftp> prompt, end the ftp session by typing

quit↓

- 10 When the Disk light stops flashing and the printer's message window reads Idle for at least 30 seconds, turn the printer off and then on again.
- 11 When the printer's message window reads Idle again, the fonts are ready to use.

The fonts should be listed in the Fonts section of the printer's Advanced Status page.



You may want to erase any installation files left on your computer (and/or workstation), and then remove any temporary directories.

Kanji Font Internal IDE Hard Disk

The preformatted Kanji font internal IDE hard disk contains Kanji fonts and other files. These fonts can be printed at a variety of point sizes and in different styles and resolutions.

After the Kanji hard disk is installed in your magicolor 2200, the Kanji fonts are available for use just as if they were resident in the printer.

What's in the Kit?

- Internal hard disk preformatted with the following Kanji fonts:
 - FutoGoB101-Bold

- FutoMinA101-Bold
- Jun101-Light
- MidashiGo-MB31
- MidashiMin-MA 31
- IDE hard disk with ribbon cable attached
- IDE hard disk bracket
- 4 screws

Hardware Requirements

■ A Macintosh, IBM PC, or compatible computer

Software Requirements

- An application (such as a word processing or desktop publishing package) that supports the PostScript printing. If you're using a Macintosh, the following Macintosh system software:
 - KanjiTalk, version J1-6.0.7 or later
 - System File, version J1-6.0.7 or later
 - Laser Prep, version J1-6.0.1 or later
 - LaserWriter, version J1-6.0.2 or later
 - Print Monitor, version J1-1.3 or later
 - MultiFinder, version J1-6.1.7 or later
 - Macintosh OS 8.xJ
- If you're using a PC, the following system software:
 - If you're using Windows, version 3.1J or later
 - If you're using DOS, version 5.0J or later

Installing a Kanji Font Internal IDE Hard Disk

Attention

The Kanji fonts are factory installed on a formatted hard disk drive. DO NOT reformat or initialize the Kanji internal hard disk. Reformatting erases all data, fonts, and files on the disk. Your warranty does not cover this error.

The Kanji font internal IDE hard disk is installed on the controller board in the same way any internal hard disk is installed. See "Internal IDE Hard Disk Drive" on page 126 for detailed steps on installing an internal hard disk.



If you already have an internal hard disk installed, you must remove it before you can install the Kanji disk.

Configuring the Printer for Kanji

See "Storage Devices" in the *CrownBook* for information on how to configure your printer's memory when using an internal hard disk.

QFORM

QFORM allows you to use existing lineprinter and forms-printing applications on your magicolor 2200. This printer-resident application gives you the ability to store PostScript forms on the printer's hard disk and fill those forms with your application's ASCII print stream. Features include

- Definition of page formatting and fonts
- Duplexing with binding-margin offsets
- Two-sided forms with text fill-in on front and/or back
- "Gray bar" listing formats
- Automatic page numbering
- ANSI carriage-control recognition

- Single- and multipart forms
- Labels
- Logos and watermarks

QFORM doesn't support color features.

Refer to the documentation that comes in the QFORM kit for installation and usage instructions.

PlanetPress

PlanetPress is an electronic forms package that allows the creation and modification of business forms, MICR checks, bar codes, and other preprinted forms.

Refer to the documentation that comes in the PlanetPress kit for installation and usage instructions.

Interfaces and Daughterboards

Interfaces

Your printer supports the following interface cards:

- CrownNet for Ethernet 10BaseT/100BaseTX (TCP/IP, NetWare, Ethertalk, LAN Manager/LAN Server) for an additional CrownNet for Ethernet connection
- CrownNet for Token-Ring (TCP/IP, NetWare, LAN Manager/LAN Server)
- Crown for DECnet-TCP/IP
- LocalTalk

You can install one of these interface cards in addition to the two standard interfaces parallel and CrownNet for Ethernet (TCP/IP, NetWare, Ethertalk, LAN Manager/LAN Server). The printer's Simultaneous Interface Operation (SIO) allows all of these interfaces to be active at the same time. In other words, your printer can simultaneously communicate through all three ports with three hosts, either computers or networks.

If installing Token-Ring or LocalTalk optional interface cards, see the "Notices" section in the *Installation Guide* for FCC compliance classification information.

What's in the Kit?

An optional interface kit includes the following:

- An interface card
- Interface documentation (in hardcopy and/or on CD-ROM)

The kit may also include additional parts not required for network interface installation on this printer.

Installation

Attention

It's very important to protect the printer controller board and any associated circuit boards from electrostatic damage. Before performing this procedure, review the antistatic caution on page 112. In addition, always handle circuit boards by the edges only.

- 1 Turn off the printer, and then disconnect the power cord and all interface cables from the printer.
- 2 Loosen five screws and, using the tab on the lower side of the panel, pull the controller board from the printer.
- **3** Remove the two screws holding the metal plate over the optional interface opening.

The optional interface opening is labelled "Option." It's located next to the "Parallel" port. Save the two screws. (You'll use them when you install the optional interface card.) You can dispose of the plate according to local regulations.



- **a** Attach the interface card to the controller board.
- Position the interface card so that its I/O connector slides into its opening in the interface panel and that its 80-pin connector aligns with the 80-pin connector on the controller board.



c Gently press the interface card down until its connector is fully seated and the card is secured by the plastic support post(s).

Attention

Make sure that the connectors on the interface card and controller board are properly aligned. Damage to the interface card and/or controller board could result if the pins are misaligned.

- 4 Secure the interface card to the interface panel with the two screws you removed earlier.
- 5 Reinstall the controller board.

Gently slide the controller board into the printer until it is fully seated, and then tighten the five screws.

- 6 Reconnect all interface cables.
- 7 Reconnect the power cord, and turn on the printer.

In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."

8 Print a startup page.

Check that the startup page lists the interface (Optional NIC) just installed under "Options."

Using a Network Interface

Once a network interface is installed, refer to "Connecting the Printer to the Host Computer," in the *Installation Guide* and the *CrownBook* for information on connecting to the network, installing the software, and configuring the interface and the network.

SCSI Interface

The optional SCSI interface allows you to connect up to three optional SCSI devices, including a hard disk, and Jaz and Zip drives. These devices provide storage for fonts, emulations, and other files; increase the number of pages that can be collated; and provide a secondary storage area for spooled data, while providing virtual memory capabilities.

What's in a Kit?

An optional SCSI interface kit includes the following:

- SCSI interface card
- SCSI interface card ribbon cable
- Connector face plate
- Two larger screws
- Two smaller screws

Installation

Attention

It's very important to protect the printer controller board and any associated circuit boards from electrostatic damage. Before performing this procedure, review the antistatic caution on page 112. In addition, always handle circuit boards by the edges only.

- **1** Turn off the printer, and then disconnect the power cord and all interface cables from the printer.
- 2 Loosen five screws and, using the tab on the lower side of the panel, pull the controller board from the printer.
- **3** Remove the two screws holding the metal plate over the SCSI interface opening.

You can dispose of the metal plate and screws according to local regulations.



- 4 Attach the SCSI interface card to the controller board.
 - **a** Position the SCSI interface card so that its ribbon cable connector aligns with the SCSI connector on the controller board.
 - **b** Gently press the ribbon cable connector down until it's fully seated.

Attention

Make sure that the connectors on the ribbon cable and the controller board are properly aligned. Damage to the controller board could result if the pins are misaligned.

- c Insert the SCSI interface card connector into its opening in the interface panel.
- **d** Secure the SCSI interface card to the interface panel with the two larger screws in the kit.
- 5 Reinstall the controller board.

Gently slide the controller board into the printer until it's fully seated, and then tighten the five screws.

6 Reconnect all interface cables.

- 7 Reconnect the power cord and turn on the printer.
- In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."
- 8 Print a startup page.

Check that the startup page lists the interface (SCSI) just installed under "Options."

Using a SCSI Interface

Installing a SCSI interface allows the attachment of external SCSI storage devices, such as hard drives, JAZ, and ZIP drives. Installing the SCSI interface kit will not allow you to print via SCSI.

Internal IDE Hard Disk Drive 🚆

WARNING!

Make sure that the printer and all accessories are turned off before installing accessories involving the controller board.

One internal IDE hard disk is supported—standard on the EN and DP models, and optional on the N and GN models.

What's in the Kit?

The IDE hard disk kit includes the following:

- IDE hard disk with ribbon cable attached
- IDE hard disk bracket
- 4 screws

Installation

Attention

It's very important to protect the printer controller board and any associated circuit boards from electrostatic damage. Before performing this procedure, review the antistatic caution on page 112. In addition, always handle circuit boards by the edges only.

When installing or removing a hard disk, make sure that the metal support posts (on the hard disk) don't hit any of the electrical leads on the chips mounted on the controller board. The controller board will not function if any of the leads are broken or shorted together.

- 1 Ensure that the printer is turned off and the power cord and all interface cables are disconnected.
- 2 Loosen five screws from the controller board and, using the tab on the lower side of the panel, pull the controller board from the printer.
- **3** Position the controller board on a flat surface so the controller board lies flat and the interface panel is facing you.
- 4 Attach the IDE hard disk to the hard disk bracket.



Attach the IDE hard disk to the bracket with the grooved-end of the bracket facing the ribbon cable. The screw holes in the bottom of the hard disk should match up with the holes on the hard disk bracket. Fasten the hard disk to the bracket with the screws provided.

5 Position the hard disk so that the four support posts face the controller board, the colored stripe on the ribbon cable faces away from you, and the connector is down.



6 Insert ribbon cable connector pin 1 (the colored stripe side of the cable) in hard disk connector pin 1.

Attention

Make sure that the ribbon cable connector and the controller board connector pins are properly aligned. Damage to the controller board could result if the pins are misaligned.

7 Press down gently but firmly on the cable connector until it is fully seated.

Attention

Do not push or pull with the ribbon cable. Use the cable connector.

8 Align the support posts with the holes on the controller board, and then press down to secure the hard disk to the controller board.

So that you don't stress the board, press one corner at a time to secure the hard disk to the controller board.

If you're installing DIMMs, go to the next section.

Otherwise, reinstall the controller board into the printer. Gently slide the controller board into the printer until it is fully seated, and then tighten the five screws.

When you print a startup page (page 42), verify that the hard disk is listed.

Media Trays 🖷

The printer comes with a 500-sheet media tray (the upper tray—tray 2). The lower feeder unit (standard on the DP model) has another 500-sheet optional media tray (the optional tray—tray 5) that provides two main benefits:

- Expanded flexibility to switch media size, color, and type without having to unload and load media.
- Increased media-feed capacity

Keep replacement trays close by, so you can easily change media by slipping one tray out and another in.

Media trays accommodate only letter/A4/legal media.

Printer Stand/Cabinet

A tabletop- or floor-model printer stand or a cabinet is available. Follow the assembly instructions included with it.

SC-210 Convenience Copier

You can expand your magicolor 2200's functionality by connecting an SC-210 digital color convenience copier option to the standard parallel port on the printer (interface set to "non-interactive"). The SC-210 supports up to legal-size paper. An optional 25-sheet Automatic Document Feeder (ADF) is available.

Check the documentation included with your SC-210 for instructions on setup, configuration, and operation.

Included with the SC-210:

- Software CD-ROM
- Parallel cable
- Power adapter
- User warranty and registration card

Time-of-Day Clock (Standard on Models EN and DP) 🖷

The time-of-day clock provides time and date information on the startup page and in the accounting data.

Installation



It's very important to protect the printer controller board and any associated circuit boards from electrostatic damage. Before performing this procedure, review the antistatic caution in "Installing an Optional 5-bin Mailbox" on page 101. In addition, always handle circuit boards by the edges only.

- 1 Turn off the printer, and then disconnect the power cord and all interface cables from the printer.
- 2 Loosen five screws and, using the tab on the lower side of the panel, pull the controller board from the printer.



WARNING!

Because the time-of-day clock includes an internal battery, there is a danger of explosion if the clock is incorrectly installed or replaced. Replace it only with a supported MINOLTA-QMS time-of-day clock. Dispose of any used time-of-day clock in accordance with local laws and regulations.

ACTUNG! Da der Uhrenbaustein eine interne Batterie enthält, besteht Explosionsgefahr, falls dieser falsch eingesetzt oder ersetzt wird. Er darf nur durch einen unterstützten Baustein ersetzt werden. Bitte entsorgen Sie den Baustein gemäß den geltenden Entsorgungsbestimmungen.

AVERTISSEMENT! Dû au fait que l'horloge interne de l'imprimante est munie d'une batterie interne, il y a un risque d'explosion si celle-ci est mal installée ou remplacée. La remplacer seulement avec une horloge supportée par MINOLTA-QMS. Se départir de toute horloge interne défectueuse en respectant les lois et réglementations en vigueur. **3** Attach the time-of-day clock to the controller board.



Attention

Make sure that the pins on the time-of-day clock are properly aligned with those in the receiving socket on the controller board. Damage to the time-of-day clock and/or controller board could result if the pins are misaligned.

- **a** Locate the time-of-day clock socket on the controller board and the pin 1 notch or printed label.
- **b** Locate the pin 1 indicator mark on the top of the time-of-day clock.

This mark may be a notch or a slight depression on one end of the clock.

- **c** Align this indicator mark with the pin 1 notch or printed label on the controller board.
- d Gently press down on the time-of-day clock until it's firmly seated.
- 5 Reinstall the controller board.

Gently slide the controller board into the printer until it is fully seated, and then tighten the two screws.

6 Reconnect all interface cables.



In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."

8 Print a startup page.

The time-of-day clock is not listed under "Installed Options" on the startup page, but the time will appear as System Date in the Printer Information column.

Color Printing



Introduction

Your magicolor 2200 features advanced color laser technology that produces inexpensive and durable color prints at 600x600, and 1200x1200 dpi on plain paper, envelopes, labels, thick stock, and transparencies.

Color Management and Control

The magicolor 2200 offers a host of color screening, matching, and calibration tools for both the beginner and professional color user.

MINOLTA-QMS QCOLOR Technology

Color management does not mean all devices will match exactly. It does ensure the closest possible color transformation. MINOLTA-QMS QCOLOR technology offers four methods for color matching across devices:

- MINOLTA-QMS QCOLOR automatic color correction
- Supplied ICC printer profiles
- Built-in color rendering dictionaries (CRDs)
- Supplied PANTONE®* Color matching tables

MINOLTA-QMS QCOLOR technology takes the guesswork out of color reproduction by automatically optimizing color output. Now even a novice can produce professional quality, colorized documents without the use of sophisticated manual optimization techniques.

The following is a summary of MINOLTA-QMS QCOLOR automatic color correction features:

Ease of use across applications: With MINOLTA-QMS QCOLOR, it's as easy to get great color from a PowerPoint presentation as it is from a desktop publishing application, such as QuarkXPress. MINOLTA-QMS QCOLOR's color matching methods are simple for both novice and professional color users to navigate.

^{*}Pantone, Inc.'s check-standard trademark for color reproduction and color reproduction materials.

- Single-button control: Whether accessing through the printer driver, or from the printer's front panel, MINOLTA-QMS QCOLOR's single-button controls enable automatic correction of uncalibrated RGB or CMYK color files.
- Printer-resident CMS: Because MINOLTA-QMS QCOLOR automatic color correction is built into the printer, it works well in all computing environments and with most design, publishing, and office applications.
- Industry-standard profiles: QCOLOR uses industry-standard ICC profiles for compatibility with popular input and output devices.
- Supports host-based color management systems: Easily disable MINOLTA-QMS QCOLOR automatic color correction when using host-based ColorSync or ICM color matching.
- Profiles for common monitors and output devices: MINOLTA-QMS QCOLOR offers default color matching for a variety of common monitors and printing presses.
- Download device profiles: For custom color matching, QCOLOR supports downloaded (to disk only) ICC profiles.
- Support for Internet standard: MINOLTA-QMS QCOLOR uses sRGB for Internet-standard default color matching.
- Individual page element correction: QCOLOR separately color corrects (matches) graphics, text, and images on a singe page using printer-resident CRDs.

Further Information

For further information about the MINOLTA-QMS color management, refer to the *CrownBook*.

Repacking the Printer



Storing the Printer

Keep the following in mind when storing the printer for an extended period:

- 1 Unplug the printer.
- 2 Remove the OPC drum, the fuser oil roller, and toner cartridges from the printer and return them to their original packaging. If the original packaging is not available, protect the toner cartridges from spilling toner, and protect the OPC drum cartridge from damage and light.

Relocating Your Printer

Occasionally, you may have to move your printer to a different location, either nearby or to a distant location. To avoid damage to your printer, we advise you to follow the next instructions very carefully.

- **1** Turn off the power to your printer.
- 2 If the printer has a lower feeder unit and/or a 5-bin mailbox, remove them.
- **3** If you are moving to a distant location, follow the instructions for repacking the printer.
- 4 Relocate the printer.

WARNING!

The printer weighs about 87.1 lb (39.5 kg). Always have two people to lift and move the printer to avoid back injury.

- 5 Unpack and set up the printer in its new location.
- 6 Reinstall the accessories you removed in step 2.

Refer to the *Service & Support Guide* or www.minolta-qms.com for additional information on where to obtain assistance if necessary.

Repacking the Printer

If you need to relocate or ship your printer after it's been installed, follow the procedures in this chapter to prevent damage to the printer and to keep your warranty valid.



If you're returning just the printer for service, do not return the interface cables, power cable, documentation, media tray(s), or accessories.

Attention

MINOLTA-QMS cannot be held responsible for damage to your printer during shipment that results from the improper packaging of your printer. You must use the instructions given in this section before repacking the printer in its original shipping carton with the original packing materials. These supplies must be replaced prior to re-shipping the printer.

If you need replacement packaging, in the United States, call MINOLTA-QMS Spares at 1 (334) 633-4300 x2530 and request part number 2600674-901 for the repacking kit. For locations outside the United States, refer to the Service & Support Guide or www.minolta-gms.com. If you need to return the printer for service, be sure to write the RMA (Return Merchandise Authorization) number you received from your customer support representative clearly on the carton before shipping the printer.

What's Involved?

Repacking your printer for shipment involves the following steps. Each is described in more detail in the following sections.

- 1 Remove the cables.
- 2 Remove the fuser oil roller.
- 3 Remove the toner cartridges.
- 4 Remove the waste toner pack.
- 5 Remove the OPC drum.
- 6 Remove the transfer belt.

- 7 Remove the duplex unit (if attached).
- 8 Remove the 5-bin mailbox (if attached).
- **9** Remove the lower input feeder (if attached).
- **10** Repack the printer for shipment.

Attention

To avoid toner contamination during shipment, the printer should be repacked without the fuser oil roller, toner cartridges, waste toner pack, OPC drum cartridge, or transfer belt installed.

Remove the Cables

- **1** Turn off the printer.
- 2 Remove the power cable and all interface cables.

Remove the Fuser Oil Roller

WARNING!

The fuser unit can become extremely hot and cause severe burns. Make sure the unit is cool before handling it.

- 1 Open the printer's top cover.
- 2 Rotate the two lock levers to release the fuser oil roller.
- **3** Remove the fuser oil roller.
- 4 Store the fuser oil roller in its original shipping bag.
- 5 Close the printer's top cover.

Remove the Toner Cartridges

- 1 Open the printer's front cover.
- 2 Remove the four toner cartridges and store them in their original packaging.

Remove the Waste Toner Pack

- 1 With the printer's front cover open, remove the waste toner pack from the printer.
- 2 Use the three plugs on the side of the waste toner pack to seal the opening.
- **3** Store the waste toner pack in its original packaging.

Remove OPC Drum Cartridge

Remove the OPC drum cartridge and store it in its original packaging.

Remove Transfer Belt

- 1 Remove the transfer belt and store it in a plastic bag in a box to avoid toner spillage.
- 2 Close the printer's front cover.

Remove the Duplex Unit

If you don't have a duplex unit installed, skip to the next section.

- 1 Open the duplex cover and unhook the spring wire.
- 2 Loosen the two thumbscrews until the duplexer moves freely away from the right side of the printer.
- **3** Lift duplex unit up and away from the printer.
- 4 Install the original right-side cover that came with the printer.
- 5 Repack the duplex unit in its original shipping carton for storage or shipment.

If you're returning the printer for service, you don't need to return the duplex unit, unless the problem is with the duplex unit.

Remove the 5-bin Mailbox

If you don't have a 5-bin mailbox installed, skip to the next section.

- 1 Remove the power cable.
- 2 Remove the side plates and loosen the thumbscrews.

- 3 Lift 5-bin mailbox up and away from the printer.
- 4 Replace the original screen covers on the top of the printer.
- 5 Repack the 5-bin mailbox in its original shipping carton for storage or shipment.

If you're returning the printer for service, you don't need to return the 5-bin mailbox, unless the problem is with the 5-bin mailbox.

Remove the Lower Feeder Unit

If you don't have a lower feeder unit installed, skip to the next section.

- 1 Remove the rear bracket securing the lower feeder unit to the printer.
- 2 Remove the upper media tray.
- 3 Remove the brackets on the right and left in front that are securing the optional tray to the printer.
- 4 Replace the upper media tray.
- 5 With the help of another person, lift the printer by its carrying grips and carrying bar, and place the printer on a table.

WARNING!

The printer weighs approximately 87.1 lbs (39.5 kgs) without consumables. Be sure to have help when lifting and moving it.

6 Repack the lower feeder unit in its original shipping carton for storage or shipment.

If you're returning the printer for service, you don't need to return the lower feeder unit, unless the problem is with the lower feeder unit.



Repack the Printer

If you need replacement packaging, in the United States, call MINOLTA-QMS Spares at 1 (334) 633-4300 x 2530 and request part number 2600674-901 for the repacking kit. Refer to the *Service & Support Guide* or www.minolta-qms.com for locations outside the United States.

- 1 Place the lower cushions into the shipping carton's base.
- 2 Put the printer's plastic bag into the shipping carton's base.
- **3** With another person's help, put the printer into its plastic bag and tape the bag closed.
- 4 Replace the outer shipping carton over the printer and the base, and secure the shipping carton using the plastic interlocks that came with the original carton.
- 5 Pack the printer for shipment as shown.
- 6 If you're also shipping the power cord and any manuals with the printer, place them in the shipping carton.
- Don't ship these items if you're returning the printer for service.
- 7 Securely tape the top flaps of the shipping carton closed.


Technical Specifications



Requirements

Space Requirements

The illustration below shows the amount of space required for operating the printer, replacing supplies, and removing media jams.



If you have added accessories, the printer's height will increase by

Lower feeder unit	4.6" 116.5 mm)
Duplex unit	0" (0 mm)
5-bin mailbox	15.34" (400 mm)

Power Requirements

Power	Japan	100 VAC 50-60 Hz 12 amps
	North America	120 VAC 50–60 Hz 8 amps
	Europe	220–240 VAC 50–60 Hz 6 amps
	Latin America	120 VAC 50–60 Hz 8 amps 220–240 VAC 50–60 Hz 6 amps
Voltage Fluctuation Rate	Japan	100 VAC ±10%
	North America	120 VAC ±10%
	Europe	220–240 VAC ±10%
	Latin America	120 VAC ±10% 220–240 VAC ±10%
Frequency Variation Rate	Within 50–60 ±3 Hz	

Location Requirements

 On a hard, flat, level (1° or less slant at any point around the machine) surface capable of supporting the printer, accessories, consumables, and media. Weights are shown below.

Component	Weight
Printer	87.1 lbs (39.5 kg)
Consumables (such as toner, OPC drum)	11 lbs (5.0 kg) (total)
Media	5.2 lbs (1.9 kg) per ream
Lower feeder unit	14.8 lbs (6.7 kg)
Duplex unit	5.3 lbs (2.4 kg)
5-bin mailbox	15.5 lbs (7.0 kg)

A surface can be tested for levelness with a standard round pencil. If the pencil rolls, the surface is not level. Clear the area of any obstruction or items such as cables that might prevent the printer from sitting directly on the flat, level surface.

- In an area with an ambient temperature range of 50°-95° F (10°-35° C) and relative humidity range of 15%-85% (noncondensating).
- Away from cooling and heating sources, extreme temperature or humidity changes, direct sunlight, excessive dust, corrosive chemicals or vapors (such as ammonia),

water pipes, refrigerators, and any strong electromagnetic field (such as that created by an air conditioner), open flames, or items that can easily burn, or items that produce excessive vibration.

If the printer is located in a cold room that is rapidly heated, or if the printer is moved from a cold place to a warm, humid place, condensation may occur within the printer, degrading print quality. If this occurs, allow the printer to adapt to the environment for about one hour before use.

Away from water.

If using a humidifier or water vaporizer in the room with the printer, use only purified or distilled water. Impurities in the water may be released into the air, where they can accumulate inside the printer and cause degraded printer output.

- At an altitude of 0–8202' (0–2500 m).
- Near your computer—6.5' (2 m) or less for an IEEE 1284 bidirectional parallel connection; cables for other connections may be longer.
- Close to an easily accessible grounded power supply on an exclusively dedicated power outlet.

WARNING!

Do not connect the groundwire to gas or water pipes or grounding for telephones.

- Not connected to the same electrical outlet as noise-generating equipment. If the printer is connected to the same circuit used by other high-current machines, such as a copier or air conditioner, or to an electrically noisy machine, low voltage or noise may cause overheating, computing errors resulting in data loss, and improper performance.
- In a well-ventilated area, but away from wind.
- With enough space to allow adequate ventilation and easy servicing.

Attention

Obstructing the ventilation grilles could present a fire hazard.

Computer Requirements

Printer performance depends upon the tpe of computer to which you connect it. We recommend a Pentium-class computer with at least 16 MB of RAM (if you're using Windows Me/98/95) or 32 MB of RAM (if you're using Windows 2000/NT4).

ENERGY STAR Compliance

All models of the magicolor 2200 are compliant with US Environmental Protection Agency (EPA) ENERGY STAR regulations. After a specified period of inactivity, the printer changes to a low-power state (the engine remains on, but the fuser turns off). When a print job is received, the printer returns to normal power within a user-configurable time period.



EPA POLLUTION PREVENTER

Year 2000 (Y2K) Compliance

MINOLTA-QMS would like to reassure its customers by pointing out that the design of its products precludes the possibility of Year 2000 errors.

There are two instances when time and date information is provided by MINOLTA-QMS printers: when information about a print job is stored in the MINOLTA-QMS accounting file, and when a time stamp is printed on the header and/or



trailer page. Date and time information that appears on the header and/or trailer page is passed to the MINOLTA-QMS printer by the host computer. Since this information is passed in real time, it is virtually impossible for there to be any confusion regarding the century date. The real-time clock used to apply the time stamp to the accounting files stores the year as four digits and is designed to correctly handle leap year calculations, including the Year 2000.

Engine and Controller Specifications

Engine

Engine		Minolta NC-L4001
Duty cycle	Simplex letter/A4 pages per month	8,000 average prints and up to 35,000 maximum prints per month*

**The duty cycle will be affected by the media type, percent coverage, and the number of* monochrome versus color pages.

Print Speed—Simplex

The following table defines the maximum print speed in Pages Per Minute (ppm).

Page size	Monochrome ppm	4-Color ppm
A4	20	5
Letter	20	5
Legal	20	4*
Transparency Film (A/A4)	3.8	2.4
Label (A/A4)	3.8	2.4
Thick (A/A4)	3.8	2.4



*When color printing on legal paper, only A4 length is guaranteed.

Print Speed—Autoduplex

The following table defines the maximum print speed in Pages Per Minute (ppm).

Page size	Monochrome ppm	4-Color ppm
A4	10	2.5
Letter	10	2.5
Legal	10	1.5

General

Printer type	Desktop, non-impact, 4-color printer
Print method	Scanner: Semiconductor laser with rotating mirror Recorder: Black writing electrophotographic Process: Cyan, magenta, yellow, and black dry toner image transfer to print media Fuser: Heated rollers
Resolution	Standard: 600x600 dpi (1200x1200 dpi standard on GN, EN, and DP models) Optional: 1200x1200 dpi (additional SDRAM may be required).
Toner	Type: Microfine, dry, single component Packaging: User-replaceable cartridges
Warm-up time	Maximum: 110 volts: 150 seconds 220 volts: 160 seconds
Input sources	Standard: 500-sheet tray 150-sheet multipurpose tray Optional: 500-sheet lower input feeder
Output	250-sheet tray on top of printer

Controller

CPU	IDT RC64574
Resident emulations	PostScript—Level 2 (600/1200 dpi)
	HP PCL—PCL5c, PCL XL, PCL5e/GL2 (HP PaintJet XL300 compatible; 600 dpi; 600/1200 dpi, GL2 only)
	PDF—Version 1.2
	HP-GL—7475A/7550/Draftmaster (600 dpi)
	Lineprinter—(600 dpi)
Optional emulations	ImageServer (monochrome only) CGM
	LN03+ (300 dpi monochrome only)

Fonts	PostScript —137 resident PostScript fonts that can be scaled from 4 points upward and rotated to any angle in 1° increments; all typefaces have multilingual character sets		
	HP PCL 5e, 5c-80 scalable and 4 bitmapped fonts		
	PCL XL—45 scalable and 9 bitmapped typefaces		
	HP-GL—40 resident HP-GL symbol sets		
	Type 1 / Type 3 Support—Support for Type 1 and Type 3 host-resident downloadable PostScript fonts		
	TrueType —Support for Type 42 (PostScript format) host-resident downloadable TrueType fonts, support for TrueType fonts in PCL		
Kanji fonts	Hard disk—MINOLTA-QMS Kanji Internal IDE Hard Disk with 7 Morisawa fonts		
Standard	CrownNet for Ethernet—10BaseT/100BaseTX		
interfaces	Parallel—Centronics/IEEE 1284 bidirectional		
Optional interfaces	Network interface—Support for one optional network interface (CrownNet for Ethernet, supporting EtherTalk, LAN Manager/LAN Server, Netware, and TCP/IP; CrownNet for Token-Ring, supporting LAN Manager/LAN Server, NetWare, and TCP/IP; or Crown for DECnet-TCP/IP)		
	SCSI interface—Support for up to 3 external SCSI hard disks (up to 2.2 GB)/Jaz drives/Zip drives		
RAM	Type: PC-100 Compliant SDRAM DIMMs		
	N model base system RAM: 64 MB		
	GN and EN model base system RAM: 128 MB		
	DP model base system RAM: 256 MB		
	Total RAM: Upgradable to 384 MB (through 3 DIMM connectors)		
Optional RAM	32, 64, and 128 MB DIMMs		
System software	Softloadable; stored in Flash ROM		
Internal IDE hard	N and GN models: Optional, up to 2.2 GB		
disk	EN and DP models: Standard, up to 2.2 GB		
	For information about hard disks recommended for your printer, see the magicolor 2200 Answer Base through the Internet at http://www.qms.com/support/, or contact Technical Support (see the Service & Support Guide for a complete listing of support telephone numbers).		

Time-of-day clock	N and GN models: Optional (socket provided for)	
	EN and DP models: Standard	
Job accounting	Crown job accounting; requires an optional IDE drive	
Warning function convenience	Optional, BuzzBox (light/buzzer printer warning device); operates over a parallel connection	
Convenience copier	Optional, SC-210 operates over a parallel connection	

Electrical

Voltage and Power

Voltage and frequency	US: 120 volts ±10% at 50–60 Hz ±3 Hz Japan: 100 volts ±10% at 50–60 Hz ±2 Hz International: 220-240 volts +10% at 50–60 Hz ±3 Hz	
Phase	Single	
Power consumption	Mode	Maximum
	Operation	100/120 volts—1000 watts 220 volts—1100 watts
	Standby	250 watts
	Power saver	45 watts
Compliance	ENERGY STAR compliant	

Environmental

Noise level	Printing: Less than 55 dB (A) Standby: Less than 41 dB (A)
Relative humidity	Operating: 15-85% RH (noncondensing) Transportation/Storage: 30–85% RH (noncondensing)
Temperature range	Operating: 50-95° F (10-35° C) Transportation/Storage: 32-95° F (0-35° C)
Altitude	Operating: 0-8202 ft (0-2500 m)
Inclination	Operating: 1° or less slant at any point around the machine



Physical

	Main Body	Main Body with Lower Input Feeder	Main Body with Duplex Unit and Lower Input Feeder
Dimensions	W: 18.2 in. (463 mm) H: 20.6 in. (511 mm) D: 21.3 in. (522 mm)	W: 18.2 in. (463 mm) H: 22.0 in. (560 mm) D: 21.3 in. (522 mm)	W: 18.2 in. (463 mm) H: 22.0 in. (560 mm) D: 21.3 in. (522 mm)
Weight (excluding consumables)	Unpacked: 87.1 lbs (39.5 kg)	Unpacked: Printer: 87.1 lbs (39.5 kg) Lower Input Feeder: 13.2 lbs (6.0 kg)	Unpacked: Printer: 87.1 lbs (39.5 kg) Lower Input Feeder: 13.2 lbs (6.0 kg) Duplex Unit: 3.7 lbs (1.7 kg)
Weight (including consumables)	Shipping: 117 lbs (53 kg)	Shipping*: Printer: 117 lbs (53 kg) Lower Input Feeder: 31 lbs (14 kg)	Shipping*: Printer: 117 lbs (53 kg) Lower Input Feeder: 14.8 lbs (6.7 kg) Duplex Unit: 5.3 lbs (2.4 kg)
Notes	* Shipped separately.		

Print Media

Delivery—Output Tray	Output: Face-down Tray Capacity: 500 sheets of 20 lb bond (75 g/m²) paper	
Delivery—Mailbox	Output: Face-down Mailbox Bin Capacity: Each bin holds approximately 50 sheets of 16–24 lb (60–90 g/m ²) bond letter/A4 paper only	
Input sources	Upper input feeder (500-sheet tray): Paper, transparencies Optional lower input feeder (500-sheet tray): Paper, transparencies Multipurpose tray (150 sheet): Envelopes, labels, paper, thick stock, transparencies	
Media sizes, types, and weights	See "Media Types" on page 35.	

Notes	The maximum media weight supported for duplex printing is 28 lb
	bond (105 g/m ²).

Document Option Commands

This lists the supported Document Option Commands (DOCs) for your magicolor 2200. The commands are grouped by feature type.

Each command is preceded by either a DOC statement (%%) or an IncludeFeature statement (%%IncludeFeature). See the *Crown Document Option Commands* manual for information on all other commands.

Supported DOCs

Header/Trailer Page Commands

Print charge number	%%ChargeNumber
Print copyright statement	%%CopyRight:
Print document creator	%%Creator:
Print creation date and time	%%CreationDate:
Print current date	%%Date:
End comments	%%EndComments
Print document owner	%%For:
Print document host	%%Host:
	%%Page
Job completion notification via email	%%Notify
Select page order	%%PageOrder
Save job for reprinting (proof and print)	%%Retain proof <job name=""></job>
Print routing information	%%Routing:
Print document title	%%Title:
Print version and revision	%% Version:
Print header page	%%IncludeFeature: header
Print trailer page	%%IncludeFeature: trailer

HP-GL Emulation Commands

Select enhanced resolution Expand plot Select original paper size Select pen width and color Select plotter Scale the image Set origin %%IncludeFeature: enhanced %%IncludeFeature: expand %%IncludeFeature: size %%IncludeFeature: pen %%IncludeFeature: plotter %%IncludeFeature: scaling %%IncludeFeature: origin

HP PCL 5e Emulation Commands

Install object Remove object Remove resource Retain temporary Select default font Select default font ID Reset Select scalable fonts Select symbol set Set carriage return to CR+LF Set linefeed to CR+LF Set number of lines per inch Set point size Resource Set monochrome GL/2 % % IncludeFeature: install % % IncludeFeature: remove % % IncludeFeature: removeresource % % IncludeFeature: retaintemporary % % IncludeFeature: fontid % % IncludeFeature: fontid % % IncludeFeature: reset % % IncludeFeature: symbolset % % IncludeFeature: criscrlf % % IncludeFeature: linesperinch % % IncludeFeature: linesperinch % % IncludeFeature: pointsize % % IncludeFeature: resource % % IncludeFeature: resource % % IncludeFeature: monochromegl

Lineprinter Emulation Commands

Select font for current job Set point size for current job Specify character map type Number lines Set tabs Set linefeed to CR+LF Set carriage return to CR+LF %%IncludeFeature: font %%IncludeFeature: pointsize %%IncludeFeature: map %%IncludeFeature: number %%IncludeFeature: tabs %%IncludeFeature: lfiscrlf %%IncludeFeature: criscrlf

Set formfeed to CR+FF	%%IncludeFeature: ffiscrff
Wrap lines	%%IncludeFeature: autowrap
Set number of lines per page	%%IncludeFeature: linesperpage
Set margins	%%IncludeFeature: lpmargins
Set orientation	%%IncludeFeature: lporientation

PostScript Emulation Command

SC 200 to set PostScript protocol

%%IncludeFeature: parpsprotocol x

CCITT Groups 3 and 4 Commands

Start decompression Set encoded byte flag Set end of block Set line end Eject page Set image position Invert image Set dpi for image expansion Set data compression Reverse bits End print job Set image size Set image rotation Set source image origin Set source image position %%ImageData %%EBAMode %%BlockEnd %%LineEnd %%PageEnd %%ImagePosition %%InvertImage %%DPI %%Compression %%BitReverse %%JobEnd %%ImageSize %%Rotation %%SourceImageOrigin %%SourceImagePosition

Document Formatting

Logical page orientation Number up printing Offset logical page Print borders Scale logical page Print background images Set printer resolution %% IncludeFeature: pageorientation %% IncludeFeature: pagegrid %% IncludeFeature: pageoffsets %% IncludeFeature: border %% IncludeFeature: pagescaling %% IncludeFeature: background %% IncludeFeature: resolution Print page range Duplex printing Collate print job Logical page size Select number of copies Select paper Select orientation Select emulation Logical margins Select color separations Select color or monochrome Media type %% IncludeFeature: pagerange %% IncludeFeature: duplex %% IncludeFeature: collate %% IncludeFeature: pagesize %% IncludeFeature: numcopies %% IncludeFeature: input %% IncludeFeature: orientation %% IncludeFeature: emulation %% IncludeFeature: margins %% IncludeFeature: colorseparation %% IncludeFeature: colormodel %% IncludeFeature: mediatype

Job and Subjob Boundary Commands

Sessions (only via network interface) End of document % % Session % % EndOfDocument <ESC>%-12345x

LN03+ Commands

Identify product Control line wrap Specify default paper size Control transformation point Adjust image horizontally Adjust image vertically Set power-up configuration %%IncludeFeature: product %%IncludeFeature: autowrap %%IncludeFeature: paper_size %%IncludeFeature: paper_size_override %%IncludeFeature: xorigin %%IncludeFeature: yorigin %%IncludeFeature: reset_override

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