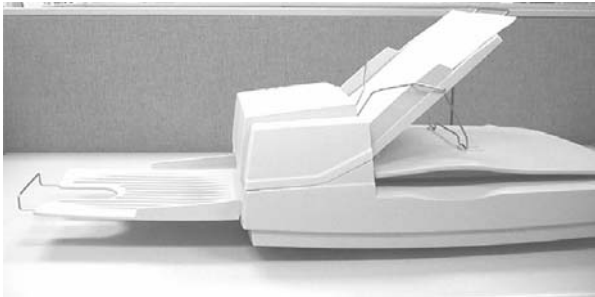


# **AV3200C**

**ADF/Flatbed Desktop Color Scanner**

## **User's Manual**



**( D/N: 250-0358-0 Rev. 2.0 )**

---

## 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.

---

Safety Regulation	UL, CSA, TUV/GS,CB
----------------------	--------------------

EMI Regulation	FCC Part 15 Subchapter J Class B DOC Class B (Canada) CE, VCCI, C-TICK, BSMI
-------------------	--

---

### **Wichtige Sicherheitshinweise**

1. Bitte lesen Sie diese Hinweis sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Das Gerät ist vor Feuchtigkeit zu schützen.
4. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Beschädigungen hervorrufen.
5. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwerte.
6. Alle Hinweise und Warnungen, die sich am Gerät befinden, sind zu beachten.
7. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
8. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.
9. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu Überprüfung:
  - a) Flüssigkeit ist in das Gerät eingedrungen.
  - b) Das Gerät war Feuchtigkeit ausgesetzt.
  - c) Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
  - d) Das Gerät ist gefflen und/odor das Gehäuse ist beschädigt.
  - e) Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.

---

# Table of Contents

<b>1. INTRODUCTION</b> .....	<b>1-1</b>
<b>2. INSTALLATION</b> .....	<b>2-1</b>
2.1 SHIPPING SWITCH.....	2-1
2.1.1 <i>unlocking the scanner</i> .....	2-2
2.1.2 <i>locking the Shipping switch</i> .....	2-3
2.2 SCSI INTERFACE DEVICE ID.....	2-3
2.3 ADF PAPER CHUTE .....	2-6
2.4 ADF OUTPUT TRAY .....	2-8
2.5 DOCUMENT LOADING.....	2-9
2.6 ADF SCANNING .....	2-10
2.7 CONNECTING THE CABLE .....	2-11
<b>3. REQUIREMENTS &amp; SOFTWARE INSTALLATION</b> .....	<b>3-1</b>
3.1 USER INTERFACE OPERATION.....	3-1
<b>4. USER INTERFACE</b> .....	<b>4-1</b>
4.1 SCAN METHOD.....	4-1
4.2 DETERMINING YOUR RESOLUTION.....	4-2
4.3 SELECTING A PROPER IMAGE TYPE .....	4-4
4.4 ENHANCING YOUR IMAGE .....	4-8
4.5 CONTRAST.....	4-9
4.6 INVERT IMAGE .....	4-10
4.7 MIRROR :.....	4-11
4.8 PREVIEW AUTO-AREA:.....	4-12
4.9 PAPER SIZE:.....	4-12
4.10 UNITS .....	4-12
4.11 DESCREEN.....	4-12
4.12 SHARPEN .....	4-13
4.13 COLOR ADJUSTMENT .....	4-13
4.14 AUTO LEVEL .....	4-14
4.15 ADVANCED SETTINGS .....	4-14
CUSTOM SETTINGS .....	4-20

---

SCAN SETTINGS .....	4-20
CONFIGURATION SETTINGS .....	4-21
4.16 MISCELLANEOUS .....	4-22
LOCK SCALE .....	4-22
THE SCALE VALUE AUTOMATICALLY CHANGES WHEN YOU APPLY THIS OPTION AND SIMULTANEOUSLY RESIZE THE SELECTED AREA.....	4-22
INFORMATION .....	4-22
<b>5. MAINTAINENCE.....</b>	<b>5-1</b>
5.1 CLEANING THE ADF .....	5-1
5.2 CLEANING THE GLASS .....	5-3
5.3 REPLACING THE ADF SNAP-IN PAD MODULE .....	5-4
<b>6. TROUBLE SHOOTING.....</b>	<b>6-1</b>
6.1 QUESTION AND ANSWER .....	6-1
6.2 PAPER JAM IN THE ADF .....	6-5
<b>7. TECHNICAL SERVICE .....</b>	<b>7-1</b>
<b>8. SPECIFICATIONS .....</b>	<b>8-1</b>

---

# 1. INTRODUCTION

Congratulations on your purchase of AV3200C scanner.

Before you install and operate the scanner, please take a few minutes to read through this manual. It provides you with the proper instructions on how to unpack, install, operate and maintain the scanner.

Figure 1-1 shows how the scanner is packed. You can check all items against your “checklist”, included with your scanner.

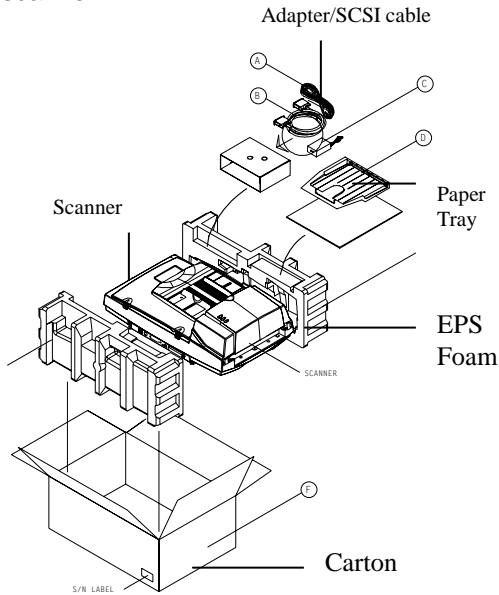


Figure 1-1 Scanner Packing

---

## 2. INSTALLATION

Please unpack the scanner carefully, and check the contents against the *checklist*. If any items are missing or damaged, please contact your authorized local dealer immediately.

### 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.

### 2.1 SHIPPING SWITCH

The scanner has a shipping switch that locks the carrier mechanism for transportation purposes. This switch must be unlocked before using the scanner.

Before proceeding, turn the power off, disconnect all cables and follow the instructions below to unlock the shipping switch.



---

### 2.1.1 UNLOCKING THE SCANNER

- i). Carefully place the scanner in an upright position on its front.
- ii). Unlock the scanner by moving the lock switch beneath the scanner to the “Unlock” position (See Figure 2-1).
- iii). Gently place the scanner back to its normal position.

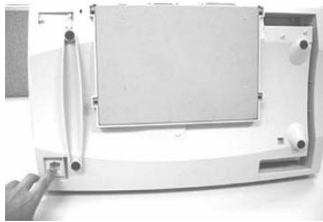


Figure 2-1 Unlocking the Shipping switch

---

### 2.1.2 LOCKING THE SHIPPING SWITCH

Whenever you need to move the scanner to a new location it is advisable to lock the shipping switch to avoid causing damage to the scanners' internal mechanism. Please follow the instructions below to lock the shipping switch.

- 1). Turn off the scanner.
- 2). Lift the Document cover to reveal the flatbed glass and scanning unit.
- 3). Turn on the scanner.
- 4). Turn off the scanner again while the scanning unit moved to the end for a few seconds.
- 5). Place your scanner in an upright position on its front side.
- 6). Lock your scanner by moving the lock switch on the bottom of the scanner to the "**Locked position**".
- 7). Place the scanner back to its normal position.

### 2.2 SCSI INTERFACE DEVICE ID

When you have several devices on a SCSI chain, you may need to adjust the SCSI ID selector setting located on the back of the scanner. This setting assigns a specific "device ID" to the scanner. If the assignment conflicts with an existing SCSI device, please select a new ID. (See Figure 2-2)

---

Note: The factory setting for scanner is ID 6. Usually, ID 0 is assigned to an internal hard disk drive, and ID 7, ID 8 ,and ID 9 are not in actual use.

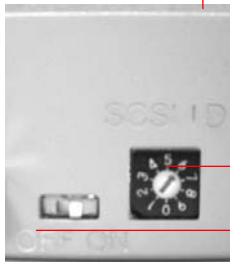
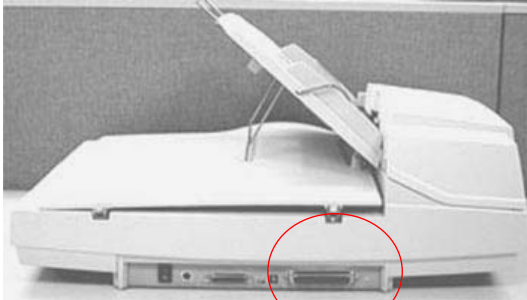
Using a suitable tool, turn the selector switch until the arrow points to the desired ID number.

### **2.3 Setting SCSI Terminator**

The scanner is equipped with a built-in terminator switch on the rear of the

scanner. (See Figure 2-2). Turn the terminator switch on if the scanner is to be

The scanner is equipped with a built-in terminator switch on the rear of the scanner. (See Figure 2-2) . Turn the terminator switch on if the scanner is to be connected to the computer as the only or the last SCSI device. Turn the terminator switch off if the scanner is to be located between the computer and the other SCSI device.



SCSI ID Selector

SCSI Termination Switch

OFF ON

Figure 2-2 Adjusting the SCSI ID setting

---

## 2.3 ADF PAPER CHUTE

- i). Lift the paper chute to about 45 degrees.
- ii). Pull the paper-chute wire leg down to the grips on the document cover.
- iii). Slightly press the paper chute to snap the wire leg into the grips on the document cover.
- iv). Pull out the paper chute extension to the length you want.

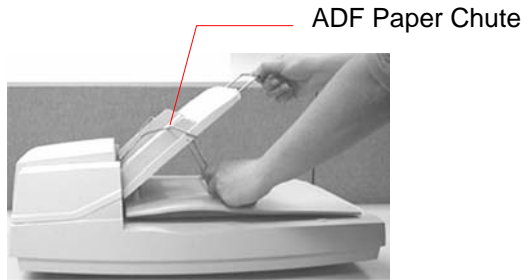
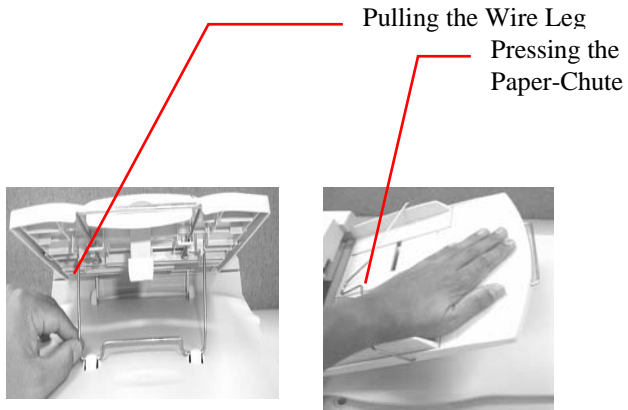


Figure 2-3 Setting the ADF

---

## 2.4 ADF OUTPUT TRAY

- i). Hold the output paper tray some 30 degrees aslant as shown in Figure 2-4.
- ii). Insert the three protrusions on the output paper tray to the three slots on the ADF.
- iii). Release the paper tray gently. Make sure the tray is firmly attached to the ADF.
- iv). Pull out the output paper tray extension wire to the desired length.

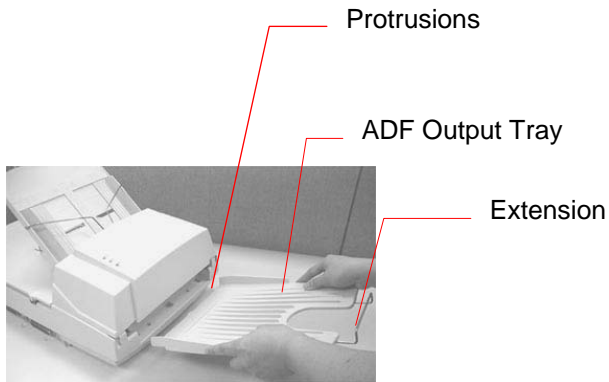


Figure 2-4 Install the ADF Output Paper Tray

---

## 2.5 DOCUMENT LOADING

For flatbed scanning

Documents that can not be scanned using the ADF can be placed on the flatbed for scanning. (See Figure 2-5)

- i). Place the document to be scanned onto the document glass face down.
- ii). Position the document so that the upper-right corner is aligned with the reference mark.

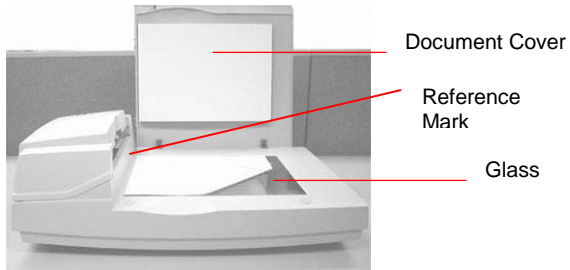


Figure 2-5 Place Document on the scanner



---

## 2.6 ADF SCANNING

Multiple documents can be fed automatically using the ADF. Refer to Figure 2-6.

- i). To prevent occasional paper jam when automatically feeding multiple documents, fan the paper before loading.
- ii). Lift the balance wire.
- iii). Place the documents onto the ADF paper chute in either paper side (face-down, face-up), with the leading edge in the auto feeder entrance.

Let the balance wire rest on the top of the documents.

- iv). Adjust the left and right guides so that they are snug against the sides of the documents.

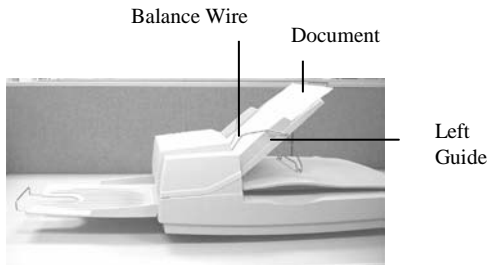


Figure 2-6 Loading Multiple Document

---

## 2.7 CONNECTING THE CABLE

### i). Turning the Power Off

Depress the side marked "O" to turn the power off.

Connect the power cable and SCSI signal cable as shown in Figure 2-7.

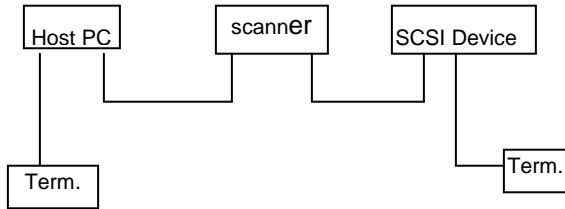
### ii). Turning the Power On

Depress the side marked "I" to turn the power on.

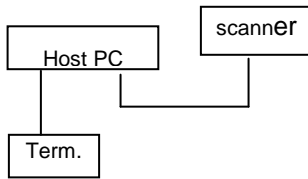
The POWER LED will light. If not, please check the power source.

### iii). SCSI Termination

The AV3200C comes complete with a built in SCSI terminator. If the scanner is the last device in a SCSI chain the terminator should be switched on. If the scanner is not the last device the terminator should be off. The terminator on/off switch is located on the back of the scanner, to the left of the SCSI cable connectors.



(Terminator Off)



(Terminator On)

Figure 2-2 Terminator ON/OFF

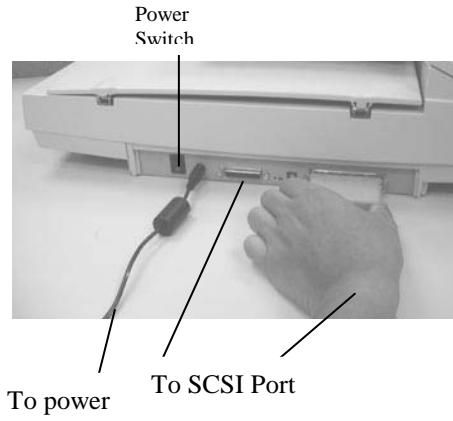


Figure 2-7 SCSI Cable Connection

---

### **3. REQUIREMENTS & SOFTWARE INSTALLATION**

To run the scanner at rated speed recommended , you must have the following minimum requirements:

- ❖ IBM compatible PC 486, Pentium or later;
- ❖ Microsoft Windows
- ❖ One SCSI card installed on your computer;
- ❖ 20M bytes of available hard disk space for installation;
- ❖ 16M bytes of RAM (32M bytes or higher recommended);
- ❖ A video graphics array (VGA) monitor;
- ❖ A Microsoft Windows-compatible pointing device (e.g., the mouse);
- ❖ A CD-ROM drive.

#### **Scanner driver Installation :**

1. Start Windows 95, Windows 98 ,Windows NT 4.0, or Windows 2000.
2. Insert the scanner bundled CD to your CD-ROM drive.
3. Press the Start button and choose RUN. Type d:\driver\setup.exe (d means the letter indicating your current your CD-ROM drive). Choose O.K.
4. Follow the subsequent instructions on the screen to complete the driver installation.

---

## 3.1 USER INTERFACE OPERATION

1. Open your TWAIN scanning application.
2. Pull down the File menu and choose **Select Source**.

If the Select Source command is not available on the File menu, see your application's user's guide to determine how the TWAIN link is used.

A dialog box with a list of scanning sources appears.

3. Select **Avision Scanner/32Vx.xx**.  
You need to select the source only once, unless you want to choose another scanner.
4. Place the document to be scanned in the ADF or on the flatbed glass platen.
5. Pull down the File menu and choose **Acquire**.

A dialog box containing scanning features appears.



6. Select the scanning method you want to use on the **Scan Method** drop-down menu.
7. Select the mode you want to use for your scans on the **Image Type** drop-down menu.

- 
8. Select a scanning resolution on the **Resolution** drop-down menu.
  9. Select the settings for the scanning features (e.g., Sharpen, Descreen, etc.) that you want to use.
  10. Click on the **Preview** or **Scan** button to preview or scan your document(s).

---

## 4. USER INTERFACE

### 4.1 SCAN METHOD



Select how you want to scan on the **Scan Method** drop-down menu.

**Simplex/One-page**—use this setting if you are using the automatic document feeder (ADF) to scan a single-page document at a time.

**Simplex /Multi-page**—use this setting if you are using the automatic document feeder (ADF) to scan batches of single-page document at a time.

**Flatbed**—use this setting if you are using the flatbed to scan one page at a time.

**Duplex/One-page**—use this setting if you are using the automatic document feeder (ADF) to scan a double-page document at a time.

**Duplex /Multi-page**—use this setting if you are using the automatic document feeder (ADF) to scan batches of double-page documents at a time.



---

## 4.2 DETERMINING YOUR RESOLUTION



A good control of the resolution results a satisfactory detail of an image that scans. The resolution is measured by dots per inch(dpi). Normally, the greater the dpi number, the higher the resolution and the image file size.

Be aware that the greater resolution takes more time, memory and disk space, therefore, up to a certain degree of dpi, the resolution will not visually be improved, on the contrary, it makes your files more unmanageable.



---

*Tips:*

1. *For your information, an A4 size color image scanned at 300 dpi at True Color mode consumes approximately 25 MB of disk space. A higher resolution (usually means over 600 dpi) is recommended only when you need to scan a small area at True Color mode.*
2. *You can also refer to the following table to choose a proper resolution while applying your image to other application.*

<i>Scanner Settings Application</i>	<i>Image Type</i>	<i>Resolution (dpi)</i>
<i>File, Fax, E-mail <b>Your Document</b></i>	<i>LineArt</i>	<i>200</i>
<i>View, Copy, Edit <b>Your Color Picture</b></i>	<i>True Color</i>	<i>100</i>
<i><b>OCR* Your Document</b></i>	<i>LineArt</i>	<i>300</i>

***\*OCR:** Stands for Optical Character Recognition, the process to convert an image to a text format.*

---

---

## 4.3 SELECTING A PROPER IMAGE TYPE



Select image type through the mode from the **scanner user interface** for your own purpose.

***Each image type is described as follows:***

### ***Line art(Black and White)***

LineArt presents the image in black and white only and there are no intermediate shades of gray in between. That means each pixel of the image is 100% black or 100% white. LineArt is the best choice of image type if you want to scan text, pen or ink drawing. Since only 1-bit of black or white information is required for each **pixel\***, the disk space required for saving lineArt image is only about 1/24 of that required to save 24-bit true color images.



**Lineart Image**

---

*\*Pixel: A combination of two words: picture and element, a pixel is a single dot on a computer display or in a digital image.*

---

---

## ***Halftone***

In addition to the black and white display, Halftone simulates gray scale by using different size of dots. Particularly when you view the image at a certain distance, it looks very closely like a gray image yet it consumes the least disk space. Halftone is the picture that we usually see in newspapers or magazines. Since Halftone is one type of black and white image, the disk space required to save a halftone image is  $1/24$  of that required to save a 24-bit true color image.



**Halftone Image**

---

## 8-Bit Gray

A single-channel image consists of at least 256 shades of gray. An 8-bit scanner produces a grayscale image with 1024 shades of gray between pure black and pure white. Choose this option if you are scanning black-and-white photographs.

With 8 bits of color information per pixel, the file size of an image is eight times larger than a *Black and White* image and 1/3 the size of a *24-Bit Color* image.



**Gray Image**

---

## 8-Bit Color

an *8-Bit Color* image provides 256 color hues in the image. The file size of a 256 color image is 1/3 the size of a *24-Bit Color* image.



**8-Bit Color Image**

## 24-Bit Color

A *24-Bit Color* image consists of three 8-bit color channels. The red, green, and blue channels are mixed together to create a combination of one billion colors which give a more true-to-life quality to the image. Choose *24-Bit Color* if you are scanning color photos.



**24-Bit Color Image**

---

## 4.4 ENHANCING YOUR IMAGE



**Brightness:** Adjusts the lightness or darkness of an image.

The higher the value, the brighter the image.

Increase your Brightness



---

## 4.5 CONTRAST



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

Increase your Contrast





---

## 4.6 INVERT IMAGE



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*.

Original



After Invert



---

## 4.7 MIRROR :



Click on the **Mirror** button to reverse the image (create a mirror image).



Mirror function is off



Mirror function is on

---

## 4.8 PREVIEW AUTO-AREA:



Clicking on the **Preview Auto-Area** button automatically crops the preview scan area to the previewed document. This will then be the cropping area for all of the scanned documents.

## 4.9 PAPER SIZE:



Select a size on the **Paper Size** list of frequently used scan sizes, including business card, 5 x 3 in., 6 x 4 in., Letter, Legal, B5, A5, A4, A3, or your current scan area to perform an immediate selection of your scan size.

## 4.10 UNITS



The **Units** button indicates the measuring system that is in use(Inch, Cm, or Pixel).

## 4.11 DESCREEN



Click on the **Descreen** button to access a drop-down menu that allows you to specify the type of document you are scanning in order to eliminate the moiré pattern\* commonly found in printed matter. You can specify *Newspaper*, *Magazine*, or *Catalog*.



Before Descreen



After Descreen

\*Moiré pattern—an undesirable pattern resulting from the incorrect screen angle of the overprinting halftone.

## 4.12 SHARPEN



Click on the **Sharpen** button to access a drop-down menu that allows you to specify a level to sharpen the scanned image. You can specify a Sharpen setting of *Light*, *More*, *Heavy*, or *Extra Heavy*.

## 4.13 COLOR ADJUSTMENT



Click on the **Color Adjustment** button to enable the button for the **Hue**, **Saturation**, and **Lightness** feature.

NOTE: The **Advanced Settings** button must be enabled in order to use the **Hue**

**Saturation**, and **Lightness** feature.

---

## 4.14 AUTO LEVEL



Click on the **Auto Level** button to add shadow to reveal more details in an image.

## 4.15 ADVANCED SETTINGS



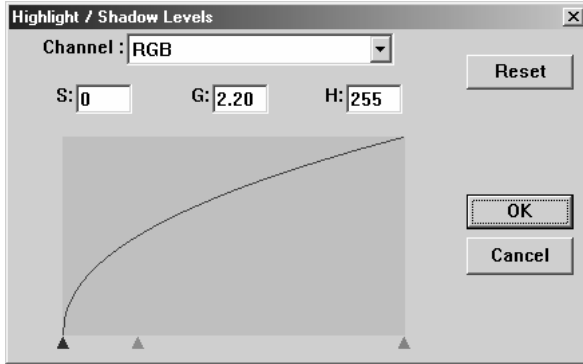
Click on the **Advanced Settings** button to view the advanced settings buttons for Highlight / Shadow, Curves, Color Balance, Hue / Saturation / Lightness, Color Drop-out, and Custom Settings (six buttons on the right side of the TWAIN dialog box).

### Highlight / Shadow



This feature is available when *8-Bit Gray*, *8-Bit Color*, or *24-Bit Color* is selected on the **Image Type** drop-down menu. Highlight refers the lightest point in a scanned image; shadow refers the darkest point.

Click on the **Highlight / Shadow** button to access the Highlight / Shadow Levels dialog box. You can type values in the text boxes or you can place the mouse cursor over the line, click the right mouse button, and drag the line to specify the values you want.



Use the **Highlight** and **Shadow** settings together to extend the range of color and reveal more details in a color image.

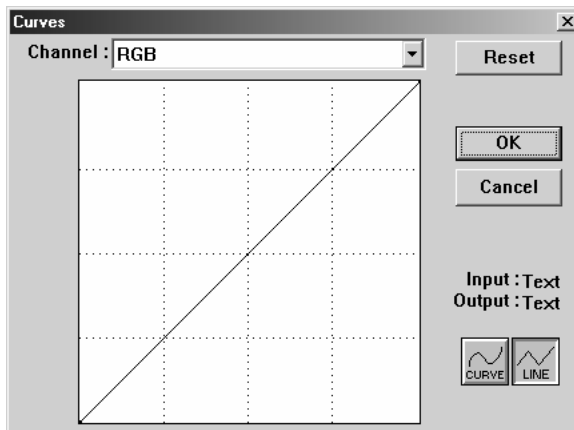
---

## Curves



When you select the **Curves** button, a dialog box appears that allows you to adjust the midtone of the image without losing details in the lightest and darkest areas.

Select the *Curve* or *Line* button, depending on if you want a curved or an angled setting. Place the mouse cursor over the line, click the right mouse button, and drag the line to set the curve you want.



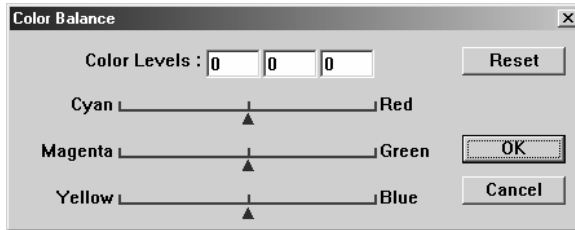
## Color Balance



When you select the **Color Balance** button, a dialog box appears that allows you to adjust the color of the image so that it comes close to that of the original.

---

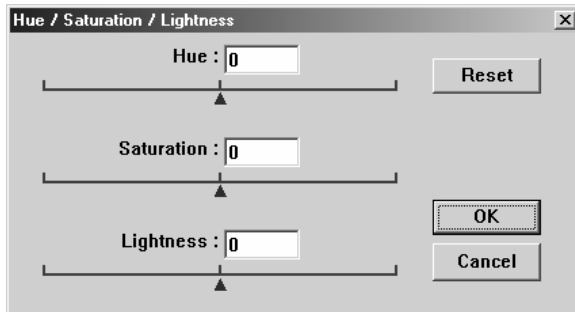
The default parameters are used to adjust the image. You can type values in the *Color Levels* text boxes or you can drag the sliding arrow under the color.



### Hue /Saturation /Lightness



Click on this button to adjust the hue, saturation, and lightness of an image. This button is enabled when the **Color Adjustment** button is selected. You can type values in the text boxes or you can drag the sliding arrow under the each item.



**Hue**—specify a value in the **Hue** box to adjust the hue up to 360° by clicking on the desired color on the color wheel or selecting a setting on the drop-down menu.

Note that the level of intensity for a color simultaneously changes when the hue adjustment is made.



---

**Saturation**—specify a value in the **Saturation** box to adjust the saturation level of the color. The level of saturation indicates whether the color is pale or rich.

**Lightness**—specify a value in the **Lightness** box to adjust the color strength.

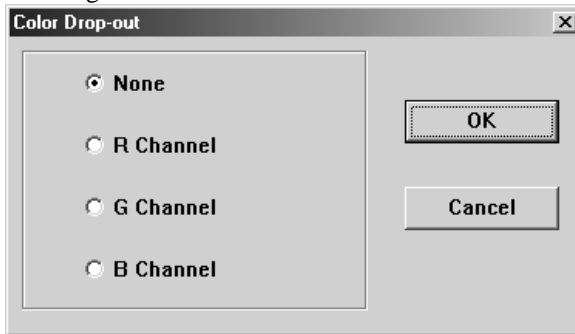
NOTE: These options are available only when the **Color Adjustment** button is enabled.

---

## Color Drop-out



This feature is available when *Black and White*, *Halftone*, or *8-Bit Gray* is selected on the **Image Type** drop-down menu. Click on the **Color Drop-out** button to access a dialog box that allows you to choose to remove the R (Red), G (Green), or B (Blue) color channel while scanning.



For example, if your image contains red text or a red background, choose **R channel** (red) to remove the red text or red background.

This feature is applicable only for black-and-white and grayscale images. Make sure that you have selected a black-and-white or grayscale image type (on the **Image Type** drop-down menu) when you use this option.

### Tip

Increasing the brightness after removing one of the color channels will make the image clearer.

---

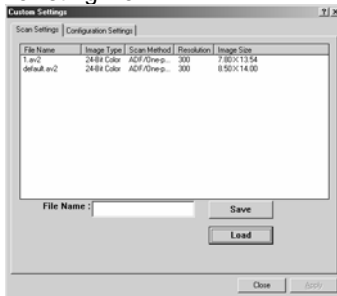
## Custom Settings



Click on the Custom Settings button to access a dialog box where you can save your scan settings and configuration settings. There are two tabs: Scan Settings and Configuration Settings.

### Scan Settings

The Scan Settings tab allows you to save your scanning feature settings in a file, load an existing file, or delete an existing file.



#### Saving a scan settings file

Type a name for your settings in the **File Name** text box and click on the **Save** button. Your settings will be saved and the file name will appear in the list box.

#### Using a scan settings file

You can use an existing settings file. Right-click on the file name for the settings you want to use and click on the **Load** button. The settings in the file will automatically be specified in the scanning features dialog box.

#### Deleting a scan settings file

Right-click on a file name and press the **Delete** button on the computer keyboard to delete the file. You cannot delete the default scan settings file *default.av2*.

---

## Configuration Settings

The Configuration Settings tab allows you to customize some special settings.



**Energy Saving Mode**—check the **Enable** box to enable energy savings. You can specify a time delay in the **Minutes** box. Click on the **Apply** button to save the changes.

**Hint Setting**—check the **Show Hints** box if you want to have flags that show the name of an item appear when you place the mouse cursor on an item in the dialog box. Click on the **Apply** button to save the changes.

---

## 4.16 MISCELLANEOUS

**Width :** Shows the current image width.

**Height:** Shows the current image height.

**Size:** Shows the current file size of the scanned image.

### Lock scale



Click on this button to fix the output width and height despite the selected scan size.

The scale value automatically changes when you apply this option and simultaneously resize the selected area.

### Information



Click on the Information button to access a window that gives you information about the scanner and driver.

---

**Preview:** Click on the **Preview** button to scan a document so you can review the scanned image. This allows you to specify an area to be scanned and any scanning feature settings to be used for future scans. When a scanning feature is changed and applied, the Preview image is updated for a real-time view of the change. You can define the area to be scanned by dragging the cursor lines with the mouse.

**Zoom view:** Click on the **Zoom view** button to preview a selected area.

**Scan:** Click on the **Scan** button to scan the area with the specified parameters.

You can define the area to be scanned by dragging the cursor lines with the mouse.

**Exit:** Click on the **Exit** button to cancel the current job.

---

## 5. MAINTAINENCE

### 5.1 CLEANING THE ADF

The scanner is designed to be maintenance free. However, it still needs to be cleaned occasionally to ensure optimum image quality and performance.

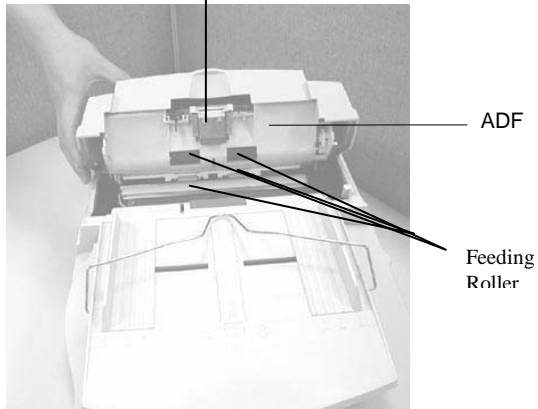
From time to time the pad assembly and feeding rollers may become contaminated with ink, toner particles or paper dust. In this case the scanner may not feed documents smoothly or several documents may feed at once. If this occurs please follow the cleaning procedures to return your scanner to its original state.

The cleaning procedures

- i). Moisten a cotton swab with isoprophyl alcohol (95%). (Cleaner kits are available from PictureVision.)
- ii). Carefully open the ADF to the left . Wipe the feeding rollers by moving the swab from side to side. Rotate the rollers forward with your finger and repeat the above cleaning procedures until the rollers are clean. Be careful not to snag or damage the pick springs.
- iii). Wipe the pad in the direction from top to bottom. Be careful not to hook the pick springs.
- iv). Close the ADF unit. Your scanner is now ready for use.

---

ADF feed module



Opening the ADF unit and Document Cover



---

## 5.2 CLEANING THE GLASS

### The procedures:

- i). Soak a cotton swab with some isopropyl alcohol (95%).
- ii). Open the ADF unit and document cover as shown in Figure 6-2. Wipe the glass of flatbed area and ADF area by moving the swab from side to side.
- iii). Close the ADF unit and document cover. Your scanner is now ready for use.

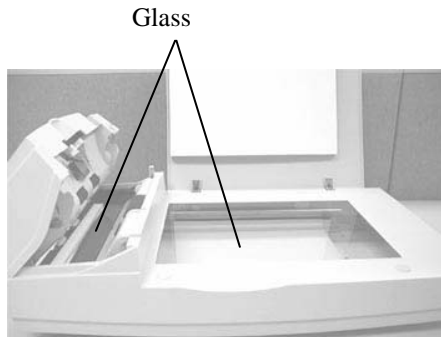


Figure 6-2 The Cleaning Area

---

### 5.3 REPLACING THE ADF SNAP-IN PAD MODULE

After scanning approximately 20,000 pages through the ADF, the separation pad may be worn out and you may experience problems with document feeding. In this case, it is highly recommended to replace the pad module with a new one. For ordering the pad module, please consult your nearest dealer and follow the procedure below to replace it.

#### Disassembling Procedure

1. Open the ADF cover.
2. Remove the ADF snap-in pad module by pulling out the upper part of the pad clamp as shown in Figure 6-3.

Upper Part of ADF Pad Clamp

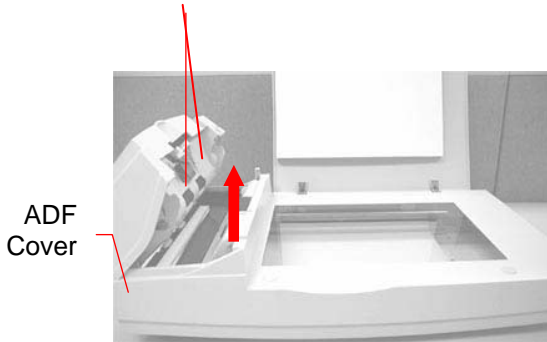


Figure 6-3 Remove the pad module

---

## Assembling Procedure

1. Take out the ADF pad module from the box.
2. Hold the upper part of the pad clamp and place it gently to the pad holder as shown in Figure 6-4.

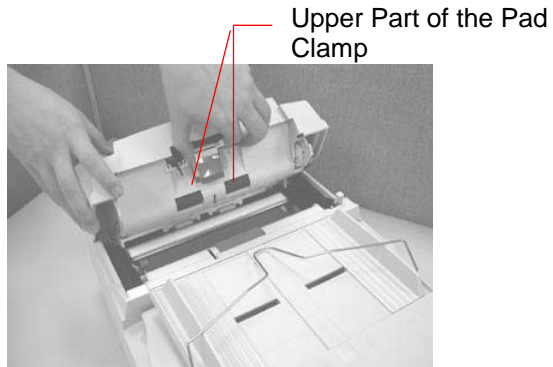


Figure 6-4 Installing the pad module

---

## 6. TROUBLE SHOOTING

The scanner will automatically perform a simple self-test each time it is turned on. This will help spot major system errors in the scanner itself.

When the test is initiated, the READY LED is flashing. When the test is completed, if no error occurs, the READY LED is steadily on.

If you have problems with the operation of your scanner, please check the following troubleshooting hints.

### 6.1 QUESTION AND ANSWER

**Question:** The LED indicates that the scanner is ready, but the scanner does not respond to the scan command from the host computer.

**Answer:**

- a) Please check if the signal cable is firmly seated, and invoke the scan command again. If there is still no response, please reset the scanner by turning it off and then on again, and reboot your host computer as well.
- b) Check if the driver is correctly installed.

---

**Question:** Paper becomes jammed during scanning.

- Answer:**
- a) Open the ADF unit.
  - b) Pull out the jammed paper carefully.
  - c) Close the ADF unit.

**Question:** More than one sheet of paper were fed into the scanner.

- Answer:**
- a) Open ADF unit.
  - b) Remove the multi-fed sheets of paper.
  - c) Close the ADF unit.
  - d) Flatten the corners and edges; loosen the paper before reloading it in the paper guide.
  - e) Check the feeding roller condition and do the cleaning if necessary.

---

**Question:** Paper becomes skewed in the scanner.

**Answer:** a) Check the feeding roller condition; do the cleaning if necessary.

b) Use the paper guide when feeding the paper.

**Question:** When I power on the scanner, it makes noises and will not stand ready.

**Answer:** There are two possibilities:

a) You forgot to remove the shipping switch from the scanner. Please remove the shipping retainer first.

b) You did not place the scanner on a flat desktop surface. This may cause the scanner to function improperly.

**Question:** When I power on the scanner, the lamp does not light.

**Answer:** The possibilities are as follows:

a) The lamp is out of order. In that case, contact your authorized local dealer to change the lamp. The life time of the lamp is about 5000 hours.

b) Check whether the power LED on ADF cover steadily lights or not.

If it flashes, the power adapter malfunctions or the main board is short-circuited.

Contact your authorized local dealer to replace the power adapter or main board.

---

**Question:** Getting image from the scanner is not a problem, but when scanning, the scanner or system will often crash.

**Answer:** Please check

- a) If the cable is firmly seated;
- b) Only two SCSI terminators can be connected to your SCSI daisy chain. One is at the end of the SCSI device, and another is already in your host adapter.

---

**Question:** The scanned image always comes out to be too dark.

**Answer:**

- a) Use your application to modify the Gamma setting to 2.2 and 1.8 for your printer and monitor respectively.
- b) Use Brightness setting from the TWAIN user interface to get a brighter image.

**Question:** The scanner works well otherwise, but for the line art, the lines scanned seem much thicker than those of the original.

**Answer:** Use the Brightness or Threshold setting to adjust the line art image.

## 6.2 PAPER JAM IN THE ADF

In the event of paper jam, please follow the procedures below.

- i). Open the ADF cover as shown in Figure 7-1.
- ii). Pull the paper out of the ADF unit carefully.



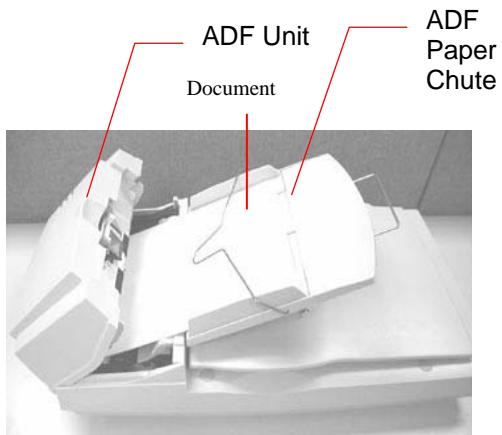


Figure 7-1 ADF Paper Jam - Removing the Paper

---

## 7. TECHNICAL SERVICE

Technical support for Avision scanner is provided at Avision Technical Assistance Center (ATAC). Before contact with ATAC, please prepare the following information.

- ❖ 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, etc.)
- ❖ The name and version of your 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  
Telephone                +1 (510) 739-2369  
number:  
Fax number:              +1 (510) 739-6060  
Web Site:                <http://www.avision.com>  
E-mail:                    [support@avision-labs.com](mailto:support@avision-labs.com)

**Other Area:              **Avision Inc.****

Address:                    No.20, Creation Road I, Science-Based  
                                  Industrial Park, Hsinchu,  
                                  Taiwan, R.O.C.  
Telephone                +886 (3) 578-2388  
number:  
Fax number:              +886 (3) 577-7017  
Web Site:                <http://www.avision.com>  
Email:                    [service@avision.com.tw](mailto:service@avision.com.tw)

---

## 8. SPECIFICATIONS

Scanner Type	ADF/Flatbed Desktop Duplex Color Scanner
Scanning Mode	48-bit single pass color(R, G, B) 256 shades of gray scale halftones Line Art Error Diffusion
Optical Resolution	up to 300 x 600 dpi in (1dpi increments)
Light Source	Cold Cathode fluorescent lamp
ADF Capacity	50 sheets
ADF Scanning Speed	Duplex : 40 PPM (200dpi, B/W mode, ADF) Simplex: 25 PPM (200dpi, B/W mode, ADF)
Scan Area	Flatbed: up to European A4 (8.5" x 11.69") ADF: 3.7" x 5.5"(Min) ADF: 8.5" x 14"(Max)
Interface	SCSI-2
Power Requirement	< 24Vdc, 1.5A
Power Consumption	< 36 watts
Operation Temperature	5°C to 35°C
Storage Temperature	-40°C to 60°C
Dimension	567 x 350 x 199 mm
Weight	7.2 kg (15.87 lbs)