Content:

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SAFETY AND SERVICE

Safety notes

Please read through this section carefully. Following all the instructions will guarantee reliable operation and years of enjoyment from your new flat bed scanner.
Always keep these instructions near your flat bed scanner for easy reference.
Keep these instructions and packaging safe. Use the original packaging in the event that you need to ship or transport your flat bed scanner.

OPERATING SAFETY

- **Never open the housing** of the flat bed scanner! This could lead to an electrical short-circuit, damage to your flat bed scanner or fire.

- Slots and openings in the flat bed scanner serve for ventilation and prevent overheating. **Do not cover these openings.**

- **Never insert any objects through the slits and openings** into the inside of the flat bed scanner. Doing so could lead to an electrical short circuit or damage to your flat bed scanner.

- **Do not allow children to play unattended with any electrical appliances.** Children may not always correctly recognize possible safety hazards.

- Keep the packing materials, such as **foil away from children**. The **danger of suffocation** could arise in the case of misuse.

- This flat bed scanner is intended for personal use only. It is **not** intended for commercial use in a **heavy industrial environment**.

- Keep your flat bed scanner and all connected equipment away from **moisture, dust**, **heat** and **direct sunlight** in order to **avoid** malfunctions.

- Set up and operate all components on a **stable, level** and **vibration-free surface** to prevent damage to the flat bed scanner.

- Only use in a suitable ambient temperature:

ENVIRONMENT CONDITIONS

The flat bed scanner can **be operated** at an ambient temperature of **10° C/40° F to 40° C/104° F** and a relative humidity of **35% to 80%** (not condensing).
When switched off the flat bed scanner can be stored at temperature from -10° C/14 °F to 60° C/140°F at a relative humidity of 20 % to 80 % (not condensing).

> **Please note:**
>
> After **transporting** your flat bed scanner wait until it has reached the ambient temperature before putting it into operation. In the event of major variations in the **temperature or humidity**. Condensation can form on the inside of the flat bed scanner which can cause an **electrical short-circuit**.

ELECTRO-MAGNETIC COMPATIBILITY

- When connecting the flat bed scanner **observe** the **guidelines** for electro-magnetic compatibility (EMC).

- Please use only the AC adapter **supplied**.

- Maintain a **distance of** at least 3 feet **from sources of high frequency and magnetic interference** (television sets, loudspeakers, mobile telephones, etc.), in order to avoid malfunctions and data loss.

Power supply

- Do not open the power adapter housing. When the housing is open there is a **danger** of severe electric shock. It contains no user-serviceable parts.

- The **power socket** must be in the vicinity of the scanner and within reach of the power adapter cables. **DO NOT** stretch the power cables tightly to reach a power socket.

- To disconnect your scanner from the power source remove the power cord from the power socket. Always hold the mains part firmly when taking it out. Never pull on the lead.

- Only use the power adaptor provided with this flat bed scanner (**HDAD15W101-126**) operating at **AC 200-240V~/50 Hz.** Enquire at the relevant energy provided if you are not sure about the electricity supply at the setting up location.

- If using an **extension cord**, make certain that it meets your **local safety requirements**. If in doubt, consult a qualified electrician.

- To provide additional protection against **electric shock**, **power surges**, **lightning strikes**, or other electrical damage to your scanner, we recommend the use of a **surge protector**.

Observe the following instructions to connect your flat bed scanner properly:

- Route the cable so that no one can step on it or **stumble** over it.

- To avoid damage to the cable **do not place any objects or furniture on the cable**.

- Please **unlock** the scanner before use. When you intend to transport the scanner lock it again. (see page 8)

Please contact our service centre if you have any problems with your flat bed scanner. **ALWAYS** have repairs completed only by our authorised service centre.

Contact your local service centre when...

- Liquid has got into the flat bed scanner
- The flat bed scanner does not operate properly
- The scanner is dropped or the housing is damaged.

Cleaning

- Ensure that the scanner, particularly the glass plate, is not dirty.
- Clean the flat bed scanner with a moist cloth.
- Do not use any type of solvents, caustic or gaseous cleaning agents.
- Use glass cleaner to clean the scanner glass plate.

Data security

Please note:

Every time you update your computer's data make back-up copies on an external storage medium, i.e. CDR disc.

We cannot assume a liability for data loss or associated subsequent damage.

Recycling and disposal

This scanner and its packaging was produced mostly from materials which can be disposed of in an environmentally friendly manner and be professionally recycled.
After its use this device will be taken back and recycled or use will be made of its useful material, if it is returned in a condition corresponding to its intended use.
Parts not usable will be properly disposed of.
Should you have any questions concerning the disposal please contact your dealer or our service.

INTRODUCTION

Notes on these instructions

We have arranged these instructions so that you can quickly find the subject related information in the table of contents.

Many application programs incorporate **extensive help functions**. As a general rule, you can access help functions by pressing F1 on the keyboard.

These help functions will be available to you while you are using the Microsoft Windows® operating system or the respective application program.

The conzept

QUALITY

We focused on great features, ease of use, safety and reliability in manufacturing this flat bed scanner. The balanced hardware and software design offers you an advanced flat bed scanner design which will provide you a great deal of functionality for business or entertainment purposes.

SERVICE

Service and support is available any time you use your flat bed scanner. Contact us, we will be glad to help you. This manual contains a separate chapter on the subject of service beginning on **page 22**.
Thank your for purchasing this flat bed scanner. We thank you for your confidence in our products and are pleased to welcome you as a new customer.

OUR TARGET GROUP

These instructions are intended for novice users as well as advanced users. Regardless of possible professional functions, this flat bed scanner is intended for domestic home use only.

What can be reproduced or copied?

> **Please note:**
>
> Unless you own the copyright or have the permission of the owner of the copyright unauthorised reproduction (e.g. of bank notes) can violate domestic or international law and be subject to severe penalties. In questions of doubt please consult a lawyer.

Box includes

Please check the contents of the box. Notify us within 14 days of purchase if your flat bed scanner is not complete. Your box includes:

- USB flat bed scanner unit
- Transparency Adapter
- USB cable
- AC Adapter (**HDAD15W101-126**)
- Installation and application software on CD
- This user manual
- Guarantee document

System requirements

• **Computer**	PC/AT compatible computer
• **Processor type and speed**	Pentium III class 500 MHz or higher
• **Operating system**	Windows®98SE/ME/2000/XP
• **Memory**	64 MB, recommended: 128 MB or more
• **Hard disc capacity**	min. 800 MB free storage capacity
• **Installation**	CD-ROM drive
• **Connections**	USB interface

SETUP

1. Installation of software

Warning!

During software installation your important files can be changed or deleted. To avoid problems in using older files after installation, make sure you backup your hard disk.

Important:

Do not install the Adobe® Acrobat® Reader when your computer has this Software already installed.
Install the required software before connecting the scanner.

1. Insert the CDROM "**Software**" supplied to automatically start the installation.

Please note:

If installation does not start automatically, probably the so-called. "*Auto-run*" feature is deactivated. Activate this feature if required in your Device Manager by calling the entry **"CD-ROM"** and then marking the feature "*Automatic notification on change*".

Manual installation without Autorun feature:

   1) Open the "*Start*" menu and select "*Run*".
   2) Then enter the letter for the CD-ROM drive followed by a colon and the name of the program: *CD-Setup*"
   3) Confirm by clicking "*OK*".

2. Select your preferred language, if required, and follow the further instructions as they are displayed.

3. Restart your computer.

2. Unlock the scanner

1. With the scanner powered off, turn the scanner on its side to see the locking screw at the bottom of the scanner.
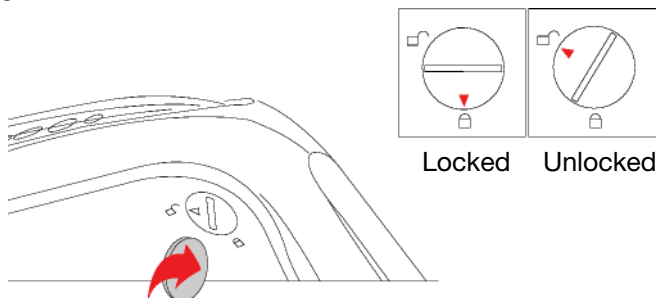
Locked   Unlocked

2. Using a coin, turn the locking screw clockwise (using some force to do this) until the arrow mark points to the "**Unlocked**" position.

3. Turn the scanner back carefully.

LOCKING THE SCANNER FOR TRANSPORT

Proceed as follows if you have to transport the scanner.

1. Switch the scanner off, pull the mains part from the socket and re-move all connection cables and those supplying electricity.

2. Remove the slide attachment before you secure the scanner, if it is installed. Inform yourself from the appropriate installation instructions.

3. To lock the scanner (for shipping and other reasons), tilt the front-right corner of the scanner to see the locking screw.

4. Next, use a coin to turn the locking screw counter-clockwise until the arrow mark points to the "**Locked**" position. Do not turn the scanner upside down and attempt to lock the scanner this way; as this may not work.

5. Transport the scanner in the original packaging if possible.

3. Connecting to the power supply

Diagram for illustration purposes only:
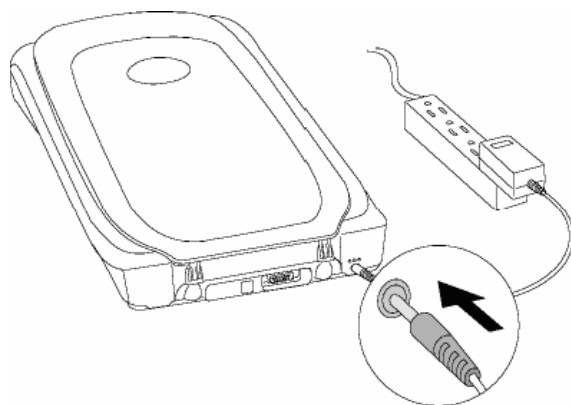
1. Observe the notes in chapter **"*Safety and Service*"** (page 1).
2. Position the computer and scanner so that you can work with them easily and safely. Connect the supplied power adapter to your scanner as shown in the diagram above.
3. Connect the power adapter to a power socket in close proximity of your flat bed scanner.

4. Connecting to the PC

Connect your flat bed scanner as follows:
Make sure your scanner software has been installed already (see page 7).

Power on/off
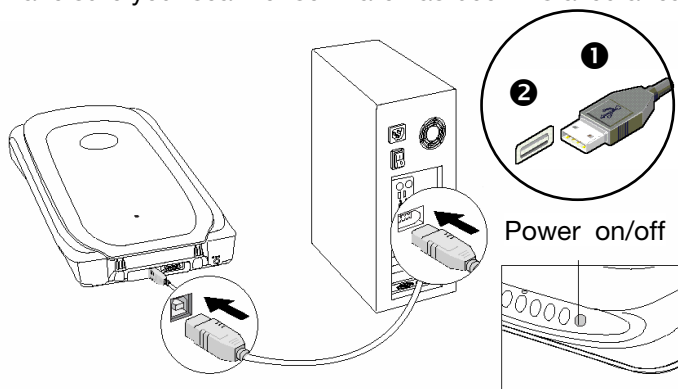
1. Switch on the computer and all connected peripheral equipment (monitor, printer, external hard drive, etc.) and wait until the operating system has booted completely.
2. Connect one end of the USB cable (❶) to a free USB connection socket on your computer (❷) and the other end to the scanner.
3. Press the On/Off switch on the control panel.
4. Windows® will then recognise that a new piece of hardware has been connected and complete the installation procedure. Do not interrupt this setup procedure.

Please note:

If your operating system is configured so that the installation procedure accepts only signed drivers and software (the default) an information screen will appear. Although the software lacks the digital signature it may still work properly. Click on "Tell me why this testing is important" to get detailed information. Confirm by clicking on "**Continue**".
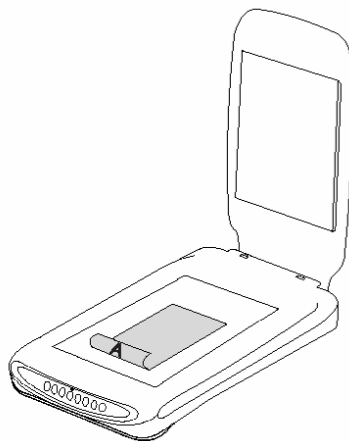
OPERATION

You will find new program groups and Help files on your computer when the software installation has finished.

You will find the installed OCR program, which will make comprehensive documentation available to you through the online help.

Scanning

1. PLACE THE SCAN MATERIAL

1. Open the scanner cover.

2. Place the original to be scanned on the scanner bed. The top of the original should be positioned towards the front end of the scanner with the surface to be scanned facing down.

3. Close the scanner cover.

2. LAUNCH SCANWIZARD

To launch ScanWizard, double-click the ScanWizard icon on your desktop. By default, the scanner will detect the settings (under Original, Scan Type, and Purpose), and automatically performs a **"fast preview"** of your image based on those settings.
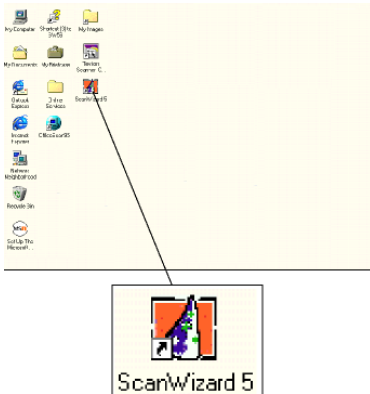
1. To launch ScanWizard, double-click the ScanWizard icon on your desktop.

2. You can use the following tool buttons to change the settings according to your preferences:

|	
Original	defines the category of the original (scan material).
Scan type	selects the output image type (colour, grey, or B&W).
Purpose	defines the image resolution to match your target application.

Please note:

Click the Scale Output, Adjust, and Reset buttons if you need to make further adjustments.

---

3. Click the Scan to button from the ScanWizard Control Panel.

4. When the "**Save As**" dialog box appears, specify the folder location, a file name, and the format for the output image, then click "**Save**". The image is then scanned and saved to the specified location.

Please note:

Send image to application after saving: If this option is checked, the scanned image is saved first, then automatically delivered to an image-editing application, an e-mail editor, or a web browser as indicated in the destination box.

Scanner button controls
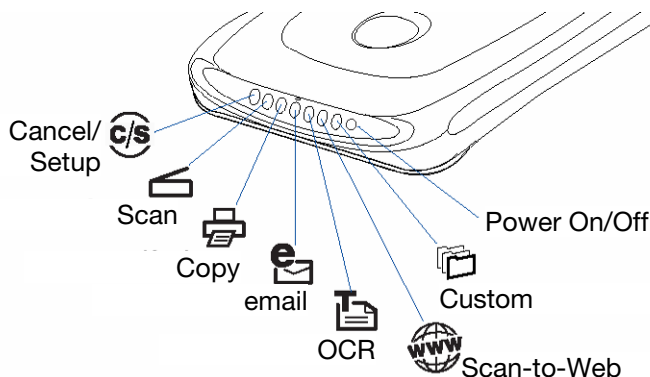
The Scanner is equipped with seven scanner buttons, providing quick access to the most frequently used functions:

Cancel/Setup

Launches the configuration utility when the scanner is not scanning. Cancels the scanning job when the scanner is scanning.

Scan

Captures images that can be saved as files or sent to an image-editing application.

Copy

Scans the image and sends it to your printer.

email

Scans the image and delivers it directly to your email application.

OCR

Scans a text document, converts, and saves it in text file format.

Scan-to-Web

Scans an image and sends the output to a website. Your default browser will open and display the captured image.

Custom

Customises the Power Saving, Scan, Fax, and Launch Application functions according to your requirements.

The parameters for each button can be set through the Scanner Configuration (SC) utility.

Please note:

You need to exit ScanWizard before accessing the SC utility.

To launch the Configuration Utility, simply press the Cancel/Setup button on your scanner or choose it from your computer.
Click on one of the 6 registers and then enter the relevant values after the configuration program has been displayed. Detailed information is available in the online help of the program.

For more help

If you experience problems with installation, refer to the Troubleshooting file in the **Techinfo** folder on your CD-ROM.
For more information on operating your scanner with ScanWizard, launch your Internet browser to view the software manual (in HTML format). Alternatively, you can also view the same manual directly from your CD-ROM.

Scanning positive and negative films

The Transparency Adapter is an accessory included with your scanner. It gives you the ability to scan 35mm slides and film negatives on your flat-bed scanner. We recommend the use of this accessory to scan slides for on-screen display purposes or where high resolution is not critical.

> **Please note:**
>
> Scanning of colour transparencies may vary, depending on the quality of your film original.
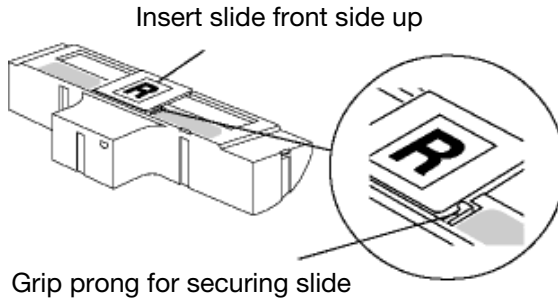
CONNECTING THE TRANSPARENCY ADAPTER
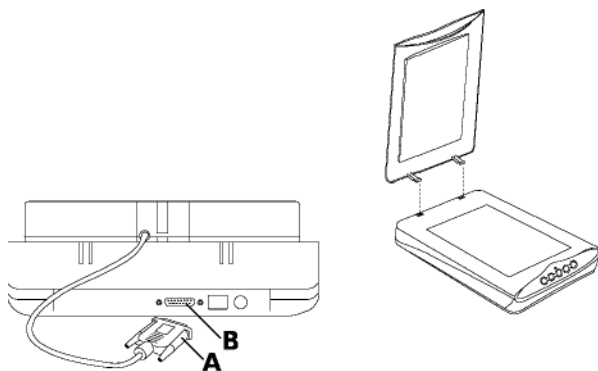
1. Switch off the scanner and unpack the Transparency Adapter.
2. Remove the scanner lid and connect the Transparency Adapter to your scanner.
3. Connect the 15-pin connector (**A** in diagram) of your Transparency Adapter to the accessory port (**B**) at the back panel of your scanner.

Mount the slide

Insert slide front side up

Grip prong for securing slide

1. Turn the Transparency Adapter over.

2. Insert the 35mm slide front side up into the recessed area at the center of the Transparency Adapter. Secure the slide by gripping it with the grip prong provided at the connector side of the recessed area. For added stability, you may wish to secure the slide with a piece of adhesive tape.

Mounting film negatives:

Filmstrip front side up
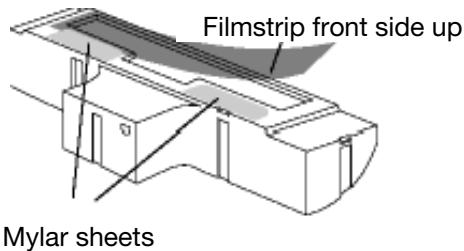
Mylar sheets

1. Turn the Transparency Adapter over.

2. Insert the 35mm film negative front side up along the recessed area, with one perforated side of the film negative tucked under the mylar sheets. For added stability, secure the other perforated side of the film negative with a piece of adhesive tape.

1. Place the Transparency Adapter (with the secured film negative or slide to be scanned) on the glass surface of the scanner. The Transparency Adapter can be placed horizontally at the front edge of the scanner glass bed, or vertically at anywhere on the glass surface, as shown below.

horizontal

vertical
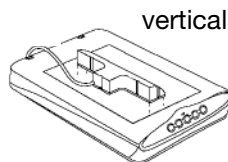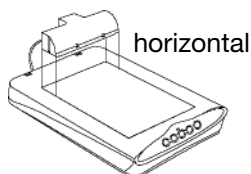
2. Select your Scan Material and start scanning.

ScanWizard 5 has two modes — Standard and Advanced — and each mode has its own way of selecting the scan material and scanning. Each mode of operation is shown below:

Standard Control Panel:

In the preview window, click the **Original** button, and choose **Positive** or **Negative Film**, depending on the material you are scanning. When you are ready to scan, click on the Scan To button, and select where the scanned image will be sent (to image or OCR editing application, to disk, to printer, or to e-mail or website program).
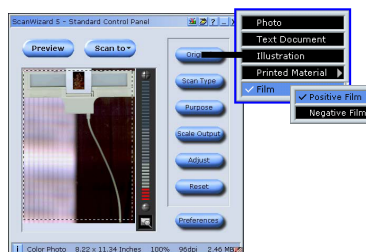
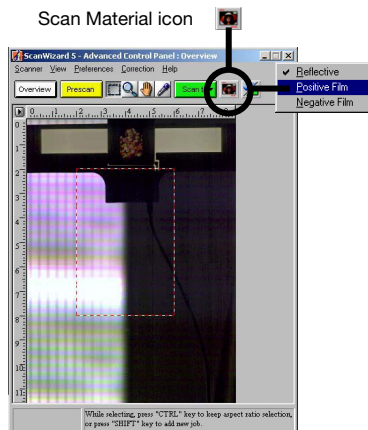Scan Material icon

Advanced Control Panel:

In the Preview window, click on the **Scan Material** icon, and choose **Positive** or **Negative Film**, depending on the material you are scanning; When you are ready to scan, click the Scan to button.

GETTING THE BEST RESULTS

To obtain the best results when scanning with the Transparency Adapter LightLid 35, set the scan Resolution to a minimum 600 dpi and the Scaling to 100%. Refer to the diagrams below for more information on how to set these values in ScanWizard **Standard** and **Advanced** Control Panels.

Standard: **Advanced:**
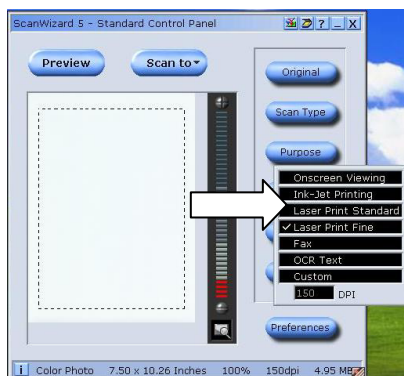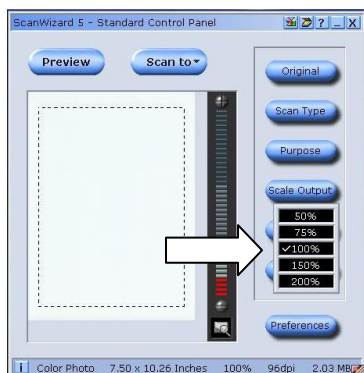
The **Transparency Adapter Calibrator** is a program designed for calibrating your Transparency Adapter to ensure that it captures colours accurately when scanning slides and film negatives. Calibration is **strongly recommended** as a procedure for optimizing your scanned image.

Install the Transparency Adapter Calibrator:
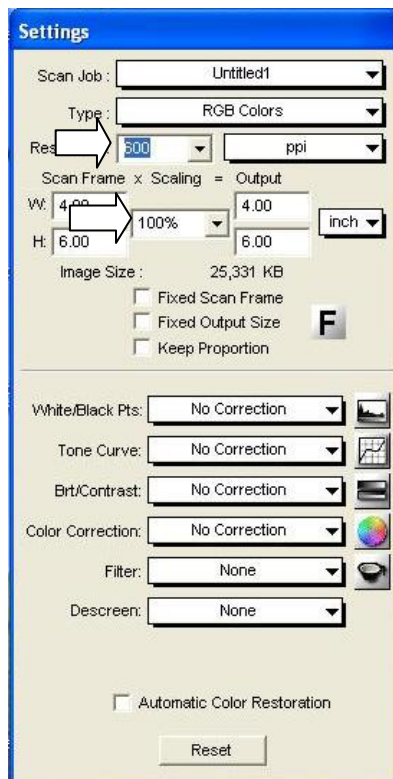
1. Place the software CD into your CD-ROM drive. When the Installer screen comes up, click "**Exit**".
2. Double-click the **My Computer** icon on the desktop.
3. Locate your CD-ROM drive icon, and **right-click** the icon to bring up the context menu.
4. Choose **Open**, then double-click the **TA Calibrator** folder to open it.
5. Double-click the **setup.exe** icon to install the Calibrator. Follow the on-screen instructions until installation is complete.

Launch the Transparency Adapter Calibrator

Make sure that ScanWizard 5 is already installed on your system and that your scanner is powered up. Launch the **Transparency Adapter Calibrator** from the Transparency Adapter Calibrator folder. Follow the on-screen instructions as shown in the Calibrator window.
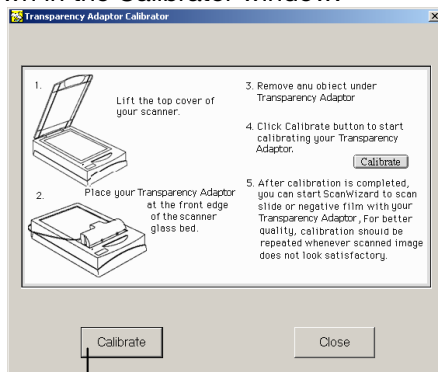
Click here

Optical Character Recognition (OCR) software

If you want to read in text which is to be subsequently edited with a word processing program, you require an OCR program. This program reads in a document and attempts to recognise all of the letters, special characters and numbers present in the text. In order to achieve the highest possible recognition rate, the program uses the newest OCR technologies as well as intelligent error correction.

The recognition rate depends on:

	Recognition Rate		
	very high	good	problematic
Original	High print quality, high contrast, example: black and white brochures	Standard print quality, two-colour, good contrast. Example: newspapers, magazines, books	Poor print quality, multiple colour, low contrast
Fonts	Standard fonts from printed media: Times, Arial, etc.	Slightly modified standard fonts of the same type	Abstract fonts, hand writing.
Scanning quality	1 bit, b/w line drawing	-	All other resolutions.

TECHNICAL QUESTIONS AND ANSWERS

Which resolution for which purpose?

Purpose	Resolution	Colour depth
colour picture, print-out	150 dpi	24-48 Bit
greyscale pictures/photos	200 dpi	10-Bit
text recognition	300 dpi	1-Bit

For greater quality requirements, higher values can be set, but these require far more memory and therefore slow down the speed of the scanning process.
Text recognition functions optimally with the settings given.

MEMORY REQUIREMENT FOR DIFFERENT RESOLUTIONS

Scanning an original with an area of 10 x 10 cm uses the following amount of memory with the resolution stated:

	100 dpi	150 dpi	300 dpi	600 dpi
line picture	19,5 Kb	44 Kb	175 Kb	703 Kb
greyscale	156 Kb	352 Kb	1.37 MB	5.5 MB
colour	469 Kb	1 MB	4.12 MB	16.5 MB

What does the following mean?

Colour depth	Number of colours which can be represented simultaneously. 1-Bit = 2^1 = 2 colours = black/ white 8-Bit = 2^8 = 256 colours 16-Bit = 2^{16} = 65.536 colours 24-Bit = 2^{24} = 16.777.216 colours
Dpi	Unit of resolution, number of **d**ots **p**er **i**nch.
OCR	Text recognition
Pixel	Picture dot
Resolution	The ratio of the pixels (dpi) shown in the area.
TWAIN	Standard – this makes the exchange between the scanner and the computer possible.

SERVICE

First Aid for Malfunctions

TROUBLESHOOTING

In most cases, scanner problems have simple causes. We would like to give you some tips to solve the most common problems. Should these tips not help you solve your problems, please call us.

BASIC INSTRUCTIONS

➢ Regularly running the Windows® program "*Defragmentation*" and "*Scan disc*" can eliminate errors and increase the operating system's performance.

CHECK CONNECTIONS AND CABLES

Start by carefully checking all cable connections visually. If the indicator lights do not function properly, ensure that the computer and all peripheral equipment is properly connected to the power supply.

➢ Switch off the computer and check all cable connections. If the computer is connected to any peripherals, check the plug connections on all cables.
Do not mix the cables for the various pieces of equipment. Though they may appear identical, the pin assignments in the connectors may differ from product to product.
Once you have ensured the power supply to the equipment is in working order and all connections are intact, switch the computer back on.

Flat bed scanner is not recognized:

- ➢ Have you connected the cable provided, according to the installation instructions? Please check all cable connections.
- ➢ Did you restart the computer after installing the software from the supplied CDROM?
- ➢ Is it possible that an active scanning operation has not been completed? Check whether any programs that have access to the scanner are open.
  If applicable, close any scanner applications not required at the moment (e.g. OCR) to continue the desired operation.

The scanned images require too much memory.

- ➢ The resolution selected is too high. If you require the scanned material for printout. A lower resolution is usually sufficient which decreases the size of the file.
- ➢ The file was stored in an uncompressed format (e.g.: BMP). File formats such as JPG can store images without noticeable loss of details and require only a fraction of the original storage space.

Optical character recognition does not function properly or not at all.

- ➢ Is the original document of good enough quality?
  It is not possible to recognise some poor quality faxes, hand writing or abstract fonts. Fonts used in newspapers should be OK.
- ➢ Wrong resolution set.

The material scanned in cannot be processed by the application program....

- ➢ The application program used must support the format you selected for the file.
  For example if a scanned document is a form, it is usually a mixture of both text and graphics.
  In order to process such a file, it is usually necessary for file to be incorporated as graphics with the property "behind the text".
- ➢ Under certain circumstances an error message may be displayed in certain word processing programs. However, optical character recognition still functions.

Information about connecting the USB device to a **USB 1.1** port under Windows XP:
The operating system will display the message that a high speed USB device is not connected a non-high speed USB hub. This is **not an error message**, but merely information that the speed will be adjusted because of the slower USB 1.1 connection.

TECHNICAL SUPPORT

This flat bed scanner has been vigorously tested in our laboratories in conjunction with a wide variety of devices and peripherals.
However, it is not unusual, that drivers are updated from time to time. This is due to possible compatibility problems with other components, programs and equipment not yet tested with the flat bed scanner.
The latest information on your products and the most current driver updates are available at the following URL address on the Internet:

Internet: www.medion.com

DO YOU NEED ADDITIONAL HELP?

Should our suggestions in this manual not solve your specific problem, please contact our helpline. We will try and help you over the telephone. However, before you contact us, it would be helpful to have the following information available:

- What is your computer configuration?

- What additional peripheral devices do you use?

- What error messages, if any, appear on your screen?

- What software program(s) were you using when the error occurred?

- What steps have you already undertaken to solve the problem?

- If you have received a customer number before, please refer to this number when you call.