FARGO®
ELECTRONICS, INCORPORATED

Foto FUN! ™

DIGITAL COLOR PHOTO PRINTER

User's Manual

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Patent Pending.

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Printing History

Edition 1.4, #970627

For Users in the United States:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of a shielded cable is required to comply with the Class B limits of Part 15 of the FCC Rules.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate and/or obtain warranty service for this equipment.

For Users in Canada:

This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out on the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

CAUTION!

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SIDE OR BACK PANELS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. OPERATE THE UNIT ONLY ON 100-250 VAC, 50/60 Hz. USE PRINTER ONLY WITH THE POWER SUPPLY LABELED FOR USE WITH *FotoFUN!*

Table of Contents

Section 1: Getting Started

THANK YOU...

...for choosing FARGO's *FotoFUN!* Digital Color Photo Printer. *FotoFUN!* is the perfect way for you to print all of your smaller digital photos and designs at just the right size. With its wide variety of printing accessories, *FotoFUN!* is also the perfect way to print custom photo labels, photo postcards, birth announcements, party invitations, or holiday photo greeting cards. And with FARGO's special *FotoMUG!*™ kit, you can even print and transfer all of your favorite photos directly onto coffee mugs.

To begin your color printing adventure, please refer to the remainder of this manual. The *FotoFUN!* User's Manual is your complete step-by-step guide to quickly and easily setting up and printing with your new *FotoFUN!* Digital Color Photo Printer!

A. CHOOSING A GOOD LOCATION

- Place *FotoFUN!* in a location with adequate air circulation to prevent internal heat build up.
- Do not place printer in a location where the ventilation slots located on the rear of the unit could become blocked.
- Do not place printer near heat sources such as radiators or air ducts or in a place subject to direct sun-light, excessive dust, mechanical vibration or shock.
- Allow for adequate clearance above the printer to accommodate the height of the printer with its cover open.

B. UNPACKING AND INSPECTION

While unpacking your printer, inspect the carton to ensure that no damage has occurred during shipping. Make sure that all supplied accessories are included with your unit. The following items should be included with *FotoFUN!*

- Printer
- Power Supply
- Printer Driver Diskette (3.5")
- Print Film Kit (36 prints)
- Warranty Statement and Registration Card
- This manual and other printed information

Save the carton and packing materials. They will come in handy when transporting the printer.

C. IDENTIFYING THE PARTS

This illustration shows the printer's Cover Release Button, the Paper Input/Output Slot, the **on off** and **clear** buttons, and their LED indicator lights. The **on off** button turns the printer's power on and off. This button also serves to cancel the current print job and to reset the printer for the next print job. Turning the printer's power on and off also ejects any paper left within the printer after a print job is canceled. The **clear** button clears all print errors as indicated by its flashing LED indicator light (see Section 7 for further LED information).
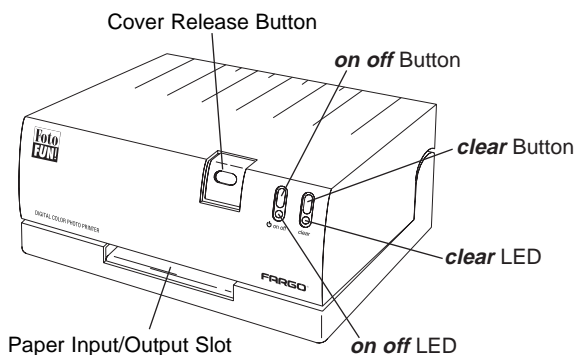
This illustration shows the printer's Ventilation Slots, its Power Input Port, and its Interface Port. The printer ships with either a parallel or a serial interface port. If using *FotoFUN!* for Windows™, a Parallel Interface Port is provided. If using *FotoFUN!* for Apple® Macintosh®, a Serial Interface Port is provided. The printer does not include both interfaces. Please refer to later sections of this manual for further information on these ports.
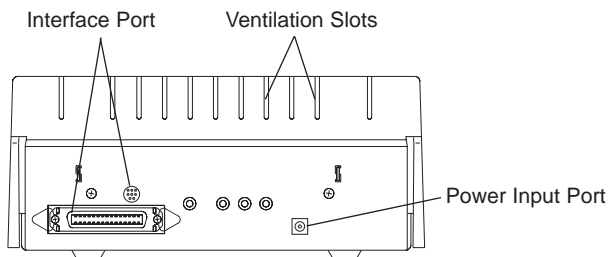
Section 2: Photo Ribbon and Paper

A. ABOUT PHOTO RIBBON AND PAPER

For full-color printing, *FotoFUN!* has a 3-color ribbon available. This ribbon consists of a series of three consecutive colored panels along with a fourth clear overlay panel. The three colored panels, yellow, magenta and cyan, combine to offer an almost infinite number of printable colors. The clear overlay panel is printed last and serves to seal and protect your printed images from moisture, fingerprints, and UV light.

Although printing with the clear overlay panel is optional, it is highly recommended that you always utilize the ribbon's clear overlay panel when printing. **The clear overlay will greatly extend the longevity of your prints.** Without the clear overlay, images will fade more quickly. The only time you should not print with the clear overlay panel is if you plan to transfer the printed image to a mug (see Section 4 or 5 for instructions on enabling or disabling the clear overlay print function).

FotoFUN! ribbon comes prepackaged with FARGO's special photo paper in what is called a Print Film Kit. This kit consists of a 36-print ribbon and 36 sheets of photo paper. A 36-print Postcard Film Kit and a 36-print *FotoLABEL!™* Kit are also available for printing custom photo postcards as well as photo labels or bumper stickers. *FotoFUN!* ribbons and paper are not sold separately.

Contact your local *FotoFUN!* dealer or contact FARGO directly at 1-800-327-4690 for selection and pricing on the most current *FotoFUN!* supplies, options, and accessories.

B. INSTALLING PHOTO RIBBON

1. Remove the ribbon from its packaging. Try not to touch the colored portion of the ribbon. Oil or dirt from your hands can impair print quality.

2. The supply end of the ribbon is the end with the fresh, unused ribbon on it. The ribbon take-up is the other end.

Supply

Take-up
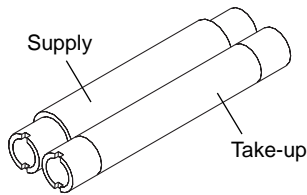
3. Place the supply end of the ribbon in between the two black ribbon drive hubs located towards the rear of the printer's interior. Insert the supply end so that the ribbon is fed from **underneath** the ribbon roll. *Hint: the ribbon drive hub on the right-hand side of the printer is spring-loaded. Use the end of the ribbon core to push in this ribbon drive hub as ribbon is inserted.*

Ribbon drive hubs

Spring-loaded ribbon drive hubs
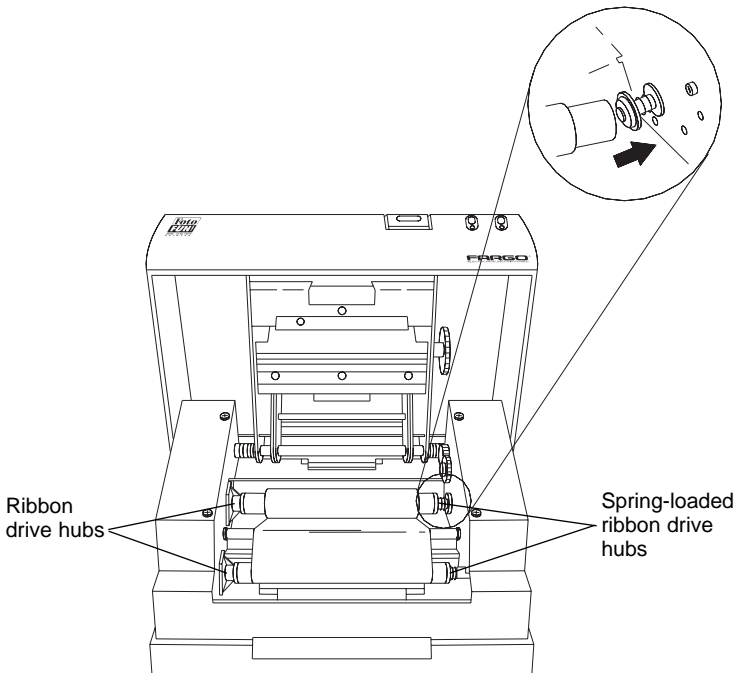
4. Place the take-up end of the ribbon in between the front ribbon drive hubs. When installed properly, ribbon will feed from **underneath** the supply end of the ribbon roll, **up and over** the top of the take-up end.

## C. INSERTING PHOTO PAPER, POSTCARDS, OR LABEL PAPER

FotoFUN! paper is inserted one sheet at a time and only when the printer prompts you to do so.

1. With ribbon installed and the printer cover closed, send a print job to *FotoFUN!*

2. When you hear the printer's feed rollers begin to turn, insert the paper into the printer with the **glossy print side facing down.** Note that once the rollers begin to turn, you have about 20 seconds to insert the paper. If you wait longer than 20 seconds before inserting the paper into the printer, the feed rollers will stop turning and the **clear** light will begin flashing quickly. To resume printing, simply press the clear button to restart the feed rollers, and insert the paper.

IMPORTANT! *Do not touch the printable side of the paper. Oil or dirt from your hands can impair print quality. Handle blank photo paper by grasping only the very top or bottom of the sheet. Also, do not attempt to insert FotoFUN! paper, postcards, or label paper into a laser printer. This media is sensitive to extreme heat and could damage a laser printer!*
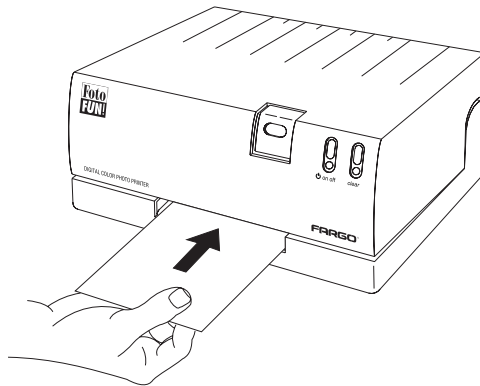
3. Insert paper into the printer until it pauses. Once inserted, paper will automatically feed and print.

NOTE: *As an added feature, it is also possible to pre-load a sheet of paper before you begin your print job. To do this, simply press the **clear** button to start the feed rollers turning. Then, insert a sheet of paper according to the above instructions. You can now start your print job and walk away. FotoFUN! will automatically begin printing once it receives your print job.*

A. APPLYING POWER

The power supply included with *FotoFUN!* should be properly configured for the power used in your country. Remove the power supply from the box and double-check that it is correct.

CAUTION! *If you have any doubts about the plug configuration or the voltage, **DO NOT ATTEMPT TO USE THE PRINTER.** Contact the printer reseller or FARGO for information on the correct power supply configuration.*

1. Plug the power cord into the power cord port of the power supply.
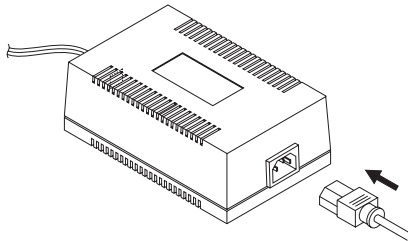
2. Place the DC power plug end of the power supply into the printer's Power Input Port.
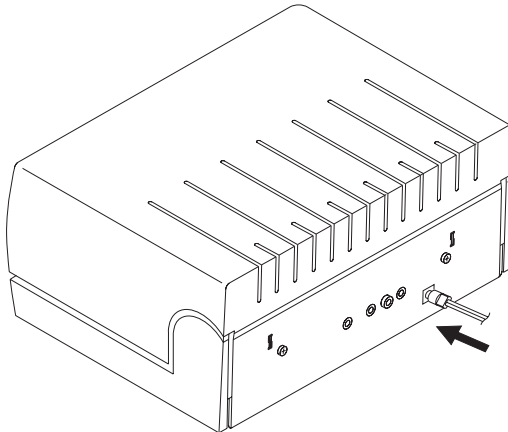
3. Place the AC power plug end of the power supply cord into an available wall outlet.

Power is automatically applied to the printer when it is plugged in. Press the **on off** button if you wish to turn the printer off.

NOTE: *Optional external power supply must be a listed Class 2 device with an output rating of 20 volts and 4 amps DC (direct current).*

B. PRINTING A SELF TEST

Now that ribbon is installed and power is connected, a self test should be performed to check for proper operation of the printer. A sample of the self test print is shown below. Refer to the following steps to run a self test:

1. If power is *on,* turn it *off* now. The **on off** light should be *off.* Verify that ribbon is installed.

2. With the printer's cover closed, press and hold the **clear** button.

3. While holding the **clear** button down, press and release the **on off** button. Continue to hold the **clear** button down until the self test activates.

4. You should then hear the printer's feed rollers begin to turn. Once these rollers begin to turn, release the **clear** button and insert a sheet of photo paper with the **glossy print side facing down.** The self test pattern should now be printing.

FotoFUN! VER: 1.09 08/09/95
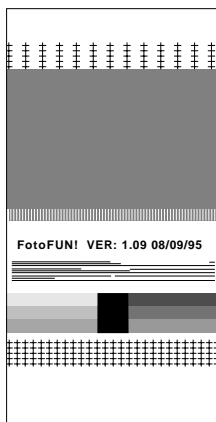
Color Self Test Example: (30% of actual size)

NOTE: *If you notice dark lines running the length of your self test print, don't worry. These lines will not appear in your output when printing from your computer. The self test feature is intended only for testing the mechanical funtions of the printer, not its print quality.*

Section 4: Using *FotoFUN!* for Windows

A. CONNECTING *FotoFUN!* TO YOUR COMPUTER

FotoFUN! is designed to be used with nearly any IBM-PC® or compatible running Windows 3.1x or Windows 95. For best performance, a minimum of a 486/66 computer with 8Mb of RAM or higher is recommended.

The printer is equipped with a standard 8-bit Centronics-type parallel port. This port is the means through which *FotoFUN!* receives data from your computer. To connect *FotoFUN!* to your computer, simply obtain a standard computer to printer parallel cable, and refer to the following steps:

NOTE *You may experience printing problems if your computer's parallel port mode is set to ECP. For best results, set your computer's parallel port to the standard "Printer Port" setting. Refer to your computer's system documentation for instructions on checking and/or changing the parallel port mode.*

1. Connect the Centronics-type parallel side of the cable to the printer. Snap the fastening clips into place.
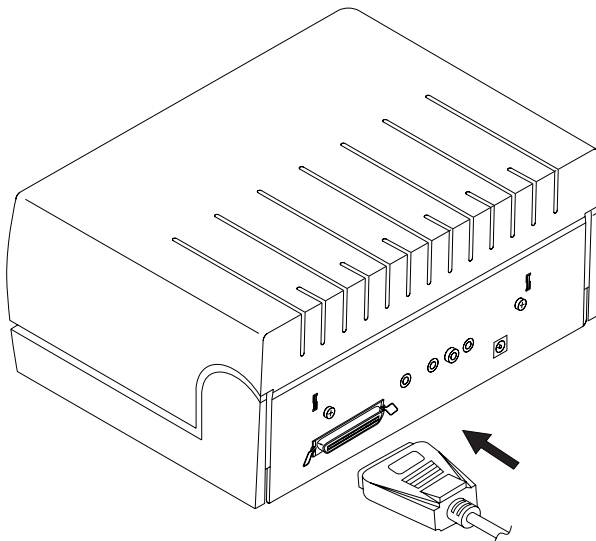
2. Connect the other side to the back of your computer at LPT1, LPT2, or the PARALLEL connector.
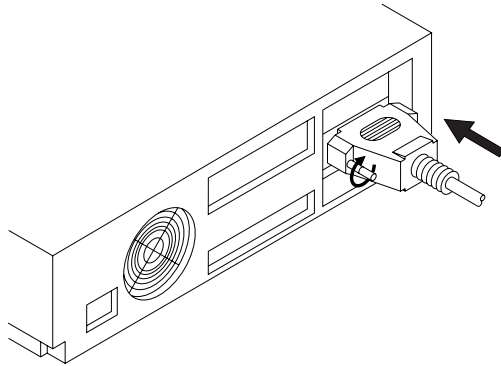
The printer must have its **clear** light illuminated to receive data. If the light is not on, press the **clear** button. When connected properly, both the illuminated **on off** and **clear** lights will remain solid.

B. INSTALLING THE *FotoFUN!* PRINTER DRIVER

FotoFUN! can be used with virtually any Windows 3.1x/95 application program. This is accomplished by installing in Windows what is called a "printer driver." The printer driver is simply a diskette with software on it which gives *FotoFUN!* all the information needed for printing. Use the following steps to install the *FotoFUN!* printer driver. Keep in mind that the original *FotoFUN!* printer driver packaged with the printer must be installed before installing any other printer driver versions or upgrades.

IMPORTANT! *You must keep the original printer driver diskette which shipped with your printer. This printer driver diskette includes special print information which is unique to your specific printer and may be called for when updating printer drivers. Do not lose this disk!*

Windows 95

To install the printer driver into Windows 95, refer to the following:

1. Insert the printer driver diskette into your computer's disk drive.

2. Click the **Start** button, point to **Settings,** and select **Printers.**
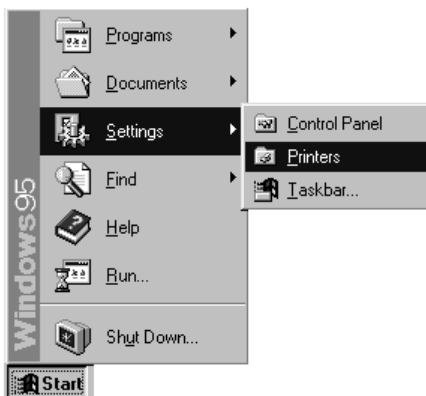
3. Double-click on the **Add Printer** icon.

4. Follow the on-screen instructions to complete installation. When prompted, do not have Windows print a test print since you most likely performed a printer self test in Section 3. When driver installation is complete, the "FARGO FotoFUN!" printer icon will appear in the Printers folder.

FARGO
FotoFUN!

5. Once installed, there are a few options you should select which will help optimize your system for printing. To do this, click on the "FARGO FotoFUN!" icon with the right

mouse button and select the **Properties** option. Select the **Details** tab, then select the **Spool Settings** button. Select the **Print directly to the printer** option and click on **OK.** Again from the Details tab, select the **Port Settings** button. Deselect the **Check port state before printing** option and click on **OK.** See section C for information on printer driver settings and options.

NOTE *Before installing updated printer driver versions, always delete the existing printer driver version from your system. To do this, simply select the printer driver icon from within the Printers folder, and press the Delete key.*

Windows 3.1x

To install the printer driver into Windows 3.1x, refer to the following:

1. After starting Windows, go to the Main program group and select **Control Panel.**

2. From the Control Panel, select **Printers.**

3. Select **Use Print Manager** from the bottom left of the Printers window.

4.   Select the **Add**>> button.

5. Highlight the **Install Unlisted or Updated Printer** option from List of Printers.

6. Select the **Install** button.

7. Insert the supplied Printer Driver diskette into your computer's disk drive. If you insert the diskette in a drive other than the A: drive displayed in the Install Driver dialog box, you must change the drive designation. Select the **OK** button.

8. "FARGO FotoFUN!" should now be listed in the Add Unlisted or Updated Printer dialog box. Select the **OK** button. Your PC's disk drive will now load the printer driver. Depending upon your computer, loading will take about 10 to 20 seconds.

9. Select the **Set As Default Printer** button in the Printers window. *FotoFUN!* has now been selected as your default (main) printer. If you wish to use another printer later, you must de-select *FotoFUN!* and switch back to the other printer's driver.

10. Finally, select the **Connect** button. Check that the box called **Fast Printing Direct to Port** is selected. Although this option is not necessary, it helps optimize printer driver speed and performance. Select **OK** to exit the Connect window. Select **Close** to exit the Printers window. See section C for information on printer driver settings and options.

C. SETTING UP THE *FotoFUN!* PRINTER DRIVER

Once the printer driver has been successfully installed, you will need to set the driver up with the appropriate print options. Refer to the following steps to change or verify your printer driver options:

1. If using Windows 95, go back to the Printers folder (see step 2 on page 10). Then, click on the **FARGO FotoFUN!** icon with the *right* mouse button and select **Properties.** The Properties window will appear. If using Windows 3.1x, go back to the Control Panel and the Printers group (see steps 1 and 2 on page 11).

2. In Windows 95, click on the **Details** tab of the Properties window and select the **Setup** button. In Windows 3.1x, select the **Setup** button.

NOTE   *Most applications allow you to change these same printer driver options from their "Print" and/or "Printer Setup" screens. This means that you don't have to go back to the main printer setup window each time you want to change a setting or option in the printer driver. These applications will usually give you the same choices and options, but in a slightly altered format.*

3. The FARGO *FotoFUN!* Printer screen appears. Change the options as follows:

Paper Size

The size of FARGO's special photo paper is exactly 4" x 7.7" (102 x 196mm). The maximum printable area of this paper is 4" x 6" (102 x 152mm), leaving a non-printable margin of about .5" (13mm) at the top of the sheet and 1.2" (30mm) at the bottom. When printing in landscape orientation, this non-printable margin shifts to .5" on the left-hand side of the sheet and 1.2" on the right-hand side.

If you have a 4" x 6" image and you wish to print it at the maximum 4" x 6" size, select the **Borderless** paper size option. If you wish to have a .2" (5mm) border placed around your image, select the **Border** paper size option. In order to achieve a .2" border, this option reduces the maximum printable area from 4" x 6" to 3.6" x 5.6" (91 x 142mm). Click on the Paper Size down arrow and choose the paper size that's right for your image. These two drawings illustrate the maximum printable area for each paper size option.
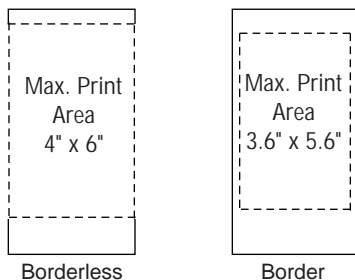
Ribbon Type

Indicates that you are printing with **Color** ribbon.

Color Matching

Click on the Color Matching down arrow and choose the color matching option that's right for you. Select **None** if you are more interested in print speed rather than print color, if you have already color corrected your image for printing, or if you are using some other third party color matching software.

Select **Algebraic** if you would like the printer driver to make very simple, yet fast, color balance adjustments. This option gives you more natural looking images without actually utilizing any specific color matching software and without slowing down the processing speed of the printer driver.

Select **FargoColor** to enable color matching profiles written specifically for *FotoFUN!.* This option automatically adjusts the color of your image according to preconfigured printer profiles and default system profiles. This results in a very precise color match compliant with ICC standards. Since the default system profiles provided are generic, the colors of some monitors may still vary slightly from your output. As a solution, raw printer profiles are provided in case you would like to combine your custom monitor profiles with the printer profiles.

Intensity

This option controls the lightness and darkness of a printed image. Click on the left and right arrows or click and drag on the slide's adjustment box to change the amount of heat used in the printing process.

Overlay

Select this option to utilize the ribbon's clear, protective overlay panel. **This option should always be selected when printing,** except when printing mug transfers. Do not select this option if printing mug transfers since the overlay will impair the quality of the transferred image.

***FotoMUG!* Settings**

When this option is selected, the *FotoFUN!* printer driver will automatically optimize itself for printing mug transfers. Your image will automatically be reversed so as to appear in "mirror

image" format when printed, the Overlay option will automatically become inactive, and the Intensity will automatically increase to the recommended setting of 85%. When deselected, all options will return to their default settings. Select this option only when printing images for mug transfers.

Write Direct to Port

Selecting this option allows the *FotoFUN!* printer driver to bypass the Windows 3.1 print manager or the print spooler of Windows 95 and to send all print data directly to the printer. When selected, this option devotes all of your system resources to the current print job, thus, increasing print speed and quality. When the print job is finished, your system resources will again be devoted to the normal function of your on-screen applications.

Depending upon the brand of your computer, you may or may not wish to select this option when printing. For most computers, selecting this option will enhance the rasterizing and printing process. In this case, the **Write Direct to Port** option should be selected. For some computers, however, this option may not be supported by the particular brand of PC and should not be selected.

Orientation

Select either **Portrait** or **Landscape**. Selecting Portrait causes the image to print in a vertical orientation. Selecting Landscape causes the image to print in a horizontal orientation. An icon illustrating the printed page helps you remember the difference between the two.

4.   After your selections have been made, close out of the printer setup window. You are now ready to go to an application program and print. All printer driver selections will stay the same until you change them.

D. PRINTING A PHOTO

Now that you've hooked up *FotoFUN!*, loaded the ribbon, and installed the printer driver, you're ready to print your first digital color photograph. Follow these steps to print your first image:

1.   Go to your favorite Windows application program.

2. Open the image file you wish to print. For best results, use only 24-bit color, 203 dpi (or higher) images and print at an image size of approximately 100%. Over-enlarging an image or printing lower dpi images will cause your photos to appear jaggy or pixelized when printed. Likewise, printing file formats with less than 16.7 million colors (such as 256 color GIF files) will cause your photos to appear rough or grainy when printed.

3. If you intend to print a borderless print, you must also make sure that your image size is just a bit larger than 4" x 6". This will assure that your image will bleed off the sides of the printed sheet. Use the program's cropping and resizing options to properly size your images. Remember, however, not to increase or decrease the size of your image too much.

4. Once you are ready to print, select **Print Setup** from the program's File menu to verify that the printer driver settings are correct for your image. Once the driver is set, select **Print** from the program's File menu.

5. The *FotoFUN!* printer driver will then begin to process the image. Depending upon the size of the image and the processing speed of your computer, processing time can take from several seconds to a few minutes.

6. Once processing is complete, you will hear the printer's feed rollers begin to turn. At this time, insert a sheet of *FotoFUN!* paper into the printer with the **glossy print side facing down.** Remember, you have about 20 seconds to insert the paper. Insert the paper until it pauses. After the pause, *FotoFUN!* will automatically feed the paper and print the first color (yellow) followed by the two remaining colors (magenta and cyan). The clear overlay panel will print last. Wait until all the panels have printed and until the sheet is fully ejected before trying to pull it out of the printer.

7. If everything looks good, ***congratulations!*** You've successfully set up and printed with your new *FotoFUN!* Digital Color Photo Printer.

A. CONNECTING *FotoFUN!* TO YOUR COMPUTER

FotoFUN! is designed to be used with any Apple Macintosh supporting Color QuickDraw™ and running system software 7.0 or higher. For best performance, a Macintosh with a 68040 processor and 8Mb of RAM (or higher) or a PowerMac with 8Mb of RAM (or higher) is recommended. The *FotoFUN!* printer driver is accelerated for use with a PowerMac. *FotoFUN!* cannot be used with the Macintosh Plus, SE, or Classic since these models do not support Color QuickDraw.

The printer is equipped with a high-speed serial port. This port is the means through which *FotoFUN!* receives data from your computer. This port is not AppleTalk™ compatible. To connect *FotoFUN!* to your computer, simply obtain a standard serial cable with an 8 pin mini-DIN connection on each end, and refer to the following steps:

1. Connect one end of the serial cable to the printer.
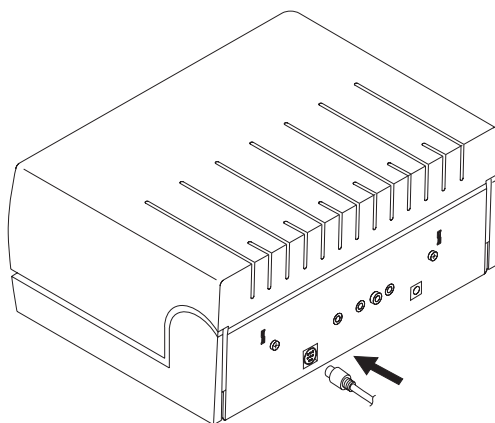
2. Connect the other end of the cable to either the Printer or Modem port of your Macintosh.
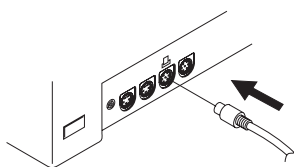
The printer must have its **clear** light illuminated to receive data. If the light is not on, press the **clear** button. When connected properly, both the illuminated **on off** and **clear** lights will remain solid.

B. INSTALLING THE *FotoFUN!* PRINTER DRIVER

FotoFUN! can be used with virtually any Macintosh application program. This is accomplished by installing what is called a "printer driver." The printer driver is simply a diskette with software on it which gives *FotoFUN!* all the information needed for printing. Use the following steps to install the *FotoFUN!* printer driver. Keep in mind that the original *FotoFUN!* printer driver packaged with the printer must be installed before installing any other printer driver versions or upgrades.

IMPORTANT! *You must keep the original printer driver diskette which shipped with your printer. This printer driver diskette includes special print information which is unique to your specific printer and may be called for when updating printer drivers. Do not lose this disk!*

1. After starting your Macintosh, insert the supplied *FotoFUN!* printer driver diskette into your computer's disk drive.

2. When the disk icon appears on your desktop, double-click on the disk icon to open the disk window.

3. Click on the READ ME file to get the latest information on the driver and the installation process. When you are finished reading, select **Quit** from the File menu.

4. Double-click on the *FotoFUN!* Installer icon.

5. When the Installer window appears, select the options you would like the installer program to install. In most instances, the default selections will suffice. For a description of each of these options, refer to the notes found in the box directly above these options (use the up and down arrows to scroll through the notes). Once the desired options are selected, click on **Install.** The appropriate files will automatically install onto your computer. An alert box will then display indicating that installation is complete.

6. Click on **OK** to exit the installer. Driver installation is now complete.

C. THE CHOOSER

The Chooser is a Desk Accessory in the Apple menu. Before you can use *FotoFUN!,* you need to select the *FotoFUN!* printer driver using the Chooser. This instructs your Macintosh to send print jobs to *FotoFUN!* instead of to some other printer you may already have connected to your system. Refer to the following steps to select the *FotoFUN!* printer driver:

1. Select **Chooser** from the Apple Menu.

2. The Chooser displays an icon for all the printer drivers installed in the System Folder. Among these, you should see the icon for the *FotoFUN!* printer driver you just installed. If you do not see the icon, go through the installation procedure again making sure the **Install driver and prefs** option is selected. Once you locate the *FotoFUN!* icon, click on the icon to select it.
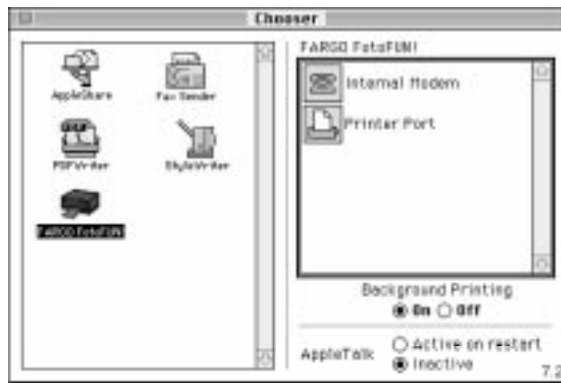
3. Select either the **Modem** or **Printer Port** to indicate to which port the serial interface cable was connected. If the Printer port is selected, AppleTalk should remain inactive while printing with *FotoFUN!* unless you are using AppleTalk through your Ethernet port. AppleTalk does not apply when printing with the Modem port selected.

4. If you chose to install the Background Print Utility during the installation procedure, select either **On** or **Off** to enable or disable *FotoFUN!*'s Background Printing function. When enabled, this function allows you to work in the foreground of your application program while printing in the background. Please refer to Section 6 for more information on background printing.

The next time you open the Chooser, the selected driver will no longer be highlighted. The Chooser, however, remembers which driver is the current one, but does not display it when opened.

D. SETTING UP THE *FotoFUN!* PRINTER DRIVER

Once the printer driver has been successfully installed, you will need to set the driver up with the appropriate print options. To change or verify your printer driver options, select **Page Setup** from the File menu and change the options as follows:

Paper Size

The size of FARGO's special photo paper is exactly 4" x 7.7" (102 x 196mm). The maximum printable area of this paper is 4" x 6" (102 x 152mm), leaving a non-printable margin of about .5" (13mm) at the top of the sheet and 1.2" (30mm) at the bottom. When printing in landscape orientation, this non-printable margin shifts to .5" on the left-hand side of the sheet and 1.2" on the right-hand side.

If you have a 4" x 6" image and you wish to print it at the maximum 4" x 6" size, select the **Borderless** paper size option. If you wish to have a .2" (5mm) border placed around your image, select the **Border** paper size option. In order to achieve a .2" border, this option reduces the maximum printable area from 4" x 6" to 3.6" x 5.6" (91 x 142mm). Click on the Paper Size box and choose the paper size that's right for your image. These two drawings illustrate the maximum printable area for each paper size option.
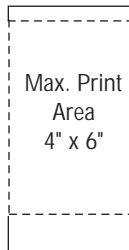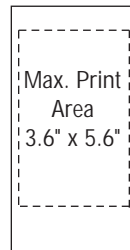
Color Matching

Click on the Color Matching box and choose the color matching option that's right for you. Select **None** if you are more interested in print speed rather than print color, if you have already color corrected your image for printing, or if you are using some other third party color matching software.

Select **Algebraic** if you would like the printer driver to make very simple, yet fast, color balance adjustments. This option gives you more natural looking images without actually utilizing any specific color matching software and without slowing down the processing speed of the printer driver.

Select **FargoColor** to enable color matching profiles written specifically for *FotoFUN!.* This option automatically adjusts the color of your image according to preconfigured printer profiles and default system profiles. This results in a very precise color match compliant with ICC standards. Since the default system profiles provided are generic, the colors of some monitors may still vary slightly from your output. As a solution, raw printer profiles are provided in case you would like to combine your custom monitor profiles with the printer profiles.

Select **ColorSync** to perform a ColorSync match on the image to be printed. This option enables ColorSync™ 2.0 to color correct your image according to preset printer profiles and the selected system profiles. A recommended default system profile is installed into the ColorSync Preferences folder. For best results, it is recommended that only this default system profile be used. To select this profile, go to the ColorSync System Profile control panel in the Apple menu.

Ribbon Type

Click on the Ribbon Type box and select either **3-color** or **3-color with Overlay.** Select 3-color with Overlay to utilize the 3-color ribbon's clear, protective overlay panel. **This option should always be selected when printing with the 3-color ribbon,** except when printing mug transfers. Mug transfers should not have the clear overlay applied to them since the overlay will impair the quality of the transferred image. Select 3-color only when printing mug transfers.

Orientation

Select the appropriate icon according to the orientation of your particular image.

Enlarge/reduce

This option alters the size of the printed image between the integers of 25% and 400%. A setting of 100% indicates the document will be printed at actual size. Please note that significantly enlarging or reducing the image may cause the image to appear pixelated or "jaggy" when printed.

***FotoMUG!* Settings**

When this option is selected, the *FotoFUN!* printer driver will automatically optimize itself for printing mug transfers. Your image will automatically be reversed so as to appear in "mirror image" format when printed, the Ribbon Type will automatically switch to **3-Color** (no overlay), and the Intensity will automatically increase to the recommended setting of 85. When deselected, all options will return to their default settings. Select this option only when printing images for mug transfers.

Intensity

This option controls the lightness and darkness of a printed image. Click on the left and right arrows or click and drag on the slide's adjustment box to change the amount of heat used in the printing process.

After your selections have been made, select the **OK** button to save your printer driver selections and to exit the Page Setup window. You are now ready to go to an application program and print. All printer driver selections will stay the same until you change them.

E. PRINTING A PHOTO

Now that you've hooked up *FotoFUN!*, loaded the ribbon, and installed the printer driver, you're ready to print your first digital color photograph. Follow these steps to print your first image:

1. Go to your favorite graphics application program.

2. Open the image file you wish to print. For best results, use only 24-bit color, 203 dpi (or higher) images and print at an image size of approximately 100%. Over-enlarging an image or printing lower dpi images will cause your photos to appear jaggy or pixelized when printed. Likewise,

printing file formats with less than 16.7 million colors (such as 256 color GIF files) will cause your photos to appear rough or grainy when printed.

3. If you intend to print a borderless print, you must also make sure that your image size is just a bit larger than 4″ x 6″. This will assure that your image will bleed off the sides of the printed sheet. Use the program's cropping and resizing options to properly size your images. Remember, however, not to increase or decrease the size of your image too much.

4. Once you are ready to print, select **Page Setup** from the program's File menu to verify that the printer driver settings are correct for your image. Once the driver is set, select **Print** from the program's File menu and click on **OK**.

5. The *FotoFUN!* printer driver will then begin to process the image. Depending upon the size of the image and the processing speed of your computer, processing time can take from several seconds to a few minutes.

6. Once processing is complete, you will hear the printer's feed rollers begin to turn. At this time, insert a sheet of *FotoFUN!* paper into the printer with the **glossy print side facing down.** Remember, you have about 20 seconds to insert the paper. Insert the paper until it pauses. After the pause, *FotoFUN!* will automatically feed the paper and print the first color (yellow) followed by the two remaining colors (magenta and cyan). The clear overlay panel will print last. Wait until all the panels have printed and until the sheet is fully ejected before trying to pull it out of the printer.

7. If everything looks good, ***congratulations!*** You've successfully set up and printed with your new *FotoFUN!* Digital Color Photo Printer.

Section 6: Using the Print Backgrounder for Macintosh

The *FotoFUN!* printer driver for Macintosh provides a background print utility called the Print Backgrounder. This print utility is turned on or off through the Chooser. When the Backgrounder is turned on, it allows you to conveniently continue working in the foreground of your application while printing in the background. When Backgrounder is turned off, all print jobs are processed immediately in the foreground of your application. The Backgrounder offers many helpful features which are described further in this section.

A. INSTALLING THE BACKGROUNDER

The Backgrounder is installed by selecting the **Install Background Print Utility** option from within the printer driver's installer program. This option is NOT selected by default, so if you did not select the Backgrounder option when installing the printer driver, it is most likely not installed. To install the Backgrounder, simply go through the printer driver installation procedure described in Section 5-B making sure that the **Install Background Print Utility** option is selected. The Backgrounder installs into the Extensions folder of your startup drive. Once installed, Backgrounder will automatically open and close with the start and finish of each print job. To manually open Backgrounder, double-click on the Print Backgrounder icon within the Extensions folder.

B. PRINTING WITH THE BACKGROUNDER

With the Backgrounder turned on in the Chooser, select **Print** from the File menu to print your image. A message appears telling you the image is being spooled to disk for Background/Later processing. Once the message disappears, background processing has begun so your application is free to be used for other work.

The print job is processed automatically by the Backgrounder. Other documents can be printed and, in turn, will be processed by Backgrounder. While Backgrounder is running, you can quit the current application and start another without disturbing

your print jobs. Backgrounder processes all print jobs in the order in which they were sent to the printer.

C. THE BACKGROUNDER STATUS WINDOW

Status of currently processing print job

"On hold" print job

List of queued print jobs

Print job in which a print error has occurred
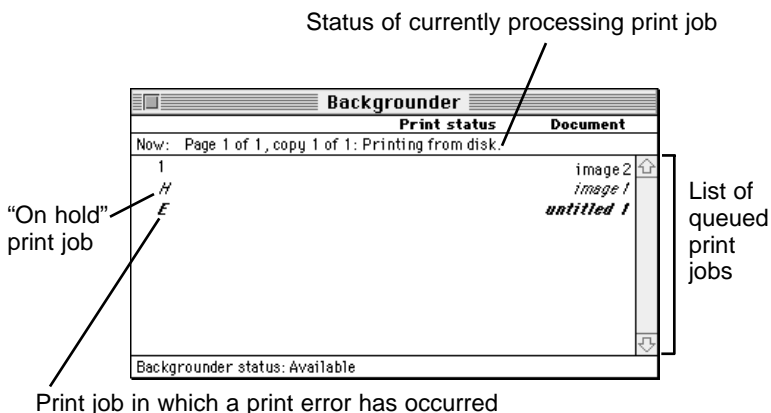
The Backgrounder status window gives you detailed information about the status of the print job currently processing and about each print job waiting in the queue. The status of the job currently processing displays at the top of the status window. The message indicates how much of the job has been processed and displays any other relevant information. This line is blank if, for example, you manually start Backgrounder and no job is currently being processed.

The list of queued jobs displays below the current job in the order in which they were sent to the printer. Some applications, however, may put each page of the document into a separate spool file, creating a different job in the queue for each page. Print jobs are always added to the bottom of the queue. When the job currently processing is complete, the spool file for that job is deleted from the hard disk, and the top-most job in the queue is then processed.

Jobs that are "on hold" are displayed at the bottom of the job list in italic font. A job goes on hold when it has been canceled or when an error is detected during processing. An overall status message about the Backgrounder displays in the lower left corner of the window. The normal message is "Available," indicating that the Backgrounder can process jobs immediately or add them to the queue.

D. BACKGROUNDER MENUS

File menu

Open Status Window and **Close Status Window:** Opens and closes the Backgrounder status window. The Backgrounder continues to work if the status window is closed.

Log Files: The Backgrounder has the ability to create and maintain a sequential history file, or **Log** file, of Backgrounder print jobs. This Log file can be enabled and manipulated with the following commands of the File menu:

> **New Log File:** Selects a new file in which to maintain your ongoing Backgrounder printing log.

> **Save Copy of Log as:** Saves the current Log file to a new file name or location of your specification.

> **Start Recording Log:** Begins logging print history. Before the Log file is started, you are asked to specify a Log file in which to save your processed print job entries. When logging begins, this option dims.

> **Stop Recording Log:** Stops logging print history. This option dims once print logging stops.

Get Info: Provides additional information about the currently selected print job. Click on the processing job or any job in the queue, before selecting Get Info. Double-clicking on a job in the status window is a shortcut for Get Info.

Quit: Exits the Backgrounder. Note that you cannot quit while a job is being processed (see **Stop Processing** on the following page). All jobs in the queue are retained and processed when Backgrounder is next started.

NOTE: *The spool files are stored in the "Spool Folder," inside the "System Folder." If these files are deleted, the corresponding print jobs will be lost, and must be printed again.*

Admin menu

Stop Processing: Stops the Backgrounder from processing any jobs, although it will still receive them and add them to the queue. A dialog box is displayed if Stop Processing is selected while Backgrounder is processing a job, asking when the job should be put on hold. The Backgrounder status box in the lower left-hand corner of the window indicates that Backgrounder has stopped.

You cannot quit from Backgrounder while it is processing a job. **Stop Processing** must first be selected to cancel the processing job and stop Backgrounder. When Backgrounder stops, the menu changes to **Continue Processing.** When this option is selected, the server starts processing the top job in the queue.

Preferences: Presents a dialog box containing options for fine-tuning the Backgrounder. **Background printing priority** determines how much time your Mac spends processing the image, and how much time it spends in the foreground application (interpreting mouse clicks, key presses, etc.). When the priority is set to **High,** Backgrounder processes the image faster, but the foreground application may become less responsive. With the priority set to **Low,** Backgrounder takes longer to process the image, yet the responsiveness of the other applications is improved.

Jobs menu

All commands in the Jobs menu act on the currently selected job.

Hold: Prevents an individual job from being processed. Jobs that are "on hold" are displayed in italic font at the bottom of the queue. Placing a job on hold is useful if you wish to create a print job at present, yet save its processing until later.

If **Hold** is selected on the job currently processing, the job is canceled before it is placed on hold. Canceling the current job can take some time, since the printer software may be performing a lengthy task that cannot be interrupted.

Remove Hold: Moves the job from the hold section of the list and places it at the bottom of the waiting queue.

Delete: Permanently removes the selected print job. The corresponding spool file is deleted from the Spool Folder. Use this command only when you are sure that you do not wish to process the job. Note that the job currently processing cannot be deleted (this happens automatically when it is printed successfully).

Move Job Up and **Move Job Down:** Adjusts the position of the selected job in the queue, allowing you to prioritize jobs. The queue is processed in top-to-bottom order.

E. PROBLEMS DURING A BACKGROUND PRINT

Errors that are detected during a background print must be reported. The Backgrounder, however, cannot simply present a dialog box as soon as the error occurs, since the dialog could obscure work that is being done in the foreground. Error dialogs appear immediately, however, if the Backgrounder is in the foreground when the error is detected.

If operating in the background, Backgrounder stops processing until it is brought to the front. When Backgrounder detects an error, it beeps and visually indicates an error condition. This error condition is signaled by alternately flashing between the Application menu and the Backgrounder icon. A small diamond symbol is also displayed next to the Backgrounder icon within the Application menu.

Complete and save any work in the foreground application before bringing the Backgrounder to the front. Once Backgrounder is in the foreground, the error dialog displays and processing continues or is canceled. Some errors force Backgrounder to stop processing all jobs.

Section 7: **Interpreting the *FotoFUN!* Indicator Lights**

The **on off** and **clear** LED indicator lights located on the front of *FotoFUN!* can tell you a lot about what is happening inside the printer. To accurately interpret what it means when these lights are on, off, or flashing, please refer to the following:
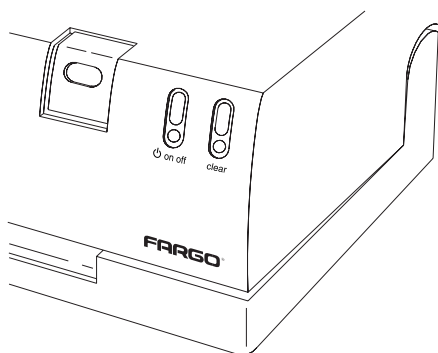
A. THE *on off* LED INDICATOR LIGHT

The **on off** light function is very simple. When the light is illuminated, the printer power is on. When the light is not illuminated, the printer power is off. Press the **on off** button to turn the printer power on or off.

B. THE *clear* LED INDICATOR LIGHT

The **clear** light can indicate several printer conditions. These conditions are as follows:

1. When the illuminated **clear** light is **SOLID,** the printer is ready to receive a print job.

2. When the **clear** light is **FLASHING QUICKLY**, it is indicating a mechanical print error condition. This will occur if:

   • You waited too long before inserting the photo paper at the beginning of a print job (see page 5).
   • The printer is out of ribbon.
   • The ribbon is not installed properly (see pages 3-4).
   • The ribbon or paper has become jammed (see pages 33-34).

Once you have determined and corrected the problem, simply press the **clear** button and resume your print job or completely cancel and restart your print job.

3. When the **clear** light is **FLASHING SLOWLY**, it is indicating a software or data transmission error. This will occur if:

    •   *FotoFUN!* is not securely connected to its interface cable.
    •   The interface cable is too long (should be approximately 6 feet in length).
    •   You have a driver other than the *FotoFUN!* printer driver selected.

Once you have determined and corrected the problem, turn the printer power on and off to reset the printer, and completely cancel and restart your print job.

C. BOTH LED INDICATOR LIGHTS

When both the illuminated **on off** and **clear** lights are **SOLID,** the printer is connected properly and ready to print. When both lights are **FLASHING SIMULTANEOUSLY,** *FotoFUN!* is indicating that it is too hot to print.

In order to accurately regulate print quality, *FotoFUN!* will not print if the printhead gets too hot. If the printhead was allowed to overheat, your printed image would darken and the colors would be distorted. Generally, you will notice this condition after printing two or more consecutive photos, one immediately after the other.

If you send a print job to the printer and both lights begin flashing simultaneously, simply let the printer sit for a moment until the lights stop flashing. Once the flashing lights have stopped, the printer's feed rollers will begin to turn indicating that the printer is now cool enough to print. Proceed with the normal printing process.

FotoFUN! is designed to require very little maintenance. Nevertheless, there are a few procedures you can perform on a regular basis or as needed to ensure your printer's best performance.

Printhead
Assembly

Printhead

Drive Roller
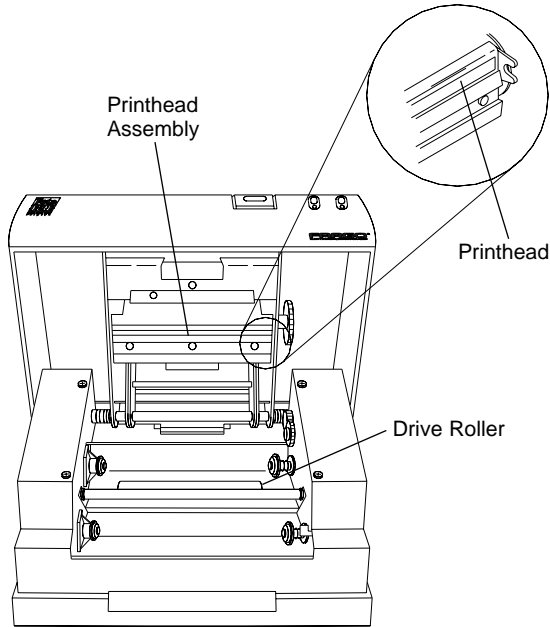
A. CLEANING THE PRINTHEAD

This procedure is done only if you notice a streak running the length of the print where ink was not transferred. Refer to the following steps to clean the printhead:

1. Disconnect your printer's power.

2. Open the printer's cover by pressing the Cover Release Button.

3. Use a soft, lint-free cloth *slightly* moistened with isopropyl alcohol to wipe dust or any other particles off the surface of the printhead. **Do not allow alcohol to drip into printer!**

4. Once the printhead is completely dry, close the cover. If a streak persists, contact FARGO Technical Support.

B. CLEANING THE OUTSIDE AND INSIDE OF THE PRINTER

Occasionally, you may wish to clean dust or other accumulated particles from the inside or outside of your printer. **Always disconnect your printer's power before cleaning.** To clean your printer, use a soft, lint-free cloth *slightly* moistened with isopropyl alcohol to wipe off dusty areas of your printer. If cleaning the inside of the printer, you must first remove the ribbon. Then, gently wipe out all visible areas of the printer's interior. Do not allow alcohol to drip inside the printer. Once the printer is completely dry, re-install the ribbon and close the cover.

C. CLEANING THE DRIVE ROLLER

Periodically, you should clean the printer's driver roller (the large black roller in the center of printer's interior.) Removing dust and other particles from this roller helps your printer to feed and print more consistently. Refer to the following steps to clean this roller:

1. Leave the power on and open the printer's cover by pressing the Cover Release Button.

2. Remove the ribbon.

3. Use a soft, lint-free cloth *slightly* moistened with isopropyl alcohol to wipe dust or any other particles off the surface of the roller. Use the ***on off*** and ***clear*** buttons to rotate the roller back and forth while you are wiping the surface clean. **Do not allow alcohol to drip into printer!**

4. Once the roller is completely dry, re-install the ribbon and close the cover.

D. CLEARING A PAPER JAM

If a sheet of paper becomes jammed inside the printer, refer to the following steps to remove it:

1. Leave the power on and open the printer's cover by pressing the Cover Release Button.

2. Remove the ribbon.

3. Press the ***on off*** button to advance the paper. Press the ***clear*** button to reverse the paper.

4. Turn the printer's power off and on to clear its input buffer memory, and restart the print job.

E. CLEARING A RIBBON JAM

If the ribbon becomes jammed inside the printer (visible when you open the printer's cover), refer to the following steps to remove it:

1. Leave the power on and open the printer's cover by pressing the Cover Release Button.

2. Remove the ribbon take-up core (the core with the used ribbon on it).

3. Grasping the ribbon take-up core, gently pull the ribbon upward as you press and hold the *clear* button. This will rotate the rollers backwards and eject the ribbon.

F. TECHNICAL SUPPORT

If you have difficulty operating *FotoFUN!*, the suggestions on the included Troubleshooting Guide should, in most cases, solve the problem. If you still have difficulty after trying these suggestions, call FARGO's Technical Support Group.

Customer and technical support representatives are available Monday through Friday, 7:00 AM to 6:00 PM Central Standard Time. Technical support is free of charge for your first call and for those calls made within the first 30-days following that first call. To contact a technical support representative, call (612) 941-0050. You may also leave a message 24-hours a day if you would like to have a representative call you back the next business day.

If technical support is needed and it has been over 30-days since your first call, you must call 1-900-555-3274. A fee of $10.00 per call will then be charged to your phone bill. You must be at least 18 years of age to call this number.

Several additional support options are available for free, 24-hours a day, 365 days per year. They are:

FARGO BBS:	**(612) 942-7958**
FARGO WWW Home Page:	**http://www.fargo.com**
FARGO Tech Support FAX:	**(612) 941-1852**

On both the BBS and the WWW Home Page, you're able to download printer drivers at speeds up to 14,400 bits per second. A wide range of text files can also be printed or downloaded.

Section 9: Technical Specifications

Print Method:	Thermal Dye-sublimation
Print Resolution:	203 dots per inch
Print Speed:	Approximately 2.5 minutes/print
Colors:	16.7 million
Printer Driver:	Windows 3.1 (or higher), Macintosh
Interface:	Standard 8-Bit Centronics-type Parallel (IBM-PC), Serial (Macintosh)
Media Size:	4" x 7.7" (102 x 196mm)
Printing Area:	Up to 4" x 6" (102 x 152mm)
Ink Ribbon:	3-color; Yellow, Magenta, Cyan, Overlay; 36 prints/roll
Paper Feed Method:	Friction feed
Dimensions:	9.5"W x 4.25"H x 7.5"D (241mmW x 108mmH x 191mmD)
Weight:	7lbs (3.2 kg)

Temperature:

Operating:	5°C to 35°C
Storage:	-20°C to 55°C (5°C to 35°C guaranteed for Photo Ribbon; -5°C to 45°C for up to one month is normally acceptable but not guaranteed)

Humidity:

Operating:	20% to 80% (RH non-condensation)
Storage:	0% to 95% (RH non-condensation) (15% to 85% for Ink Ribbon)

Supply Voltage:	Engine requires 20 VDC at 4.5 Amps
Supply Frequency:	50 Hz/60 Hz 100-250 VAC 1.2 Amps
Safety:	USA — UL1950 Canada — CSA C22.2 No. 950-93 Europe — TÜV-GS (IEC950)
EMI:	USA — FCC Class B Canada — CRC c1374, Class B Europe — TÜV-EMC
CE:	Self certified based on IEC 801-2,-3,-4, CISPR 22-B and IEC950 certification
Warranty:	One year parts and labor

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