

AV620C

Color Image Scanner

User's Manual

(D/N 250-0131-E Rev. A)

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FCC Radio Frequency Interference Statement

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 instruction manual, may cause harmful interference to radio communication. 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:

- * Reorient 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.

CAUTION: Any changes or modifications not expressly approved by the manufacture of this device could void the user's authority to operate the equipment.

Table of Contents

1. INTRODUCTION.....	1-1
2. SCANNER INSTALLATION.....	2-1
2.1 PRECAUTIONS.....	2-1
2.2 UNLOCKING THE SCANNER	2-2
2.3 CONNECTING THE CABLE	2-3
2.4 DOCUMENT PLACEMENT	2-4
3. SCANNER DRIVER INSTALLATION	3-1
3.1 AUTO-INSTALLATION PROGRAM	3-1
3.2 UNINSTALL THE SCANNER.....	3-3
4. SCANNER OPERATION & DOCUMENT PRINTING.....	4-1
4.1 IMAGE TYPE.....	4-3
4.2 SCANNING PARAMETERS & IMAGE CONTROL.....	4-5
4.3 SCANNING.....	4-9
4.4 PRINTING.....	4-10
5. MAINTENANCE.....	5-1
6. TROUBLESHOOTING.....	6-1
6.1 QUESTIONS AND ANSWERS.....	6-1
6.2 TECHNICAL SERVICE.....	6-5
7. SPECIFICATIONS.....	7-1
7.1 MODEL: AV620C.....	7-1

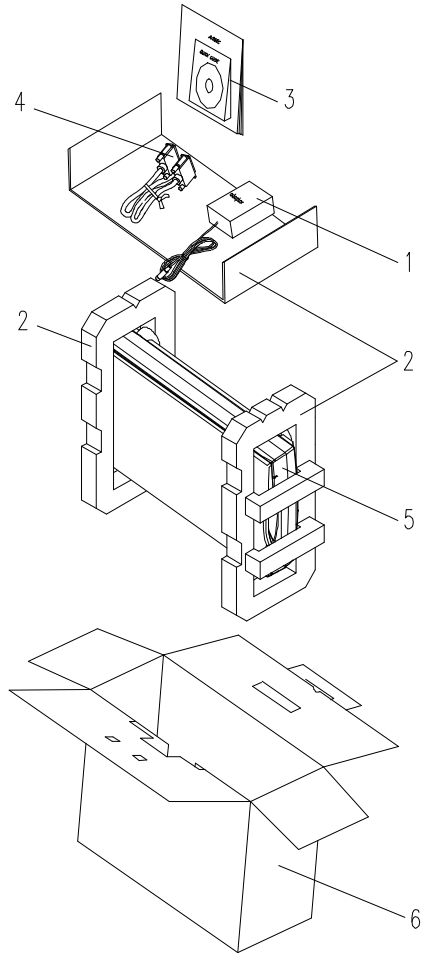
1. Introduction

Congratulations on your purchase of Avison AV620C color image scanner. Avison is one of the leading companies in the world to deliver high quality color scanner.

You can scan both normal printing material including photographs as well as the transparency and store them in your computer. Then you can modify them for your keen purpose on your computer and enjoy the wonderful world of image.

The following sections introduce the unpacking, hardware and software installation, the operation, and maintenance information to you. Please do take a few minutes to read through them to keep quality scanning result possible.

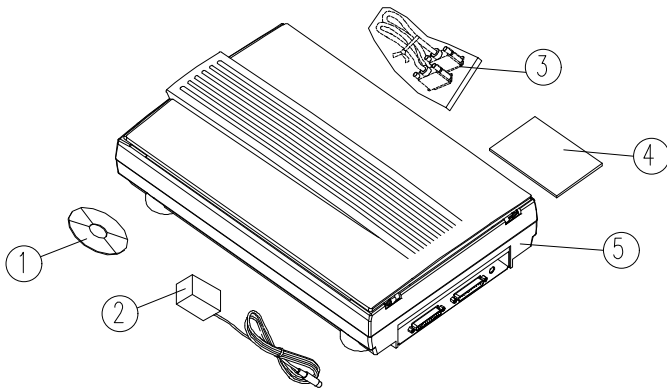
Figure 1-1 shows how the scanner is packed. Please check all the items against your checklist contained in the box or against Figure 1-1. If there is any missing or damaged, please contact your nearest dealer immediately for the replacement.



1. Power Adapter, 2. Cushion 3. Manual, Driver Kit CD.
4. D25P Cable, etc 5. Scanner 6. Carton

Figure 1-1 Scanner packing

Package Contents



1. Software CD
2. Power Adapter
3. Scanner Cable
4. Quick Installation Guide
5. AV620C Scanner

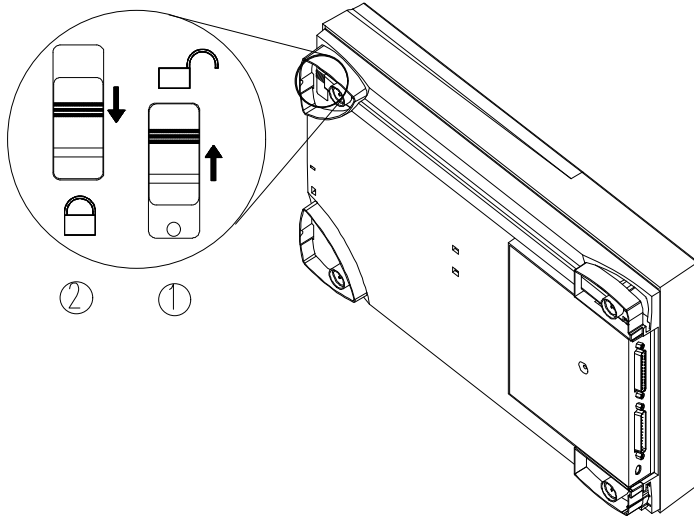
2. Scanner Installation

2.1 Precautions

- Keep the scanner out of direct sunlight. Direct exposure to the sun or excessive heat may cause damage to the unit.
- Do not install the scanner in a humid or dusty place.
- Be sure to use the proper AC power source.
- Place the scanner securely on an even, flat surface. Tilted or uneven surfaces may cause mechanical or paper-feeding problems.
- Retain the scanner box and packing materials for shipping purposes.

2.2 **Unlocking the Scanner**

As shown below, unlock the scanner by moving the scanner lock to the *Use* position.

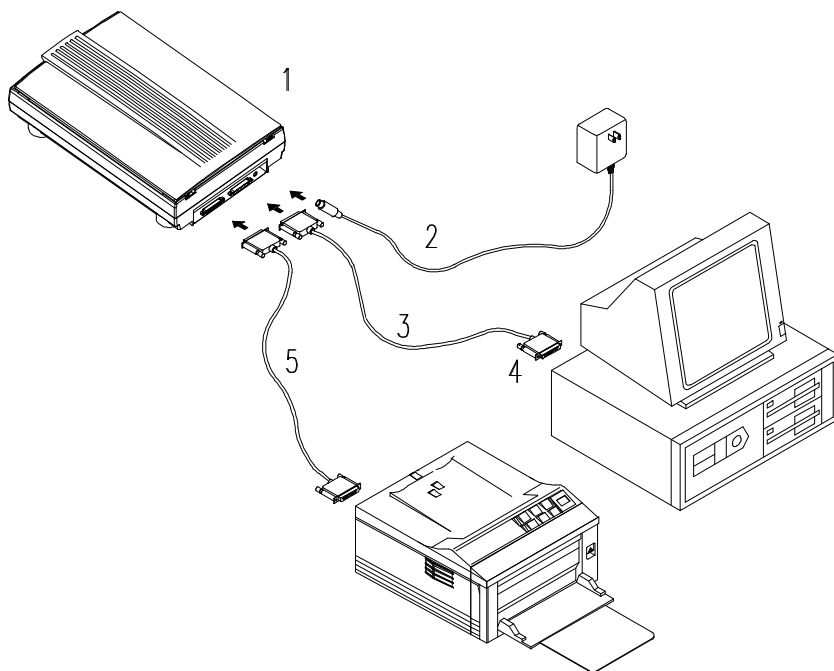


1. "Use" Position 2. "Shipping" Position

Figure 2-1 Unlocking the Scanner

2.3 *Connecting the Cable*

Connect the power cable and signal cable as shown below.

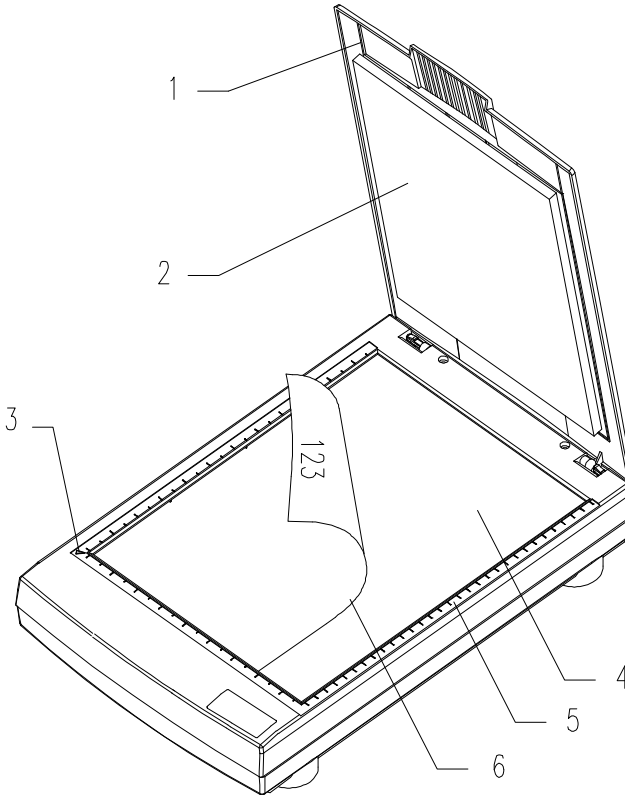


- | | |
|------------------|---------------------|
| 1. Scanner | 2. Power Adapter |
| 3. D25P Cable | 4. PC Parallel Port |
| 5. Printer Cable | |

Figure 2-2 AV620C scanner cable connection

2.4 Document Placement

As shown in Figure 2-3, place the document on the glass with the text facing away from you.



- | | |
|--------------------|-------------------------|
| 1. Document Cover | 2. Document Pad |
| 3. Reference Mark | 4. Document Board Glass |
| 5. Reference Frame | 6. Document |

Figure 2.3 Document Placement

3. *Scanner Driver Installation*

To run AV620C color image scanner at optimum speed, the following minimum requirements are recommended:

- * IBM compatible PC 386/486, Pentium or later;
- * Microsoft Windows 3.1, Windows 95, Windows NT;
- * One printer port available (enhanced parallel port recommended);
- * 20 Megabytes of available hard disk space for installation;
- * 8 Megabytes of RAM (16 Megabytes or higher recommended);
- * A video graphics array (VGA) monitor;
- * A Microsoft Windows-compatible pointing device (e.g., mouse);
- * A CD ROM drive.

3.1 *Auto-Installation*

Installation procedures of AV620C Scanner driver with Avison Auto-installation Program are as follows:

1. Start Windows 3.1 or Windows 95.
2. Insert PaperCom Deluxe for AV620C CD into your CD ROM drive.

3.2 *Manual-Installation*

In Windows 3.1 or higher

3. From the File Menu, choose RUN, type d:\driver\AV620C.exe (d represents the letter for your current CD-ROM drive). Click O.K.

In Windows 95 or Windows NT

3. Press the Start button, choose RUN, type d:\driver\AV620C.exe (d: the CD-ROM drive in use), and then click O.K. (See Figure 3-1,3-2)
4. Follow the on-screen instructions to complete the installation.



Fig. 3.1

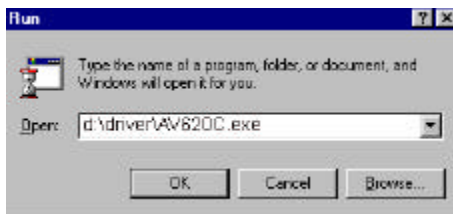


Fig. 3.2

3.3 *Uninstall the Scanner*

You can uninstall the scanner by selecting Start>Programs>Avision Scanner AV620C and double clicking on the *Uninstall* command from the Avision Scanner AV620C.

4 *Scanner Operation & Document Printing*

Scanning Images from within an Application (TWAIN)

1. Open your application and choose **Select Source** from the File menu. If the *Select Source* menu options are not available from the File menu, see the user guide of your application to learn how the TWAIN link is used.
2. A dialog box appears containing the different TWAIN sources that you can choose from to bring an image into your application.
3. Select **AV620C/xx VX.xx** as the source.
4. When you have used the dialog box to select a different source, you will need to select **AV620C** as the source again before you can reuse the Avision AV620C scanner.
5. Place the image to be scanned face down on the glass.
6. From the File menu, select *Acquire*.
7. AV620C TWAIN user interface will pop up on the screen. Click on the **Preview** or **Scan** button to get the image.

AV620C TWAIN user interface:

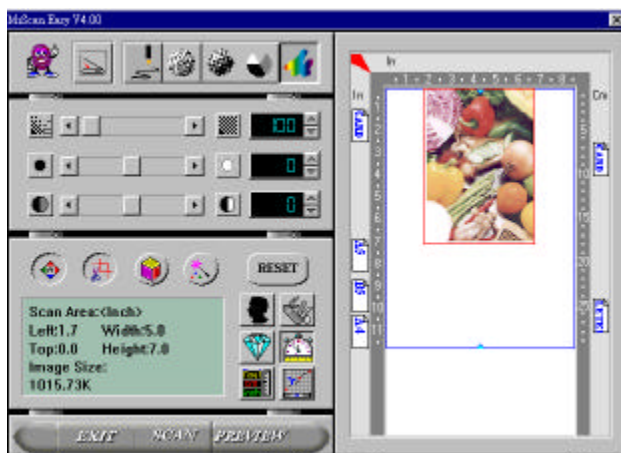
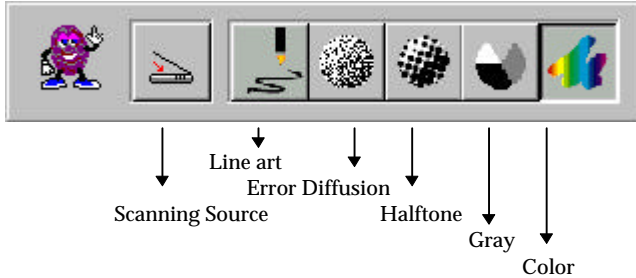


Image Type

AV620C provides five image types as explain in below:



Scanning Source

Two scanning sources are provided- flatbed as well as transparency.

Line art

Line art presents the image in black and white only and there are no intermediate shades of gray in between.

Halftone

In addition to the black and white display, Halftone can present a somehow gray shade of image by using different size of dots.

Error Diffusion

While taking up but a minimum storage space, error diffusion gives good image texture and excellent image details.

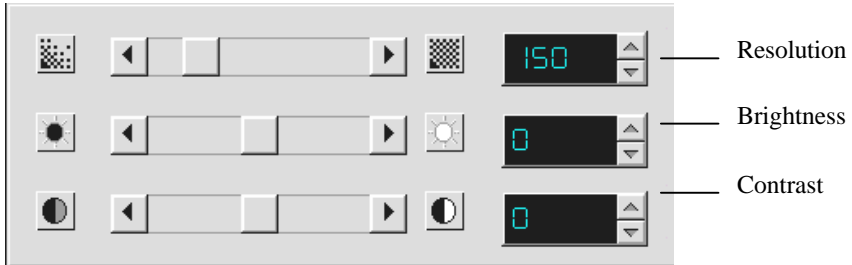
Gray (256 levels gray scale)

Gray presents a 256 shades of gray in an image.

Color (Internal one billion colors)

The 30 bits True Color presents 16.7 million color and give much more tonal range and details in a color image.

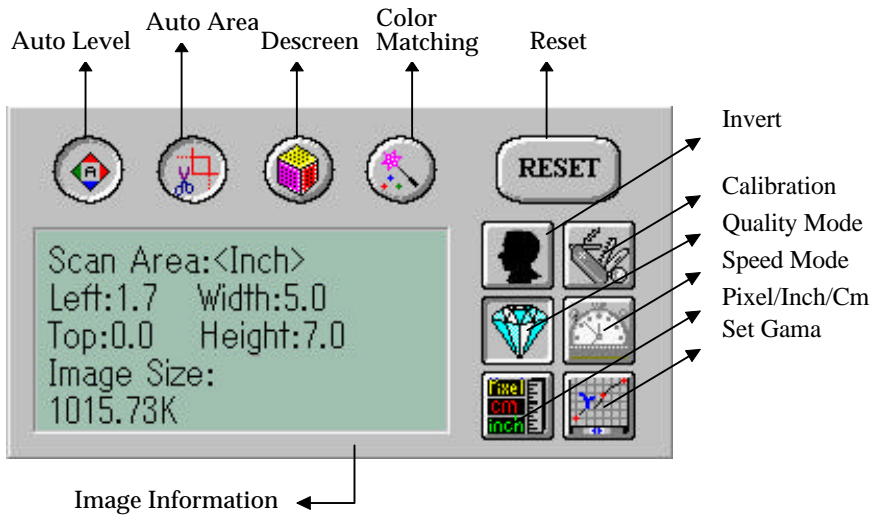
4.1 Scanning Parameters & Image Control



Resolution: The number of dpi (dots per inch) that AV620C uses for a scan. Usually the greater the number, the higher the resolution. Yet up to a certain level, the resolution will not be visually increased but the disk space will be increased.

Brightness: Adjusts the lightness or darkness of an image. The higher the value, the brighter the image.

Contrast: Adjusts the range between the darkest and the lightest shades in the image. The higher the contrast, the bigger the different gray scales.



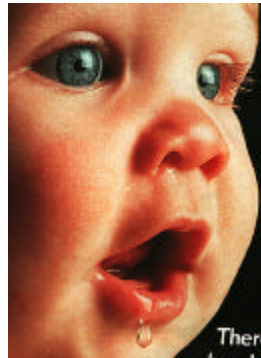
Auto Level: Optimizes the scanned image.

Auto Area: Automatically sets the whole document as the scan area, no matter what its size.

Descreen: Eliminates the Moire patterns commonly found in printed matter.



Before descreen



After descreen

Color Matching:

Adjusts the color quality of the image to make it close to the original. This function uses default parameters to adjust the image.

Reset:

Resets the scanning parameters you set.

Invert:

The invert command reverses the brightness and the color in the image. For color images, each pixel will be changed into its complementary color at the command of *Invert*.

Calibration: Defines *Brightness* for the scanner. Users are recommended to calibrate the light source if the scanned image looks undesirable or comes out to be too dark.

Quality/Speed Mode:

Users can select the mode to perform scanning according to their own need. Select quality mode scanning if your emphasis is on the quality of the scanned image. Or you can select speed mode scanning if you want to speed up the scanning process.

Pixel/Inch/Cm:

Represents the different measuring systems to be used in each scan.

Set Gamma: Adjusts the midtone of the image yet without losing details of the lightest and the darkest areas at the same time.

Image Information:

Gives related information of the scanned image.

4.2 Scanning



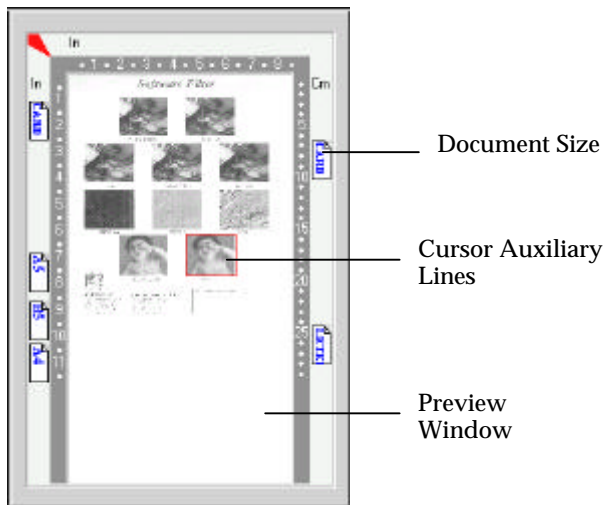
Preview: Previews your image roughly and allocates the area to be scanned.

Scan: Execute the Scans action.

Exit: Cancels the current job.

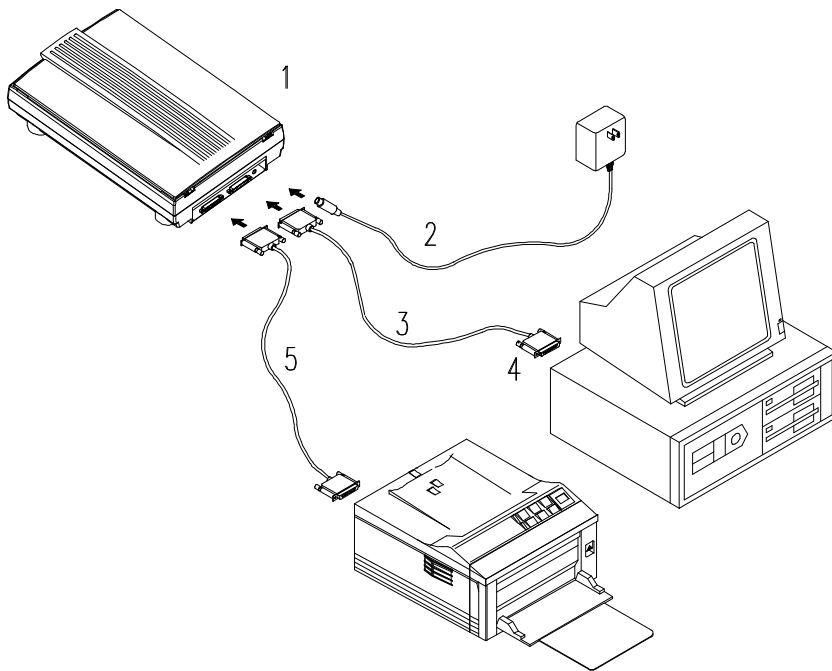
Document Size: To designate the size of your document, just click on its icon on the margin of the preview window.

As shown in the figure below, in the Preview window, you can define the area to be scanned by dragging the four cursor auxiliary lines.



4.3 Printing

Connect the printer cable as shown below.



1. Scanner
2. Power Adapter
3. D25P Cable
4. PC Parallel port
5. Printer Cable

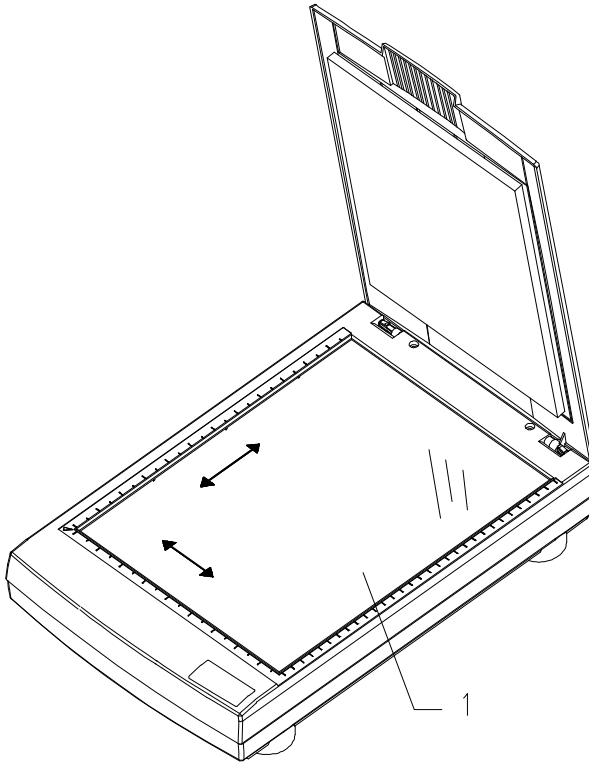
Caution:

1. **Be sure to power on the scanner if you want to do pass-through printing.**
2. **Do not scan and print at the same time.**
3. If your PC does not support EPP mode or have pass-through compatibility problem, please contact your authorized local dealer for an EPP card or an additional interface card.

5. *Maintenance*

Clean the Document Board Glass:

As shown in Figure 5-1, wipe the scanner glass with a piece of soft clean cloth to rid the glass of dust or toner particles.



1. Document Board Glass

Figure 5-1 Clean the document board glass.

6. Troubleshooting

If you have any operational problem, please check the following troubleshooting hints.

6.1 Questions and Answers

Question: Why the scanned image always comes out to be too dark?

Answer: 1) Modify the Gamma setting to 1.8 for your monitor and, when printing, set Gamma to 2.2 for your printer.
2) Use the Brightness setting of the TWAIN user interface to get a brighter image.

Question: The scanning speed of my scanner is much slower than that of those installed at other computers. Can I speed it up?

Answer: Set you PC printer port to the EPP mode from BIOS setting.

Question: Why does my scanner scan at a very low speed?

Answer: If you have installed *Works for Windows*, it will install Window Printing System (WPS) in your WIN.INI file. This will take up the printer port time remarkably. You can remove the WPS from your WIN.INI file, as follows:

From:

[MS Text Converters]

MSWorksWin=Works for Windows

2.0,C:\WINDOWS\MSAPPS\TEXTCONV\worksdos.cnv,wps

Works for Dos 2.0=Works for DOS 2.0 MSAPPS\TEXTCONV\workswin.con,wps

To:

[MS Text Converters]

MSWorksWin=Works for Windows

2.0,C:\WINDOWS\MSAPPS\TEXTCONV\worksdos.cnv

Works for DOS 2.0=Works for DOS 2.0,

C:\WINDOWS\MSAPPS\TEXTCONV\workswin.con

Question: The printer does not print the documents.
Why?

Answer: Pass-through printing may pose a problem for some printers. It is suggested to add a second printer card for printing purpose, or you may call your authorized local dealer for further support.

Question: Does it take long for the scanner to initialize?

Answer: If your printer port supports SPP mode only, it takes about two minutes for the scanner to initialize. If your printer port supports EPP mode, the initialization speed is much faster, about 20 seconds.

Question: Why sometimes pass-through printing does not work at all?

Answer: It may be that you fail to power on the scanner. When doing pass-through printing, please be sure to power on the scanner. Else, without power, the scanner can not transfer the printing data/signals to the printer.

Question: Why my GDI printer does not work with the AV620C?

Answer: Disable the *Auto Scan* function in the application, then your printer will function in normal working condition.

Question: Why some parallel port devices and software's keypro do not work with the AV620C?

Answer: The AV620C can do pass-through printing all right , but the pass-through printing may not work if you connect the parallel port with devices other than printer. Therefore, if you would like to connect some parallel port devices other than printer, please do not connect them to the same parallel port that AV620C currently uses. It is suggested to use other parallel ports to connect these devices or keypro. For instance, you can connect the AV620C to LPT1, and connect other parallel port devices to LPT2. Or you can add a data switch to avoid the problem.

6.2 Technical Service

Technical support for Avision scanner is provided at the Avision Technical Assistance Center. Before you contact us, please prepare the following information for a quick solution:

- Scanner serial & revision number (located on the bottom of the scanner);
- Hardware configuration (e.g., your host CPU type, RAM size, free disk space, display card, interface card...);
- The name and version of your scanning software application;
- The version of your scanner driver.

Please call us at:

US and Canada Area: Avision Labs, Inc.

Address: 6815 Mowry Ave. Newark CA 94560, USA

TEL: +1 (510) 793-2369

FAX: +1 (510) 793-6060

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E-mail: avision@avision-labs.com

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Fax number: 886-3-5777017

BBS: 886-3-5786149

Email: service@avision.com.tw

Web Site: <http://www.avision.com.tw>

7. *Specifications*

All specifications are subject to change without notice.

7.1 *Model: AV620C*

Scanner Type:	Flatbed Scanner
Optical Resolution:	Up to 600 dpi * 1200 dpi (H*V)
Maximum Resolution:	19200 dpi
Scanning Modes:	Black & White mode Halftone mode (64-step) Error diffusion Grayscale(12 bits scanning/8 bits output) Color(36 bits scanning/24 bits output)
Document Size	A4, B5, A5, business card
Interface:	Printer port (supports SPP/EPP for PC)
Power Source:	100Vac~240Vac, 50~60Hz, external
Power Consumption:	12 watts (12Vdc,1A)
Dimensions: (WxDxH)	419 x 260 x 95 (mm)
Weight:	2.9kg (6.3 lbs)

EC Declaration of Conformity

According to EN45014

Manufacturer's Name: Avision Inc..
Manufacturer's Address: No. 20, Creation Road I,
Science-Based Industrial
Park, Hsin-Chu, Taiwan,
R.O.C.

declare that the product

Model Number: AV620C

conforms to the following Product Specifications:

Emission: EN 50081-1 (1992)
EN 55022 (Class B)
(Conducted Radiated)
(1994)
EN 60555-2 (Harmonics) (1987)
EN 60555-3 (Flicker) (1987)

Immunity: EN50082-1 (1992)
IEC 1000-4-2 (ESD) (1995)
IEC 1000-4-3 (RS) (1995)
IEC 1000-4-4 (EFT/Burst)
(1995)
IEC 1000-4-5 (SURGE) (1995)

Date: December 1995