



# **USB COLOR FLAT BED SCANNER**

OPERATING INSTRUCTIONS

Copyright © 2003

All rights reserved.

This manual is protected by Copyright.

The Copyright is owned by **Medion®**.

Trademarks:

**MS-DOS®** and **Windows®** are registered trademarks of **Microsoft®**.

**Pentium®** is a registered trademark of **Intel®**.

Other trademarks are the property of their respective owners.

**Medion®** makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

**Medion®** shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

**Medion®** assumes no responsibility for the use or reliability of its software on equipment that is not furnished by **Medion®**.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of **Medion®**.

The information in this document is subject to change without notice.

## Content:

<u>SAFETY AND SERVICE .....</u>	<u>1</u>
Safety notes .....	1
Operating safety .....	1
Point of use .....	2
Environmental condidtions .....	2
Electro-magnetic compatibility .....	2
Connecting .....	3
Power supply .....	3
Repair .....	4
Cleaning .....	4
Data security .....	4
<u>INTRODUCTION .....</u>	<u>5</u>
Notes on these instructions .....	5
Our Target Group .....	5
Quality .....	5
Service .....	5
What can be reproduced? .....	5
Set includes .....	6
System requirements .....	6
Technical Data .....	7
<u>INITIAL OPERATION .....</u>	<u>8</u>
1. Installation of Software .....	8
2. Unlock the scanner .....	9
3. Connecting to power supply .....	10
4. Connecting to PC .....	11
Optical Character Recognition (OCR) Software .....	12

Deutsch

English

Française

Nederlands

Dansk

Español

OPERATION ..... 13

Control Panel.....	13
E-Mail-Button:.....	13
OCR-Button: .....	14
Copy-Button: .....	14
Scan-Button: .....	14

TECHNICAL QUESTIONS AND ANSWERS ..... 15

Which Resolution for which Purpose? .....	15
Memory requirement for different resolutions .....	15
What does the following mean... ..	15

SERVICE..... 16

First Aid for Malfunctions.....	16
Troubleshooting.....	16
Basic Instructions .....	16
Check Connections and Cables .....	16
Errors and Possible Causes .....	17
Technical Support .....	19
Do you need additional Help? .....	19
Guarantee.....	20
Liability limitations .....	20
Copying this manual .....	20

## SAFETY AND SERVICE

### SAFETY NOTES

Please read through this section carefully. Following all the instructions will guarantee reliable operation and years of enjoyment of your new flat bed scanner.

Always keep these instructions near your flat bed scanner for ease 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.
- This flat bed scanner is intended for personal use only. It is **not** intended for commercial use in a **heavy industrial environment.**

## POINT OF USE

- 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 the flat bed scanner from falling.
- Provide for a suitable ambient temperature:

## ENVIRONMENTAL CONDITIONS

The flat bed scanner can **be operated** at an ambient temperature of **10° C/50° 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).



After **transporting** your flat bed scanner wait until it has assumed the ambient temperature before putting into operation. In the event 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.

## CONNECTING

### 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 electric outlet 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 an electric outlet.
- To disconnect your scanner from the power source remove the power cord from the power socket.
- Only use power adaptor provided with this flat bed scanner (**YS-1015-T12S**, for UK **YS-1015-K12S**) operating at **AC 200-240V~/50 Hz.**
- If using an extension cord, make certain that it meets your local safety requirements. If in doubt, consult an 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 of 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)

## REPAIR

Please contact our service center if you have problems with your flat bed scanner. Have repairs accomplished only by our authorized service dealers.

Contact your service dealer when...

- Liquid has gotten 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 for the glass plate.

## DATA SECURITY



- Every time you update your data make back-up copies on an external storage medium. We cannot assume a liability for data loss or associated subsequent damage.



## 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. The purpose of these instructions is to help you operate your monitor safely, quickly and easily.

### OUR TARGET GROUP

Thank you for purchasing our flat bed scanner. We thank you for your confidence in our products and are pleased to welcome you as a new customer. These instructions are intended for initial users as well as advanced users. Regardless of the possible professional utilization, this flat bed scanner is intended for private use only.

### QUALITY

We focused on great features, ease of use, safety and reliability in manufacturing our flat bed scanner. The balanced hardware and software concept offers you an advanced flat bed scanner design which will provide you a great deal of pleasure for your work and entertainment.

### SERVICE

Service and support will be available every time you use your new 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 16.

### WHAT CAN BE REPRODUCED?



Unless you own the copy right or have the permission of the owner of the copy right unauthorized reproduction (e.g. of bank notes) can violate domestic or international law and be subject to severe penalties. In questions of doubt please consult an attorney.

Deutsch

English

Française

Nederlands

Dansk

Español

## SET INCLUDES

Please check for completeness. Notify us within 14 days after purchasing if your flat bed scanner is not complete. Your flat bed scanner includes:

USB flat bed scanner

AC Adapter (YS-1015-T12S, YS-1015-K12S (for UK))

Installation and applications software on CDs

This user manual

Guarantee documents

## SYSTEM REQUIREMENTS

<b>Computer</b>	PC/AT compatible computer
<b>Processor rating</b>	Pentium 200 or higher
<b>Operating system</b>	Windows® 98SE/ME/2000/XP
<b>Memory</b>	32 MB, recommended: 64 MB or more
<b>Hard disc capacity</b>	min. 800 MB free storage capacity
<b>Installation</b>	CD-ROM drive
<b>Connections</b>	USB interface

## TECHNICAL DATA

<b>Type of scanner</b>	USB flat bed scanner	
<b>Scanning method</b>	Single pass	
<b>Scanning modes</b> Color: Gray scale: Text/line:	48 bit (internal) 12 bit (internal) 1 bit (internal)	
<b>Original size</b> (w x h)	8.5" x 11.69" (maximum)	
<b>Resolution</b>  optical:  maximum:	Horizontal	vertical
	1200 dpi	2400 dpi
	19200 dpi*	
<b>Interface</b>	USB 2.0 (USB 1.1 compatible)	
<b>Weight</b>	approx. 4.85 lb	
<b>Dimensions</b> (L x W x H )	17.72" x 10.24" x 2.56"	
<b>Temperatures</b>	during operation	shut-off
	10°C to 40°C 50°F to 104°F	-10°C to 60°C 14°F to 140°F
<b>Humidity</b> (relative)	35% to 80%	20% to 80%
<b>Power adaptor</b> YS-1015-T12S YS-1015-K12S (for UK)	AC 200-240V~, 50 Hz. Output: +12V--- 1,25A	

\* software interpolated

## INITIAL OPERATION

---

### 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 to safeguard your hard disk.

Install the required software before connecting the scanner.

1. Insert the CD supplied with to automatically start the installation.

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

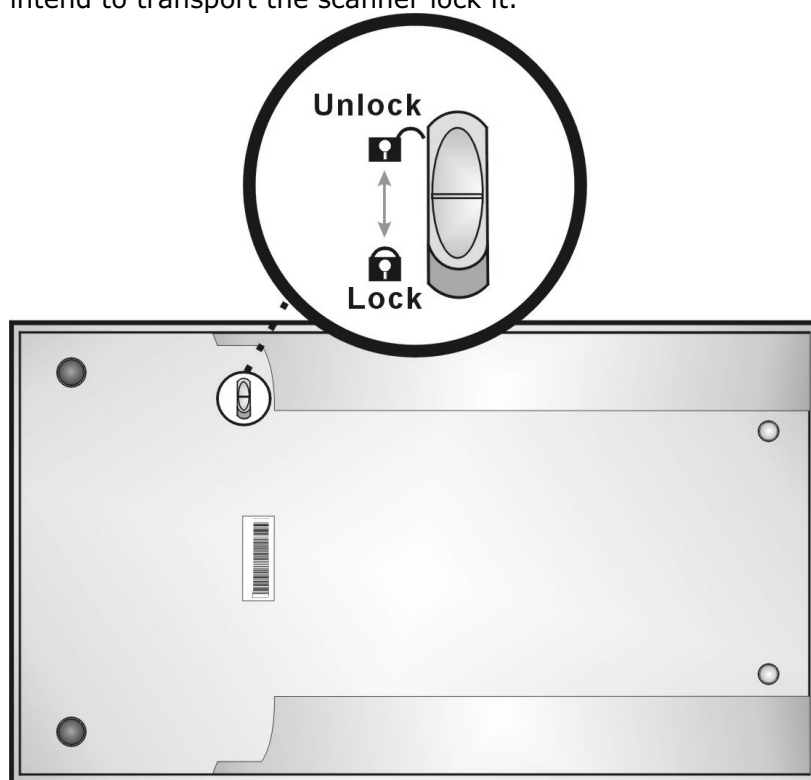
**Manual installation without Autorun feature:**

- 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: "**Setup**".
- 3) Confirm by clicking "**OK**".

2. Select your preferred language and follow the further instructions on the monitor.
3. To end installation close all windows and restart your computer. The Twain driver is automatically completed when the computer is restarted.

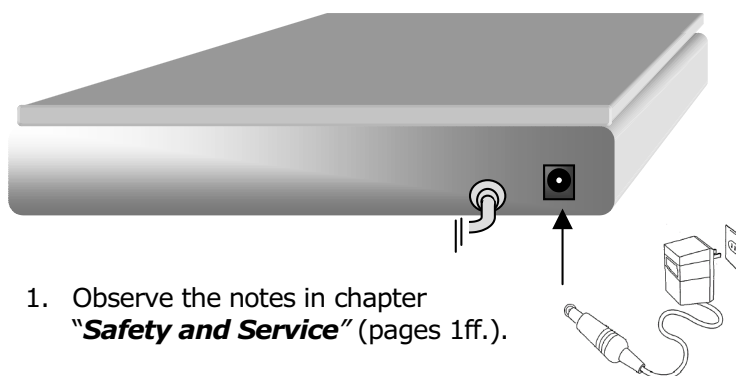
## 2. UNLOCK THE SCANNER

Turn the flat bed scanner over. To find the "Unlock/Lock" switch. Please **unlock** the scanner before use. When you intend to transport the scanner lock it.



### 3. CONNECTING TO POWER SUPPLY

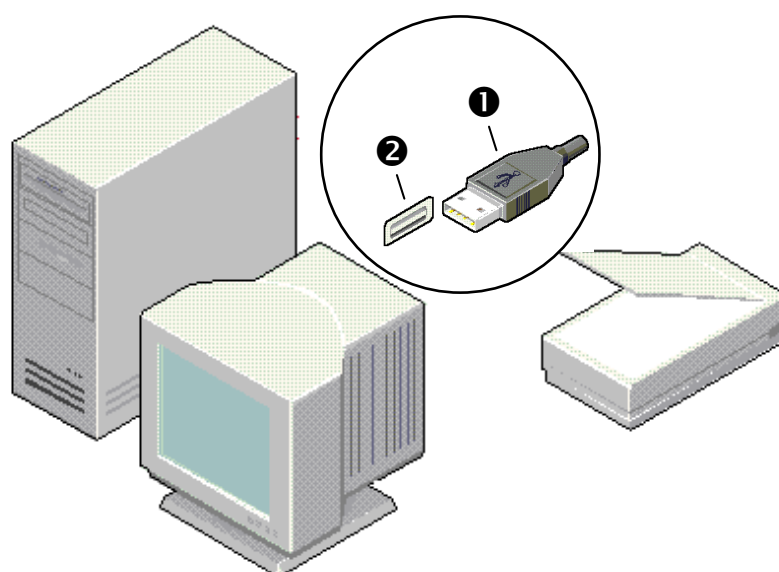
Diagram symbolic:



1. Observe the notes in chapter "**Safety and Service**" (pages 1ff.).
2. Position the computer and scanner so that you can work with them easily and safely.
3. Connect the power adaptor to your scanner as shown in the picture.
4. Connect the power adapter to an electronic outlet in the vicinity of your flat bed scanner.

## 4. CONNECTING TO PC

Keep the scanner software provided ready for use.  
Connect your flat bed scanner as follows:



1. Switch on the computer and all connected peripheral equipment (monitor, printer, external modem, etc.) and wait until the operating system has booted completely.
2. Connect the end of the USB cable (❶) to a free USB connection socket on your computer (❷).
3. Windows® will then recognize that a new piece of hardware has been connected and start the installation procedure. Do not interrupt this procedure as described in the following instructions.

## OPTICAL CHARACTER RECOGNITION (OCR) SOFTWARE

If you want to read in a text which is to be subsequently processed with a word processing program, you require an OCR program. This program reads in a document and attempts to recognize 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-color, good contrast. Example: newspapers, magazines, books	Poor print quality, multiple color, 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.

Install the OCR program as follows:

1. Insert your "**OCR-Software**" CD in your CD drive. This will start the installation process.
2. Follow the program's instructions.
3. Close all windows and restart your computer.



## OPERATION

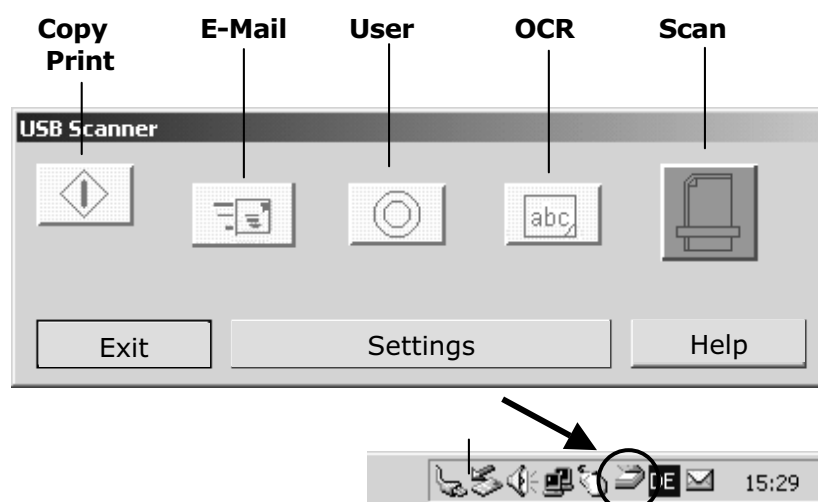
Installation is finished and a new program is generated.

The program offers detailed documentation within the online help (press F1 while the program is active).

For image documents which you read in we provide a simple-to-use program called "**Photo Express**" from **Ulead** which allows you to professionally process images. This offers a multitude of possibilities for improving the image quality or incorporating special effects.

### CONTROL PANEL

To use the panel, press on the PANEL button in the task line and the panel will appear on screen.



### E-MAIL-BUTTON:

Click the E-mail button. Your system will automatically load your scanned image as a JPEG file format attachment to your Email message.

**OCR-BUTTON:**

Click on the OCR button. Your system will automatically load your default word processing program and place your scanned document on screen.

**COPY-BUTTON:**

Click on the Copy button. Your system will automatically send your image to your default printer for printing.

**SCAN-BUTTON:**

Click on the scan button. Your system will automatically load the assigned compatible graphics program.

## TECHNICAL QUESTIONS AND ANSWERS

### WHICH RESOLUTION FOR WHICH PURPOSE?

Purpose	Resolution	Color depth
color picture, print-out	150 dpi	24-48 Bit
picture with gray levels	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
gray levels	156 Kb	352 Kb	1.37 MB	5.5 MB
color	469 Kb	1 MB	4.12 MB	16.5 MB

### WHAT DOES THE FOLLOWING MEAN...

Resolution	The ratio of the pixels (dpi) shown to the area.
Dpi	Unit of resolution, number of <b>dots per inch</b> .
Color depth	Number of colors which can be represented simultaneously. 1-Bit = $2^1 = 2$ colors = black/ white 8-Bit = $2^8 = 256$ colors 16-Bit = $2^{16} = 65.536$ colors 24-Bit = $2^{24} = 16.777.216$ colors
OCR	Text recognition
Pixel	Picture dot
TWAIN	Standard – this makes the exchange between optical devices and the computer possible.

Deutsch

English

Française

Nederlands

Dansk

Español

## SERVICE

---

### FIRST AID FOR MALFUNCTIONS

#### TROUBLESHOOTING

Many times, problems have simple causes. We would like to give you some tips to solve some 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 error sources and increase the system 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 peripheral properly, 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.

## ERRORS AND POSSIBLE CAUSES

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 PC after installing the software?
- Is it possible that an active scanning operation has not been completed? Check whether a number of programs having 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 exclusively.

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 quality?  
It is not possible to recognize hand writing or abstract fonts. Fonts used in newspapers are optimal.
- Wrong resolution set.
- Word2000 may output an error message during macro-update (installation).  
This error can be ignored because no effect to the function has been noted to date.

The material read in cannot be processed by the program....

- The 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 output with certain word processing programs. However, optical character recognition still functions.

Not enough free capacity

- Cancel the temporary files of the scanner in the program **"USB Scanner Utility"** ⇒ **"Settings"**.

The scanning process starts without giving the possibility to change settings.

- This is the basic setting of your scanner. The user-defined setting can be made in the program **"USB Scanner Utility"** ⇒ **"Settings"**.

## TECHNICAL SUPPORT

This flat bed scanner has been vigorously tested in our laboratories with a wide variety of devices.

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 our flat bed scanner.

The latest information on your products and the most current driver updates are available under the following address on the Internet:

Internet: <http://www.medion.com>

### DO YOU NEED ADDITIONAL HELP?

Should our suggestions not solve your problem, please contact our hotline. We will try and help you over the telephone. However, before you contact your Technology Center, 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.

Deutsch

English

Française

Nederlands

Dansk

Español

## **GUARANTEE**

The receipt serves as proof of first purchase and should be kept in a safe place. It is required should you need to make use of the guarantee. If the product is passed onto another user, then he shall be entitled to guarantee services for the remaining period of the guarantee. The receipt of purchase as well as this declaration should be passed onto the new user. We guarantee that this equipment is in perfect working order and from a technical point of view it complies with the descriptions in the enclosed documentation. Upon production of the receipt, the remaining period of guarantee shall pass on from the original parts to the respective replacement parts. If you hand in this equipment to make use of the guarantee, you must remove all programs, data and removable storage media. Products which are sent without accessories will be replaced without accessories. The warranty obligation does not apply in the case of the problem being caused by an accident, a catastrophe, vandalism, misuse, incorrect use, ignoring the safety and maintenance regulations, changes by software, viruses or another piece of equipment or accessories or by other modifications not approved by ourselves. This limited guarantee declaration replaces all other guarantees of express or implied nature. This includes the guarantee of saleability or the suitability for a certain purpose but is not limited to this. In some countries the exclusion of implied guarantees is not permissible upon principle. In this case the validity of all express and implied guarantees is limited to the guarantee period. Once this period has expired, all guarantees become invalid. In some countries limiting the period of validity for implied guarantees is not permitted, so that the above limitation does not come into force. If you have any questions with regard to these guarantee conditions, please contact us.

## **LIABILITY LIMITATIONS**

The contents of this manual are subject to unannounced changes caused by technical progress. Manufacturer and sales shall not be responsible for any damages which have been caused as a result of omissions or errors in the information provided in this manual.

Under no circumstances shall we be liable for any of the following:

1. Claims made against you by third parties based on loss or damage.
2. Loss or damage to your blanks, recordings or data.
3. Economic follow-on damage (including lost profit or savings) or associated damage even in the case that we have been informed of the possibilities of this type of damage.

In some countries the exclusion or limitation of accompanying or follow-on damage is not legally accepted so that the above limitations do not come into force.

## **COPYING THIS MANUAL**

This document contains legally protected information. All rights reserved. Copying in mechanical, electronic and any other form without the written approval of the manufacturer is prohibited.